

INSTRUMENT FOR PRE-ACCESSION ASSISTANCE RURAL DEVELOPMENT PROGRAMME (IPARD) 2021-2027 OF THE REPUBLIC OF TÜRKİYE



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REPUBLIC OF TURKEY
MINISTRY OF AGRICULTURE
AND FORESTRY



TABLE OF CONTENTS

LIST OF FIGURES.....	V
LIST OF TABLES.....	VI
LIST OF ABBREVIATIONS AND ACRONYMS	IX
1. TITLE OF IPA RURAL DEVELOPMENT PROGRAMME AND IPARD OBJECTIVES .	1
2. BENEFICIARY COUNTRY.....	1
2.1. Geographical Area Covered by the Programme.....	1
3. DESCRIPTION OF THE CURRENT SITUATION, SWOT AND IDENTIFICATION OF NEEDS	1
3.1. The General Socio-Economic Context of the Geographical Area.....	1
3.2. Performance of the Agricultural, Forestry and Food Sectors	8
3.3. Environment and Land Management	24
3.4. Rural Economy and Quality of Life	39
3.5. Preparation and Implementation of Local Development Strategies – LEADER.....	44
3.6. Table of Context Indicators.....	46
3.7. Alignment with EU’s Green Deal Rules	51
4. SWOT - SUMMARY OF THE ANALYSES ABOVE	53
4.1. Agriculture, Forestry and Food Industry	53
4.2. Environmental and Land Management	61
4.3. Rural Economy and Quality of Life	65
4.4. Preparation and Implementation of Local Development Strategies – LEADER.....	68
5. MAIN RESULTS OF PREVIOUS INTERVENTIONS	69
5.1. Main Results of Previous National Intervention; Amounts Deployed, Summary of Evaluations or Lessons Learnt	69
5.2. Main Results of EU Assistance, Amounts Deployed, Summary of Evaluations or Lessons Learnt.....	73
5.3. Main Results of Unilateral and Multilateral Assistance Conducted, Amounts Deployed, Evaluations or Lessons Learnt	79
6. DEFINITION OF THE STRATEGY AND OBJECTIVES OF THE PROGRAMME	80
6.1. Description of the current National Rural Development Strategy (NRDS).....	80
6.2. Identification of the Needs and Summary of the Overall Strategy.....	82
6.3. Objectives of the Programme.....	96
6.4. Consistency between the Proposed IPARD Intervention and the IPA III Programme Framework and the Strategic Response.....	96
6.5. Alignment of the selected Measures and selection criteria with key elements of the EU Green Deal and with the Green Agenda for the Western Balkans	99
6.6. Summary table of the intervention logic showing the measures selected for IPARD, the quantified targets.....	100
7. AN OVERALL FINANCIAL TABLE	105
7.1. Maximum EU Contribution for IPARD Funds in EUR by Year*	105
7.2. Financial Plan Per Measure in EUR, 2021-2027	105
7.3. Budget Breakdown by Measure	106
7.4. Budget of EU Contribution by Measure 2021-2027 in EUR for Monitoring (EUR)	107
7.5. Percentage Contribution of EU by Measure.....	108
8. DESCRIPTION OF THE SELECTED MEASURES.....	109

8.1.	Requirements concerning all or several measures.....	109
8.2.	Administrative procedure.....	114
8.3.	Description by Measure	117
8.3.1	INVESTMENTS IN PHYSICAL ASSETS OF AGRICULTURAL HOLDINGS – M1	117
8.3.2	INVESTMENTS IN PHYSICAL ASSETS CONCERNING PROCESSING AND MARKETING OF AGRICULTURAL AND FISHERY PRODUCTS – M3	137
8.3.3	AGRI-ENVIRONMENT-CLIMATE AND ORGANIC FARMING MEASURE – M4.....	154
8.3.4	IMPLEMENTATION OF LOCAL DEVELOPMENT STRATEGIES - LEADER APPROACH – M5.....	181
8.3.5	INVESTMENTS IN RURAL PUBLIC INFRASTRUCTURE – M6	190
8.3.6	FARM DIVERSIFICATION AND BUSINESS DEVELOPMENT – M7.....	199
8.3.7	TECHNICAL ASSISTANCE – M9	216
9.	NATIONAL RURAL DEVELOPMENT NETWORK.....	223
10.	INFORMATION ON COMPLEMENTARITY OF IPARD WITH THE MEASURES FINANCED BY OTHER (NATIONAL OR INTERNATIONAL) SOURCES	226
10.1.	Demarcation criteria between IPARD and the supports provided under other IPA III Programming Framework Windows or within the same Window	226
10.2.	Complementarity of IPARD with other financial instruments	227
10.3.	Complementarity of IPARD Measures with national policy and the Demarcation Criteria between them	227
11.	SUMMARY DESCRIPTION OF MANAGEMENT AND CONTROL STRUCTURE	234
12.	DESCRIPTION OF THE OPERATING STRUCTURE, INCLUDING MONITORING AND EVALUATION.....	237
12.1.	Description of the operating structure (Managing Authority and IPARD Agency) and their main functions.....	237
12.2.	Description of monitoring and evaluation systems, including the envisaged composition of the Monitoring Committee.....	240
13.	RESULTS OF CONSULTATION ON PROGRAMMING AND PROVISIONS TO INVOLVE RELEVANT AUTHORITIES AND BODIES AS WELL AS APPROPRIATE ECONOMIC, SOCIAL AND ENVIRONMENTAL PARTNERS	243
13.1.	Method Adopted to Involve Relevant Authorities, Bodies and Partners.....	243
13.2.	List of Partners Consulted – Summary	244
13.3.	Results of Consultations – Summary	252
14.	RESULTS AND RECOMMENDATIONS OF THE EX-ANTE EVALUATION OF THE PROGRAMME	260
14.1.	Description of the Process.....	260
14.2.	Summary of the Recommendations	261
15.	PUBLICITY, VISIBILITY AND TRANSPARENCY IN ACCORDANCE WITH IPA LEGISLATION	278
15.1.	Actions foreseen to inform potential recipients, professional organizations, economic, social and environmental partners, bodies involved in promoting equality between men and women and NGOs about possibilities offered by the programme and rules of gainig access to funding ...	278
15.2.	Actions foreseen to inform the recipients of the EU contribution	279
15.3.	Responsibilities of the recipients.....	280
15.4.	Actions to inform the general public about the role of EU in the programmes and the results thereof	280
16.	EQUALITY BETWEEN MEN AND WOMEN AND NON-DISCRIMINATION PROMOTED AT VARIOUS STAGES OF PROGRAMME (DESIGN, IMPLEMENTATION, MONITORING AND EVALUATION)	281

16.1. Description of How Equality Between Men and Women will be Promoted at Various Stages of Programme (Design, Implementation, Monitoring and Evaluation)	281
16.2. Description of How Any Discrimination Based on Sex, Race, Origin, Religion, Age, Sexual Orientation, will be Prevented during Various Stages of Programme Implementation.....	282
17. TECHNICAL BODIES AND ADVISORY SERVICES.....	283
ANNEX I. DEFINITION OF MEDIUM AND SMALL SCALE ENTERPRISES	286
ANNEX II. INSTITUTIONS REPRESENTED IN THE CORE GROUP ASSIGNED TO DRAFT THE NATIONAL RURAL DEVELOPMENT STRATEGY (2021-2023).....	287
ANNEX III. NATIONAL LEGISLATION RELEVANT TO THE PROGRAMME.....	288
ANNEX IV. GENERAL CRITERIA FOR EVALUATION OF THE ECONOMIC VIABILITY OF THE BENEFICIARY (FOR M1, M3 AND M7)	295
ANNEX V. PAYMENT CALCULATIONS OF TYPE OF OPERATIONS UNDER AGRI-ENVIRONMENT-CLIMATE MEASURE.....	296
ANNEX VI. CONTROLLABILITY AND VERIFIABILITY OF AGRI-ENVIRONMENT-CLIMATE COMMITMENTS.....	308
ANNEX VII. BEYPAZARI DISTRICT EROSION AND PARCEL SLOPE MAPS AND EROSION RISK MAPS OF TÜRKİYE	311
ANNEX VIII. LIST OF ELIGIBLE CRAFTS.....	315
ANNEX IX. SUMMARY OF THE EX-ANTE EVALUATION REPORT	319
ANNEX X. SCORING SHEET FOR SELECTION OF LDS.....	321
ANNEX XI. LIST OF FORAGE PLANTS	323
ANNEX XII. TECHNICAL ASSISTANCE PROJECT NAMED “ORGANIZATION FOR THE STUDIES RELATED TO THE REVISIONS OF BIODIVERSITY SUB-MEASURE UNDER AGRI-ENVIRONMENT” REPORT	324
ANNEX XIII. THE ORGANIZATION CHART OF MA FOR FULFILMENT OF ITS TASKS AND RESPONSIBILITIES	337
ANNEX XIV. THE ORGANISATION CHART OF IPARD AGENCY (ARDSI) FOR FULFILMENT OF ITS TASKS AND RESPONSIBILITIES	338

LIST OF FIGURES

Figure 1. Annual GDP per capita growth rate (Source TURKSTAT).....	4
Figure 2. Greenhouse Gas Emissions by sectors (UNFCCC 2018).....	32
Figure 3. Total emissions from agriculture sector by source	33
Figure 4. Distribution of forest land, 2005-2020	37
Figure 5. Amount of agricultural and rural development supports (million TL).....	69
Figure 6. The map indicating the likely distribution of HNV farmland in Türkiye...	155
Figure 7. Location of Beypazarı in Ankara.....	159
Figure 8. Location of Polatlı in Ankara	165
Figure 9. Villages of Polatlı eligible for the type of operation	169
Figure 10. Beypazarı District Erosion Map	311
Figure 11. Beypazarı District Parcel Slope Map.....	312
Figure 12. Wind Erosion Risk Map of Türkiye (2018).....	313
Figure 13. Water Erosion Risk Map of Türkiye (2019).....	313
Figure 14. Villages of Polatlı eligible for the type of operation: Biodiversity-enhancing the Great Bustard population	314

LIST OF TABLES

Table 1. Labour Force Statistics	2
Table 2. Distribution of Farm Sizes	7
Table 3. Amount of Milk Production in Türkiye (tonnes)	11
Table 4. Milk Collection and Milk Processing Establishments (by items).....	12
Table 5. Türkiye's Foreign Trade in Milk and Dairy Products (\$).....	12
Table 6. Number of animals per species (head).....	14
Table 7. Türkiye poultry assets (by item)	16
Table 8. Türkiye poultry products.....	16
Table 9. Number of enterprises and cages in the poultry sector (by items).....	17
Table 10. Türkiye fruit and vegetable production figures	18
Table 11. Amount and value of aquaculture products by years	19
Table 12. Türkiye's Aquaculture product imports and exports between 2010 and 2019	20
Table 13. Breakdown of agricultural land by years in Türkiye (1000 hectares).....	24
Table 14. Amount and Degrees of Water and Wind Erosion in Türkiye by 2019.....	26
Table 15. Erosion Based on Land Use	27
Table 16. Pasture Improvement and Management Projects in Türkiye between 2000-2020	28
Table 17. Pesticide use in Türkiye over the years (tonnes)	30
Table 18. Fertiliser use in Türkiye over the years (tonnes)	30
Table 19. Total emissions from agriculture sector by source	32
Table 20. Sustainable development indicators under forestry 2010-2019.....	38
Table 21. Context Indicators.....	46
Table 22. Milk SWOT Analysis	53
Table 23. Red Meat SWOT Analysis.....	54
Table 24. Poultry Meat and Eggs SWOT Analysis.....	55
Table 25. Fruits, Vegetables and Other Horticultural Crops SWOT Analysis	57
Table 26. Fisheries and Aquaculture SWOT Analysis	59
Table 27. Land Cover Management and Soil Erosion Control SWOT Analysis.....	61
Table 28. Water Conservation SWOT Analysis	62
Table 29. Biodiversity SWOT Analysis	63
Table 30. Organic Agriculture SWOT Analysis	64
Table 31. Farm Diversification and Business Development SWOT Analysis	65
Table 32. Rural Infrastructure Investments SWOT Analysis	66

Table 33. Renewable Energy SWOT Analysis	67
Table 34. Preparation and Implementation of Local Development Strategies – LEADER SWOT Analysis.....	68
Table 35. Progress of IPARD Programme (as of 31.12.2020)	74
Table 36. IPARD Projects conducted under Institutional Capacity Building Sub-Sector	77
Table 37. Projects Conducted under the Institutional Capacity Building Sub-Sector for Chapter 11 and CAP	78
Table 38. Summary Table Showing Main Rural Development Needs and Measures Operating.....	86
Table 39. IPA III Framework structure with its windows	97
Table 40. Window 3: Green agenda and sustainable connectivity	97
Table 41. Window 4: Competitiveness and inclusive growth	97
Table 42. Quantified Targets of the Programme.....	100
Table 43. Maximum EU Contribution for IPARD Funds in EUR by Year*	105
Table 44. Financial Plan Per Measure in EUR, 2021-2027	105
Table 45. Budget Breakdown by Measure.....	106
Table 46. Budget of EU Contribution by Measure 2021-2027 in EUR for Monitoring (EUR).....	107
Table 47. Percentage Contribution of EU by Measure	108
Table 48. Selection criteria and scoring table	131
Table 49. Indicative budget.....	132
Table 50. Budget for non-productive investments.....	133
Table 51. Indicators and targets to be used in the programme	133
Table 52. Selection criteria and scoring table	149
Table 53. Indicative budget.....	151
Table 54. Indicators and targets to be used in the programme	151
Table 55. Land Distribution in Beypazarı.....	160
Table 56. Distribution of the agricultural land in Beypazarı	160
Table 57. Indicators and target levels	164
Table 58. Land Distribution of Polatlı	165
Table 59. Agricultural Land Size and Their Distribution	166
Table 60. Important crops and production amounts in Polatlı.....	166
Table 61. Cultivation amount for 2020 on the basis of crop.....	166
Table 62. Indicators and target levels	171
Table 63. Relevant mandatory standards (baseline) for the pilot agri-environment- climate measure in Türkiye.....	172

Table 64. Calculation of transaction costs for the AE	176
Table 65. Indicative budget.....	178
Table 66. Indicators and targets to be used in the programme	178
Table 67. Indicative budget.....	188
Table 68. Indicators and targets to be used in the programme	188
Table 69. Selection criteria and scoring table	196
Table 70. Indicative annual allocations of the public and EU-funds	197
Table 71. Indicators and targets to be included in the programme	197
Table 72. Selection criteria and scoring table	212
Table 73. Indicative budget.....	213
Table 74. Indicators and targets to be used in the programme	214
Table 75. Indicative budget.....	220
Table 76. Indicators and targets to be used in the programme	220
Table 77. RDISP lower and upper limits	232
Table 78. IPA III Management and Control Mechanism Institutions.....	236
Table 79. List of Stakeholder Consulted – Summary	244
Table 80. Results of Consultations – Summary	252
Table 81. Summary of recommendations included in the Ex-ante Evaluation.....	271
Table 82. Identification of all relevant authorities and a brief description of the management and control structure	275
Table 83. National legislation relevant to the programme, Laws	288
Table 84. National legislation relevant to the programme, Secondary Legislation ...	291
Table 85. Cost and Profit Calculations of Wheat cultivation	298
Table 86. Cost and Profit Calculations of Common Vetch.....	299
Table 87. Cost and Profit Calculations of Trefoil	299
Table 88. Package 1 Compensation Payments According to the Years	300
Table 89. Package 2 Compensation Payments According to the Years	301
Table 90. Cost and Profit Calculations of Wheat.....	304
Table 91. Cost and Profit Calculations of Hungarian Vetch.....	305
Table 92. Cost and Profit Calculations of Trefoil	305
Table 93. Package 1 Compensation Payments According to the Years	306
Table 94. Package 2 Compensation Payments According to the Years	307
Table 95. Package 3 Compensation Payments According to the Years	307

LIST OF ABBREVIATIONS AND ACRONYMS

€	Euro
\$	United States Dollar
AEC	Agri-environment-climate
ARDSI	Agriculture and Rural Development Support Institution
BSGM	General Directorate of Fisheries and Aquaculture
CBAM	Carbon Border Adjustment Mechanism
CFP	Common Fisheries Policy
CISOP	Competitiveness and Innovation Sector Operational Programme
CMO	Common Market Organisation
COVID-19	Disease caused by the SARS-CoV-2 (2019-nCoV) coronavirus
da	decare
DG	Directorate General
DG AGRI	Directorate General for Agriculture and Rural Development
DG SANTE	Directorate General Health and Food Safety
DG-FC	Directorate General of Food and Control
DOKAP	Eastern Blacksea Region Development Projects
DSI	State Hydraulic Works
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EGD	European Green Deal
EMRA	Energy Market Regulatory Authority
eq.	equivalent
EU	European Union
EUR	Euro
FADN	Farm Accountancy Data Network
FAO	Food and Agricultural Organisation
FAS	Farm Advisory System
GAEC	Good Agricultural and Environment Condition
GAP	South-Eastern Anatolia Project
GDAR	General Directorate of Agricultural Research and Policies
GDP	Gross Domestic Product
GVA	Gross Value Added
ha	hectare

HACCP	Hazard Analysis of Critical Control Points
IACS	Integral Administration and Control System
ICT	Information and Communication Technology
IFAD	International Fund for Agricultural Development
ILBANK	Bank of Provinces
IPA	Instrument for Pre-Accession Assistance
IPARD	Instrument for Pre-Accession Assistance on Rural Development
IRENA	International Renewable Energy Agency
JICA	Japan International Cooperation Agency
LAG	Local Action Group
LDS	Local Development Strategy
LEADER	Links Between Actions for the Development of the Rural Economy
LSD	Lumpy Skin Disease
MA	Managing Authority
MC	IPARD Monitoring Committee
MoAF	Ministry of Agriculture and Forestry
Mt	Million Tonnes
MW	Mega Watt
NAO	National Authorisation Officer
NF	National Fund
NGO	Non-Governmental Organisation
NIPAC	National IPA Coordinator
NRDS	National Rural Development Strategy
NRN	National Rural Network
NUTS	Nomenclature of Units for Territorial Statistics
OECD	Organisation for Economic Cooperation and Development
OTBIS	Organic Farming Information System
PCU	Provincial Coordination Unit
PO	Producer Organisation
PPS	Purchase Power Standards
PRAG	Practical Guide to Contract Procedures for European Union External Action
R&D	Research and Development
RDISP	Rural Development Investments Support Program
SME	Small and Medium-Sized Enterprises

SWOT	Strengths, Weaknesses, Opportunities, and Threats
TA	Technical Assistance
TBS	Agriculture Information System
TL	Turkish Lira
TSE	Turkish Standards Institution
TURKSTAT	Turkish Statistical Institute
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar

1. TITLE OF IPA RURAL DEVELOPMENT PROGRAMME AND IPARD OBJECTIVES

Instrument for Pre-Accession Assistance Rural Development Programme (IPARD) 2021-2027 of the Republic of Türkiye.

2. BENEFICIARY COUNTRY

2.1. Geographical Area Covered by the Programme

The geographical scope of the Programme is the entire territory of Türkiye.

3. DESCRIPTION OF THE CURRENT SITUATION, SWOT AND IDENTIFICATION OF NEEDS

3.1. The General Socio-Economic Context of the Geographical Area

Population

The population of Türkiye continues to grow; however, there has been a considerable decline in the growth rate from a constant of around 25% between the 50's and 80's to 13.7% in 2013 and to 12.4% in 2019. The population of Türkiye stands at 83 154 997 as of December 31, 2019. The working age population (age 15 and above) constitutes 67.8% of the total population and its share grows faster than the total population growth. The share of population aged 0-14 was 23.3%, whereas the share population aged 65 and above was 9.1% in 2019. A working age population of 56 million and a mean age of 34 demonstrate that Türkiye has a very young population and a high potential for further economic development. As of 31.12.2019, 92.8% of the population live in provinces and districts whereas 7.2% live in counties and villages. 40 276 360 of the country population live in IPARD Provinces.

Education

The illiteracy rate amongst the population aged 15 and above was 3.3% in 2019 while in the population aged 25 and above around 4% are illiterate, 4.9% are literate but have not received formal education, 91% are primary school graduates, 66% are secondary school graduates, and 42.2% are high school graduates and 20.8% have a degree in higher education. In OECD countries, 90% of the population remains in education beyond the compulsory education period. In Türkiye, the net enrolment rate for both girls and boys in the 6-9 and 10-13 age groups is 99%. Despite the uninterrupted compulsory education of 12 years, the net enrolment rate in the 14-17 age group is 88%. Analyses by age groups demonstrate that in the age range of 15-19, the schooling rate is 71%, that ranks below the OECD countries with average of 85%.

The aging trend in rural population also causes school-age population to decrease. This causes a fall in the number of active schools and a rise in the number of schools encompassed by bussed education. Dependency on bussed education services is especially high in provinces with a low rural population. Thus, the number of active primary, secondary and high schools are relatively low in the villages and counties of such provinces.

Ensuring sustainable access to both formal and non-formal education services in villages will help improve the human capacity and provide an impetus for rural development. As

for districts, it is very important in terms of vocational training efforts to ensure that village population has the opportunity to access to institutionalized public education centres regularly. In these areas, it is possible to develop various non-formal education programs aimed at equipping the adult population with vocational skills especially during the seasons when agricultural activity is less intense. Although there are agricultural vocational high schools and two-year higher education institutions, the number of graduates is relatively low and most of them are employed by the food processing industry. This situation also demonstrates the need to provide advisory services in rural areas allowing to fill gaps and update knowledge on agriculture-related and other issues and skills related to IPARD activities.

Employment

According to TURKSTAT data for the year 2020 (Table 1), total employment in Türkiye is 27 477 million and 17% (4,776 million) of this number work in agriculture. The share of agricultural sector in total employment dropped from 23% in 2011 to 17% in 2020. The number of individuals employed in agriculture across the country was 5 391 000 in 2011, and 4 776 000 for the year 2020. In the same period, participation in the labour force increased from 47% to 49%, and the unemployment rate increased from 9% to 14% according to the basic indicators pertaining to the labour force.

Table 1. Labour Force Statistics

Years	Labour Force	Employment	Economic Activities (Seasonally adjusted)					Unemployed				
			Agriculture	Non-agricultural					Labour Force participation rate (%)	Employment rate (%)	Unemployment rate (%)	Non-agricultural Unemployment rate (%)
				Total	Industry	Construction	Service					
2011	25 559	23 227	5 391	17 836	4 858	1 665	11 313	2 332	47	43	9	11
2012	26 156	23 955	5 294	18 662	4 913	1 716	12 032	2 200	48	44	8	10
2013	27 099	24 650	5 203	19 447	5 114	1 793	12 540	2 449	48	44	9	11
2014	28 776	25 917	5 455	20 462	5 310	1 901	13 251	2 860	51	45	10	12
2015	29 690	26 636	5 465	21 171	5 338	1 920	13 913	3 054	51	46	10	12
2016	30 545	27 215	5 305	21 910	5 297	1 992	14 620	3 330	52	46	11	13
2017	31 637	28 186	5 455	22 731	5 391	2 095	15 245	3 451	53	47	11	13

2018	32 267	28 719	5 300	23 419	5 652	1 992	15 775	3 547	53	47	11	13
2019	32 532	28 077	5 073	23 004	5 566	1 564	15 874	4 455	53	46	14	16
2020	31 712	27 477	4 776	22 701	5 702	1 655	15 343	4 006	49	43	13	15

Source. TURKSTAT, Labour Force Statistics (2020).

Seasonally adjusted employment variable is derived from the sum of seasonally adjusted agriculture, construction, and the industrial sector which does not bear service variables or seasonal effect. Unemployment variable is derived from the sum of seasonally adjusted non-agricultural unemployment and seasonally adjusted agricultural unemployment series.

Migration

Migration from rural to urban areas continues in Türkiye. Eastern Anatolian Regions (Erzurum, Erzincan, Bayburt, Ağrı, Kars, Iğdır, Ardahan, Malatya, Elazığ, Bingöl, Tunceli, Van, Muş, Bitlis, Hakkari provinces) are the areas which have the highest out-migration. Central Anatolia (Ankara, Konya, and Karaman), West Marmara (Tekirdağ, Edirne, Kırklareli, Balıkesir, Çanakkale) and East Marmara (Kocaeli, Düzce, Sakarya, Bolu and Yalova) have the highest in-migration. The provinces with the highest in-migration are Kocaeli, Düzce, Sakarya, Bolu and Yalova provinces in the Marmara Region. Migration generally flows from rural areas to cities, from inland to coastal areas, from arid lands to irrigated lands, from mountainous regions to plains, and from less developed to more developed sub-regions.

It is envisaged that the migration from rural to urban areas will continue, although with a lower momentum; and that the total rural population will continue to decline. However, in some provinces, there might be an increase in the village population. Basic internal parameters that might affect the decrease in population density or disintegration level in villages are the demographical structure, geographical location and climate, agricultural production infrastructure, the nature of employment and labour force, and the level of access to social and physical infrastructure services. External parameters expected to affect this process are employment and higher income expectancy brought by the rising demand for low-qualified labour force in cities, the appealing living conditions in cities, rising accessibility owing to the developments in the information technologies and transportation infrastructure, and the higher quality provision of basic public services in cities.

The ratio of rural population to total population in Türkiye was 68.4% in 1960, and this ratio has been progressively decreasing every decade (61.7% in 1970; 56.2% in 1980; 40.7% in 1990; 35.2 in 2000; 29.2% in 2010) to reach 24.3% in 2020. Given the distribution of rural population by the areas of settlement as of 2019, 50.3% of the population lives in villages, 12.4% lives in counties, 15.8% in metropolitan district municipalities, and 21.6% in district municipalities.

GDP

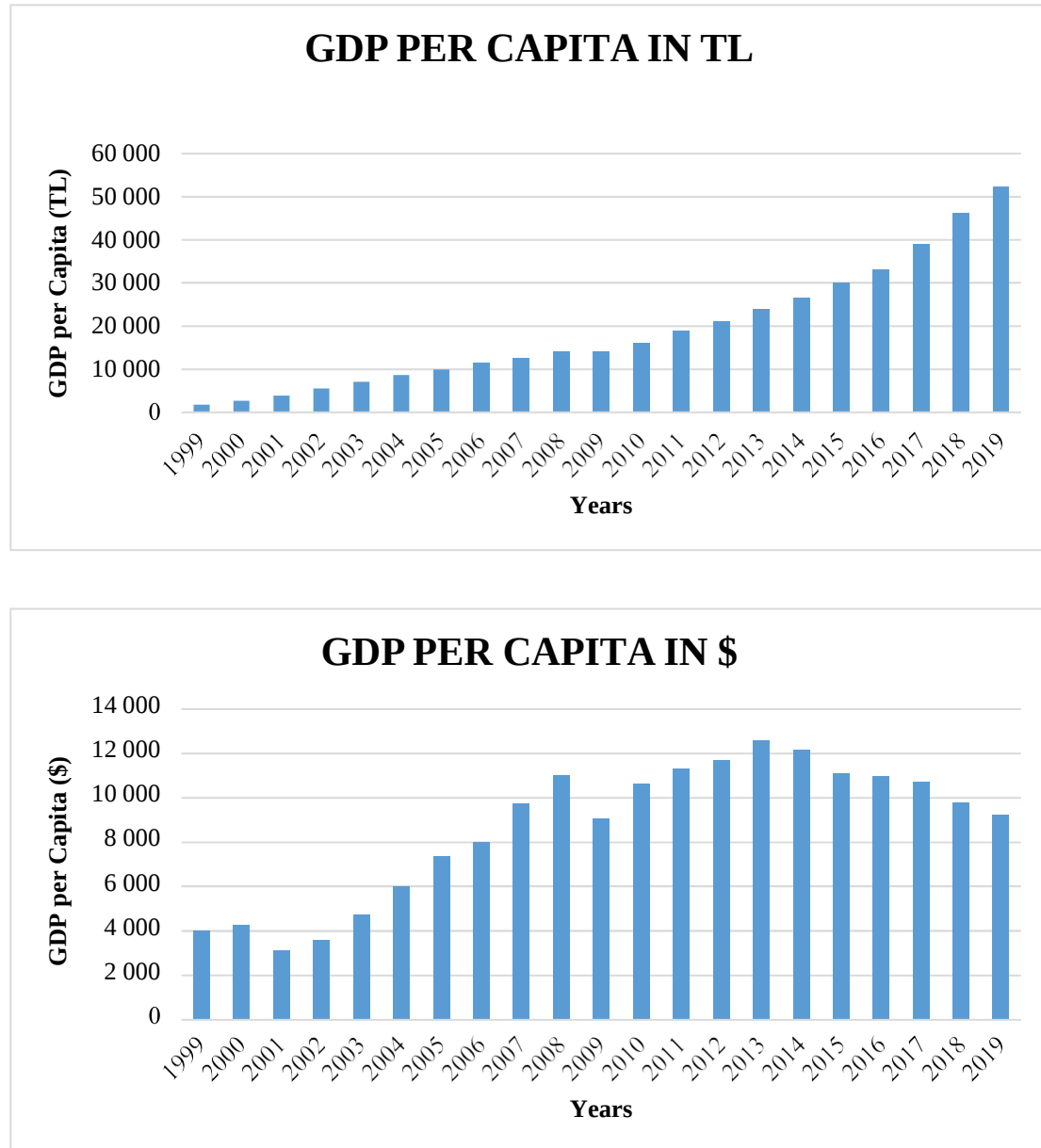
The GDP per capita in TL in 2019 was 52 316 TL with an increase of 11.7% compared to the preceding year; however, when calculated in USD, it has reached 9213\$ which represents a decrease of -6% compared to 2018. Loss of GDP value reached -36.5% compared to 2013 while population increased by 7% between 2013 and 2019.

Annual GDP per capita growth rate is shown in Figure 1.

Production-oriented GDP at current prices increased by 14.9% in 2019 compared to the previous year and reached 4 280 381 000 TL. In terms of the share of various sectors of the economy contributing to GDP in 2019, total added value of finance and insurance activities increased by 7.4%; public administration, education, human health and social service activities by 4.6%; other service activities by 3.7% and the agricultural sector increased by 3.3%. There was a decrease of 8.6% in construction sector, and a decrease of 1.8% in vocational administrative and support service activities.

Total value in agricultural production exceeded 384 billion TL in 2018. 38.4% of this value results from crop production, whereas 58.6% results from animal production. The share of agriculture in GDP was 6.6% in 2020 compared to 8.2% in 2011.

Figure 1. Annual GDP per capita growth rate (Source TURKSTAT)



Inflation

The annual increase in the consumer price index fluctuated between 8.2% and 20.3% from 2013 and 2019, with a six-year average of 11.6 %. It was recorded as 11.84% in 2019 and 20.3% in 2020. Producer price index fluctuated between 6.4% and 33.6% over the same period. The annual increase in the producer price index was 7.36% in 2019 and 25.2% in 2020.

Foreign Trade

While Türkiye's foreign trade continued to increase in terms of exports, there was a decrease in imports. In 2019, Türkiye's total exports increased by 2.1% to 181 billion USD, while imports decreased by 9% to around 210 billion USD. In 2020, there was a regression due to the COVID-19 pandemic. In 2020, exports decreased by 6.6% to 169.6 billion USD, and total imports increased by 4.6% and reached 219.5 billion USD.

Türkiye's most important trading partners are EU countries. While the share of exports to EU 27 countries in total exports increased from 36% in 2013 to 41.3% in 2020, the import share slightly decreased from 34.6% in 2013 to 33.4% in 2020. Other important trade partners of Türkiye are OECD countries (accounted for 56% of export and 49.3% of import in 2020), Black Sea Economic Cooperation (export: 12% and import: 12.8% in 2020), the Organization of Islamic Cooperation (accounted for 25.8% of export and 14.1% of import in 2020), and the Economic Cooperation Organization (export: 5.1%, import: 2.1% in 2020).

The share of food and agriculture in total imports decreased from 5.2% in 2013 to 4.6% in 2019. In case of export, food and agricultural products have seen a significant drop from its share of 10.9% of total exports in 2013 to only 3.1% in 2019. However, this decrease is not absolute but relative: the increase in value created in the industry and service sectors was greater than in agriculture and although the place of the agricultural sector in the Turkish economy is steadily decreasing, the amount of agricultural production does not decrease.

In the first 11 months of 2019, the top three industries in exports were sugar and sugary products, fresh fruits and nuts, whereas in imports these were grain, animal feed and flour. The industries with the highest increases in export were nuts, sugar and sugary products, fishery and aquaculture products, cocoa and chocolate industry, milk and milk products.

Administrative system

The largest administrative unit in Türkiye is a province and districts are located under the provinces. There is a capital district in each province. The units under districts are villages in rural areas and neighbourhoods in urban areas. In 2019, there were 81 provinces, 922 districts, 386 counties and 18 292 villages in Türkiye.

In each province and district, there is a governor appointed and governorate's budget is allocated by the central administration. All provinces, districts and counties also have municipalities which are governed by elected mayors and are independent from the central structure.

Although they have a share in the tax revenue from settlement areas, their main budget is allocated by central administration depending on the size of their population. Municipalities are mainly responsible for providing infrastructure services to administrative units. Generally, there is one municipality covering all neighbourhoods

in each district. However, with population growth, as districts merge and transform into metropolitan areas, the number of metropolitan municipalities rose to 30 by 2019.

Pursuant to the law 6360 dated 2012, the number of districts, counties and villages changed. According to TURKSTAT data, total population of counties and villages in 51 provinces without a metropolitan municipality slightly changed from 6.8 million in 2012 to nearly 6 million in 2019. More than 16 thousand villages and counties that transformed into neighbourhoods will be eligible to have the status of “rural neighbourhood” upon their demand and by the proposal of district municipality council and the approval of the metropolitan municipal council.

Land Use and Ownership

Türkiye has a land asset of 78.35 million ha in surface area. Nearly 1.4 million ha of this land is covered by dams, reservoirs, etc. and the remaining 98.2% is covered by soil. According to TURKSTAT data for 2020, 23.13 million ha of land (29.6%) was agricultural land (arable or covered with vegetation), 22.74 million ha (29.02%) was forests and moors, 14.6 million ha (18.7%) was pastures and meadows, 17.8 million ha (22.68%) was used as military zones, industrial zones and residential areas.

Annual crops can be planted in 85% of agricultural land, and 15% is covered by perennial plants. 67% of the arable land is covered by plant groups referred to as field crops, composed mainly of cereals, industrial plants, and field vegetables. Plants in the vegetable group only occupy 3% of agricultural land. A significant portion of arable land (15%) is left fallow.

According to the data from the Farmer Registration System, the number of agricultural holdings was 3 022 127 as of 2019. In Türkiye, 80% of agricultural holdings manage their own land, and the land managed as such corresponds to 60% of total land. The ratio of enterprises that conduct agricultural activities on owned as well as rented land is 17% and the land managed by them correspond to 36% of total land. The ratio of enterprises active on rented land only is 3%.

As a result of the population growth versus a diminishing amount of total agricultural land in Türkiye, the amount of agricultural land per capita has decreased. In the period between 1990 and 2018, there was approximately a 45.2% increase in the population of Türkiye, and the agricultural land per capita contracted by 39.3% over the same period.

The average farm size in Türkiye was 6.1 ha in the 2001 General Agricultural Census of TURKSTAT (Table 2), and 7.6 ha in the 2016 Agricultural Enterprise Structure Survey, which takes into account the 2014-2015 production season. According to the data of the Farmer Registration System, it is 7.0 ha as of 2017. Therefore, the size per holding is in an increasing trend.

Table 2. Distribution of Farm Sizes

Agricultural holding size (ha)	Number of agricultural holdings	Number of agricultural holdings (%)	Arable Agricultural land size (ha)	Agricultural land (%)	Number of pieces of agricultural land per holding (number)	Agricultural land average piece size (ha)
0-0.49	178 006	5.89	48 200	0.26	1.5	0.16
0.50-0.99	290 461	9.61	195 247	1.06	2.4	0.27
1.0-1.9	539 816	17.86	737 802	4.00	3.4	0.38
2.0-4.9	950 840	31.46	2 953 162	16.02	4.7	0.64
5.0-9.9	560 049	18.53	3 812 704	20.68	6.9	0.94
10.0-19.9	327 363	10.83	4 388 440	23.81	10.1	1.29
20.0-49.9	153 685	5.09	4 207 550	22.82	13.7	2.06
50.0-99.9	17 429	0.58	1 121 855	6.09	21.1	3.03
1000+	4 478	0.15	969 870	5.26	36.9	6.03
Total	3 022 127		18 434 830		Average: 5.9	Average : 1.29

Source: TURKSTAT, 2019

Definition of Rural Areas

According to the results of the Address Based Population Registration System (ABPRS), population statistics at the settlement level obtained annually by the Turkish Statistical Institute (TURKSTAT) are classified as "Statistical Region, Provincial and District Centers, Towns and Villages, Urban and Rural, etc.". In this context, the "Urban Threshold Survey Urban Definition for Turkey" published by the State Planning Organization in 1982 and the statistics produced by TURKSTAT are based on the urban-rural definition made in this study.

This urban-rural classification has been significantly affected by the changes in the administrative division structure because of legal regulations such as Law No. 6360 enacted in 2012. For this reason, with the 11th Development Plan prepared by the Presidency for 2019-2023, the responsibility of revising urban-rural definitions to take into account both national and international needs has been assigned to TURKSTAT.

In this framework, with the introduction of the Spatial Address Registration System (SARS), which is under the responsibility of the Ministry of Interior, a classification that more accurately reflects the actual urban-rural structure was made by TURKSTAT for producing statistics. The new urban-rural definition consists of three classes at the neighborhood-village level.

With this new classification of "dense urban, medium dense urban and rural", it is aimed to develop a sustainable structure in line with international standards and to produce statistics at this level. The classification is based on the "Degree of Urbanization (DEGURBA)" developed by the European Statistical Office, and the SASRS and ABPRS are used as data sources.

(List can be found at <https://biruni.tuik.gov.tr/medas/?kn=95&locale=tr>)

In order to ensure applicability in line with the objectives of the IPARD Programme, rural areas shall be defined as:

The definition of rural areas in the IPARD Programme is taken from the "Revision of Rural-Urban Definition" study conducted by TURKSTAT. According to this study, settlements are divided into 3 classes: urban, medium density urban and rural. In the IPARD Programme, settlements that fall under the definition of "rural" are defined as rural areas. Population and population density data dated December 31, 2022 will be used stably until the closing date of the IPARD III Programme and updates will be ignored.

The calculation method of the study is summarized below:

The 1km² population grids used in determining urban-rural classes were created using the aggregation method. For the aggregation method, coordinated population (household population) data were obtained by matching ABPRS), results and Spatial Address Registration System data. After coordinated population points and 1 km² grids were obtained, population points were aggregated to the grids where they spatially intersected. Thus, the total population for each 1 km² was obtained.

Two thresholds were used for the urban-rural classes determined according to the grid populations. The first one is the population of each grid, and the second one is the population of the cluster formed by the grids that meet this population condition and are spatially adjacent to each other. After applying the thresholds, the grids were divided into three classes:

City Center Grids: The population of each grid must be greater than 1 500 and the total population of the cluster of these grids must be greater than 50 000.

Urban Cluster Grids: The population of each grid must be larger than 300 and the total population of the cluster formed by these grids must be larger than 5000.

Rural Grids: This is the class containing other grids that do not meet the Urban Center and Urban Cluster conditions.

After determining the degree of urbanization at the grid level, the neighborhood and village level was used for settlement classification. If at least 50% of the population living in each settlement is located in the city center grids, it is classified as Dense Urban, if more than 50% of the population is located in rural grids, it is classified as Rural, and settlements that do not meet this condition are classified as Medium Dense Urban."

According to this definition, all settlements classified as "rural" will be considered within the scope of the definition of "Rural Areas"

Definition of Mountainous Area

In the programme, a mountainous area is defined as an area located on an altitude of minimum 1 000 m, or located on an altitude between 500 m and 1 000 m and having a slope of minimum 17%. The list of mountainous areas is published on the official website of MoAF.

3.2. Performance of the Agricultural, Forestry and Food Sectors

Meeting the objective of food security is on top of the list of contributions expected

from the agricultural sector.

Production amounts were approximately 64.4 million tonnes in cereals and other herbal products, 30 million tonnes in vegetables, and 22.3 million tonnes in fruits, beverages and spice crops in 2018. The vegetable and fruit groups have a lower share in terms of agricultural land, whereas their contribution to production is quite high compared to field crops that are primarily a grain, forage, sugar, oil, or fiber crop.

The value of animal production was 225 billion TL. 65% of this was the value of livestock, and 35% was the value of animal products. In 2019 almost all of the 17.7 million bovine animals in Türkiye were composed of cattle, whereas a very small portion was composed of water buffalos. There were 48.5 million ovine animals 37.3 million of which were sheep and 11.2 million were goats. There were 32 million heads of milked animals, of which 19.8 million were sheep; 6.6 million cattle; 5.5 million goats and the remaining small part was composed of water buffalos. Total milk production was 23 million tonnes. In the poultry sector, according to the data for 2018, there were 19 996 cages in a total of 10 879 enterprises. Most of these are composed of commercial meat and egg producing enterprises.

Of an aquaculture production of 628 000 tonnes, 314 thousand tonnes were obtained by fishing and 314 thousand tonnes were obtained by fish farming. Of the fishing production, 284 thousand tonnes were obtained from the sea, 30 thousand tonnes from inland water fishing; and of the breeding production, 209 thousand tonnes were obtained from the sea and 105 thousand tonnes were obtained from inland water farming.

Legal Harmonisation of Agriculture and Food Processing Establishments with EU Standards

One of the eight sub-committees established with the decision 3/2000 dated 11 April 2000 by the Türkiye-European Community Association Council was Sub-Committee No.1 on Agriculture and Fisheries. The sub-committee discussed thoroughly efforts to harmonize national legislation with the EU Acquis in the negotiation chapters 11 (Agriculture and Rural Development), 12 (Food Safety, Veterinary and Phytosanitary Policy) and 13 (Fisheries), the progress made as to the opening and closing benchmarks, and planned activities for the future period in the framework of the National Programme and Accession Partnership Document.

The EU standards expected to be met by IPARD beneficiary agricultural holdings and food processing establishments at the end of investment fall under the scope of Chapter 11 and Chapter 12.

Legislative harmonization efforts continue under IPARD as to the opening benchmarks of Chapter 11 in the fields of agricultural support system, common market organisation, agricultural statistics, geographical indications, organic farming, rural development, etc.

Projects under Institutional Capacity Building Sub-Sector and the Institutional Capacity Building Sub-Sector for Chapter 11 and the CAP conducted in IPA II period (2014-2020) are: Technical Assistance for Capacity Building for Measure Advisory Services of the IPARD II Programme in Türkiye (2014), Technical Assistance for Development of a Strategy for Alignment with Common Market Organisation (CMO) Requirements (2014), Technical Assistance for Strategy Development to Ensure Compliance with Common Market Requirements (2014), Technical Assistance for the Establishment of a Farm Advisory System (FAS) in Türkiye (2014), Technical Assistance (TA) for improving the Awareness of Food Processing Sector and Farmers in terms of European

Environmental and Hygiene Standards and IPARD Support (2015), Technical Assistance for Strengthening Implementation Capacity of Risk Management and Control Activities of Agriculture and Rural Development Support Institution (ARDSI) (2016), and Technical Assistance for FADN: Target 2020 (2016).

In terms of chapter 12, Law 5996 on Veterinary Services, Plant Health, Food and Feed, which lays the legal basis for the harmonisation of the relevant secondary legislation with the EU law entered into force on 13 December 2010. Within the scope of this Law, around 250 pieces of secondary legislation, totally or partially aligned with the EU acquis, have been issued and legislative harmonization efforts continue. The related on-going projects under IPA II period (2014-2020) are Technical Assistance for Control and Prevention of Lumpy Skin Disease (LSD) (2015) and Supply of Oral Vaccination against Rabies in Türkiye (2015).

Chapter 13 has not been opened for negotiation and possible opening benchmarks have not been conveyed by the EU yet. However, studies for development of institutional capacity and alignment with the EU acquis have been carried out under the leadership of Ministry of Agriculture and Forestry. Projects which are being implemented under IPA II (2014-2020) Programme are: Implementation of Stock Assessments in Fisheries Activities (2015), and Capacity Building for Fisheries Producer Organisations and Provincial Agricultural Directorates in line with Common Market Organisation (CMO) of Common Fisheries Policy (CFP) (2016).

The progress regarding Chapters 11, 12 and 13 according to the EU Progress Report 2020 for Türkiye is summarized below:

Chapter 11

It is stated that important steps were taken for the development of an integrated administration and control system (IACS) and the farm accountancy data network (FADN) covering all 81 provinces and integrated into the agricultural production and registration system. It is also mentioned that the agricultural census was not yet complete and the strategy for agricultural statistics remained to be adopted. Policy orientations suggest that Türkiye's agricultural support policy should follow more closely and improve its alignment with the EU common agricultural policy's principles. This includes the need to link area-based payments to cross-compliance standards.

Specific to IPARD, the report states that some progress was made in the IPARD II Programme in 2019. It is mentioned that 3 826 new applications were received and 649 projects were contracted with EUR 65.4 million of EU contribution to investments in agricultural holdings and in processing and marketing, and farm diversification (Measures 1,3 and 7) and 53 Local Action Groups applied for the LEADER measure in 12 provinces. It is also stated that some work was done on the National Rural Network and the implementation of the pilot agri-environment measure continued.

The report states that on quality policy, Türkiye continued to implement legislation on protection of Geographical Indications, which is largely aligned to the EU acquis. The alignment with the EU acquis on principles and implementation of organic farming is well advanced and the Turkish Accreditation Agency accredits organic agriculture control bodies. It is also stated that the farm advisory system remains to be fully harmonised with the EU acquis.

Chapter 12

It is mentioned that some level of preparation in the area of food safety, veterinary and

phytosanitary policy was reached. There was progress concerning enforcement capacity for animal welfare and food safety legislation and food establishments were yet to be upgraded to meet relevant EU standards. It is also emphasized that full implementation of the EU acquis in this area requires significant further work.

Chapter 13

It is expressed that some level of preparation in the area of fisheries was reached. Good progress was made as regards the adoption of key amendments to the fisheries law, on fisheries and aquaculture, resources and fleet management, and inspection and control.

Agricultural, forestry and food sectors

Milk Sector analysis

Türkiye occupies a significant place in global milk production accounting for nearly 2.5% of the world's milk production. According to 2019 data, 90.8% of the raw milk produced in Türkiye was cow milk, 6.3% sheep milk, 2.6% goat milk and 0.3% water buffalo milk. The milk sector in Türkiye has been constantly developing. Considering the data pertaining to the last decade, there has been a steady increase in the number of milk providing animals and the amount of milk production. Milk processing sector is also progressing in parallel to the increase in production.

As per 2019 figures, the number of milked cows in Türkiye was 6 580 753 heads and the total cow milk production was 20 782 375 tonnes. An increase of 49.7% has been seen in the number of milked cows in the last decade. Cow milk production increased by 67.3% over the same period (2010-2019). It is fair to say that there has been an increase in productivity of cow milk production in Türkiye. On the other hand, the number of milked sheep in Türkiye according to 2019 data was 19 836 985 heads with a sheep milk production of 1 521 456 tonnes. The total number of sheep, milked sheep and sheep milk production in Türkiye have constantly risen in the last decade. In this period, the number of milked sheep increased by 87.4%, and sheep milk production increased by 86.3%. The number of milked goats was 5 471 086 heads in 2019. Goat milk production was 577 209 tonnes (Table 3). The demand for and therefore the production of goat milk continues rising thanks to its unique characteristics. Number of milked buffalos and buffalo milk production increased especially during the years between 2010 and 2019.

Table 3. Amount of Milk Production in Türkiye (tonnes)

Year	Cow milk		Sheep milk		Goat milk		Buffalo milk		Total	
	amount	%	amount	%	amount	%	amount	%	amount	%
2000	8 732 041	89.16	774 379	7.91	220 211	2.25	67 330	0.69	9 793 961	100.0
2005	10 026 202	90.26	789 877	7.11	253 759	2.28	38 058	0.34	11 107 896	100.0
2010	12 418 544	91.69	816 832	6.03	272 811	2.01	35 487	0.26	13 543 674	100.0
2015	16 933 520	90.77	1 177 227	6.31	481 174	2.58	62 761	0.34	18 654 682	100.0
2018	20 036 877	90.58	1 446 271	6.54	561 826	2.54	75 742	0.34	22 120 716	100.0
2019	20 782 375	90.51	1 521 456	6.63	577 209	2.51	79 341	0.35	22 960 379	100.0

Source. TURKSTAT, 2020.

When the structure of dairy cattle holdings in Türkiye are examined, it is seen that small-scale family holdings are in the majority. According to 2016 data, the percentages corresponding to the capacities between 1-5 heads, 6-9 heads, 10-19 heads, 20-49 heads, 50-99 heads, 100-199 heads and 200+ heads were 58.0%, 19.0%, 13.9%, 7.3%, 1.4%, 0.3% and 0.1%, respectively. 77% of these holdings has a capacity of less than 10 heads, although the number of large-scale holdings has increased in recent years. The ratio of holdings with more than 20 heads is only 10%. This situation shows that the business structure in Türkiye is insufficient for mass production and the small herd size increases the costs in milk production and complicates the competitive conditions.

The number of milk collection and milk processing establishments are given in Table 4. Although there were 2 160 milk processing enterprises and 6 173 milk collection centres in Türkiye in 2020, the annual capacity of these enterprises were approximately 70 000 tonnes. The excess in the number of enterprises indicates that there are many small and medium-sized enterprises in the sector with limited capacity and quality of production. The high number of small-scale enterprises and the low-capacity utilization rates are negative factors in the sector.

Table 4. Milk Collection and Milk Processing Establishments (by items)

Years	2002	2009	2013	2020*
Milk Processing Establishment	2 160	2 222	2 232	2 379
Milk Collection Centre			5 950	6 173

Source: MoAF, General Directorate of Food and Control (*as of 27.10.2020).

Enhancing the milk production and milk productivity in the country depends on the success of these enterprises and the policies pursued. When it comes to the milk productivity per animal, milk productivity per cow increased from 1 654 kg in 2000 to 3 158 kg in 2019 (91% increase). Milk productivity per sheep increased from 49 kg to 77 kg (57% increase), and milk productivity per goat increased from 57 kg to 105 kg (84% increase) over the same period. Productivity of the sector increases over the years and it is envisaged that it will continue to increase in the years ahead. Capacity usage in the sector is relatively high in addition to productivity. As a result of the field studies conducted by the Ministry of Agriculture and Forestry, it was determined that the capacity usage ratio was 80.6% in the enterprises engaged in cattle breeding and 89.4% in enterprises engaged in sheep breeding.

According to 2019 data, 46% of the milk produced in Türkiye is processed in the industry. This ratio is 94% on average in the EU and varies between 78-100% in EU member states. Thus, the transfer ratio of milk to industry in Türkiye is relatively low compared to EU countries. Processing milk and turning it into products with high added value (butter, cheese, cream, etc.) is crucial for the development of the sector and for the benefit of all stakeholders.

Products like processed milk, milk powder, cream, cheese, whey, butter, yoghurt drink (ayran), yogurt, etc. derived from the milk transferred to the manufacturing sector are mostly consumed domestically.

Table 5. Türkiye's Foreign Trade in Milk and Dairy Products (\$)

Year	Exports	Imports
2013	308 324 974	163 026 332
2014	375 913 242	179 735 917
2015	305 964 733	135 218 158
2016	360 455 931	117 781 252
2017	365 493 966	113 060 910
2018	366 400 862	109 931 835
2019	409 142 499	111 092 929

Source: TURKSTAT, 2020.

Exports increased from approximately 225 million \$ in 2012 to 409 million \$ in 2019. Imports decreased from 163 million \$ in 2013 to 111 million \$ in 2019. According to 2019 data, of a total export value milk and dairy products worth nearly 409 million \$, 42.7% was composed of cheese, 28.2% of drinking milk and cream. These are followed by 11.0% ice cream, 9.8% whey and 7.3% other products. The total value of dairy product imports of Türkiye worth 111 million \$ in 2019 was composed of 51.7% butter, and 37.1% cheese. These were followed by 8.0% milk-cream and 3.2% other products.

In country-wide research conducted in Türkiye, it was determined that in 98.0% of cattle breeding holdings, holding owners worked for 241.1 days a year on average. According to these data, it can be said that the cattle breeding activity provides employment to nearly 2.2 million people in their own enterprise. In sheep breeding enterprises, 98.7% of enterprise owners participate in the labour force. In 71.0% of the enterprises, at least one member of the family participates in the labour force. Enterprise owners work for 266.9 days, whereas family members work for 225.8 days a year. It was determined that 19.0% of cattle breeding enterprises and 48.0% of sheep breeding enterprises employed labour force from outside the family.

Treatment of waste in the holdings is a focal issue for protecting natural resources, tackling climate change and producing renewable energy. The huge amounts of organic waste like cow manure produced imposes to seek for a new approach and new methods to manage organic waste to avoid pollution of natural resources. From the other side, cow manure presents many properties that can be useful as renewable energy and soil organic natural amendment. Türkiye has high animal manure potential originating from 68% bovine, 5% ovine and 27% poultry that can be used for renewable energy and bio-fertilizer production.

With regard to the control and follow-up regarding animal health in the recent years, there have been significant improvements related to animal transfers between provinces and regions. However, regarding animal welfare, there are serious deficiencies in terms of the status of stables/barns and the usage of necessary materials in enterprises for this purpose. In many enterprises in the sector, animal housing is insufficient and there are problems of exceeding capacity in the transfer of animals. The animals kept in animal housing and meadows are in excess of the owned capacity. Bacteria and somatic cell checks of produced milk are conducted in a limited number of regions. There is no widespread system in this area. On the other hand, although the number of milk collection centres is quite high (6 173), most of them are composed of non-modernized enterprises. Milk collection system needs to be improved in terms of its logistic

elements, particularly its technical infrastructure. Raw milk analysis system needs to be more widespread and the number of reference laboratories needs to be increased.

Milk Sector Needs

Milk production and milk processing sector in Türkiye is in development. There has been an increase in production and exports in the sector in recent years. There is a positive expectation for the future. Although there has been a quantitative increase in raw milk production, there are still deficiencies in quality milk production and achieving hygiene norms. Raw milk yield per animal is low. The producers lack knowledge on the selection of animal breed suitable for the region, animal feeding, feed crop production, animal welfare. In terms of transferring the milk to the cold chain and conducting necessary analyses, there are problems with insufficient infrastructure in milk collection sector. The number of small and medium-sized enterprises in the milk processing sector is higher. There are a few companies that can withstand the competitive pressure in domestic and foreign markets in the near future. Although necessary steps have been taken regarding legal regulations in the EU accession process, implementation deficiencies still persist.

Milk producing holdings and milk processing enterprises have significant deficiencies in terms of environmental protection such as treatment of waste water and animal wastes, use of renewable energy, recycling of solid wastes and elimination of emissions and they need to be supported in this regard.

Red Meat Sector analysis

Türkiye's red meat production reached 1.2 million tonnes by 2019. According to the official report, the production was composed of 1.07 million tonnes of cattle, 109 382 tonnes of sheep, 16 536 tonnes of goat and 73 tonnes of water buffalo meat. Number of animals per year is given in Table 6.

Table 6. Number of animals per species (head)

Years	Water Buffalo	Cattle	Goat	Sheep
2000	165 000	11 054 000	7 774 000	30 256 000
2005	103 900	10 069 346	6 609 937	25 201 156
2010	87 207	10 723 958	5 128 285	21 794 508
2015	121 826	14 223 109	10 344 936	31 140 244
2019	184 192	17 688 139	11 205 429	37 276 050

Source: TURKSTAT, 2020.

In Türkiye, the cattle asset that constitutes 99% of the total bovine assets is composed of culture, culture crossbreed and indigenous cattle breeds. According to 2017 data, culture-breed cattle constituted 49%, cross-breed cattle 41%, and indigenous breed cattle 10% of the total cattle assets. The most prevalent culture breeds in Türkiye are Holstein Friesian breed, followed by Simmental, Brown Swiss and Jersey breeds. There has been an increase in recent years in Hereford and Angus breeds, which have become prominent due to their meat yielding properties. According to 2019 data, cattle had a share of 90%, goats 1% and sheep 9% in the total red meat production in Türkiye.

In the United States and Australia, average annual meat consumption per person is over 100 kg, whereas in most of the Western European countries a person consumes 80-90 kg meat annually. This figure is 10-15 kg in Türkiye showing the development potential

of the sector.

Red meat production is conducted in enterprises that are labour intensive and based on family labour force and in big enterprises which are engaged in a more controlled and economic-scale production. Over 80% of families engaged in animal husbandry have a cattle asset of less than 10 heads and cannot proceed with industrial production due to the traditional nature of their production techniques.

In Türkiye, the capacity of red meat producing enterprises is categorized as family businesses, small scale enterprises and extensive enterprises. It would be appropriate to support these enterprises with suitable incentive programs considering the internal dynamics and growth potential of such enterprises. The share of family businesses and small-scale enterprises is quite high. According to 2019 data, when the enterprises owning bovine animals (cattle and buffalo) were analysed by size, enterprises owning 1-4 heads of animals constituted 44.5%, enterprises owning 20-49 heads constituted 24.8% of the total amount. These ratios for enterprises owning ovine animals (sheep and goats) were 28.5% for 50-149 heads and 36.3% for 300+ heads of animals.

There is a total of 635 slaughterhouses in Türkiye; 210 owned by the private sector and 425 owned by the state. The red meat to be processed is sent to processing establishments after being slaughtered. The meat that is not going to be processed is sent to sales points like butchers', department stores, wholesalers or for export. Designing slaughterhouses, including small enterprises far from city centres, as small capacity slaughterhouses scattered in rural areas instead of large-capacity central slaughterhouses will reduce unregistered slaughters and the handicaps related to food safety.

Although there have been developments in production and consumption of red meat in Türkiye, these are not at the desired level to ensure productivity and profitability due to the structural problems such as the shortage of roughage, high input costs. The production has not become widespread enough in the economy of scale. To meet nutritional needs of the increasing population, it is expected that the meat sector competitiveness reflected in its production and productivity should further increase while its environmental impact be limited. This includes agricultural holdings with small-scale production model which have however a considerable production potential for sustainable production.

The main farm waste of meat production is methane coming from manure. Livestock production is the main contributor within agricultural sector in terms of methane emissions. A projected waste management is important for both the sustainability of natural resources and the holding's economy. The livestock rearing by-product in form of manure should also become part of the farms' circular economy.

Red Meat Sector Needs

Improvements in issues such as ensuring price stability, procurement of quality raw materials (livestock for slaughter, carcass meat etc.), production technology, quality and hygiene practices, food safety, animal health and welfare should be achieved.

Awareness-raising and training activities should be carried out on the issues of calf losses and deaths, protective measures against animal diseases, environmental protection, herd management and animal welfare practices at the farm level, productivity in terms of reproduction and fertility, improvement of care-feeding conditions, in terms of financial losses created at the enterprise level, regional and

national scale. It is necessary to encourage young entrepreneurs who have professional equipment and competence in cattle breeding and all animal husbandry sub-sectors, to provide appropriate credit and financing opportunities for investment, modernization and capacity building.

To minimize negative effects of meat production on natural resources, management of waste is crucial and the agricultural holdings must be supported in this regard. Also, the renewable energy investments transforming manure into energy such as biogas should be supported.

Poultry Meat and Egg Sector analysis

There is a growing trend in the production and consumption of chicken meat, which contains less fat for health reasons and is more affordable compared to red meat. Poultry farming is on top of the list of the most developed sectors in Türkiye. Egg production in Türkiye increased by 68% in the last decade and Türkiye had the ninth place globally in egg production with 19.9 billion eggs in 2019. Türkiye has become a country that meets around 15% of global egg exports and is the second largest global exporter following the Netherlands. With a chicken meat production of 2.1 million tonnes, Türkiye is a self-sufficient country with a high export potential. Around 22% of chicken meat produced in the country is exported. 85% of broiler hen assets is met by Marmara, Aegean, and Mediterranean regions, whereas 62% of laying hens are met by Aegean, West Anatolia and East Marmara regions.

Table 7. Türkiye poultry assets (by item)

Years	Laying Hen	Broiler	Turkey	Goose	Duck
2010	70 933 660	163 984 725	2 942 170	715 555	396 851
2015	98 597 340	213 658 294	2 827 731	850 694	398 387
2018	124 054 810	229 506 689	4 043 332	1 080 190	532 841
2019	120 725 299	221 841 860	4 541 102	1 157 049	519 575

Source: TURKSTAT, 2019

Poultry sector has been one of the leading sectors in Türkiye in the last decade. In 2010-2019 period, there has been a sustainable increase in the number of laying hens, broilers, turkeys, geese and ducks of 70.2%, 35.3%, 54.3%, 61.7% and 30.9% respectively. Total poultry assets in Türkiye are composed of 348.8 million items. Broilers and laying hens constitute the majority of poultry animals. Compared to these species, the supply of turkey, goose and duck are fairly low in Türkiye similar to the rest of the world.

Table 8. Türkiye poultry products

Years	Chicken eggs (Thousand items)	Chicken		Turkey	
		Number of slaughtered animals (item)	Meat (tonnes)	Number of slaughtered animals (item)	Meat (tonnes)
2010	11 840 396	843 897 793	1 444 059	3 656 578	31 965
2015	16 727 510	1 118 719 413	1 909 276	5 359 763	52 722
2018	19 643 711	1 228 533 262	2 156 671	6 778 909	69 536

2019	19 898 126	1 207 088 021	2 138 451	6 188 060	59 640
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Source: TURKSTAT, 2019

Number of eggs from laying hens was 19.9 billion items in 2019. Still in 2019, 1.2 billion items of broilers were slaughtered and a resulting 2.1 million tonnes of chicken meat was derived. Türkiye meets nearly 2% of global broiler production with this amount. The number of turkey slaughtered in the same year was 6.2 million items, and the resulting meat derived was 59.6 thousand tonnes.

In Türkiye, approximately 600 thousand people are employed in the sector such as raw material producers, farmers, tradesmen related to the sector, and those who work in fodder, medicine-vaccine, by-industry, shipment and marketing branches.

Considering the foreign trade figures pertaining to the sector, Türkiye's self-sufficiency ratio in the egg sector is 159%, 126% in chicken meat and 119% in turkey meat. Export potential and domestic demand for these products need to be further enhanced.

Number of enterprises engaged in the poultry sector was 10 992 as of 2019. As for the nature of the enterprises; 74 were hatcheries, 338 were broiler breeder farms, 7 807 were commercial broiler poultry farms, and 2,837 were commercial laying hen farms. Total number of cages reached 20 222 as of 2019, of which 2 439 (12.06%) were broiler breeder cages, 12 725 (62.9%) were commercial broiler poultry cages, and 5 058 (25%) were commercial laying hen cages. In terms of the number of enterprises and cages from 2009-2019, the increase was 7% and 25% respectively; yet the highest increase was in the number of commercial laying hen enterprises (163%) and cages (62%) (Table9). Total number of slaughterhouses in 2019 was 64.

Table 9. Number of enterprises and cages in the poultry sector (by items)

Years		Hatchery	Broiler breeder	Commercial broiler poultry	Commercial laying hens	Total
2010	Enterprise	79	277	8 908	1 072	10 410
	Cage	-	1 657	11 623	3 162	16 442
2015	Enterprise	75	354	9 676	1 113	11 296
	Cage	-	2 390	14 415	3 229	20 034
2018	Enterprise	75	367	7 655	2 715	10 879
	Cage	-	2 388	12 542	5 066	19 996
2019	Enterprise	74	338	7 807	2 837	10 992
	Cage	-	2 439	12 725	5 058	20 222

Source: TOB, 2020

Organic farming draws a lot of interest today. According to 2019 data, organic poultry breeding was conducted in 22 provinces of Türkiye. 108 producers were engaged in organic production with 844 319 heads. 697 tonnes of meat and 179.8 million items of organic eggs were derived from these chickens. There is an increasing demand in organic production although it has a fairly low share in the total production.

Poultry Meat and Egg Sector Needs

There are many integrated facilities in the poultry sector in Türkiye, and these enterprises produce in accordance with EU standards. Therefore, no support will be given to newly established businesses within the scope of the programme. Only modernization of existing facilities is within the scope of support.

Although this sector is well developed, the product quality and competitiveness of the sector should be further improved. For broiler production, the small and medium size holding capacities are between 15 000-100 000 while these capacities are between 20 000-100 000 for laying hens.

It is important for rural development purposes to channel the subsidies to be provided by the government to the poultry sector for the modernization of the small and medium scale enterprises in the sector. Lack of proper management and organisation prevent these enterprises from making adequate cost and profitability analyses. Offering trainings on management organization, environmental standards to holdings and enterprises, encouraging the employment of educated and qualified staff, ensuring cooperation between NGOs, universities and relevant institutions, supporting investments in biosecurity, renewable energy, ensuring widespread usage of technology and automatic systems are important issues for the sector.

Making investments related to circular economy as well as renewable energy production aiming environmental protection and building resilience to climate change is crucial but cost-increasing for many small and medium scale holdings and enterprises in the sector, so they must be supported.

Fruit, Vegetable and Other Horticultural Plants Sector analysis

Türkiye is a country home to very fertile and extensive agricultural lands favourable for production with a high ecologic diversity. This makes it a rare country where fruits and vegetables can be grown in good conditions and in high quality. Table 10 shows the fruit and vegetable production figures. According to 2018 data, Türkiye has the 5th place in global fruit production and the 4th place in global vegetable production. Although fruit production increased by 22.7% and vegetable production by 16.85% in Türkiye in the last 9 years, the ratio remained low.

Table 10. Türkiye fruit and vegetable production figures

Years	Fruit Production (Tonnes)	Vegetable Production (Tonnes)
2010	19 229 237	20 655 850
2015	20 295 899	23 696 207
2016	21 781 448	24 421 408
2017	23 154 681	24 977 476
2018	23 598 623	24 137 627

Source: FAO, 2020

When foreign trade figures for 2018 are considered, Türkiye had the ninth place in global fruit exports with a share of 3.21%. It ranked the 15th with an export value of 1.9 billion \$ in the vegetable sector. Looking at the sub-components, the highest amount of exports were conducted in cherry-sour cherry (22%), grape (18%), pomegranate (12%), peach (11%) and apple (11%). In vegetables, the highest amount of exports were conducted in tomato (47%), pepper (19%), onion (8%) and squash (8%).

Although Türkiye is a country that has attained self-sufficiency in many types of fruits-vegetables, the percentage is low for some products. This is mostly the case in the fruit sector for walnut (74.2%), mulberry (97.8%) and banana (79.1%). Self-sufficiency is low in vegetable products such as watermelon (99.3%), dry onion (97.4%) and dry garlic (99%).

In Türkiye, the main problem of agricultural holdings in fruits and vegetable sector is land. Production growth is limited due to factors such as agricultural holdings not owning sufficient land which is also very fragmented where parcels are located far from each other. This situation leads to a low number of holdings with high profitability and productivity.

Agricultural activities are the main constituent of the food sector Türkiye. The dynamic structure created by the mutual relation between the Türkiye and consumers, the environment, energy, technical and technological factors constantly require organising plans and strategies. The number of enterprises in the food sector increased from 33 727 in 2010 to 49 205 in 2018; corresponding to an increase of 45%. 2 615 of these enterprises are engaged in processing and storing fruits and vegetables. Food industry is important in terms of processing the products yielded by the fruit and vegetable sector and transforming them into products with high added value. The share of abovementioned enterprises in the food industry is 5.33%. Increasing the number of these enterprises is important for diminishing the losses in the sector.

The number of people working in the food industry increased from 353 591 persons in 2010 to 514 971 persons in 2018. Among the people employed in the food industry, the share of those working in relation to the processing and storage of fruits and vegetables was 12.97% in 2018. The number of people working in this area in 2018 was determined to be 66 783 persons.

Fruit, Vegetable and Other Horticultural Plants Sector Needs

Fruit and vegetable processing enterprises should be supported to minimise post-harvest losses, to ensure their compliance with EU standards and promote more environmentally friendly production methods while providing higher food safety and quality. This will be achieved by enabling producers to adopt Good Manufacturing Practices and establishment of HACCP monitoring mechanisms.

In terms of increasing productivity and production in the fruit and vegetable sector, it is important to make technological investments, increase the number of storage facilities as well as supporting renewable energy investments.

Fisheries and Aquaculture Sector analysis

Fisheries production is one of the oldest economic, social and cultural activities and becomes more and more important in Türkiye. However, when the fishery resources are not used in a balanced manner, this can lead to economic, social and ecological problems. In 2018 Türkiye ranked the 46th in wild catches. A major amount of fisheries production comes from small pelagics.

Table 11. Amount and value of aquaculture products by years

	FISHING		AQUACULTURE		TOTAL	
Years	Amount (ton)	Value (TL)	Amount (ton)	Value (TL)	Amount (ton)	Value (TL)
2000	503 345	367 840 650	79 031	139 552 950	582 376	507 393 600

2005	426 496	1 574 988 300	118 277	704 283 000	544 773	2 279 271 300
2010	485 939	1 078 515 200	167 141	1 066 778 600	653 080	2 145 293 800
2015	431 907	1 245 020 381	240 334	2 569 208 590	672 241	3 814 228 971
2016	335 320	1 340 878 317	253 395	3 239 320 980	588 715	4 580 199 297
2017	354 318	1 535 702 592	276 502	4 049 199 270	630 820	5 584 901 862
2018	314 094	1 852 664 426	314 537	5 606 828 410	628 631	7 459 492 836
2019	463 168	2 380 414 908	373 356	7 694 124 480	836 524	10 694 124 480

Source: BSGM, 2020; TURKSTAT, 2019

Fishing activities dominate the sector compared to aquaculture. As of 2019, 55% of production was derived from fishing activities with an amount of 463 168 tonnes. Amount of production derived from fishing activities has diminished in recent years. Proper management of stocks is crucial for fishing activities. Anchovy was the leading product with 262 544 tonnes according to 2019 figures followed by sprat (38 078 tonnes), horse mackerel (19 505 tonnes) and pilchard (19 119 tonnes) production.

Türkiye is an advantageous country in terms of aquaculture farming owing to its geographical location. It is surrounded by the sea on three sides and rich in sources of water available for warm and cold water production, which demonstrates that the sector has a high potential. Research conducted shows that the inland water sources of Türkiye have an aquaculture production potential of around one million tonnes per year.

There were 434 enterprises engaged in aquaculture farming in Türkiye. The total capacity of these enterprises was 373 356 tonnes in 2019. The last ten years has seen a 123% increase. In the course of time, farming activities moved from inland water production to marine farming. 68.8% of the products derived from farming activities in 2019 were obtained from marine farming. As for farming activities per species, the majority of production was composed of sea bass (137 419 tonnes), trout (125 745 tonnes) and sea bream (99 730 tonnes) respectively. Türkiye houses 20 marine fish hatcheries with an annual fry capacity of 815 million and 55 inland water fish hatcheries with an annual fry capacity of 541 million that are owned by the private sector.

In Türkiye, it is seen that aquaculture farming grows at an enormous pace, and feed industry develops accordingly. There are 23 fish feed establishments in Türkiye. Increasing the number of such establishments is important especially for the activities of the enterprises engaged in aquaculture farming.

Aquaculture products are offered to the market as either live, fresh and refrigerated forms in developing countries and in frozen or processed and packaged form in developed countries. Although Türkiye has seen positive developments in its aquaculture products processing and evaluation industry in recent years, it is observed that the supply of aquaculture products to the consumer is in the form of fresh consumption.

Table 12. Türkiye's Aquaculture product imports and exports between 2010 and 2019

Years	Exports	Imports
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	Amount (tonnes)	Value (\$)	Value (TL)	Amount (tonnes)	Value (\$)	Value (TL)
2010	55 109	312 935 016	471 459 989	80 726	133 829 563	200 395 897
2015	120 963	691 552 284	1 877 838 802	110 761	250 969 660	685 467 749
2016	145 440	790 232 095	2 398 048 797	82 074	180 753 629	548 878 092
2017	157 061	855 088 029	3 129 448 087	100 446	230 127 804	841 444 645
2018	177 074	952 001 252	4 579 495 053	98 297	188 951 045	898 785 064
2019	200 226	1 025 617 723	5 818 776 189	90 684	189 438 745	1 076 277 706

Source: BSGM, 2020; TURKSTAT, 2019

Türkiye has managed to increase its productivity and exports in aquaculture farming parallel to the recent developments in production and processing technologies. Amount of products exported by Türkiye in the last decade has risen by 363%. The import figure is quite low compared to exports.

In fish flour, export figures have increased by 14% in the last ten years in terms of amount; however, the desired success could not be attained in fish oil and there has only been an increase of 4.3%. Türkiye is a country with high external dependency ratio in fish flour and fish oil products. In aquaculture sector, in the post-2000 period, self-sufficiency ratio has not changed drastically and remained at around 95-115%, and was calculated as 115.1% in 2019. Dependency on import index value reached as high as 10% in 2008 and was measured as 12.5% in 2019. Exportability index value reached 10% in 2011, and was 27.5% in 2019 due to the faster increase in exports.

According to the information provided by BSGM for 2019, there were 18 055 fishing boats fishing at sea and in inland waters. 15 315 of these boats were active at sea and 2 740 were used in inland water fishing.

The number of such enterprises has increased depending on the growth in the aquaculture production in Türkiye. The number of enterprises engaged in aquaculture production increased from 1 245 in 2002 to 2 127 in 2019. 62.6% of enterprises are constituted by small enterprises with a capacity of 0-50 tonnes. Enterprises with a capacity of over 500 tonnes have a share of 14.2% in the total.

There are 269 processing facilities in the aquaculture sector. 243 of these establishments are engaged in processing fishing products, 10 in processing bivalves, 16 in frog leg and snail. The major processed fish products are frozen fish; dried, smoked and tinned fish; fish flour and fish oil fish feed, and canned fish. Since fresh fish consumption is predominant in Türkiye, the processing sector has not developed sufficiently.

Türkiye is one of the 42 Union for Mediterranean countries that adopted the Ministerial Declaration on Sustainable Blue Economy on February 2021 which includes commitments on sustainable food from the sea: fisheries and aquaculture.

In the Black Sea, Türkiye participates to the regional cooperation framework on sustainable blue economy, endorsed in 2019 by the Bucharest Ministerial Declaration by the six coastal countries and the Republic of Moldova and including sustainable fishery and aquaculture in the region.

Fisheries and Aquaculture Sector Needs

The number, capacity and technological equipment of processing facilities need to be enhanced in order to produce high added-value products and to maximize the sector's

contribution to the economy.

The enterprises in the sector should be supported in terms of making aquaculture management plans in accordance with EU standards. The investments including energy saving actions, renewable energy production, waste management, waste water treatment also need to be supported as well as the circular economy-type investments.

Forestry Sector analysis

Türkiye is featured as a rare country that has been able to increase its forest assets over the years. Multi-purpose afforestation on suitable areas and soil preservation efforts have been conducted in the country, which helped increase forest areas on one hand and prevent erosion and sediment transportation on the other. This has ensured the formation of recreation and ecotourism areas, new carbon sinks and oxygen resources. In addition, it was targeted to contribute to the local community economy especially with the afforestation activities conducted in income yielding species.

The forest assets of Türkiye are composed of 22 740 000 ha, accounting for nearly 29% of the country's surface area. 13 264 429 ha of normal closed forest areas constitute 57.84%, and 9 668 571 ha of fragmented closed forest areas constitute 42.16% of the overall forest area. 94.43% of forests are managed as long-standing forest, and 5.57% as coppice forest; the total tree wealth is approximately 1.7 billion m³, and the increment, which is an indication of wood raw material yield strength of forests, is around 47.4 million m³.

The total annual increment in forests that was 41 million m³ in 2012 reached 47.4 million m³ in 2020 as a result of forestry practices. The growth in high forests has an impact on this result, but acquiring new forest areas and the maintenance efforts in forests have a huge impact as well.

Forestry Sector Needs

With the Eleventh Development Plan, it is targeted to increase the contribution of forests to the economy through sustainable forest management in Türkiye; and in this scope, efforts are ongoing to complete the National Forest Inventory study, strengthen the capacity to combat diseases, pests and wildfires in forestry; maintain the support provided for forest villagers within certain programmes, raise professionalization through training activities in order to increase quality production and labour productivity in forestry, facilitate industrial plantations with fast-growing species. In order to meet the wooden raw material needs, expand the use of wood and set standards.

Advisory Services

Agricultural Advisory System is a system established in order to meet information, technical and methodological needs of owners of agricultural holdings on time and at a sufficient level, reduce production and operational costs, increase fertility and quality, prevent inadequate practices in the agriculture sector and the unfavourable conditions that appear in this regard. Advisory services are to help improve the economic and environmental performance of the holdings while also sharing information and knowledge on new technologies, innovations and farming practices and methods.

Currently, agricultural extension and advisory activities are implemented under the responsibility of ministry of agriculture, NGOs (chambers, unions, associations etc.), universities, cooperatives, consultancy firms and individual consultants. In Türkiye, certified agricultural advisory practice was launched in 2006 to create a pluralistic

agricultural extension and advisory system, meet the information need of farmers in parallel to the rapid developments and changes in the field of agriculture and ensure safe food supply from farm to table.

Communique on Agricultural Subsidies for Agricultural Extension and Advisory Services published in the Official Gazette no 31321 dated 01.12.2020 (Communique No: 2020/35) aims to support agricultural holdings and individuals and organisations offering agricultural advisory services with a view to ensuring a pluralistic, effective and efficient structure for the agricultural extension and advisory services system. The Communique covers the responsibilities of agricultural advisors and organisations to provide agricultural advisory services for agricultural holdings, application procedures for individuals and organisations that will apply for subsidies, subsidy payment criteria, duties and mandate regarding subsidy audits, withdrawal of subsidies as well as the procedures and principles on criminal liabilities.

More information on advisory services in Türkiye can be found in the 17th unit named “Technical and Advisory Services”.

Vocational Education

Other than information services provided by provincial directorates of MoAF, there is no formally established system providing vocational training to farmers. MoAF conducts studies on training needs of farmers according to Strategic Plan (MoAF, 2019-2023). This includes Farmer Education-Extension and Provincial Agricultural Extension Projects, Agricultural Innovation and Information System Studies, Agricultural Business Advisory, Certified Agricultural Advisory Services, Women, Youth and Their Families in Rural Areas and Other Special Policy Requirements for groups (children, seasonal agricultural workers, refugees, etc.) Studies, In-Service Training, Handicraft Training Activities, Printed Publication Production, Video and Audio Production Promotion, Fairs and Organizations.

The ongoing programs on Farmer Training and Extension Activities are prepared and implemented by the provincial directorates. Under the scope of training programs, training and extension activities are organised for farmers on all the issues covering vegetative and animal production through using various extension programs prepared to increase knowledge and skills of farmers, enable an increase in their production, raise their level of income and quality and standards of the products.

Under the scope of extension programs of Provincial/District Directorates, as of September 2019; 2 149 activities (farmer study visits, panels, conferences etc.) were organised and 353 989 farmers participated in these events. Trainings were provided for 24 799 farmers in 1 311 farmer courses, 539 707 farmers in 40 681 farmer meetings, 32 342 farmers in 9 185 demonstrations and 5 510 farmers in 164 farm days. 287 363 printed and visual materials were prepared to be used in the mentioned training activities.

Rural Credits

A protocol was signed between Agriculture and Rural Development Support Institution (ARDSI) and 20 banks whose names are shared in ARDSI’s website in order to support the IPARD Programme. Applicants specifying in their application package that they will use credits to implement their project could obtain the credit letter of intention requested by the institution from just one of the relevant banks. Though the banks offer

credits based on a fixed interest rate, this rate is lower than the credit rates offered by commercial banks in the market. In addition, the interest rates are even lower with the State's subsidised interest support. Moreover, "Young Farmers" and "Women Entrepreneurs" are also included in the credit interest rate reductions applied to rural credits by Ziraat Bank. The Banks provide consultancy and information services for agricultural investments in addition to offering credits.

A protocol was signed between Agriculture and Rural Development Support Institution (ARDSI) and the General Directorate of the Central Union of Agricultural Credit Unions for the IPARD Programme. Applicants specifying in their application package that they will use credits to implement their project could obtain the credit letter of intention requested by the institution from Agricultural Credit Unions.

It was made possible to use credits lower than the commercial interest rates in the market to support agriculture provided that recipients meet the conditions stated in the Decision on Offering Investment and Working Credit with Low Interest Rates for Agricultural Production by Ziraat Bank Inc. and Agricultural Credit Unions.

3.3. Environment and Land Management

Türkiye has a total area of 783 562 km² consisting of 98% of continental land and 2% of dam and lake area. Approximately 48% (383 800 km²) of this is agricultural land.

Table 13. Breakdown of agricultural land by years in Türkiye (1000 hectares)

Years	Total Agricultu ral Land	Cultivated Land	Fallow Land	Vegetable Gardens	Land for Fruits, Crops for Beverage and Spices	Meadows and Pastures
2001	40 967	17 917	4 914	909	2 610	14 617
2002	41 196	17 935	5 040	930	2 674	14 617
2003	40 644	17 408	4 991	911	2 717	14 617
2004	41 210	17 962	4 956	895	2 780	14 617
2005	41 223	18 005	4 876	894	2 831	14 617
2006	40 493	17 440	4 691	850	2 895	14 617
2007	39 504	16 945	4 219	815	2 909	14 617
2008	39 122	16 460	4 259	836	2 950	14 617
2009	38 912	16 217	4 323	811	2 943	14 617
2010	39 011	16 333	4 249	802	3 011	14 617
2011	38 231	15 692	4 017	810	3 091	14 617
2012	38 399	15 463	4 286	827	3 201	14 617
2013	38 423	15 613	4 148	808	3 232	14 617
2014	38 558	15 782	4 108	804	3 243	14 617
2015	38 551	15 723	4 114	808	3 284	14 617
2016	38 328	15 575	3 998	804	3 329	11 696
2017	38 002	15 532	3 697	798	3 343	11 696
2018	37 817	15 421	3 513	784	3 457	11 696
2019	37 036	15 378	3 387	790	3 525	11 696

Source: TURKSTAT, 2020.

The share of sown and unsown agricultural land corresponds to roughly 30% of Türkiye's surface area and its 5% is used for vegetable and fruit production. Of the remaining 25%, 20% is cultivated and the rest is fallow land. There has been an increase by 10% of agricultural land used for only growing fruits.

The country has a mountainous terrain having an average altitude of 1 132 m, with the highest 5 185 m (Ağrı Mountain), surrounded by coasts at the North (Black Sea), South (Mediterranean Sea) and the West (Aegean Sea). Numerous mountain ranges run generally parallel to the northern and southern coasts surrounding the central undulating Anatolian Plain. These ranges reach a height of 500 m in the west and over 2 000 m in

the East.

Türkiye is located between the temperate and subtropical climate zones. Being surrounded by three seas, the position of the mountains and the variety of land forms led to different types of climate in Türkiye. Milder climate conditions are observed in the country's coasts together with the impact of seas. North Anatolian Mountains and Taurus Mountain Range prevent the impact of seas from reaching inner regions. Therefore, continental climate characteristics are visible in the country's inner regions. Extensive coastlines and high mountains are the main reasons of the climatic variations. As a result of geographical characteristics, regional climate characteristics are observed. For example, while the average rainfall in the country is 670 mm, this figure decreases to 250 mm in the Central Anatolia and increases to 2 500 mm in the coastal lines of the East Black Sea Region.

The main characteristics of Türkiye's natural flora are pasture-meadows, forests and moors. The flora of the Black Sea Region is forests including coniferous trees such as pines, spruce trees and fir trees. On the western and southern regions under the sub humid mild Mediterranean climate, together with topography, typical Mediterranean vegetation is seen. Different maquis types as wild olive, carob, oak, ash tree, hackberry, stone pine, daphne, liquorice, myrtus and vitex are some examples.

Central parts of Anatolia are semi-arid, with the steppe being the main characteristic. Examples of vegetation include annual or perennial scrubs and thornbushes (veronica, eryngium, etc.) and clover, common vetch, barley and fodder plants. Flora of the East Anatolia is pastures and meadows because of high mountains, however deciduous and pine forests can also be seen.

Land abandonment and marginalisation

Migration from rural to urban areas is still ongoing in Türkiye due to undesirable socio-economic conditions and lack of infrastructure in rural areas. Loss of population negatively affects rural areas and environment. Land abandonment is especially common in areas with low fertility in terms of agriculture.

As a result of urbanisation, agricultural lands around metropolitan areas are started to be used for residential or commercial purposes. A certain part of Türkiye's total agricultural land has shifted in years and is no longer classified as agricultural land because of the industry and urbanisation. It is seen that agricultural land reduced by 9.6% in 2019 in comparison to 2001. However, the applicable Soil Conservation and Land Use Law stipulates the procedures and principles to ensure the preservation and improvement of soil by preventing natural or superficial loss of soil and loss of its quality as well as planned use of land in compliance with the principle of sustainable development prioritising the environment.

Soil quality and erosion

Türkiye is extremely vulnerable to desertification/land degradation, erosion and drought due to its geographical location, climate, topography and soil conditions.

As per Desertification Vulnerability Map, one of the most important studies on desertification/land degradation in Türkiye, desertification vulnerability is high for 22.5%, while it is medium for 50.9% of the country. Furthermore, according to national desertification criteria and indicators specified in Türkiye's Desertification Model, the main elements of desertification/land degradation are listed as climate, water, soil, land cover and use, topography, geomorphology, socio-economy and management.

Inadequate interventions of people in nature and excessive use of natural resources increase the erosion even more. Farming in marginal areas, wrong tillage (ploughing in the slope direction, with the wrong tools and machinery, etc.), failure to take on-farm measures for soil and water protection (field levelling, in-field drainage, saline and alkaline soil improvement, etc.) cause a decrease in efficiency and productivity of soil. As a result, vegetation and physical structure of soil weaken and intensity of erosion increases. Türkiye is faced both with water and wind erosion; Table 14. shows their amount and degrees.

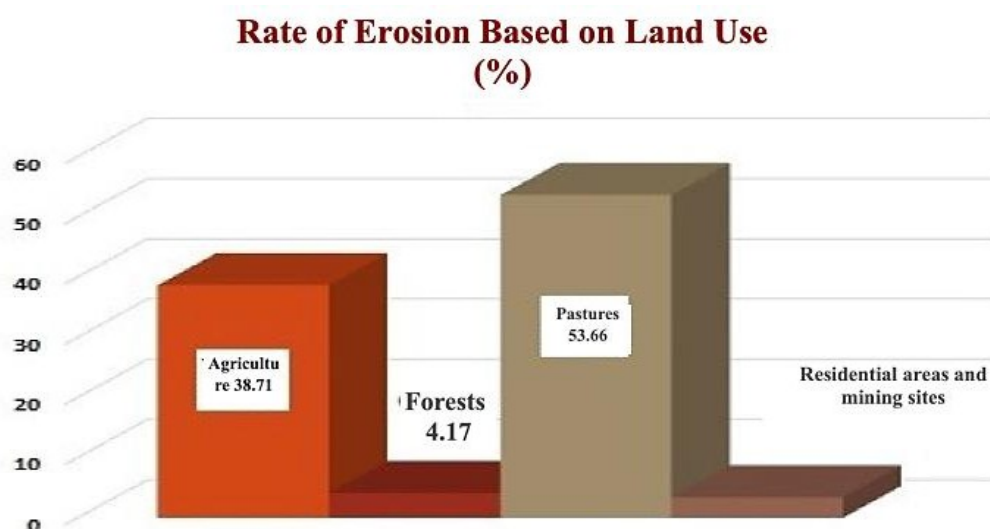
Table 14. Amount and Degrees of Water and Wind Erosion in Türkiye by 2019

	EROSION DEGREE	AFFECTED AMOUNT (million ton)
WATER EROSION	Very light	387
	Light	123
	Medium	51
	Intense	38
	Very intense	43
WIND EROSION	None	3.56
	Very light	6.78
	Light	1.99
	Medium	2.36
	Intense	0.95
	Very intense	1.49

Source: <https://cevresehgostergeler.csb.gov.tr/erozyon-tehlikesi-altindaki-alanlar-i-85769>

As mentioned in 2019-2030 National Strategy and Action Plan to Combat Desertification, 46% of Türkiye's total area has a slope over 40% while more than 62.5% of its area has over 15% of slope. In addition, the country faces a serious erosion problem in the forests, pastures and agricultural land in parallel to its climate, topography, soil characteristics and socio-economic circumstances. Effective factors in loss of soil in Türkiye are: precipitation by 14.26%, soil structure by 3.36%, topography by 47.55%, and vegetation by 34.82%.

Table 15. Erosion Based on Land Use



Source: <https://www.tarimorman.gov.tr/CEM/Menu/32/Erozyon-Kontrolu>

49% of existing agricultural lands are exposed to mid-level erosion while 8% is exposed to extreme erosion.

The main causes for the occurrence of accelerated erosion in Türkiye are deforestation, overgrazing of pastures, and inadequate farmland management methods (inappropriate tillage, stubble burning, abandonment of rural infrastructure such as terracing, lack of soil cover, insufficient presence of landscape features, and inappropriate or excessive irrigation).

Over-irrigation, lack of drainage or poorly maintained drainage channels and leakage of fertilisers decrease soil productivity and increase salinity by increasing the levels of sodium in the soil and lead ultimately to aridity. In Türkiye around 30% of irrigated areas are already under the influence of salinity and aridity.

Manageable factors such as crop rotation techniques, duration of cultivation, cultivation techniques, stubble burning, fertilization methods as well as factors such as climate, particularly temperature and precipitation regime, affect **organic matter** amount in soil. The use of chemical fertilizers alone, without the addition of organic matter causes faster mineralization of valuable organic matter in the soil. Thus, instead of being a carbon well, soils become a source of emission and contribute to the progression of the negative balance in the atmosphere/earth carbon (C) balance. It should not be forgotten that carbon is the main element in soil organic matter and makes up 48-58% of soil organic matter by weight. The increase in the carbon content of the soil increases the fertility of the soil against erosion and rehabilitates the lands that have lost their agricultural productivity as a result of erosion. Agricultural activities such as minimum tillage or zero tillage farming, crop rotation and use of organic waste provide organic carbon increase in soil and re-balance of high CO₂ in the atmosphere.

Soils of Türkiye are mostly poor in terms of organic matter. While the rate of soils containing insufficient (very little, little and medium) soil organic matter in Türkiye was 92% in 1990, this rate increased to 99% in the analyses made in 2011-2014. Soils with good and high soil organic matter decreased from 7.2% to 1%.

Extensive pastures in Türkiye help preservation of soil as well as biodiversity. Although the total area of pastures is decreasing, MoAF is taking actions to improve the status of pastures (Table 16).

Table 16. Pasture Improvement and Management Projects in Türkiye between 2000-2020

Years	Number of Projects	Project Area (da)
1998-2002	46	83 527
2003-2020	1 870	12 547 065
Total	1 916	12 630 592

Source: <https://www.tarimorman.gov.tr/Konular/Bitkisel-Uretim/Cayir-Mera-ve-Yem-Bitkileri>

In brief, in Türkiye, erosion appears as a big problem that needs to be prevented as well as deficiency in soil organic matter. Environmental friendly farming methods is the key for limiting erosion and improving soil quality.

Water Quality and Quantity

Water Quality

Water quality is a serious concern in Türkiye for several reasons. Consumption of natural resources due to unplanned and rapid urbanization, discharge of untreated domestic and industrial wastewater to fresh water resources and/or seas, inadequate wastewater treatment facilities, and difficulty in controlling dispersed resources such as agriculture cause water quality to deteriorate. Agriculture contributes significantly to water pollution due to its economic importance and high water use. Although the intensity of fertilizer use is relatively low, 20% to 50% of surface waters are contaminated with nitrogen (NO₃) from agriculture and livestock. Phosphorus pollution is also significant in some lakes.

Under the scope of water quality studies; environmental quality standards for sensitive water bodies, urban sensitive areas and nitrate sensitive areas in Türkiye as well as EU priority substances and certain pollutants specific to our country have been determined and transferred to the legislation. Monitoring programs in EU norms have been prepared in 25 river basins of Türkiye and monitoring has been started. River Basin Management Plans are also being elaborated in these basins and are planned to be completed by 2023. In the field of water quality, the *acquis* has been largely harmonized with national legislation, with the exception of transboundary waters.

Water Quantity

Türkiye is a country with water scarcity (1 500 m³/per person in a year). Approximately 73% of our country's water resources is used for agricultural irrigation, 11% for industry, 16% for urban consumption.

In terms of agricultural water quantity, problems faced are; excessive use of water resources due to excessive irrigation, cultivation of crops by farmers not suitable for their region's water resources, illegal wells, low irrigation water charges, insufficient use of modern pressurised and drip irrigation systems or their inadequate use, lack of

knowledge and resistance to use treated waste water for irrigation, and inadequate use of meteorological data, etc.

In order to eliminate these problems, related awareness raising studies with farmers should be done. Studies to reduce the amount of water returned from irrigation and reuse by improving its quality should be expanded. Alternatives such as rainwater harvesting should be searched. By taking the necessary technical measures to reduce the loss/leakage rates, deterrence and efficiency should be improved. A crop pattern that uses less water in water-scarce areas should be promoted and disseminated.

Irrigation

Irrigation is a threat to groundwater reserves since almost three quarters of the total freshwater extracted is used for agricultural purposes. The pressure of agriculture on groundwater is expected to increase in the future to meet the needs of the growing population. The quality of irrigation water is another significant matter in addition to the amount of water when it comes to planning and operating irrigation projects. Amount of salinity and sodium is taken into consideration for planning irrigation projects of State Hydraulic Works (DSI). However, rapid urbanisation and industrialisation as well as use of fertilisers and pesticides in agriculture result in the pollution of water resources. Thus, it is of importance to monitor and take into account more pollutants for irrigation planning and operation of water resources due to their impact on soil and plants and therefore all living creatures.

Total irrigable agricultural land (economically) was determined as nearly 8.5 million ha. As of the end of 2018, 6.60 million hectares of land was subject to irrigation, 4.31 million hectares of this area built by State Hydraulic Works (DSI) has modern irrigation system (also known as pressurised irrigation systems such as springer irrigation and drip irrigation). 2.29 million hectares is publicly irrigated areas.

Despite the great efforts and investment incentives in the last 15 years, Türkiye mainly uses traditional methods in agricultural irrigation. While the traditional surface irrigation systems are used by 80% of the irrigated areas in Türkiye, modern pressurised irrigation systems (drip irrigation) are applied to the remaining 20%.

While any irrigation means use of water resources, the most performant irrigation methods and practices are necessary to ensure the competitiveness and productivity of farming; it allows the amount of product per unit area to increase, multiple crops can be cultivated and more income generating plants can be planted. The main crops irrigated in Türkiye are sugar beet, corn, cotton, sunflower, fruits and vegetables, citrusfruits, vineyards, some fodder plants and some cereals.

For these reasons, utilization of pressurised irrigation techniques (drip irrigation), measuring of water used for irrigation at a holding level, optimisation of water drained to the fields and careful management of irrigation are of great importance. Such practices should be supported to decrease the consumption of water resources by agricultural activities in Türkiye.

Use of fertilisers and pesticides

Use of pesticides in Türkiye is low as compared to developed countries (Table 17). Pesticides are mostly used in poly-cultural areas in Mediterranean and Aegean regions. In these regions of intensive agriculture, their use is high and gets closer to the level of developed countries. Fruits and vegetables are mostly grown in these regions which also provide raw materials to food industry mostly exporting to international markets.

Table 17. Pesticide use in Türkiye over the years (tonnes)

	Insecticides	Fungicides	Herbicides	Acarisides	Rodenticides and Molluscicides	Other (*)	Total
2006	7 628	19 900	6 956	902	3	9 987	45 376
2007	21 046	16 707	6 669	966	51	3 277	48 716
2008	9 251	16 707	6 177	737	351	5 613	38 836
2009	9 914	17 863	5 961	1 533	78	2 302	37 651
2010	7 176	17 396	7 452	1 040	147	5 344	38 555
2011	6 120	17 546	7 407	1 062	421	6 978	39 534
2012	7 264	18 124	7 351	859	247	8 766	42 611
2013	7 741	16 248	7 336	858	129	7 128	39 440
2014	7 586	16 674	7 794	1 513	149	6 007	39 723
2015	8 117	15 984	7 825	1 576	197	5 327	39 026
2016	10 425	20 485	10 025	2 025	259	6 835	50 054
2017	11 436	22 006	11 759	2 452	236	6 209	54 098
2018	13 583	23 047	14 794	2 486	309	5 801	60 020
2019	11 609	19 698	12 644	2 124	264	4 958	51 297

Source: TURKSTAT, 2020

When the general situation of the sector is considered in Türkiye, it stands out that production of fertilisers, which tends to increase in years, is not sufficient to cover the consumption and the need is met through imports. Although consumption of fertilisers in Türkiye varies slightly over the years depending on the climate, cultivated type of plants, crop rotation, means of irrigation and economic developments in the country and the world, it is on average 5 to 6 tonnes annually (Table 18).

Table 18. Fertiliser use in Türkiye over the years (tonnes)

2014	2015	2016	2017	2018	2019
5 471 518	5 507 780	6 744 922	6 332 871	5 411 881	6 087 714

Source: <https://www.tarimorman.gov.tr/sgb/Belgeler/SagMenuVeriler/BUGEM.pdf>

A document giving recommendation on the use of fertilizers has been elaborated by the Ministry of Agriculture and Forestry. The recommendations have been prepared according to the region, farming type (dry or irrigated) and the crop cultivated in that region.

Climate change

The process to combat climate change is addressed in general by two main pillars, namely, “mitigation” and “adaptation”. Mitigation policies which basically refer to mitigating the adverse effects of climate change are also frequently used in the same sense as reduction of greenhouse gas emissions. The second method adopted to fight against adverse effects of climate change are adaptation policies.

Mitigation and adaptation are considered as two integral parts of result-oriented actions against climate change.

It is possible to mitigate the effects of climate change and ensure adaptation at the same time through climate and nature friendly agricultural activities. The main actions to be taken in this scope are;

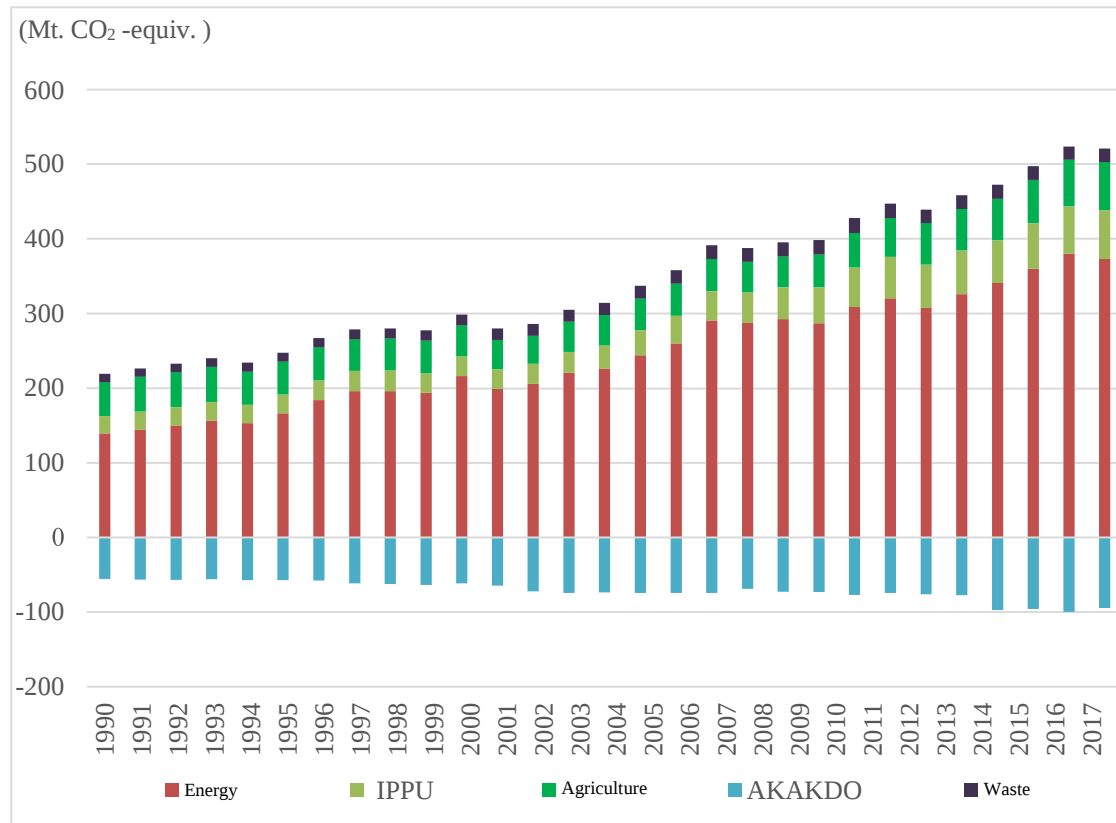
- Ensuring management of agricultural areas and pastures to increase carbon storage capacity of the soil,
- Agricultural practices with minimum soil tillage,
- Protection of water resources,
- Supporting modern irrigation techniques for saving water and expanding their coverage,
- Using renewable energy in agriculture sector,
- Development of drought tolerant species,
- Management of animal based fertilisers,
- Nitrogen fertilisers application techniques developed to reduce N₂O emissions,
- Restoration of peaty soil open to agricultural use and degraded lands,
- Paddy agriculture techniques developed to reduce CH₄ emissions,

All the listed practices decrease soil erosion and use of fossil fuels while increasing carbon storage capacity of the soil. Moreover, they raise crop productivity by increasing soil organic matter.

According to Türkiye's latest National Greenhouse Gas Emission Inventory Report (NIR), total greenhouse gas emissions were 426.0 Mt. CO₂-equivalent including AKAKDO (Land Use, Land Use Change and Forestry) sector and 520.9 Mt. CO₂ eq. excluding AKAKDO sector in 2018. This corresponds to a 137.5% increase in comparison to 1990 levels. Energy sector has the highest share in 2018 total greenhouse gas emissions with 71.6% share, which is followed by agriculture with 12.5%, industrial processes and product use (IPPU) with 12.5% and waste with 3.3% share.

Fluctuations in all sectors between 1990-2018 are available in Figure 2.

Figure 2. Greenhouse Gas Emissions by sectors (UNFCCC 2018)

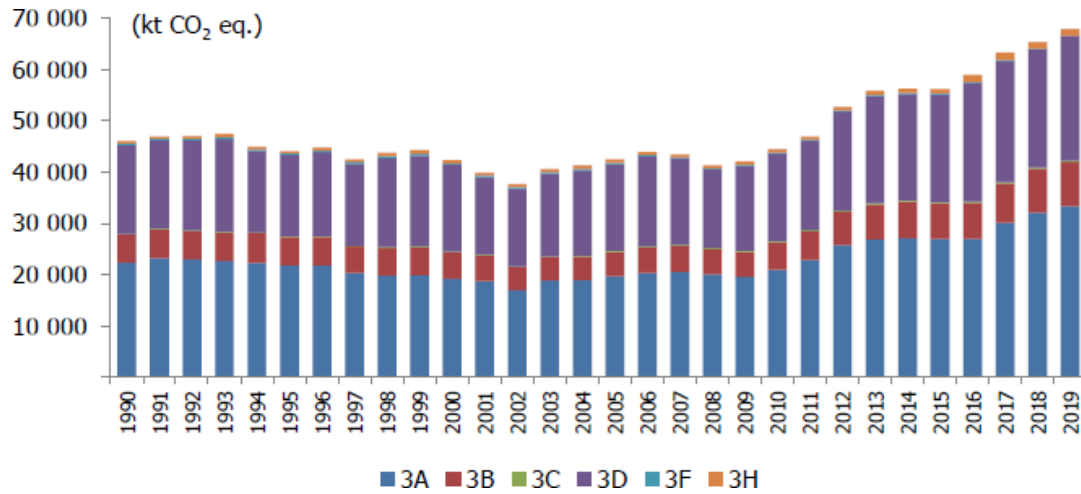


Although agriculture sector had a 5.8% share in Türkiye's Gross Domestic Product (GDP) in 2018, emissions originating from this sector were responsible for 12.5% of total emissions (Table 19 and Figure 3 show the total emissions from agriculture sector by source). The main sources of greenhouse gas emissions in the agriculture sector are enteric fermentation, agricultural lands and management of fertilisers. Agricultural activities are the main sources of CH₄ and N₂O. 63.1% of CH₄ emissions and 70.1% of N₂O emissions originate from agricultural activities.

Table 19. Total emissions from agriculture sector by source

	(kt CO ₂ eq.)									
	1990	1995	2000	2005	2010	2015	2016	2017	2018	2019
Total	46 054	44 080	42 332	42 439	44 409	56 133	58 894	63 262	65 338	68 024
3.A Enteric fermentation	22 397	21 815	19 234	19 680	20 946	26 947	26 984	30 110	32 136	33 368
3.B Manure management	5 436	5 523	5 142	4 781	5 391	6 956	7 060	7 697	8 508	8 597
3.C Rice cultivation	100	113	128	183	202	240	243	234	252	263
3.D Agricultural soils	17 314	15 871	16 870	16 880	17 006	21 006	23 147	23 607	23 022	24 343
3.F Field burning of agricultural residues	347	332	340	302	219	174	164	165	163	165
3.H Urea application	460	426	617	613	645	811	1 295	1 450	1 257	1 288

Figure 3. Total emissions from agriculture sector by source



3A: enteric fermentation, 3B: manure management, 3C: rice cultivation, 3D: agricultural soils, 3F: field burning of agricultural residues, 3H: urea application

In 2018, agriculture sector emissions were **64,9 Mt. CO₂ eq.** with a 3.2% increase compared to the previous year and 41.5% increase compared to 1990, which corresponds to **12.5%** of total greenhouse gas emissions. In 2018, 49.4% of greenhouse gases emissions of the agriculture sector originated from enteric fermentation with a share of 32.0 Mt. CO₂ eq., 35.0% from agricultural lands with 22.7 Mt. CO₂ eq. and 13.0% from organic fertiliser (manure) management with 8.49 Mt. CO₂ eq. while 1.9% originated from urea application with 1.39 Mt. CO₂ eq. and 0.7% from rice production and stubble burning with 0.4 Mt. CO₂ eq.

Agriculture sector emissions in the world were 5.03 Gt. CO₂ eq. in 1990 whereas they reached 5.8 Gt. CO₂ eq. in 2016. An increase of 15.3% is observed in comparison to 1990 and this increase is 26.8% for Türkiye in the same years.

62.6% of global emissions originate from the top 10 greenhouse gas emitters. Of these, China ranks first with an emission rate of 25.8%, the U.S. ranks second with 12.8% and India is the third with 6.7%. Türkiye's share in global emissions was calculated as 1.0% for 2016, which made it 17th in the list (World Resources Institute).

Global Carbon Budget 2019 Report, one of the most detailed scientific studies analysing global emissions, indicated the following per capita emissions: 2 tonnes CO₂ eq. in India, 6.7 tonnes CO₂eq. in the European Union (EU), 7 tonnes CO₂eq. in China, 16.6 tonnes CO₂ eq. in the U.S. while per capita emissions were calculated as 6.4 tonnes CO₂ eq. in 2018 in Türkiye.

Under the scope of agriculture's adaptation to climate change, our Ministry:

- Conducted the following activities related to reduction of greenhouse gas emissions; Land Consolidation, Organic Farming, Good Agricultural Practices, Environmentally Based Agricultural Land Protection Project (CATAK), Modern Irrigation and Tillage Methods Support Scheme for Saving Water and support for minimum soil tillage methods,
- Took the following actions related to increasing retaining areas for carbon sequestration; Soil Conservation and Land Use Law, increasing the number of

orchards thanks to supports for certified saplings and fruit facilities and improvement of pastures,

- Prepared and implemented “Türkiye’s Strategy and Action Plan for Combating Aridity” that covers the period 2018-2022 as well as “Provincial Aridity Action Plans” in 81 Provincial Directorates; “Provincial Aridity Centres” were also established and the following objectives were set as such:
 - To raise public awareness,
 - To include all stakeholders in the process,
 - To plan sustainable agricultural water usage,
 - To take the necessary measures as well in times when there is no aridity,
 - To minimise the effects of aridity by implementing an effective combating strategy in times of crisis.

Biodiversity

Türkiye has acquired the characteristics of a small continent in terms of biodiversity as a result of changes in its climatic and geographic characteristics in short intervals due to its location in between three biogeographical regions, namely, Europe-Siberia, Mediterranean and Iran-Turan and their transition zones as well as its bridging position between the two continents. Türkiye has forest, mountain, steppe (moor), wetland, coastal and sea ecosystems and different forms and combinations of these ecosystems.

It ranks 9th on the European continent in terms of biodiversity richness. The 7 geographical regions each of which have their own climate, flora and fauna are divided into 3 ecological regions.

North-east Anatolia has colchis flora/forests, steppes-grasslands are on Central Anatolia and Mediterranean region has maquis vegetation and cypress (*Cupressus sempervirens*) and cedar (*Cedrus libani*).

It would be sufficient to make a comparison between Türkiye and the continent of Europe to grasp the richness of the country in terms of flora range. While there are 12 500 gymnosperms and angiosperms in Europe, it is known that the figure is very close to this in Anatolia alone (around 11 707 plant species). Nearly one third of these are endemic. There are over 500 bulbous plants in Türkiye’s flora. The country’s endemic plant species are also rich in medicinal and aromatic plants.

As a result of Türkiye’s geographical location, geological characteristics and interaction with three major bioclimatic regions, the richness in biodiversity is also reflected to agriculture. Many cultivated fruit species such as cherries, apricots, almonds and figs originated in Türkiye. Turkish flora includes many wild relatives of food crops and important cultivated species, such as wheat, chickpea, lentil, apple, pear, apricot, chestnut, hazelnut and pistachio. In all, there are about 256 different grain types, 95 wheat, 91 corn, 22 barley, 16 sorghum and 2 rye types. Türkiye is also home to a number of ornamental flowers, the most notable being the tulip.

Türkiye’s geographical location at the intersection of Asia, Europe and Africa influences its diverse fauna. Latest data show that 170 mammals, more than 400 bird species, nearly 130 reptiles and 480 fish species as well as 236 freshwater fish species live in

Türkiye. Moreover, endangered species such as Mediterranean seal (*Monachus monachus*), sea turtle (*Caretta caretta*) and green sea turtle (*Chelonia mydas*) live in Mediterranean and Aegean coasts. And it is estimated that there are 20 indigenous cattle breeds, 17 of sheep and 5 of goat in the country.

Climate change, human activities (agricultural activities such as stubble burning, inadequate and inefficient irrigation techniques, deforestation, industrial activities such as uncontrolled mines and factories, pollution, illegal hunting), loss of habitats and overexploitation are some of the threats against biodiversity.

The perception of pressures and threats on biodiversity as an environmental problem was accepted in 1992 with the signing of the Convention on Biological Diversity in Rio de Janeiro's Sustainable Development Conference. Countries have become parties to this agreement and the existence of an international concern on this issue has been formally put forward. Türkiye also signed this Convention in 1992 and ratified it through Law No. 4177 dated 29 August 1996. The Convention obliges the states to protect the biodiversity and to define the conditions of access to genetic resources.

Parties to the Convention are obliged to prepare and update National Biodiversity Strategy and Action Plan (NBSAP) and the last NBSAP of Türkiye (2018-2028) was published in 2019. Through the actions in this Plan, the lists of habitats and birds (Specially Protected Areas – SPA and Special Areas of Conservation – SAC) have been elaborated in line with the EU Habitat and Birds Directives. These areas are important in terms of Natura 2000. Natura 2000 area studies are being carried out in order to put the endangered natural living environments and species under protection. Protected areas such as natural parks, natural monuments, nature protection areas, Ramsar areas, gene protection areas and wetlands have been designated by General Directorate of Nature Conservation and National Parks under MoAF.

Biodiversity of Türkiye needs to be protected by all parts of public including farmers, industries, hunters, etc. Awareness raising studies on biodiversity should be further elaborated leading to the implementation of more projects aimed at limiting the negative impacts of agricultural activities/farming practices on biodiversity.

Organic Farming

Organic farming refers to controlled, certified and traceable production systems in compliance with the principles of organic farming activities stipulated in the Law No. 5262 on Organic Farming and Regulation on the Principles of Organic Farming and their Implementation. Organic farming is a sustainable farming system that offers alternative economic opportunities for producers, includes a production system harmonious with the environment and adopts a great social responsibility principle.

Organic farming production in Türkiye was launched in 1980's as response to an export demand for organic products. The first organic farming legislation was published in 1994 and the Law on Organic Farming was published in 2004. Türkiye's organic farming legislation was drafted based on EU's organic farming legislation and it is amended in parallel to the amendments in EU legislation.

There are 37 control and certification bodies authorized by the Ministry of Agriculture and Forestry (MoAF) to work for providing control and certification services to producers engaged in organic farming activities.

The number of organic products which was 150 in 2002 reached 213 in 2019 and the number of organic farmers increased from 12 428 to 74 545 while the total production area reached 545 870 ha from 89 827 and the amount of production which was 310 125 reached 2 030 466 tonnes in the same period (according to 2018 data, organic farming area within the total agricultural area in Türkiye has a share of 2.7%).

The main crops under organic farming are nuts and nut products, raisins, apricot and apricot products, fig and fig products, cereals, fresh fruit and vegetables and cotton.

The certificate and label information and organic product logo indicate that a product is organic. In addition to the organic product logo, the label includes information about authorised control and certification body, its logo and name, product certificate for the relevant product or entrepreneur certificate – all this information provides retrospective traceability for the product. Labels and logos of organic products are solely used for organic ones. The label and package design of a non-organic product cannot connote or be similar to an organic product's label and package. In Türkiye, it is mandatory to use organic product logos on packaging of products to be marketed as organic.

The Ministry delegated the control and certification of organic farming products to authorised bodies. Controls and certifications of organic production enterprises are performed by these bodies. Bureau and land audits of the bodies are conducted by the Ministry (Department of Good Agricultural Practices and Organic Farming). The Ministry audits the enterprises when necessary. Furthermore, organic farming units of Provincial Directorates of Agriculture and Forestry located in 81 provinces audit the places where organic products are cultivated, processed and sold by enterprises with and without prior notice in certain periods under the relevant legislation.

The flow of data between control and certification bodies (KSK) authorised by the Ministry and Provincial Directorates initiated as of 2005 through Organic Farming Information System (OTBIS) established under the Department of Good Agricultural Practices and Organic Farming, General Directorate of Plant Production in order to gather national level organic farming data. OTBIS was integrated to Agriculture Information System (TBS) under the auspices of the Directorate General of Agricultural Reform in 2014. OTBIS aims to ensure tracing, control and monitoring to be used for strategies, policies, statistics and subsidies for organic farming activities and to access information in the most rapid, easy and reliable manner.

High Nature Value Farming

Türkiye also has high potential in High Nature Value Farming. This is thanks to the country's long history of traditional farming, the presence of low intensity farming locations, in addition to the presence of extensive wild areas. Türkiye participated in the Convention on Biodiversity and signed other international agreements on the matter. High Nature Value Farming becomes vital to sustain traditional farming applications and preservation of biodiversity.

In the context of the legislative harmonization; Good Agricultural Practices Code has been prepared in accordance with the Article 7 of the Regulation on the Protection of Waters against Nitrate Pollution from Agricultural Sources. Its aim is to determine the agricultural activities necessary to be carried out by the farmers for the conservation of natural resources while protecting waters against agricultural production based pollution.

This Code includes not only fertilizer, plant nutrient, irrigation, plant production

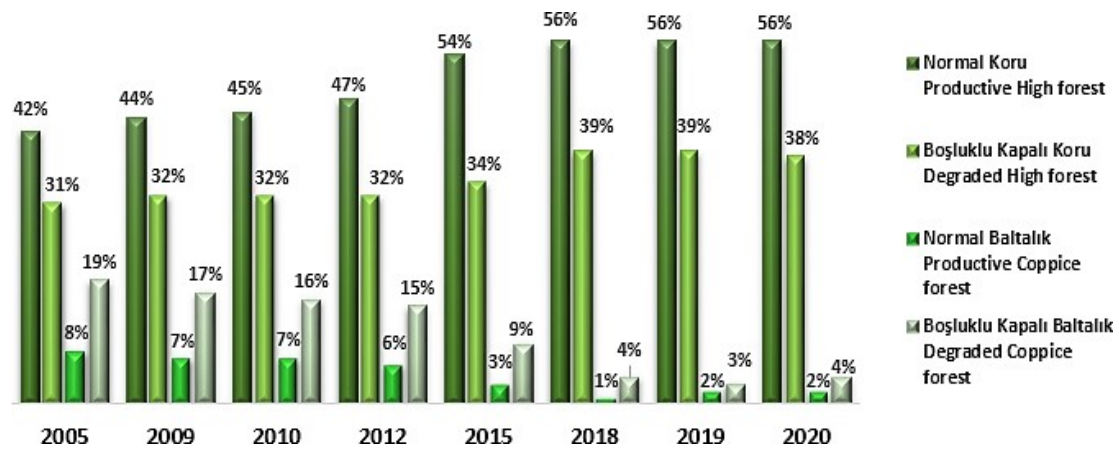
material use management but also land management issues. In this scope; green bands and buffer strips should be created along surface waters to prevent flow in arable lands with valley features or on slopes in large lands, permanent grass, forest or similar land cover should also be considered if necessary. In addition, an uncultivated area of 0.5 meters wide should be left between the plots in high slope lands.

Natural landscape features such as shrubs, hedges, etc., are often desirable as a valuable part of the natural environment ensuring both protection for the land and sheltering for insects, reptiles, birds and small mammals that can at the same time constitute natural methods of pest control.

Protected Forests

Ministry of Agriculture and Forestry has the mission to protect forests and forest resources and to develop their management benefiting the nature and the society. In this context, forest management plans have been elaborated (Figure 4 and Table 20). According to 2020 Sustainable Forest Management Group Working Document, Türkiye's forest asset was 20.2 million ha in 1973, 21.1 million ha in 2004, 21.7 million ha in 2012, 22.3 million ha in 2015 and 22.6 million ha in 2018.

Figure 4. Distribution of forest land, 2005-2020



Source: <https://www.ogm.gov.tr/tr/e-kutuphane/resmi-istatistikler>

Table 20. Sustainable development indicators under forestry 2010-2019

Goals and indicators											
Goal 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss											
	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
15.1.1 Forest area as a proportion of total land area	(%)	27.1	27.1	27.2	27.5	27.7	28.1	28.1	28.3	28.5	29.2
Normal forest area as a proportion of total land area		14.6	14.6	15.0	15.6	16.0	16.5	16.5	16.7	16.9	16.8
Degraded forest area as a proportion of total land area		12.5	12.5	12.2	11.9	11.7	11.6	11.6	11.6	11.6	12.4
15.2.1 Progress towards sustainable forest management											
Forest area annual net change	Number	-	0.0	0.1	0.3	0.2	0.4	0.0	0.2	0.2	0.7
Forest area annual net change rate	(%)	-	0.0	0.4	1.1	0.7	1.4	0.0	0.7	0.7	2.5
Above-ground biomass stock in forest	Million tonnes	916	944	960	1 000	1 014	1 035	1 041	1 031	987	1 029
Proportion of forest area located within legally established protect areas	(%)	3.5	3.5	3.3	3.3	3.3	5.5	5.5	5.5	5.5	5.5
Proportion of forest area under a long-term forest management plan	(%)	100	100	100	100	100	100	100	100	100	100
Forest area under an independently verified forest management certification scheme	Thousand hectares	-	72	1 360	2 110	2 367	2 360	2 366	2 351	2 397	6 297

Source: <https://www.ogm.gov.tr/tr/e-kutuphane/resmi-istatistikler>

In compliance with the 2020 statistical data provided by General Directorate of Nature Conservation and National Parks, protection forests cover 247 708 ha, urban forests 10 089 ha and gene protection forests 43 120 ha.

However, 29 857 319 m³ planted trees were damaged in an area of 4 464 913 ha in the period 1995-2018 due to factors including landslide, floods and drought.

Main threats for the forests include excessive grazing, air pollution, climate change, alien species, uncontrolled picking of plant and animal species, harm caused by bugs, forest fires and illegally expanding lands in the forests.

Forest protection practices were actually developed to protect forests against fires, insects and human action. The geomorphological structure of Türkiye, especially mountainous areas with high slopes and dry soil characteristics, makes it necessary to take actions to protect forests. Actions are ongoing in the following areas in Türkiye:

- Combating harmful bugs and diseases,
- Conservation of biological resources and ecology,
- Forestation,
- Rehabilitation of degraded forest areas,
- Preservation of soil and basin management,
- Fighting against forest fires,
- Fighting against forest offences and regulation of grazing,
- Actions to improve forest-public relations and to eliminate ownership issues,
- Actions to benefit from products and services offered by forests in a multipurpose and sustainable manner.

3.4. Rural Economy and Quality of Life

Rural Economy

The rural population is mainly engaged in agriculture and animal husbandry. In addition to these widespread activities, they are involved in medicinal and aromatic plants, ornamental plants, aquaculture, beekeeping and growing bee products, craftsmanship, production of added value products and activities that provide economic diversity in rural life such as rural tourism. When income diversification activities such as recycling, renewable energy etc. are added up to these, bioeconomy is created together with agriculture economy and biosectors that process these raw materials.

Creating biosectors also means forming an important economy (bioeconomy) considering the population who will earn their living from these sectors, meeting the need for food, industries they support (food, medicine), foreign trade figures as well as their indirect effects. Diversification of rural economic activities will contribute to the improvement of income for people living in rural areas and their welfare along with an increase of rural employment.

Development with a circular approach which includes production, sharing, distribution, consumption and recycling in compliance with sustainable development principles and legislation, that is, development based on zero waste, is of an utmost importance.

Reducing migration from rural to urban areas and improving the quality of life in rural areas lie in generating alternative sources of income. In this scope, participation of women and youth in both production and employment is of a great significance. It is

possible to achieve this by increasing the diversity of small-scale economic activities in rural areas. Current situation in regards to the main economic activities that could contribute to rural economy is summarised in the following paragraphs.

Diversification of Plant Production, Processing and Packaging of Plant Products

Türkiye, due to its climatic conditions, vegetation and topography, has favourable conditions for the growth of many plant species. However, it is seen that this advantage is not being benefited from to a sufficient level. The main product types that can be diversified are as follows:

Mushroom: Mushroom is a species that has increased in production and management in Türkiye in recent years. Being able to be grown throughout the year without the need for fertile agricultural land is the most important factor in the spread of mushroom cultivation. Mushrooms are also an environmentally friendly product that consumes lignocellulosic materials such as agricultural and domestic wastes and industrial and forestry wastes. Türkiye's mushroom production increased from 17 thousand tonnes in 2005 to 46 thousand tonnes in 2018.

Medicinal and aromatic plants: This group includes many important species (57 sage, 47 centaury, 40 mountain tea, 33 thyme, 7 anise, 10 mint, 3 foxglove, 3 lavender and 1 zahter) to be found endemic in Türkiye. Therefore, Türkiye is one of the important countries in the world in terms of its medicinal and aromatic plant biodiversity. Medicinal and aromatic plants are produced by being collected from nature or cultivated for commercial purposes. The amount of medicinal and aromatic species cultivated for commercial purposes in Türkiye has increased in recent years. The production was 96 000 tonnes in 2016 and increased to 114 000 tonnes in 2018.

Seedlings and Saplings: The increase in the number of orchards in recent years has increased the need for seedlings. In the 2014-2018 period, fruit sapling production increased by 36% from 30 335 592 to 41 260 722. While sapling production in Türkiye was carried out only by public institutions and organizations until the 1990s, today most of the production belongs to the private sector. A significant part of the sapling enterprises is located in the Aegean, Marmara and Mediterranean regions.

Ornamental plants and bulbs: Ornamental plants production areas in Türkiye increased by 37.89% between 2009 and 2018, reaching 51 802 decares. While outdoor ornamental plants (72.8%) have the largest share in terms of production area among product groups, important producing provinces are İzmir (31.4%), Sakarya (20.9%) and Antalya (11.50%).

In Türkiye, bulbs are produced under two categories as natural and cultured bulbs. Natural bulbs refer to bulbs that are removed directly from nature while cultured bulbs refer to other flowers, tubers, root shoot heads, rhizomes, etc. Natural flower bulbs are grown mainly in Balıkesir, Yalova, Antalya and İzmir provinces, while most of the culture bulbs are grown in Konya and Karaman provinces.

According to 2018 data, the share of the area where bulbs are grown in the total ornamental plants production area is 0.95%, while there was a 10.6% decrease in the natural flower bulb production area during the 6-year period between 2013 and 2018. However, in the same period, more than 88 million bulbs were produced in 2018 with an increase of 168.6% in production.

Support for expanding plant production, processing and marketing will allow farmers to focus more on high value-added jobs and create new employment opportunities, especially among women and youth, due to its labour-intensive nature.

Türkiye is very suitable for medicinal, aromatic and ornamental plant cultivation due to its geographical location, climate, agricultural potential and wide surface area. Especially in response to the demands of consumers and industrialists, it is very important for the development of the sector to determine and improve the quality varieties in accordance with the ecological conditions of Türkiye, to collect them without harming the nature, to develop post-harvest processing technologies, to improve production and market opportunities.

Rural Tourism and Recreational Activities

With the developments in the world tourism sector, there is a significant increase in the number of travellers. Türkiye is one of the most important countries in the world tourism sector with its nature, climate and unique flora.

Rural tourism is defined as an area of activity that is created by the society living in the rural area and that interacts with the socio-cultural values that it has inherited from the past while making use of the rural area-specific production and peace environment and its natural resources. Rural tourism integrates a rural lifestyle, natural environment, and agriculture creating many types of tourism such as cultural tourism, agricultural tourism, faith tourism and gastronomic tourism.

Rural tourism has an important function in developing and diversifying the income and improving living standards of the rural households and thus supports the social policies of the countries. The importance of rural tourism in terms of the country's economy is increased by its capacity to operate in all seasons, thus providing sustainable benefits to rural economic development. The tourism sector offers job opportunities for women and youth in rural areas.

The realization of support to increase domestic demand in rural tourism, with its socio-economic benefits for rural population, is one of the important needs of rural economy. Increasing the accommodation facilities for the rural tourism sector and modernizing the existing facilities, developing recreational activities and initiatives to promote rural tourism and marketing campaigns are necessary issues for the progress of the sector.

Traditional Hand Crafts and Added Value Products

Türkiye has a very high potential in terms of traditional handicrafts and value-added products. The production and marketing of these products allows for increased employment by utilizing household income as well as family workforce and as such it makes significant contributions to rural development.

The gender distribution in the sector is 63.6% female and 36.4% male. As of 2019, the number of employees in the traditional handicrafts and high value-added products sector, which is an important source of employment for rural areas in Türkiye, was 250 000.

In Türkiye, there are 3 products registered with the "traditional product name" by the Turkish Patent Institute, 224 products registered with the "name of origin", and 390 products registered with the "origin mark". In addition, the number of handicraft products that have received geographical indication by the Turkish Patent Institute or

are at the application stage is 131. Of these, 33.7% are carpets and kilims, 29.7% are woven and 36.6% are handicraft products excluding carpets, rugs and weavings.

Total export of handicraft products in 2019 was 33.1 billion TL and the share of handicrafts in total cultural goods exports is 76.9%.

Beekeeping and Production

As is the case for other countries in the world, beekeeping is an important sector that significantly improves and ensures the natural balance as well as sustainability and productivity of agricultural production in Türkiye. There are in total 9 000 flowering plant species of which 3 000 are endemic in the country. The habitat, genetics and eco-geographical richness make sustainable and environmentally friendly beekeeping practices possible in Türkiye. Beekeeping is prominent for its important characteristics. For instance, it is not dependent on soil, could be done with less capital compared to other animal husbandry activities, requires less labour force in comparison to other types of production and has short payback periods for investments. Türkiye has 92% share in the world's production of pine honey, which is a sweet, spicy, dark coloured type of honey with resin, and hosts nearly one fifth of 25 sub-species of bees in the world.

Beekeeping is an important source of employment for producers and young people that live in rural areas and do not own sufficient land. In addition, it contributes to the employment in that new businesses and employment opportunities are created to produce other necessary inputs for the beekeeping sectors (bees, queen bees, beekeeping equipment, packaging, package etc.)

As is the case all over the world, beekeeping in Türkiye has become a sector that welcomed important developments in recent years. Türkiye is among the countries that have a say in beekeeping in the world with more than 8 million beehives and honey production of approximately 110 thousand tonnes in 2019. However, this advantage in production cannot be reflected in foreign trade. In 2019, 5 543 tonnes of honey were exported, which resulted in an income of 24.7 million \$. The most important regions for beekeeping in the country are Aegean, the Black Sea and Mediterranean. 25% of Türkiye's honey production originates directly from forests -pine honey. Türkiye has a large share -92%- in the world's pine honey production. In Türkiye, bee, pollen, royal jelly and propolis standards set by TSE (Turkish Standards Institution) are applicable for bee products. Though totally 8 types of honey have been granted with geographical indication in Türkiye, there is no EU certified geographical indication for Turkish pine honey.

It is of utmost importance for sustainable beekeeping to offer healthy products for the whole world by producing healthy and reliable honey. In this scope, it is expected to focus on improving the market volume and provision of other bee products as well as assessment of branding potential for pine honey.

Preparing training courses and certification programs for producers of bee and bee products will increase the interest for the sector and thus new employment opportunities will be provided, in particular for women and young people in rural areas.

Rural Infrastructure

Rural infrastructure investments in Türkiye focus on priority issues such as roads, water, energy, drainage, access to internet, sports and recreation in general. In addition, the following issues are also covered by infrastructure: education technologies,

communication infrastructure, transportation infrastructure investments, trade infrastructure, monitoring infrastructure related to sustainable use of natural resources, infrastructure for access to finance, health services infrastructure, social infrastructure in the form of village halls, mobile houses or vehicles for nomadic communities and issues related to protection of villages against attacks by wild animals.

In Türkiye 1 357 of 1 399 municipalities (97%) provide services with a sewerage system as of 2018. The share of municipal population receiving services with waste water treatment plants among the total municipal population is 78.7%. The rate of access to internet is 88%. The Ministry of Energy stated that 30% of the total installed capacity is renewable. Similarly, 2020 data of International Renewable Energy Agency (IRENA) show that in Türkiye, the total renewable energy generation capacity in 2019 was 44 thousand 587 MW.

Rural infrastructure investments are the leading urgent needs to reduce migration from rural to urban areas, decrease unemployment in cities and raise living standards in Türkiye from the perspective of multiplier and accelerator effects of rural development.

One of the factors influencing the perception of rural areas as the attractive areas to live and work are standards of living. In this context, it is particularly crucial to meet energy needs of rural population. It is estimated that migration from rural areas would decrease at least by 30% when housing heating is provided (due to lack of natural gas sources in many villages in winter, heating should be based on renewable energy). This is a serious issue observed in East Anatolia where winter conditions are especially harsh. Cities are almost emptied out in spring while they are again full of people in autumn or winter when part of rural population leaves villages. Infrastructure investments to enable housing heating with renewable energy are necessary.

Renewable energy investments will also provide continuity in terms of increasing the effectiveness of rural development plans. Producers who have to migrate to cities in winter due to the heating problem sell their animals at a low price in autumn and they face difficulties to purchase animals in the following spring due to their higher prices. This leads to the process of leaving agriculture. Particularly small-scale farmers, women and young people working in an unpaid manner renounce from living in rural areas and move to cities which however do not always offer sufficient employment opportunities.

Renewable Energy

In Türkiye, shares of energy resources in energy consumption is 33% natural gas, 27% petroleum, 15% hard coal, 14% lignite, 4% hydraulic, 2% wood, 2% petcoke, 1% geothermal, 1% plant-animal waste, 1% solar, 1% geothermal.

Dissemination of renewable energy consumption for meeting energy need is important for adaptation to climate change on one hand and for sustainable economic development on the other hand.

Türkiye has a significant potential particularly for renewable energy resources such as solar, wind, geothermal, biogas and water power and it attaches importance to renewable energy investments whose costs have decreased thanks to technological advancements. 30% of the country's current electricity need is met by renewable energy resources. Türkiye's installed capacity for renewable energy generation reached 46 811 MW in August 2020 while it was 17,369 MW in 2010.

Hydroelectric energy has the largest share in Türkiye's renewable energy resources potential and its generation corresponds to 1% of the world's average and 16% of Europe's potential. Geothermal energy is more advantageous than other renewable energy resources like solar and wind power as it has a low carbon emission, it does not result in air pollution and it is uninterrupted. Türkiye ranks first in the world in this respect as a country having a rich geothermal resource. More than half of its geothermal resource potential is usable now and the target is to benefit from the whole potential in the near future.

Biogas energy is a harmful factor for the environment since it generates methane which is created by decomposition of animal and plant based organic waste. However, energy transformation is possible through storage of active gas, its treatment and burning the generated methane gas later on. Agricultural basins and basins under preservation provide a large potential considering opportunities of using biogas energy and its wastes in agriculture.

As a type of renewable energy, hydrogen is considered to be the “energy of the future” as it does not harm the environment. It is clean, can easily be turned into electrical and mechanical energy and has zero carbon and could be used in many fields (industry, houses and vehicles). Since Türkiye is surrounded by three seas, sea current energy is an easy and cheap source of energy. Diversification of renewable energy resources is of great importance for both reducing dependence on foreign resources and ensuring the security of energy supply.

The areas with high renewable energy needs in Türkiye's rural regions could be defined as follows:

- a) Meeting heating needs of farm buildings,
- b) Meeting energy needs of facilities related to processing and marketing of plant and animal products,
- c) Having renewable energy investments under the scope of activities for diversification of income in rural areas and
- d) Meeting energy needs of water and sewerage treatment plants.

Meeting rural energy needs with renewable energy will be an important factor for ensuring a rural-urban balance and reducing migration from rural areas. In this context, it is relevant to consider wind, biomass, biogas, solar and geothermal energy to accelerate the development of rural areas and prioritise investments in such energy sources by village administrations, cooperatives, producer unions, provincial special administrations, ILBANK, Regional Development Administrations and Development Agencies. In addition, supporting zero waste by recycling biological waste and transforming it into energy source will be effective for reducing environmental pollution from agriculture.

3.5. Preparation and Implementation of Local Development Strategies – LEADER

LEADER is an approach proven to be a very valuable resource for developing rural policies by encouraging local participation and partnership in preparation and implementation of sustainable development strategies for rural areas. This approach encourages innovative solutions for rural problems and assumes an important mission to meet the needs of local communities. It also means that local actors participate in

decision-making process related to the strategy and the projects to be conducted in their local area.

There is a great need for operational management in the form of integrated implementation of the business administration functions called "seven sisters" for conducting the targeted programs for rural development in Türkiye and increasing the effectiveness of strategic management in serving the specified objectives. These functions are:

- Improvement of Human resources,
- Marketing,
- Strategic plan,
- Accounting,
- Financial plan,
- Production planning,
- Organization.

In operational management, development of human resources can be possible with training, publication and consultancy activities; and on the other hand, the digital agricultural market (DİTAP) becomes effective for marketing, through different marketing practices such as community agricultural support and agricultural exchanges. In addition to these, the important thing is to provide rural infrastructure investments and technical support. It is because development cannot be sustainable without public infrastructure investments and technical support. In this respect, the LEADER approach is an important example of the implementation of local development strategies.

LEADER approach was included in the 2007- 2013 Programme for Türkiye to implement European Union Common Agricultural Policy and Rural Development Policy within the scope of measure “Preparation and Implementation of Local Rural Development Strategies (LDS)”. Capacity development activities were launched as of 2010 in order to gather knowledge about LEADER approach, encourage establishment of potential LAGs and prepare development strategies at the local level as well as to prepare to implement the measure.

First pilots were initiated in Şanlıurfa/Birecik and Çorum/İskilip districts. These efforts gained impetus in 2015 and LEADER was disseminated to the provinces of Ankara, Amasya, Çanakkale, Denizli, Diyarbakır, Erzurum, Kastamonu, Manisa, Ordu and Samsun. The Commission letter dated 20 February 2019 noted that “Türkiye’s request for delegation of authority for budget implementation of LEADER was accepted and implementation could start upon the relevant Financing Agreement is revised and takes affect”, and LEADER measure was then accredited.

In Türkiye, there are currently 50 LAGs established in 12 IPARD provinces. Implementation processes for Local Development Strategies (LDS) in these LAGs are covered by the budget of LEADER measure. A new process was launched to disseminate information about LEADER approach, to raise awareness in the local community of potential LAGs to be established and help prepare LDSs in additional 15 IPARD provinces, namely, Balıkesir, Burdur, Bursa, Çankırı, Elazığ, Erzincan, Giresun, Hatay, Isparta, Karaman, Kütahya, Mardin, Muş, Uşak and Yozgat. It is

planned to establish minimum 60 LAGS and prepare LDSs in these 15 IPARD provinces during this process.

3.6. Table of Context Indicators

Table 21. Context Indicators

Context Indicator Name	Measurement unit [if relevant]	Context Indicator Value [Mandatory]	Year [Mandatory]	Comment [Optional]
Total Population		83 614 362	2020	TURKSTAT / Basic Indicators
Population Density	Number / km ²	109	2020	TURKSTAT / Basic Indicators
Share of Population for town and villages	%	7	2020	TURKSTAT / Basic Indicators
Total Population for town and villages.		5 878 321	2020	TURKSTAT / Basic Indicators
Population less than age 15 (Total)		19 068 237	2020	TURKSTAT / Basic Indicators
Population between 15-65 years of age (Total)		56 592 570	2020	TURKSTAT / Basic Indicators
Population between 15-65 years of age (Rural)		-	-	Not available
Share of population between 15-65 years of age	%	67.7	2020	Calculated from above indicators
Population over 65 years of age (Total)		7 953 555	2020	TURKSTAT / Basic Indicators
Share of population over 65 years of age	%	9.51	2020	Calculated from above indicators
Total Area	km ²	783 562	2020	TURKSTAT / Basic Indicators
Total rural area	km ²	-	-	Not available
Share of rural area	%	-	-	Not available
Population density	Inhabitants / km ²	109	2020	TURKSTAT / Basic Indicators

Rural population density	Inhabitants / km ²	-	-	Not available
Employment (age 15-64)		26 812 000	2020	TURKSTAT / Labour force Statistics
Employment rate (age 15-64)	%	47.5	2020	TURKSTAT / Labour force Statistics
Rural employment (age 15-64)	-	-	-	Not available
Unemployment rate (age 15-64)	%	13.2	2020	TURKSTAT Databases / Labour Force Statistics
Non-agricultural unemployment rate	%	15.3	2020	TURKSTAT / Labour force Statistics
Rural unemployment rate (age 15-64)		-	-	Not available
Youth unemployment rate (age 15-24)	%	25.3	2020	TURKSTAT Databases / Labour Force Statistics
Rural youth unemployment rate (age 15-24)		-	-	Not available
Employment in Agriculture		4 718 000	2020	TURKSTAT Databases / Labour Force Statistics
Share of employment in agriculture	%	17.7	2020	TURKSTAT Databases / Labour Force Statistics
GDP Per Capita	EUR / inhabitant PPS / inhabitant	8 599 ¹	2020	TURKSTAT Databases
Share of Agriculture in GDP	%	6.6	2020	TURKSTAT Databases
Total Gross Value Added	TL	4 486 655 612 835	2020	TURKSTAT Databases

1 Reported in USD, converted to EUR based on exchange rate

GVA by sector (primary, secondary, tertiary) total and share of total GVA	Primary	TL 337 160 050 617 (%7.51)	2020	TURKSTAT Databases
	Secondary	TL 1 414 074 535 348 (%31.52)	2020	TURKSTAT Databases
	Tertiary	TL 2 735 421 026 870 (%60.97)	2020	TURKSTAT Databases
GVA in agriculture		TL 337 160 050 617	2020	TURKSTAT Databases
Utilised agricultural area	Total utilised agricultural area (UAA)	37 762 000 ha	2020	TURKSTAT Databases
	Arable land	19 586 000 ha	2020	TURKSTAT Databases
	Permanent grassland	14 617 000 ha	2020	TURKSTAT Databases
	Permanent crops	3 559 000 ha	2020	TURKSTAT Databases
Total Forest Area	km ² % of total	227 402 29.15%	2020	DG Forestry Figures
Agricultural and Farm Income	Farm net value added by type of farming	-	-	Not available
	Farm net value added by region	-	-	Not available
	Farm net value added by economic farm size	-	-	Not available
	In areas facing natural and other specific constrains according to national equivalent definition	-	-	Not available
	Gross Fixed Capital Formation (GFCF)	-	-	Not available
	Share of Gross Value Added (GVA) in agriculture	-	-	Not available
Agricultural Productivity	Labour productivity in agriculture, forestry and food industry	-	-	Not available
Agricultural Trade (imports and exports)	Total agri-food trade value (imports + exports)	36.8 billion \$	2020	TURKSTAT 2020
	Agri-food trade balance (total and separate for agricultural food and feed products, food preparations and beverages, non- edible)	-	-	Not available

	Agri-food exports (total and separate for agricultural food and feed products, food preparations and beverages, non- edible)	-	-	Not available
	Agri-food imports (total and separate for agricultural food and feed products, food preparations and beverages, non- edible)	-	-	Not available
Agricultural area under organic farming	-Number of hectares under organic farming -Share of area under organic farming in the total utilised agricultural area (UAA)	545 870 ha	2019	MoAF
Livestock units	Total number of livestock units	-	-	Not available
	bovine	18 157 971	2020	TURKSTAT Databases
	ovine	54 112 626	2020	TURKSTAT Databases
	poultry	386 080 582	2020	TURKSTAT Databases
	swine	990	2020	TURKSTAT Databases
	other	-		Not available
Tourism Infrastructure	Number of bed places	1 022 366 ² 576 876 ³	2020	Statistics of Ministry of Culture and Tourism
	Share of total bed places by degree of urbanisation	-	-	Not available

² As certified by the Ministry of Culture and Tourism

³ As certified by local Municipalities

Water	- Water use - Water quality (gross nutrient balance nitrogen, phosphorus and nitrates in ground water)	- Approximately 73% of water resources is used for agricultural irrigation (nearly 8.5 million ha is irrigable agricultural land, approximately 40 billion m3 water is used for irrigation) - 51297 tonnes of pesticides and 6 087 714 tonnes of fertilizer use	- 2018 - 2019	TURKSTAT and MoAF
Soil	-Soil organic carbon in agricultural land - Soil erosion by water	- 3.5 billion tonnes of organic carbon stock in 30 cm depth - 642 million tonnes of soil affected by water erosion	- 2018 - 2019	- MoAF - Ministry of Environment Urbanization and Climate Change
Energy (Sustainable production of renewable energy from agriculture and forestry)	-Production of renewable energy from agricultural biomass -Production of renewable energy from forestry biomass -Production of renewable energy from agriculture and forestry -Share of the combined production of renewable energy from agricultural and forestry biomass over the total primary energy production of renewable energy.	-	-	Not available
Climate	Greenhouse gas emissions from agriculture	- 12.5% (62.5 Mt.CO2-equiv.)	- 2018	UNFCCC
Air	Ammonia emissions from agriculture	-1.9% (1.39 Mt.CO2-equiv.)	- 2018	UNFCCC

Health	Sales/use of antimicrobials in food producing animals	-	-	Not available
	Risk, use and impacts of pesticides	-	-	Not available
Modernisation	Share of IPARD budget for knowledge sharing and innovation	%4	2021	Draft IPARD III Programme document (advisory services budget)

3.7. Alignment with EU's Green Deal Rules

The goal to transform EU's economy for a sustainable future lies at the hearth of basic components of European Green Deal (EGD). In parallel to this, EGD aims to reduce greenhouse gas emissions under a specific program with an aim to have a climate neutral EU in 2050. With this Deal, European Commission does not only design an "environment" strategy but also a new international trade system and division of labour, closely relevant for Türkiye. The EU continues to work on a new system based on new taxes in trade and non-tariffs barriers with "carbon border adjustment mechanism" (CBAM) to reduce carbon leakage. It is mentioned that CBAM is designed both to prevent carbon leakage and make it mandatory for its trade partners to adopt EU's target to reduce global greenhouse gas emissions. Protection of biodiversity, reduction in pesticides and fertilizers use as well as in antimicrobial products, promotion, organic farming methods and creating sustainable food systems are other equally important components of the EU Green Deal.

Measures regarding abovementioned issues are of utmost importance for Türkiye, whose largest foreign trade partner is the EU, to consider how to turn this situation into an advantage. Türkiye's alignment with the developments of the new EU climate regime and greenhouse gases emissions reductions and ensuring the respect of the EU standards and new policy orientations is necessary in this context.

EU aims to turn 25% of its agricultural land into organic farming land by 2030. In this framework, organic production of fresh fruits and vegetables sector and frozen products will increase in the upcoming years. In addition, the potential to increase organic production thanks to the EU Green Deal targets will also be advantageous for other agricultural productions such as medicinal and aromatic plants and mushrooms. Cultivating and supplying these products organically only in the EU will not be sufficient hence creating the market and opportunities also for candidate and neighbouring countries.

Organic farming, like any other farming production method, is an integrated production system covering production and post-harvest stages. As the Green Deal also aims to reduce losses and waste and to ensure product safety throughout the year, it is necessary, also in organic production, to create adequate conditions for post-harvest period to avoid such, products losses in terms of both quantity and nutritional value. In this regard, supporting cold storage, packaging and logistic practices for organic products as is the

case for fresh fruits and vegetables grown by other production systems will contribute to the alignment with the Green Deal.

Post-harvest losses of agricultural products are related to a number of factors including pre-harvest cultural practices, type, species, storage conditions (heat, moisture, composition of the atmosphere etc.) and post-harvest practices. Increasing storage capacity in countries such as Türkiye that is the important producer of many agricultural products will enable sustainable shipment of these products to the EU other consumers throughout the year.

Another pillar of the Green Deal is opting for saving energy and renewable energy resources. Electricity is the largest input cost in cold storages. New technologies and equipment and construction with strong isolation will be effective for preventing energy losses. Using renewable energy resources such as solar power in part in newly constructed storages will support the objectives pursued by the Green Deal.

The Green Deal aims to regulate consumption habits of consumers in Europe as well. Increased obesity and cancer result in deaths and a significant economic burden for healthcare systems. Therefore, improving diet by, among others, raising the share of fruit and vegetable consumption in human nutrition is targeted. Ensuring accessibility to healthy food at suitable prices for individuals is key for building sustainable and healthy generations. That is why, growing crops by the use of environmentally friendly methods, adequate storage, processing, reduction of losses and logistics of agricultural products should be improved to build a sustainable food system.

4. SWOT - SUMMARY OF THE ANALYSES ABOVE

4.1. Agriculture, Forestry and Food Industry

Table 22. Milk SWOT Analysis

Strengths	Weaknesses
➤ Large number of and upward trend in animal population and livestock farmers who have animal breeding culture, ➤ Increasing rate of high-yielding animal breeds in cattle population, ➤ Milk production establishments having an investment capacity, ➤ Favorable climate and large pastures to raise a variety of animals, ➤ Fodder crop production being within the scope of support, ➤ Steady growth in raw milk production, ➤ Milk producers having an organized structure like cooperatives, producer organizations, etc. ➤ Awareness and investments for better quality raw milk production, ➤ Incentives for raw milk production, ➤ Increased contracted production practices between milk producers and milk processing sector, ➤ Efficiently-managed large-scale milk establishments, ➤ Large-scale companies which produce and export quality milk products.	➤ High number of small-scale establishments, ➤ Producers having a low level education, not keeping farm records, ➤ Lack of milking and cool storage facilities as well as barns and other structures in milk establishments, ➤ Insufficient fodder production and high fodder costs, ➤ Poor feeding, ➤ Low milk yield, ➤ Insufficient animal welfare and environmental standards –deficiencies in law implementation, ➤ Lack of organization among producers and especially inadequacy of local cooperatives, ➤ Limited number of establishments capable of producing quality milk and insufficient cold chain, ➤ Poor standardization of milk collection and processing facilities, ➤ Lack of infrastructure and equipment for manure management ➤ Milk analysis system not being common, ➤ Majority of milk processing facilities being small- and medium-scale, ➤ Lack of finances, inadequate infrastructure, and high energy costs in milk collection and processing facilities.
Opportunities	Threats
➤ High local demand for drinking milk and milk products as well as increasing population, ➤ High number of countries that milk products have been exported to as well as the geographically strategic location of the country, ➤ Availability of national and international support programs, ➤ National legislation being in line with the EU food hygiene and farm animal welfare requirements, ➤ Technological developments enabling energy-efficient and environmentally-friendly production, ➤ Increasing demand for organic and traditional farm products as well as the spread of the farms that produce such products, ➤ Increased demand due to the widespread use of the online sales system,	➤ Decreasing number of milk production establishments and farmers, ➤ Problems that might be faced due to the closing down of the small- and medium-scale milk processing facilities and milk collection establishments because they fail to fulfill the requirements stipulated in national legislation, ➤ Low competitive capacity of small-scale establishments against large-scale establishments and imported products due to high costs, ➤ Reduced fodder production and low-yielding pastures due to climate change, ➤ Insufficient studies to protect the genetic structure, ➤ Low fertility and animal diseases.

Table 23. Red Meat SWOT Analysis

Strengths	Weaknesses
➤ Proximity to potential markets apart from the EU, ➤ Favorable climatic conditions for different methods of animal rearing, ➤ Expectation by all segments of the society to have a restructuring in animal husbandry due to the relations with the EU, ➤ Genetic material diversity creating unique raw material potential, and product diversity, ➤ High number of animal population, ➤ Relatively low labor cost, ➤ High demand pressure to be created by insufficient animal product consumption per capita in the future, ➤ An abundance of trained technical staff, ➤ Shrinkage of non-agricultural sectors having made animal husbandry an attractive investment, ➤ Domestic genetic resources being the raw material of geotagged meat products ➤ Most of the provided support and grants target sustainable production, ➤ Breeders' willingness to use innovative technologies, ➤ Predisposition of Anatolian culture to animal breeding.	➤ Problems faced in collecting statistics, and unregistered animal husbandry, ➤ Insufficient quality fodder-pasture production, high mixed fodder raw material prices in the domestic market, ➤ Unstable prices, ➤ Deficiencies in the functional organization of agricultural holdings, ➤ Animal diseases, hygiene and quality problems, ➤ Low productivity, ➤ High unit production cost, insufficient establishment size, ➤ Insufficiency of the budget share allocated to animal husbandry, ➤ Lack of infrastructure and equipment for manure management ➤ Insufficient flow of information between researchers, disseminators and producers, ➤ Genetic insufficiency of the production material in terms of some yields, ➤ Foreign dependency in the supply of fodder and animal material, ➤ Insufficient knowledge level of advisors helping farmers to prepare projects for support, ➤ Low quality of incoming animal material, lack of animal resting stations in our country, and problems faced during transportation.
Opportunities	Threats
➤ The EU accession process serves as a driving force (developments on food safety, border control, animal health, animal husbandry, etc.), ➤ Türkiye's geographic location ➤ High number of animal population, ➤ Organic animal husbandry potential, ➤ Supports to animal husbandry, ➤ Expectation for an increase in the demand for animal products, ➤ A large variety of raw materials and products, ➤ A high potential of qualified staff and labor force, ➤ Investors' willingness,	➤ Problems in animal health and animal movements, ➤ High production costs, and especially high prices of feed raw materials, ➤ Marketing problems and inability to build a trademark, ➤ Continued informal production, ➤ Continued organizational and managerial problems and lack of coordination in the sector, ➤ Lack of quality and standardization, ➤ Problems related to the size of establishments, ➤ Insufficient agricultural advisory services, ➤ R&D related problems,

Table 24. Poultry Meat and Eggs SWOT Analysis

Strengths	Weaknesses
➤ Türkiye is one of the biggest producers in the world in the poultry sector, ➤ Increasing domestic consumption and export opportunities in chicken meat and eggs encourage production, ➤ Active producer unions, ➤ Poultry housing with a modern and technological infrastructure, ➤ The fact that the land is fragmented and small in scale creates an advantage for the poultry sector, ➤ Increase in employment with the growth of the poultry sector, ➤ A strong cooperation and coordination between the public sector and the private sector, ➤ A short and strong value chain with the integration and contracted production model in the poultry meat sector, ➤ No marketing problems because the farmers producing broilers use a contracted production model and the eggs are bought by the final product collection center, ➤ Poultry housing and slaughterhouses, which are integrated, are equipped with the latest technology and they work with a suitable capacity and in proper hygiene conditions, ➤ Using digital applications at every stage of poultry meat production, ➤ Poultry have a good feed conversion ratio, one can obtain the highest efficiency with the least feed, ➤ A price level acceptable to the consumer for egg prices, and the labeling of the egg according to the production systems in marketing, ➤ Traceability being increasingly widespread, and increased traceability on the Internet, ➤ Laws and regulations comply with the EU norms, ➤ Continued breeding material improvement studies, ➤ Increased awareness among producers, and increasing number of qualified staff, ➤ Increasing number of research on production techniques, feeding, and animal welfare, and increasing number of publications, ➤ Using good agricultural practices in the sector, ➤ Meeting consumer demands with organic and alternative production systems, ➤ Practicing halal product standards (especially in slaughtering) demanded by the importing countries that are Muslim, ➤ Environmentally-friendly establishments, ➤ Increase in the feed crop supports.	➤ The vaccines, feed raw materials and breeding (egg and chick) materials used in the poultry sector are imported, which causes foreign dependency, ➤ High feed and energy costs, ➤ Shortage of qualified staff, ➤ Negative perception in the society about white meat consumption, ➤ Small-scale establishments close down because they fail to adapt to the market conditions, and they have difficulties in renewing themselves, ➤ Animal by-products that cannot be offered for human consumption are disposed, they are not used sufficiently in animal feeds (rendering facility, dog and cat food production), ➤ Lack of legislative regulations that secure the producers' rights and incomes, although the sector is based on a contracted production model, ➤ Problems faced in export business bring along large decreases in domestic market prices, ➤ Lack of domestic main breeding species in poultry, ➤ It is expected that the risk of disease will gradually increase as a result of not separating the egg and meat production areas, ➤ Avian flu and other diseases pose a risk, ➤ Lack of inspection in the markets (non-standard marketing of chicks, chicken meat, spent chicken and eggs), ➤ Failure to develop slaughter standards suitable for traditional production for poultry meat production other than chicken, ➤ Insufficient distribution of disease diagnosis laboratories by production regions, and lack of veterinarians specialized in poultry diseases.

Opportunities	Threats
➤ Chicken meat and eggs become attractive due to the increase in population, the increase in purchasing power and the high cost of alternative animal protein sources, ➤ Increasing the production of corn and soybeans which are feed raw materials (especially in poultry feed), ➤ Extending the creation of a new international sales platform with e-commerce applications throughout the country, ➤ Proximity to major importing countries, ➤ Demand for poultry products by every income level, ➤ Poultry litter and manure can be reused, ➤ The rise of protein-based nutrition in healthy eating and diets, and the frequent emphasize on the importance of eggs, ➤ The production levels allow for exportation in new markets, ➤ The regions with low density become attractive for new poultry establishments, ➤ Poultry meat and eggs are preferred by consumers of all income levels because of their low prices, in addition to low cholesterol and fat rate, ➤ Production and development of producers' own main breeders in the poultry sector.	➤ Foreign dependency in breeding materials and feed raw materials, ➤ Having to sell products below the cost due to the fact that production cannot be stopped during the market shrinkage, ➤ Increasing number of establishments due to the splits although they do not operate in full capacity, ➤ Changes in egg prices and the high pricing requirement of producers in Türkiye compared to major competitors (due to feed costs), ➤ Animal diseases and residual risk in the sector, ➤ Uncontrolled increase in egg production by creating excessive growth during periods of high profit, ➤ Unforeseen trade-related problems with importing countries, ➤ Seasonal fluctuations in the demand for poultry products, ➤ High competition in the poultry sector.

Table 25. Fruits, Vegetables and Other Horticultural Crops SWOT Analysis

Strengths	Weaknesses
➤ Environmental conditions and products diversity of the country, ➤ Geographical location of Türkiye providing logistical advantages, leading position on world markets in certain products, ➤ Organic agriculture and good agriculture practices are becoming increasingly widespread, ➤ Supports to plant production and insurances, ➤ Sufficient amount of fruits and vegetables production to meet the demands of processing sector ➤ Investments in developing the sector industry, ➤ Availability of qualified technical staff. ➤ Legislative infrastructure in place, ➤ Product diversity, ➤ Export experience, ➤ Existence of institutional organization (Public sector - Private sector, non-governmental/professional organization), ➤ Availability of qualified experts, ➤ Some agricultural raw materials are supplied from domestic production.	➤ Fragmented land and small-scale establishments, ➤ High input costs, ➤ Lack of planning in agricultural production, ➤ Lack of efficient and strong producer organizations, ➤ Lack of market regulation and intervention organizations in agricultural products, ➤ Foreign dependency in input, ➤ Insufficient plant breeding, ➤ Failure to ensure integration in agricultural information systems in terms of decision support mechanism, ➤ Insufficient use of technology, ➤ Insufficient storage and marketing infrastructure, ➤ Insufficient use of certified seeds and saplings, ➤ Insufficient traceability from field to fork, ➤ Resources and facilities are not used efficiently and effectively, ➤ Failure to ensure the efficiency of public support and incentives, ➤ Product reliability problems, ➤ Insufficient resource allocation in the sector for R&D & lack of R&D required for a production matching the changing demand structure, ➤ Food industry enterprises resist applying innovative technologies and practices due to their closed nature and rejection of cooperation, ➤ Lack of hygienic infrastructure and application, ➤ High level of foreign dependency in some raw materials and problems experienced with raw material quality, ➤ Low-level of skills and education of labor force ➤ Failure to combine marketing, food and tourism dynamics, ➤ Failure to brand country-specific products, ➤ Statistical data deficiencies, lack of biostatistics, ➤ Control system deficiencies, ➤ Scattered and small parcels of orchards, the insufficient quality and quantity of the supplied fruits, ➤ Lack of support for investments in food safety.

Opportunities	Threats
➤ Increasing incentives, loans and other supports, ➤ Accelerated land consolidation activities/efforts, ➤ Plant production becomes more important due to the use of limited resources and increasing food demand, ➤ Enhanced cooperation between the public sector, NGOs, private sector and universities in agricultural R&D, ➤ Works for harmonization in the EU accession process have started, ➤ Works for basin-based production planning have started, ➤ Increased tendency for becoming organized with the development of the vertical and horizontal structuring of agricultural organizations, ➤ Increasing capital inflows from other sectors to the agricultural sector, ➤ Increase in irrigated farming areas, ➤ Increasing cooperation opportunities with international organizations, ➤ Increased tendency for a balanced and healthy diet, ➤ The widespread use of human resources and technology in publishing and consultancy organizations, ➤ Diverse climate as well as the possibility of producing different products (Biodiversity), ➤ Potential for products with local/geographical indication, ➤ Traditional/local product richness, ➤ Future impacts of recent developments in fields such as materials science and biotechnology on the food sector, ➤ Positive impact of the process of harmonization with the EU acquis on the export potential, ➤ Turning the EU accession process and the economic crisis in Europe into an opportunity in favor of Türkiye – new foreign market potential, ➤ Increased consumer awareness and domestic and foreign demand, ➤ Growth of the tourism sector, ➤ Investment capital's interest in agriculture, ➤ Development of the production models (incorporations, cooperatives) that will not include divided (economy of scale) agricultural economy, ➤ Increased public support and incentives.	➤ Lack of continuity in agricultural policies, ➤ Rapid pollution of soil resources and increasing pressure on natural resources, ➤ Unconscious use and pollution of water resources, inability to control surface runoff waters and insufficient drainage in areas opened to irrigation, ➤ Negative effects of climate change on fruits and vegetables production ➤ Abandonment/misuse of agricultural land, ➤ Unwillingness of the labor force to work in labor-intensive production activities, ➤ Engagement of new countries in products Türkiye specialises in ➤ Policies that do not ensure production sustainability in the privatization of agricultural industry organizations, ➤ The acquisition, by private financial organizations, of the land and production tools belonging to the producers who have difficulty in paying loans, ➤ Problems faced in applying certification requirements in exports. ➤ Use of food raw materials as energy, ➤ Misuse, destruction and division by inheritance of arable land, ➤ Problems in raw material supply due to the lack of agricultural policies and strategies & Inability to supply such raw materials that are competitive in global market conditions ➤ Informal economic activities, ➤ Unstable imported input prices, ➤ Usage of pesticides, GMO and contamination problem, ➤ Reducing customs barriers in agricultural products, ➤ Food safety process management issues, ➤ Infollution concerning the relationship between food production processes and health, ➤ High energy costs in production and raw material supply, ➤ Dependence on oil and high cost in transportation (logistics), ➤ Rapid development of technology and innovation capacity in other countries, ➤ Inability to develop new food production with biotechnological products and lack of legislation, ➤ Lack of research on the effects of foods, substances and materials produced with nanotechnology on human health, ➤ Risk of falling behind in the face of increased regulations on reliability and standards in the world, ➤ Technical barriers to setting international standards, ➤ Investment in R&D is not a priority.

Table 26. Fisheries and Aquaculture SWOT Analysis

Strengths	Weaknesses
➤ Establishment of the General Directorate of Fisheries and Aquaculture, ➤ A professional and experienced fishing fleet, ➤ Türkiye's richness of aquatic flora and fauna, biodiversity and endemic species thanks to the access to different seas and inland water resources increasing potential for fisheries and aquaculture production ➤ Industry capable of delivering fishing vessels and other fishing gear necessary to all kinds of fishing efficiently, ➤ Having fishermen's organizations whose horizontal organization (Cooperatives) and vertical organizations (Unions, Central Union) have been completed, and having fishermen who will transfer their experience and knowledge from generation to generation, ➤ Established infrastructure required for statistics and data collection systems that will form a basis for fisheries management, ➤ A good distribution and supply network despite the short fishing season, ➤ Robust institutional structure and availability of technological opportunities, ➤ Suitable areas for aquaculture especially in seas, ➤ Sufficient knowledge and experience in the sector, ➤ Export experience in the sector, ➤ Dynamic entrepreneurs who want to invest in the sector, ➤ Necessary materials and equipment can be manufactured domestically, ➤ Development of compound feed technology in the domestic industry, available feed factories, ➤ Availability of qualified labor force and employment opportunity for a large number of people (including related sectors), ➤ Suitable infrastructure for juvenile fish production, ➤ Modern processing and packaging facilities at the EU standards, ➤ A quality control and residue monitoring program and system, ➤ Economic species suitable for aquaculture, ➤ Training and research institutions and qualified labor force on water, environmental and fish health, ➤ Legislative requirement to employ trained personnel, ➤ Suitable areas for aquaculture in inland waters. ➤ Legal regulations in compliance with international legislation for the sector, ➤ Aquaculture processing industry uses new technology and is open to innovations, ➤ Sector's compliance with the standards and sustainability demands of the international market, and the presence of control organizations to ensure this compliance, ➤ The quality of the products produced in the sector can compete with the developed countries, ➤ Sustainable supply of the sector's raw material needs through aquaculture.	➤ Inefficient fight against illegal fishing, non-involvement of local administration in the process, ➤ Lack of adequate marketing and promotion and seasonal pricing, ➤ Financial difficulties experienced by those working in fishing industry, low income level in general, ➤ Lack of ecologically based scientific stock monitoring programs, ➤ Excess fishing power capacity relative to the existing stocks leading to overexploited stocks due to overfishing. ➤ Lack of traceability program and system for fish feed, ➤ Insufficient R&D for improvement activities and on the relationship between aquaculture and environment, ➤ Fish farming is not widespread within the scope of organic and good agricultural practices, ➤ The sector has a tendency towards cheap labor, and it does not protect trained manpower, ➤ Underutilization of Türkiye's existing water potential, ➤ Lack of qualified staff and prevention plans on fish diseases and pests, ➤ New production techniques are not widely used, ➤ Lack of a national policy for the management of water and living resources, ➤ Habitat protection measures are not adequately implemented, ➤ The qualified manpower is out of the sector or scattered among different research and implementing organizations because they are not authorized by laws and regulations, ➤ Problems experienced in establishing a functioning registration system and collecting statistical information in some aquacultural establishments, ➤ Lack of polyculture fish farming, ➤ Low variety of products that provide added value in the processing sector, ➤ Lack of qualified staff to work in the sector, ➤ Insufficient R&D investments and lack of cooperation with scientific institutions in the sector, ➤ Despite the formation of aquaculture export marketing channels, lack of a structure to analyze market demands and changes, ➤ Poor institutionalization and lack of branding in the sector, ➤ Foreign dependency and high investment costs in technological equipment, ➤ Wholesale and retail fish selling points fail to fully comply with the standards and experience problems during inspections, ➤ Destructive competition between exporters of aquaculture products as a result of different price offers of foreign market buyer companies to our export companies, ➤ Lack of an effective policy to increase the consumption of aquaculture products,

Opportunities	Threats
➤ A richness of diverse commercial species in marine and inland water resources, ➤ The growing awareness of natural and healthy food consumption, ➤ Additional income opportunities that use less resources such as amateur fishing tourism (pescatourism), ➤ Increased marine protected areas and artificial reef areas, ➤ Viability of modern technology, ➤ Supports and below-market prices for diesel demands, ➤ Ministerial decision-making by means of meetings especially with NGOs, cooperatives and other stakeholders. ➤ The domestic consumption market potential can be developed with the increasing population rate, ➤ Potential to produce products with high added value, ➤ Likelihood of the demand for processed products to increase in parallel with the increase in the working population, ➤ Developments in the tourism sector increase the demand for aquaculture products, ➤ Availability of new markets, ➤ Being a sector that meets international requirements, ➤ Import of aquaculture products at low prices and export of these products within the framework of the rules of origin, ➤ Increased demand for processed and packaged aquaculture products due to the pandemic.	➤ Illegal fishing activities in the area and failure to prevent them, ➤ Lost fishing gear and ghost fishing, ➤ Young people not willing to take up fishing as a profession, ➤ Lack of scientific fisheries management plans, ➤ Middlemen provide in-kind and cash support to the fishermen who are not cooperative members, make those fishermen dependent on them all year round and buy their products at a low price, ➤ Engagement of amateur fishermen in commercial fishing activities, ➤ Imposition of current fishing bans per one species without taking into account other species which share the same environment and are caught using the same fishing gear, and as a consequence, the increase in off-target fishing rates. ➤ Low financial support and high loan interest rates, ➤ Fluctuations in production in the aquaculture and fishing sector, ➤ Increased input costs and inability to compete in the foreign market, ➤ Distance to market and high transportation costs, ➤ High production costs (energy, feed etc.), ➤ Shrinkage in the European market (sea bass, sea bream), ➤ Price fluctuations in fish food and raw materials, ➤ Insufficient fish consumption habit, ➤ Prejudices against aquaculture facilities and aquaculture products, ➤ Investors are required to receive approval from many public institutions, there are bureaucratic difficulties and obstacles, ➤ Lack of interest of High school graduates in the field of aquaculture for their undergraduate study due to the decrease in employment opportunities (leading to possible closing of the undergraduate education institutions, ➤ The production areas are intertwined with tourism, culture, natural assets, national parks and protected areas, ➤ Increased risks from abroad due to the fact that the customs do not employ occupational groups trained on aquaculture products and health,

4.2. Environmental and Land Management

Table 27. Land Cover Management and Soil Erosion Control SWOT Analysis

Strengths	Weaknesses
➤ Law No. 5403 on Soil Preservation and Land Utilization in place for soil conservation, ➤ Ongoing land rehabilitation and drainage projects to protect the soil surface, ➤ Relatively less contaminated soils by fertilizers and chemicals due to the widespread use of traditional agricultural techniques compared to the EU, ➤ National Strategy and Action Plan to Combat Desertification (2019-2030) in place, ➤ National Action Plan to Combat Erosion in place, ➤ Country-based erosion risk maps prepared,	➤ Lack of an up-to-date soil database, ➤ Insufficient level of organic matter content in the soil, ➤ Erosion control measures are costly and require expertise, especially in areas with steep slopes, ➤ Using wrong crop patterns (in crop rotation), ➤ Green fallow is not a widely-used method in Türkiye, ➤ Anti-erosion measures focus on slope and do not take into account other factors such as soil properties and climate, ➤ Lack of knowledge and skills of farmers on soil conservation methods and lack of practical training for farmers, ➤ Consolidation procedures are not completed in all agricultural areas.
Opportunities	Threats
➤ Establishment and development of soil testing laboratories, ➤ Increased awareness on sustainable management of natural resources and about environmental practices, ➤ Supports for the use of organic and organomineral fertilizers, ➤ Opportunities to create images and data about Türkiye's lands with high-tech devices and to deliver them to people in a very fast manner through appropriate information systems or mass media.	➤ High risk of erosion, ➤ Uncontrolled fertilization, ➤ Aridity-desertification, ➤ Farmers are not sufficiently determined to adopt methods for soil conservation, ➤ Misuse of agricultural land and improper irrigation methods, ➤ Impacts of climate change (decrease in precipitation, overuse of water resources, drought).

Table 28. Water Conservation SWOT Analysis

Strengths	Weaknesses
➤ National legislation in compliance with the Nitrates Directive, ➤ Dynamic identification of Nitrate Vulnerable Zones via NIBIS (Nitrate Information System), ➤ The Water Law prepared and put into force, ➤ Supporting water-saving modern pressurized irrigation systems (in particular drip irrigation) equipment procurement through grants and low-interest loans from public resources, ➤ Promotion of sustainable use of Water Resources, requirement of Water Use Permits/Groundwater Use Certificates in grant and loan applications, ➤ New irrigation investments are realized as a closed system, ➤ Robust business organization in irrigation facilities management (irrigation unions, SWW -bodies dealing with water management), ➤ Ongoing preparation of Basin-Based Sectoral Water Allocation Plans and basin-based water management plans, ➤ A National Water Information System which includes all water related data such as river basin management plans, water quality, treatment facilities, water efficiency, climate change, flood and drought has been established and put into service by the Ministry, ➤ "Regulation on Controlling Water Use in Irrigation Systems and Reducing Water Losses" in place, ➤ A basin-based planning study has been carried out for the reuse of used water to ensure more effective and sustainable management of water resources.	➤ Insufficient water resources and low groundwater levels in many regions, ➤ Water consumption in irrigation networks is not measured and water measuring instruments are underused (Lack of knowledge about water consumption control (membership to irrigation association/water meter)) ➤ Failure to integrate agricultural production subsidies with water budget and production planning, ➤ Inadequate level of good irrigation practices, ➤ Underutilization of treated wastewater obtained from wastewater treatment plants to irrigate agricultural lands, ➤ Lack of awareness and knowledge of farmers on the impact of agriculture on water pollution, ➤ High rate of unauthorized use of groundwater, ➤ Lack of knowledge and skills on water use and water saving of people working in closed system irrigation projects, ➤ Lack of awareness about aquatic ecosystems that water hosts, such as lakes, rivers, streams and ponds, ➤ Lack of awareness about the importance of preserving the ecological structures of aquatic ecosystems in conserving the terrestrial ecosystems and biodiversity of the region where they are located.
Opportunities	Threats
➤ Including policies, strategies and measures on the protection of water resources in terms of quantity and quality in Development Plans and related documents of institutions and organizations, ➤ Ongoing work on river basin management plans; revisions made by the Ministry on basin master plans to better protect water, ➤ Research centers and university divisions with suitable scientific infrastructure to do research on freshwater ecosystems, ecosystem structures and their biodiversity, ➤ Foreign funds for investments in the protection of water resources, ➤ Producers' increased interest in technological developments and increased awareness about the protection of water resources, ➤ Increased awareness about the need to protect water resources in terms of quantity and quality.	➤ 74% of the existing water potential in Türkiye is used for agricultural activities, ➤ Ecological structures and continuity of freshwater ecosystems are endangered, completely dried out or even disappeared, as a result of agricultural irrigation activities, ➤ Overutilization of fertilizers in irrigated areas to increase production, ➤ Groundwater levels and reserves are decreased, ➤ Lack of sufficient water resources for irrigation during dry periods, ➤ Sudden changes in the amount and distribution of precipitation due to climate change, ➤ Necessity of irrigated agriculture throughout the country for food production and intensive agricultural production, ➤ Threats to freshwater ecosystems as a result of agricultural irrigation, excessive use of inorganic fertilizers and pesticides and herbicides in agriculture, disappearance or drying of these ecosystems (salinization, eutrophication in lakes, rivers and lagoons because of excessive amount of N and P).

Table 29. Biodiversity SWOT Analysis

Strengths	Weaknesses
➤ Türkiye's rich biodiversity, ➤ Including priorities and measures regarding biodiversity conservation and management in national policy documents, ➤ Being a party to international conventions on biodiversity conservation, ➤ Available infrastructure for research, monitoring, technology development, etc., ➤ Institutions working in the field of biodiversity and supporting legislation, ➤ Prohibitive regulations on stubble burning, ➤ Farmers' awareness about organic agriculture for the controlled use of chemicals.	➤ Lack of awareness about the importance of the contribution of biodiversity to agricultural production, ➤ Lack of training, publication and visibility activities on this topic, ➤ Lack of agricultural policies, incentives and supports for biodiversity conservation, ➤ The Law on Conservation of Nature and Biological Diversity has not been enacted yet, ➤ Traditional farming practices by farmers such as fallowing the field (instead of green fallow) for a year with the use of chemical input and without any soil cover,
Opportunities	Threats
➤ Biodiversity practices that will support farmers under the EU Common Agricultural Policy, ➤ Importance of rich biodiversity and landscape also for tourism and economy (local products labelling), ➤ Biodiversity-focused international commitments and 2030 goals, ➤ Increased awareness of some farmers on this topic, ➤ Strong non-governmental organizations active in the field of environment and nature protection, ➤ Universities and institutes conducting research on biodiversity.	➤ Increase in input-intensive farming practices, ➤ Policies supporting use rather than protection of biodiversity, ➤ Illegal hunting and plant collecting, ➤ The threat posed by industrial and residential areas to biodiversity areas (direct occupation or proximity), ➤ Changes in land and water use and production systems, ➤ Agricultural activities cause ecosystem degradation and biodiversity loss due to land use, pesticide/herbicide use as well as overuse of water, leading to threatening ecosystem services, ➤ Agricultural waste is left in the field and is mixed in water, ➤ Lack of knowledge on alternative methods of pest control.

Table 30. Organic Agriculture SWOT Analysis

Strengths	Weaknesses
➤ Organic agriculture supports, ➤ Legislation in compliance with the EU, continued updates, and available institutional structure, ➤ Organizational structure for certification and controls, ➤ Rich ecosystem and climatic conditions suitable for a diversity of organic production, ➤ Clean soil and water resources, ➤ Pastures and meadows suitable for organic animal husbandry, ➤ NGOs active in the field of organic agriculture, ➤ Proximity to export markets, ➤ Traditional knowledge and experience to support organic agriculture, organic agriculture cycle, ➤ A large number of unions and associations in the field of organic farming, ➤ Promotion of the use of minimal inputs, ➤ High rate of agricultural employment, ➤ Accredited laboratories to perform active substance analysis, ➤ Organic Agriculture Information System (OTBİS) database, ➤ A Digital Agriculture Market (DITAP) network within the Ministry, ➤ The producers engaged in organic agricultural production are suitable for an organized structure, ➤ Considering the impacts of climate change, positive impact of organic agriculture as an environmentally friendly and sustainable agricultural production method.	➤ Producers lack enough mechanisms/channels to access domestic markets such as open markets, wholesalers, retailers and stores for organic products, ➤ Lack of research, development and innovation studies, ➤ Training and extension activities are not effective enough, ➤ The market mechanisms and market depth that provide branding and price balances are underdeveloped, ➤ Insufficient number of integrated facilities producing, processing and packaging organic products, ➤ Some inputs used in organic agricultural production and processing are imported, ➤ Small-scale organic agriculture businesses, ➤ High costs, low efficiency, ➤ Low marketing capability of existing organizations, ➤ Lack of group certification, ➤ Non-recognition of the same certificates in the national and international market, ➤ High prices for consumers, ➤ Underdeveloped domestic market, ➤ Imbalance between the production and the amount of products supplied to the market. ➤ A very limited coverage of agricultural land by organic production.
Opportunities	Threats
➤ Changing consumer trends in the world and in Türkiye in favor of organic agriculture, ➤ Relative increase in demand for Agrotourism/Ecotourism, ➤ Improved logistics opportunities and widespread online sales, ➤ Relatively high prices of organic products, ➤ EU's prioritization of organic agriculture within the scope of the Green Deal and its objectives to increase organic agriculture areas.	➤ Some consumers' distrust of organic products, ➤ Negative impact of increased environmental pollution, ➤ Global climate changes effects (pollution of ground water, pollution of soil because of use of fertilizers, pesticide residuals in soil, greenhouse gas emissions, salinization, etc.) ➤ Nitrate pollution in water and soil, ➤ Dependency on imported inputs and high input prices.

4.3. Rural Economy and Quality of Life

Table 31. Farm Diversification and Business Development SWOT Analysis

Strengths	Weaknesses
➤ Favorable climatic, natural and environmental conditions and rich flora and fauna, endemic species increasing tourism attractiveness of rural areas ➤ Human resources (underemployment in the countryside, low-cost labour); ➤ Cultural heritage and varied nature for tourism ➤ Possibility of easily integrating rural tourism with other tourism types ➤ High tourism potential of Türkiye ➤ Possibility of operating tourism activities in all seasons ➤ Good national infrastructure such as main road network, airports ➤ Traditional lifestyles in rural areas ➤ Diversity of crafts and artisanal local added value products as result of adequate skills of women population ➤ Access to regional markets ➤ Past experience in rural development projects	➤ Small and fragmented holdings ➤ Difficulty in accessing funding ➤ Lack of awareness in benefits of using technological equipment and difficulties in accessing technology. ➤ Lack of publicity and marketing skills ➤ Insufficient involvement of women in economic activities in rural areas; ➤ Lack of organisational culture ➤ Rural economy mainly relies on agriculture ➤ High dependence on imports of materials used in plant farming ➤ Deficiency for developing high value-added products ➤ Lack of awareness on geographical indication certification and the advantages of having certified products ➤ Lack of entrepreneurship
Opportunities	Threats
➤ Growing interest for alternative sources of income ➤ Increasing interest among women and youth population in non-agricultural rural activities ➤ Support for new and small entrepreneurs; KOSGEB, ISGEMs, ABIGEMs ➤ Availability of grants for developing rural economy ➤ Increasing demand for organic products, crafts and artisanal added value products, alternative tourism ➤ Huge domestic market ➤ Increasing knowledge and awareness about relevant IPARD-funded best practices ➤ Expansion of IT infrastructure for easy access to information ➤ Increasing demand for renewable energy ➤ Demand for diversifying tourism activities	➤ Continued proportional decrease of rural populations due to ageing and migration to urban centres, causing loss of human resources. ➤ Increased competition among regions ➤ Environmental pollution, not able to protect nature, flora and biodiversity; ➤ Uncontrolled urbanization

Table 32. Rural Infrastructure Investments SWOT Analysis

Strengths	Weaknesses
➤ Robust institutional structure such as governorates, district governorates, municipalities, provincial special administrations in eliminating rural infrastructure deficiencies, ➤ Rural infrastructure investments for road, water, electricity, etc. have been substantially completed, ➤ Use of advanced technology in infrastructure investments, ➤ Public lands where rural infrastructure investments can be made, ➤ Historical infrastructure experience on account of Road, Water and Electricity (YSE), Rural Services, and provincial special administrations, ➤ Strong political support for rural infrastructure investments.	➤ Very high rural infrastructure investment costs, ➤ Rural infrastructure investments are determined without the participation of the rural residents in the needs analysis, ➤ Institutions do not take into account each other's infrastructure investment since there is no environmental plan in villages, ➤ Lack of awareness on waste recycling, rotational approach and zero waste, ➤ Lack of control and monitoring mechanism, ➤ Lack of operational skills of village administrations in the field of maintenance and operation.
Opportunities	Threats
➤ Low investment costs for sports and recreation areas, flood prevention, Internet infrastructures, etc., ➤ Some rural infrastructure investments are made in the form of voluntary activities, ➤ Public lands suitable for creating collective villages that will facilitate infrastructure investments, ➤ Good national and international examples in environmental protection and climate change adaption, ➤ Creating the scope of development programs with high value, ➤ Increased demand for rural tourism, ➤ Advanced technologies for liquid, solid and gas transformations.	➤ Environmental degradation in rural infrastructure investments, ➤ Rural infrastructure investments are also planned and implemented at urban scales, ➤ Low competition as rural infrastructure investments are made through a tender procedure rather than in accordance with PRAG rules, ➤ Lack of knowledge about the integrated rotational use (aquaculture, hydroelectric, agricultural irrigation, recycling), especially in the use of water resources, ➤ Intersectoral and interorganizational competition in the use of land in rural infrastructure investments, ➤ Disputes that may arise in choosing a location for rural infrastructure investments.

Table 33. Renewable Energy SWOT Analysis

Strengths	Weaknesses
➤ Allowing the sale of surplus electricity, ➤ High potential of renewable energy sources, ➤ Wind energy and solar energy maps, ➤ Water reserves are suitable for micro-hydropower investments, ➤ High wind potential in high mountain ranges, ➤ Incentives and supports for using renewable energy resources in production, ➤ Advanced technology, ➤ Increased awareness on and increased demand in renewable energy, ➤ Low operating costs.	➤ Complexity of public transactions in renewable energy investments, ➤ Allowing the installation of solar energy only on roofs, ➤ Lack of consultancy services and procedural difficulties in renewable energy investments, ➤ Lack of awareness on waste recycling, rotational approach and zero waste, ➤ Market entry difficulties in licensed production due to the lack of a control mechanism, ➤ Regional differences in terms of resource efficiency are not taken into account in practice. ➤ Small businesses are not capable of bearing investment costs, ➤ The use of renewable energy for different purposes is not yet common,
Opportunities	Threats
➤ Installation costs are decreasing day by day, ➤ Encouraging the establishment of energy cooperatives, ➤ Local governments' interest in renewable energy investments, ➤ Increased national and international public awareness about the environment and climate, ➤ High consumption costs of other energy sources.	➤ High costs of hydroelectric and wave energy infrastructure investments, ➤ Environmental problems experienced in the use of geothermal resources. ➤ Non-tariff barriers to market entry caused by foreign dependency in the field of energy.

4.4. Preparation and Implementation of Local Development Strategies – LEADER

Table 34. Preparation and Implementation of Local Development Strategies – LEADER SWOT Analysis

Strengths	Weaknesses
➤ LEADER approach in local organizations of the Ministry and the Agriculture and Rural Development Support Institution, developed experience and specialized staff in the National Rural Network (UKA), ➤ Partnerships and stakeholder relations established with Civil Society Initiatives working in line with the LEADER approach at the national level (e.g., Foundation for the Support of Women's Work), ➤ Stakeholder relations developed at local level, ➤ Completion and implementation of 50 LAGs (Local Action Groups) and Local Development Strategies where LEADER principles are applied, ➤ Good exemplary initiatives and roles of local actors representing the public, civil society and private sector in line with the LEADER approach, ➤ The diversity that Local Action Groups put forward in their boards of directors on topics such as composition, characteristics of rural areas, and Local Development Strategy practices, ➤ Türkiye's expertise/experience in LEADER approach at academic level and in practice, ➤ Local and national experience in IPARD supports successfully implemented for rural development, ➤ Incorporation of the LEADER approach in the National Rural Development Strategy as of the preparation stage in the strategy works for the new period, ➤ Large network established by the managing authority with local pioneers, ➤ Local women's cooperatives, ➤ The LEADER approach is accessible online and has efficiently become widespread, ➤ Young and female population important involvement in rural areas initiatives.	➤ Lack of local expert consultancy for local development strategy practices, ➤ Failure of LAG participants to generate local funding for the implementation of Local Development Strategy, ➤ Insufficient budgetary and administrative capacity of non-governmental stakeholders at the local level, ➤ Non-involvement of the private sector in the LEADER approach with an economic efficiency in line with its own structure, ➤ Failure of local young entrepreneurs to take an active role in LAGs, ➤ Underdeveloped managerial skills and capacity for joint action at the local level, ➤ Weak project development and management capacity to benefit from various grant sources locally, ➤ Lack of self-management tradition in rural areas, ➤ Lack of organizational skills and culture in rural society, ➤ Devotion to traditional practices and resistance to new practices in rural areas, ➤ Lack of infrastructure in rural areas, ➤ Difficulties in accessing essential services in rural areas.
Opportunities	Threats
➤ Strategic practices and local supports by development agencies, ➤ Koop-Des (Cooperative Support Program) practices and other cooperative supports by the Ministry of Trade, ➤ Support for increasing the capacity of social entrepreneurship, ➤ Local networking and collaborative initiatives in rural development, ➤ National and local policies developed on issues such as increasing geographical indications, developing cooperatives, and women's participation in life, ➤ Advantages of the Internet, especially e-commerce, ➤ Local project initiatives of successful NGOs working at national level, e.g., rural development works of TEMA.	➤ Adaptation problems experienced by the provinces that will be newly introduced to the metropolitan municipality system, and managerial problems due to the Law on Metropolitan Municipalities, ➤ Migration movements at a level that will affect the implementation of the LEADER approach.

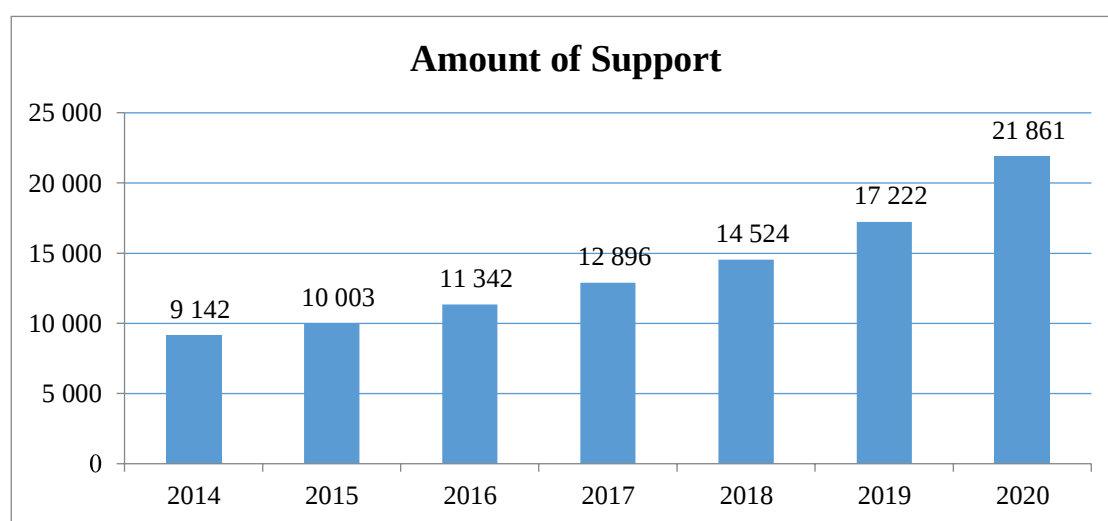
5. MAIN RESULTS OF PREVIOUS INTERVENTIONS

5.1. Main Results of Previous National Intervention; Amounts Deployed, Summary of Evaluations or Lessons Learnt

National interventions can be grouped as agricultural subsidies, rural development grants, regional development programmes applied in certain regions of Türkiye, infrastructure subsidies and agricultural credits.

For the 2014-2020 period, a total of 92.2 billion TL of direct payments for agricultural support and rural development grants were provided. A regular increase has been seen every year in the amount disbursed (Figure 5). The increase in the payments disbursed for agricultural subsidies and rural development grants is apparent for 2019 and 2020.

Figure 5. Amount of agricultural and rural development supports (million TL)



Source: GDAR

National interventions are summarised below.

Agricultural Subsidies

The aim of agricultural subsidies provided from the national budget is to contribute to the solution of the major problems of the agriculture sector, enhance the effectiveness of the policies employed, and facilitate the compliance of the sector with these policies. Agricultural subsidy policies are implemented through programmes that will meet economic and social effectiveness and efficiency conditions. Payments are disbursed upon completion of necessary audits and controls in the framework of budget possibilities and depending on the quality of programs.

Agricultural subsidies are basically: Field Based Support, Deficiency Payment Support, Animal Husbandry Support, Agricultural Insurance Support, Compensation Payment Support, Other Agricultural Purpose Supports, and Rural Development Support. These support items ensure the maintenance of production and the continuity of enterprises. Diesel fuel and fertiliser support offered in the scope of field-based supports as well as feed crops production support, calf support and milk support offered in the scope of animal husbandry supports particularly contribute to the viability and productivity of enterprises.

Rural Development Supports

Rural Development Investments Support Programme, which lays the basis of rural development supports, is a grant scheme that has been in place since 2006. The aim of this programme is to improve the income and social standards in rural areas, ensure integration between agriculture and industry, generate alternative income sources, enhance the effectiveness of the currently conducted rural development activities, improve infrastructure, and enhance entrepreneurship capacity and build capacity to benefit from international sources, in particular from EU funds. It is implemented through communiques drafted by Ministry of Agriculture and Forestry every year and enter into force after being published in Official Gazette.

Within the scope of Rural Development Investments Support Programme; economic investments, agricultural infrastructure investments are supported. Machinery and equipment procurement was supported until the end of 2014 and collective pressure irrigation systems were supported until the end of 2012. As part of economic investments and rural economic infrastructure investments, 50% of investments were supported with grants during the 2006-2020 period; a total grant of 3.1 billion TL was provided with 11 556 completed projects. Beneficiaries have to submit an investment plan to benefit from grants.

These supports complement the IPARD Programme implementation by contributing to the reduction of product losses after harvest, improvement of food safety, enhancing competitiveness of food processing establishments with equipment modernisation, capacity building for the preparation of project proposals, and increasing employment in the rural area.

Regional Development Initiatives

In addition to agricultural subsidies and rural development supports, some programmes are implemented to ensure regional development in Türkiye.

South-Eastern Anatolia Project (GAP) is on top of the list of Regional Development Programs. GAP implementation provinces are Adıyaman, Batman, Diyarbakır, Gaziantep, Kilis, Mardin, Siirt, Şanlıurfa and Şırnak. As part of the programme implemented by the Regional Development Administration, projects are conducted in several sectors aimed at contributing to the socio-economic development of the region.

In the GAP Region, an area of 571 591 ha has been opened to irrigation by the end of 2019. The actualisation rate in GAP energy projects exceeded 90% with the completion of -Ilisu Dam and HEPP Project in 2020. The electricity energy produced by the HEPP's completed in the scope of GAP from their commissioning until the end of 2019 was 473.3 billion kWh. Moreover, with the land consolidation and on-farm development services conducted simultaneously with the irrigation projects in the GAP Region, consolidation studies were completed in an area of 2.49 million ha.

Within the scope of the Project on Integrated Resource Efficiency in Agriculture and Agriculture-Based Industry, value chain analysis was conducted, data compilation and interview studies were performed in 43 enterprises. 11 projects were supported by the Resource Efficiency in Agricultural Industry Financial Assistance Programme. The

Project on Increasing the Utilization of Renewable Energy Sources and Efficiency in Energy Use in South-Eastern Anatolia Region aims to contribute to the region acquiring a “green energy zone” image. For this purpose, in 2014-2019 period; 10 sub-projects were supported, including Animal Waste Based Model Biogas Facility, Solar Cell Irrigation Canal Pilot Project, Project on Sustainable Green Prototype Building, and the Project on Transition to Carbon Neutral Economy in the GAP Region.

As part of the Integrated Rural Development Program, sub-regional rural development plans and the sub-projects envisaged thereunder were prepared in 28 districts to ensure multi-sector project implementations. 311 sub-projects were supported under topics such as capacity building training aimed development, organization, marketing, improving agriculture and plant production, drinking water, rural tourism, increasing entrepreneurship and employment, and social development. It was ensured that 36,380 people benefited from the projects and 16 374 people were employed. Within the scope of Agricultural Training and Extension Project, projects and activities pertaining to capacity building trainings, demonstrations, use of technology, organisation, marketing and trademark formation were supported.

In line with GAP Region Tourism Master Plan targets, projects are conducted aimed at promoting and branding the region and strengthening the physical infrastructure for tourism. GAP Regional Tourism Oriented Promotion and Branding Project is engaged in activities aimed at branding the region, which is composed of 9 GAP provinces, under a single name and transform it into an important and sustainable tourism centre in a holistic approach. With the Project for Strengthening Physical Infrastructure for Tourism in the GAP Region, supports were provided aimed at restoring and evaluating the structures that have an important place in the history of Türkiye and the world such as Göbeklitepe, Zerdeştan and Dara Ancient City. Within the framework of GAP in 2002-2019 period, a resource of approximately 1.5 billion TL at 2020 prices was utilized for the development of the region with the projects implemented in agriculture, industry, environment, culture-tourism, and social sectors etc. and several projects in the said sectors were supported.

Regional development projects conducted in addition to GAP were Eastern Anatolia Project (DAP), Eastern Black Sea Region (DOKAP) and Konya Plain Project (KOP). These projects are conducted by the Regional Development Administrations as well.

Within the scope of DAP, 1723 projects were supported in 2013-2020 period (agricultural irrigation project, livestock market and slaughterhouse project, project for improving plant production infrastructure, Revitalization of Historic City Regions, Project on Improving the Reading Culture, solar energy project), with a total expenditure of approximately 1.3 billion TL at 2020. DAP implementation provinces are Ağrı, Ardahan, Bingöl, Bitlis, Elazığ, Erzincan, Erzurum, Hakkari, Iğdır, Kars, Malatya, Muş, Sivas, Tunceli and Van.

Within the scope of DOKAP, activities aimed at improving beekeeping, developing infrastructure for raw milk collection, irrigation project, Project for Promoting Medicinal and Aromatic Plant Cultivation, extending the production of vermicompost, project for extending the production of oyster mushroom, Development of Organic Production in Organic Basins projects were conducted. New hazelnut orchards were established in 216 da land that had completed its useful economic life. DOKAP

implementation provinces are; Artvin, Bayburt, Giresun, Gümüşhane, Ordu, Rize, Samsun, Tokat, Trabzon Amasya and Çorum.

Within the scope of KOP, feasibility study was conducted in 2016-2017 period for a district-based support model. KOP Rural Development Program pilot project supports were launched in 2016, and a total grant of 81.5 million TL was provided for 172 projects in 8 provinces as part of the project including 2020. Developing Animal Husbandry Infrastructure and Agricultural Research Programmes were conducted. Projects aimed at developing the infrastructure for the control of animal health and animal diseases, developing the trade and increasing the added value of animal products, ensuring animal welfare and improving the living conditions of breeders are supported. KOP implementation provinces are Aksaray, Karaman, Konya, Niğde, Nevşehir, Yozgat, Kırıkkale and Kırşehir.

Regional Development Agencies also offer financial support for investments in their respective regions. As of 2020, 26 development agencies formed development agency development plans, industry strategies and Result Oriented Programs (ROP) in accordance with the National Strategy for Regional Development; and between 2020 and 2023, 12 development agencies will conduct the projects that include activities directly related to rural development under the abovementioned ROP's.

Programme for Supporting Social Development (SOGEP) has been implemented by the Ministry of Industry and Technology since 2019. As part of the programme, projects aimed at eliminating social problems resulting from poverty, migration and urbanization by mobilizing the local dynamics; meeting the needs arising from the changing social structure, increasing employment by ensuring more active participation of the disadvantaged sections of the society in the economic and social life are supported. A resource 332 million TL was allocated to 232 projects in 81 provinces in 2019 and 2020 within the scope of the Programme. As part of rural production activities, 28 projects have been provided with nearly 37 million TL support, and a resource of 45 million TL has been mobilized so far.

Infrastructure Supports

Water, Sewer and Infrastructure Project: SUKAP is a project conducted by ILBANK to support water, sewer and infrastructure projects of municipalities, studies for which were initiated in 2011. As part of the Water, Sewer and Infrastructure Project of municipalities (SUKAP), 11 billion 559 million TL credits and grants were provided for 1 340 assignments.

Project for Supporting Village Infrastructure (KÖYDES): The Project for Supporting Village Infrastructure (KÖYDES) conducted by the Ministry of Environment and Forestry supports infrastructure construction investments in villages. The programme has been implemented since 2005 and a total of 15.2 billion TL was appropriated between 2005 and 2020. The main aim of the programme is to improve living conditions in villages basically through financing the investments in constructing village roads, provision of drinking water, collection of waste water and treatment systems.

5.2. Main Results of EU Assistance, Amounts Deployed, Summary of Evaluations or Lessons Learnt

IPARD 2014-2020

During the IPARD II period, it has been observed that the applicants' profile has improved (the number of applications increased), awareness and knowledge about IPARD programme and rural development and agriculture has risen, and involvement of better organised local communities in rural areas development have been reinforced.

The culture of entrepreneurship and development originating from the local dimension emerging with the IPARD programme offers important contributions in transforming the rural life both in economic and social terms with quality products with high added-value and alternative economic activities to be located at the rural area. Investment measures are well known by the beneficiaries since they were also applied in IPARD I period. But the measures introduced in IPARD II period are also embraced by beneficiaries. Agri-environment-climate and Organic Farming measure has started as pilot implementation. Within the scope of IPARD II Programme, the LEADER measure, which has had a long preparation process, has been accredited. Türkiye is the first country among EU candidates to start implementing the Agri-environment-climate and the LEADER measures. Projects/supports implemented on regional level to support producers complement the IPARD Programme. The gains aimed at meeting IPARD indicators are stated in the Table 35.

Table 35. Progress of IPARD Programme (as of 31.12.2020)

Measure	Output / Result Indicators	Realised in year 2020	Total Realised-Cumulative from 2014 to year 2020
Investments in Physical Assets of Agricultural Holdings	Number of Projects Supported	185	632
	Number of holdings performing modernisation projects	154	574
	Number of holdings progressively upgrading towards EU standards	154	574
	Total volume of investment (€)	31 157 004	149 081 403
Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products	Number of Projects Supported	112	253
	Number of holdings performing modernisation projects	67	157
	Number of holdings progressively upgrading towards EU standards	67	157
	Number of jobs created	701	2 309
	Total volume of investment (€)	67 585 826	137 882 726
Agriculture-Environment-Climate and Organic Farming	Number of Contracts	91	92
	Agricultural land (ha) under environmental contracts	1 061	2 127
	Total volume of support (€)	251 972	597 913
LEADER	Number of Local Action Groups (LAGs)	50	50
	Total volume of support for LAGs	1 000 952	1 000 952
Farm Diversification and Business Development	Number of Projects Supported	1 537	3 688
	Number of economic enterprises developing additional or diversified sources of income in rural areas	1 356	3 075
	Number of jobs created	1 535	9 382
	Total volume of investment (€)	96 190 965	191 252 804
Technical Assistance	Number of activities	9	31
	Total volume of support (€)	163 127	881 859

Source: ARDSI Monitoring Charts - G3 Tab (31.12.2020)

The figures reflected in Table 35 demonstrates that the experience in dealing with IPARD projects and mechanisms, starting with IPARD I, gained by IPARD beneficiaries has been translated in high number of successfully implemented projects in IPARD II. This experience allowed the recipients of IPARD support to make a substantial progress in project preparation, transparency and sustainability aspects. This effects of learning process have also been observed at the level of the public administration units responsible for implementation of IPARD programmes. Thanks to the gained experience, the administration was capable to detect and define in early stages practical problems and to take necessary precautionary measures to address those problems.

Problems encountered in 2014-2020 period and the precautions taken are summarized below:

- Modifications have been made to the Programme to eliminate the shortcomings affecting its implementation and to ensure that the beneficiaries use IPARD funds more effectively. There has been serious amounts of budget cuts and transfers since the date the Programme was launched, therefore the targets and indicators have been updated in proportion to new amounts. In order to enable a higher number of beneficiaries to use the funds, it was ensured that the applications filed by producers' organizations or legal persons in which a producer's organization is the controlling shareholder would be given more incentives or priority in listing.
- Problems encountered in understanding the procedures continued also in the IPARD II period and the procedures have been simplified.
- A need to update expenditure lists has emerged, and the lists have been updated accordingly e.g., list of eligible expenditure for machinery parks must be constantly updated in order to meet all the changing needs of the sector.
- Problems arising from legislative changes introduced by other institutions have been determined and the factors affecting the implementation of the Programme have been resolved e.g., following the legislative changes to the maximum limit for unlicensed renewable energy facilities, IPARD II programme had to be modified accordingly to increase the capacity for investments in the renewable energy sector.
- Necessary measures have been taken to minimize the impact of COVID-19 pandemic e.g., providing extra time to submit the necessary documentation due to the overall extension of time needed to receive any documents.
- Raising awareness among beneficiaries, institutional capacity building of the ministry staff and preparations related to implementation of the Agri-Environment Climate Measure (which has a different logic compared to other investment measures) have taken time and had an impact on a slower start of the programme implementation. After the necessary preparations were completed, "Management of Soil Cover and Soil Erosion Control" sub-measure, budget implementation tasks for which were entrusted with the Commission letter dated 21.12.2016, have been started in the pre-defined pilot district.

Some lessons were learned in the IPARD II period from the problems encountered in the implementation phase. It was understood that the Programme should be suitable for the needs of the beneficiaries, and the procedures should be clear and easy to implement.

In the face of sudden situations such as COVID-19, the importance of inter-institutional cooperation and quick decision-making and implementation has been understood. It has emerged that the IPARD Programme is affected by the legislative changes that are under the responsibility of other institutions and the importance of following them. Experience has been gained that the preparation process of the new measures/approaches to be implemented and their adoption by the beneficiaries takes time.

IPA-I Policy Area

The Directorate for EU Affairs acts as the leading institution in the management of Civil Society sub-sector and Basic Rights sub-area in the 1st Policy Area of IPA II (2014 – 2020) period entitled “Reforms in preparation for Union membership”. Fund allocation in both sectors is conducted via annual funding agreements drafted so as to encompass other annual sectors. No projects have been conducted in relation to rural development in these sectors.

IPA-II Policy Area: Socio-economic and Regional Development

Environment and Climate Action Sector Operational Programme: Ministry of Environment and Urbanisation is responsible for the management of the funds provided for Environmental Infrastructure Investment and Capacity Building Projects to be financed in the scope of IPA Environment Sector. Total budget allocated for 2014-2020 period is EUR 332.4 million.

Transportation Sector Operational Programme: The overall objective of the Programme managed by the Ministry of Transportation and Infrastructure is to contribute to economic and social development and EU integration with a competitive, accessible and sustainable transportation system in line with the EU Standards. In the scope of the TSOP, a total of EUR 350.40 million IPA budget has been committed and the developed projects are supported.

Energy Operational Programme: The leading institution in the energy sector is the Ministry of Energy and Natural Resources. During IPA II period, three priority areas were set out to be supported by EU grants in the energy sector in the “Indicative Strategy Paper for Türkiye for the period (2014-2020)”, namely (1) Market Integration and Infrastructure development, (2) Renewable Energy ve Energy Efficiency and (3) Nuclear Safety. However, Nuclear Safety issues were later assessed in the scope of the Instrument for Nuclear Safety Cooperation (INSC) and therefore removed from the scope of IPA II Energy Sector Programme. In the other two priority areas, 15 projects were supported with a total value of EUR 53.4 million, 49 million of which was composed of EU grants in the scope of the IPA II Energy Sector Programme.

Competitiveness and Innovation Sector Operational Programme (CISOP): the Ministry of Industry and Technology (MoIT) is the institution responsible for the development, implementation, monitoring and evaluation of this Operational Programme. The Programme is implemented in all provinces of Türkiye. Unlike the previous IPA period, CISOP is designed to support projects that are focused on R&D and innovation. As a result of calls for proposals in 2017 and 2019, there were 39 projects with an overall budget of EUR 250 million in the scope of CISOP as of October 2020. CISOP

beneficiaries of the projects are not-for-profit institutions representing the sector, universities and research organisations.

IPA-III. Policy Area: Employment, Social Policies, Education, Promotion of Gender Equality, And Human Resources Development

Ministry of Family, Labour and Social Services acts as the Programme Authority and Contracting Authority in the Employment, Education and Social Policies Sector Operational Programme (EESP SOP). The budget of the Sector Operational Programme is EUR 323 million, which is composed of EUR 48 million Türkiye's contribution and EUR 275 million EU contribution. Within the framework of the Sector Operational Programme, programming activities have been completed and a total of 23 operations (projects) have been approved. During the IPA II period, in the scope of EESP SOP; under Employment Action (Action I: Employment), "Elimination of the Child Labour in Seasonal Agriculture" project was conducted, the purpose of which was to prevent child labour in seasonal agriculture and enabling the children under risk and their parents to access various services. The said project was designed in cooperation with ILO in the form of direct grant, and it now proceeds with the implementation stage after the approval of the Operation Identification Sheet (OIS).

IPA-IV Policy Area: Agriculture and Rural Development

Agriculture and Rural Development – Institutional Capacity Building Sub-Sector
Türkiye continued to carry out projects under the Agriculture and Rural Development – Institutional Capacity Building Sub-Sector during the IPA II period covering 2014 – 2020 as part of Annual Programs. Within the framework of EU accession negotiations, the steps to be taken in the field of Agriculture and Rural Development continued to be supported under this sub-sector during the IPA II period. In addition, enhancing the impact of the administrative, legal and institutional capacity gains attained during the IPA I period and ensuring the sustainability of these gains were among the basic objectives of the projects developed in the context of this sub-sector. Projects directly associated with the IPARD II programme in this period can be listed as in Table 36:

Table 36. IPARD Projects conducted under Institutional Capacity Building Sub-Sector

Name of Project	Associated Programme	Budget (EUR)
Technical Assistance for Capacity Building for Measure Advisory Services of the IPARD II Programme in Türkiye	IPA II - 2014	1 025 100
Technical Assistance for Improving the Awareness of Food Processing Sector and Farmers in terms of EU Environmental and Hygiene Standards and IPARD Support	IPA II - 2015	800 000
Technical Assistance for Strengthening Implementation Capacity of Risk Management and Control Activities of Agriculture and Rural Development Support Institution (ARDSI)	IPA II – 2016	800 000

Source: Directorate of EU Affairs

On the other hand, the projects in Table 37 are also funded in the scope of IPA II. These projects aim at supporting the institutional capacity for Chapter 11 and for ensuring compliance of Türkiye's Agriculture policy with the Common Agricultural Policy (CAP).

Table 37. Projects Conducted under the Institutional Capacity Building Sub-Sector for Chapter 11 and CAP

Name of Project	Associated Programme	Budget (EUR)
Technical Assistance for Strategy Development to ensure Compliance with Common Market Requirements	IPA II - 2014	962 068
Technical Assistance for Development of a strategy for alignment with common market organization (CMO) requirements	IPA II - 2014	2 000 000
Technical Assistance for FADN: Target 2020.	IPA II - 2016	2 000 000

Source: Directorate of EU Affairs

Due to the fund reductions implemented by the European Commission in IPA II period, there has also been a decrease in the funds allocated to Agriculture and Rural Development – Institutional Capacity Building sub-sector. The total budget of projects conducted in this sub-sector in the scope of IPA II is EUR 45 million including the projects conducted under Chapter 12 Food Safety, Veterinary and Phytosanitary Policy and Chapter 13: Fisheries.

IPA-V Policy Area: Regional and Cross-Border Cooperation

Türkiye participates in the implementation of two cross-border cooperation programmes under the Regional and Cross-Border Cooperation component.

Interreg-IPA Bulgaria – Türkiye IPA Cross-Border Cooperation Programme: The programme area encompasses Edirne and Kırklareli provinces in Türkiye and Yambol, Burgas, and Haskovo districts in Bulgaria. The aim of the programme is to ensure sustainable and balanced development based on the key areas of strength of both countries with the purpose of serving a stronger European cooperation and integration. The budget of the programme for the 2014-2020 period was EUR 29.54 million, and projects aimed at sustainable tourism and environmental protection were supported in this period.

ENI Cross-Border Cooperation Programme in Black Sea Basin: Countries participating in this multilateral cooperation programme carried out under the Neighbourhood Policy of the EU in addition to Türkiye are Armenia, Bulgaria, Georgia, Greece, Moldova, Romania and Ukraine. The programme area in our country includes the 25 provinces on and around the Black Sea coast. The programme aims at establishing partnerships and regional cooperation among the countries located in the

Black Sea Basin. Program budget pertaining to 2014-2020 period was approximately EUR 54 million, of which EUR 49.03 million was EU contribution.

The biggest benefit created for cross-border regional development is cooperation created and strengthened among beneficiary countries. Basic gains adding value to cooperation are capacity building, awareness raising, construction of trust/credibility, improved image of the region and securing commitments to new activities.

5.3. Main Results of Unilateral and Multilateral Assistance Conducted, Amounts Deployed, Evaluations or Lessons Learnt

Uplands Rural Development Project

Project Implementation Period: 2019-2026

Source of Funding and Amount of Investment: IFAD (International Agricultural Development Fund), Amount of Investment EUR 98.1 million

Project Objective: Improving the living standards and income levels of communities living in high altitudes, particularly young people and women and enhancing their market integration. To this end, it will first be ensured that the target groups engage in collective production with a clustering approach and access internal and external markets with a smooth-running agricultural value chain structure. The programme covers 2 projects: Eastern Mediterranean Rural Development Project (Adana, Mersin, Osmaniye; and to be included later: Kahramanmaraş), Western Black Sea Rural Development Project (Sinop, Bartın, Kastamonu; and to be included later: Çankırı)

Göksu-Taşeli Basin Development Project

Project Implementation Period: 2017-2023

Source of Funding and Amount of Investment: IFAD (International Agricultural Development Fund), Amount of investment 22.2 million Euro

Project Objective: Increasing the income and improving the quality of life of the rural population living in the underdeveloped regions of 238 mountainous villages in 11 districts of Karaman (Centre, Başyayla, Sarıveliler and Ermenek) and Konya (Ahırlı, Bozkır, Taşkent, Hadim, Yalılıyük, Akören and Güneysınır) provinces.

These projects complement the IPARD Programme implementations by supporting the agricultural production and improving life quality of the rural population living in underdeveloped and rural disadvantaged regions, sustainable management of natural resources and improved participation in joint activities. Such complementarity may be illustrated by activities under the Göksu-Taşeli Basin Development Project supporting a distribution of seeds and saplings in view of establishing new vineyards or orchards. The beneficiaries of the project might subsequently want to develop further their businesses by applying for IPARD support e.g., for building cold storage facilities for their fruits and vegetables.

6. DEFINITION OF THE STRATEGY AND OBJECTIVES OF THE PROGRAMME

6.1. Description of the current National Rural Development Strategy (NRDS)

According to the Eleventh Development Plan (2019-2023), Türkiye aims to increase the production capacity of producer's associations and family enterprises and increase the employability of rural labour force, improve the quality of life, fight against poverty and increase the level of welfare of the rural community and keep the population in rural areas with the understanding of sustainable rural development.

In line with these objectives, NRDS-III document covering the 2021-2023 period aims to smoothly determine the development dynamics in rural areas, which relatively lag behind the national welfare level, and to mobilize the economic and human resources potential in these areas in the framework of the strategies set. These strategies have been developed in line with the national experience of Türkiye in its rural policy implementation as well as considering the EU rural development policies.

In the NRDS-III document, a SWOT analysis was performed in line with the surveys and academic studies involving stakeholders such as the public sector, private sector and non-governmental organizations under the coordination of Ministry of Agriculture and Forestry. As a result of the analysis, measures were envisaged on the issues of population and migration, settlement areas, settlement in rural area, sustainable and climate-friendly agricultural production, labour force and employment, poverty and income distribution. According to this analysis, the NRDS-III document focuses on the following issues;

- Rural infrastructure services
- Environmentally friendly agricultural production methods,
- Food safety
- Supply chain management
- Information technologies
- Rural-urban interaction, local governments, non-governmental organizations, producer unions, demographic structure
- Labour market
- Circular economy
- Immigration and poverty
- Renewable energy
- Natural resource management
- Adaptation to the EU Green Deal and climate change

Implementation of the NRDS will rely on a number of instruments and activities:

a. Support activities conducted through national resources

- Agricultural Support for Rural Development, provided by the Ministry of Agriculture and Forestry.

- Project for Supporting Village Infrastructure (KÖYDES), conducted by Special Provincial Administrations.
- Programme for Supporting Social Development (SOGEP), conducted via Development Agencies.
- KOSGEB Support, offered by Small and Medium Enterprises Development Organization (KOSGEB) provincial directorates.
- Regional Development Support, provided by Regional Development Administrations (RDA), such as South-Eastern Anatolia Project (GAP), Eastern Anatolia Project (DAP), Eastern Black Sea Region Project (DOKAP) and Konya Plain Project (KOP).
- Support for Poverty Reduction, provided by the Ministry of Family, Labour and Social Services.
- Environmental Infrastructure and Environmental Protection Support, provided by the Ministry of Environment and Urbanisation.
- Solid Waste Programme Project (SWP), conducted by the Ministry of Environment and Urbanisation.
- Water, Sewer and Infrastructure Project (SUKAP), conducted by İLBANK (Bank of Provinces).

b. Support activities by international organizations

As part of the United Nations Development Programme (UNDP), project-based supports are offered in the fields of fight against poverty, environmental protection, women's empowerment, national capacity development, governance and participant democracy, reduction of socio-economic and regional inequalities, and gender equality.

c. IPARD Programme Support

Enhancing the competitive power of agricultural sector and sustainable development of rural areas are supported through the IPARD Fund - one of the main objectives of which is to align the agricultural and rural development policies of the candidate countries to the EU acquis and to prepare them for the implementation and management of the Common Agricultural Policy.

In the framework of IPARD, support can be provided under many measures such as investments on agricultural holdings and investments in processing and marketing of agricultural and fishery products, support for setting up of producer groups, diversification and development of farm activities, LEADER Approach, agri-environment-climate and organic farming measure, protection of forests as well as support for investments in rural public infrastructure and training and advisory services. Since these supports are only for rural areas, they include activities that directly support rural development. In particular, IPARD aims to reach regions and potential beneficiaries where national supports cannot reach. For this reason, together with other national supports, it provides a complete framework of opportunities to support rural development.

The 2007-2013 IPARD-I programme, drafted by the Ministry of Agriculture and Forestry, General Directorate of Agrarian Reform

(Managing Authority), was implemented through the Agriculture and Rural Development Support Institution (ARDSI) accredited as the IPARD Agency responsible for disbursement. IPARD-II covering the period 2014-2020 is nearing its completion.

It was ensured that the funds allocated to Türkiye in the IPARD-I period were almost entirely utilized by investors, whereby 3 152 896 051 TL support payment was disbursed to 10 697 projects. In the 2014-2020 IPARD-II period, which will be completed by 2023, 1 924 126 978 TL support payment was disbursed to 5405 projects as of the end of 2020. As a result, as of the end of 2020, a contribution of 5 077 023 029 TL has been made to rural development with 16 102 projects within the scope of IPARD-I and IPARD-2 programmes.

Both national and international supports are very important in reaching the targets set within the scope of NRDS-3. In particular, IPARD supports financed by the EU make a great contribution to achieving these goals.

6.2. Identification of the Needs and Summary of the Overall Strategy

The determination of the needs has been made on the basis of the Sectoral Analysis study and the SWOT analysis mentioned under the 3rd and 4th headings of the Programme. Sectoral Analysis study has been conducted independently in the context of the preparations of the Programme. The needs identified in line with the objectives of the IPARD Programme are grouped under five headings listed below.

Production

1. Adaptation of farms and agri-food enterprises to the EU new legislation and standards.

Türkiye has been carrying out activities for a long time to comply with the EU legislation. Efforts of especially small and medium sized producers to comply with the legislation are encouraged. With the measures "Investments in the Physical Assets of Agricultural Holdings" and "Investments in the Physical Assets Concerning the Processing and Marketing of Agricultural and Fishery Products", these farms and enterprises shall continue to be supported in this regard.

2. Improvement of competitiveness in the agriculture - food sector.

Most of the business facilities and farms have small capacities. Subsistence businesses, defined as family business or small farming, are quite common. To increase the sector's competitiveness and contribute to the economy's overall development, the capacities of the enterprises should be increased. "Investments in the Physical Assets of Agricultural Holdings" and "Farm Diversification and Business Development" measures will serve to this purpose. In this context, the drying processes, carried out under inappropriate conditions due to a lack of adequate drying facilities and causing harmful effects on human health, need to be modernized. This should be achieved with the support given under the measure "Investments in the Physical Assets Concerning the Processing and Marketing of Agricultural and Fishery Products".

3. Improvement of cold chain, storage and hygienic conditions in food processing facilities and diminishing post-harvest losses.

In order to prevent losses and waste in agricultural products, the issues of improvement of food processing and storage facilities, and creation / development of the cold chain for the collection, storage and transportation of food products under appropriate conditions shall be supported under the measures "Investments in the Physical Assets of Agricultural Holdings" and "Investments in the Physical Assets Concerning the Processing and Marketing of Agricultural and Fishery Products". The basic equipment needed by some small and medium scaled producers and processing plants to produce and process their products under hygienic conditions from field to table shall also be supported in the same manner. In addition, the improvement of packaging, processing and storage infrastructures will also be effective in reducing the products' losses.

4. Improvement of animal welfare in farms.

By supporting the farms within the scope of the "Investments in the Physical Assets of Agricultural Holdings" measure, progress shall be achieved also in compliance with EU legislation on improvement of animal welfare. The measure will serve for the establishment of new animal buildings and the improvement of existing structures in view of ensuring better animal welfare conditions.

Rural Economy

5. More employment opportunities in rural areas.

All measures as proposed in the framework of IPARD III directly and indirectly affect the development of the rural economy. The development of rural economy leads to an increase in rural employment and thus migration from rural areas to urban areas is prevented or at least limited. The measure "Diversification of Farm Activities and Business Development" aims directly at developing the rural economy and increasing employment in rural areas alternative to agriculture.

Within the scope of this measure, it has been aimed to increase household incomes and create new job opportunities in the following fields:

- Diversification of plant production, processing and marketing,
- Manufacture of value-added products made by handicrafts and craftsmen,
- Apiculture, processing and marketing of apicultural products,
- Rural tourism,
- Machine parks for the common use of farmers,
- Aquaculture.

6. Promotion of short supply chains.

Under the measure "Diversification of Farm Activities and Business Development", short supply chains will be supported to develop rural economy

by decreasing the number of intermediaries and as such preserving and increasing the share of farmer's benefits from the food and other products supply.

7. Support for small farmers.

Subsistence family businesses, which are also defined as small farmers, need to be supported not only for the employment they create, but also in view of maintaining rural areas and their economy and keep them alive so that they can continue providing various services to the society including those linked to the environment and nature protection. Moreover, supporting the small farmers, who constitute the most vulnerable group in the control of migration from rural areas to urban areas, is an important parameter for rural development. This support shall be promoted under the measure "Diversification of Farm Activities and Business Development".

Natural resources

8. Prevention of the loss of biodiversity.

Although agriculture is only one of the many factors contributing to the loss of biodiversity, due to the importance it bears for the protection of the natural environment, it is very well placed to contribute to the protection of certain key species through the elimination of the factors causing risks to those species' existence. The implementation of adequate commitments under "Agri-Environment -Climate and Organic Farming" shall contribute to preserving the biodiversity.

9. Prevention of the loss of agricultural soil.

Some environmental phenomena, especially soil erosion, caused by various reasons, including inadequate farming practices, represent a significant risk to the status of natural resources and at the same time lead to the reduction in agricultural areas. For this reason, the measure "Agri- Environment-Climate and Organic Farming" and "Implementation of Local Development Strategies - LEADER Approach" shall serve the purpose of preventing the loss of agricultural soil.

10. Preservation of Water Quality.

Under the measure Agri-Environment-Climate and Organic Farming, it has been aimed to raise the awareness on the excessive and uncontrolled use of fertilizers, herbicides and pesticides which causes destructive consequences for both the nature and the human health and on the need to ensure a control of such use. The measure "Investments in the Physical Assets of Agricultural Holdings" shall also support the construction and improvement of animal housing while ensuring proper storage and management of manure to avoid any to the environment. Furthermore, the measure "Implementation of Local Development

Strategies - LEADER Approach" shall also raise the awareness of the stakeholders on the issue.

11. Mitigation and adaptation to climate change.

The primary cause of climate change is the greenhouse gases released into the atmosphere. Increasing the use of renewable energy sources will lead to a decrease in the use of carbon-based energy that produces greenhouse gases. The "renewable energy production" shall be supported under the measure of "Rural Infrastructure Investments" and "Diversification of Farm Activities and Business Development".

12. Development of mechanisms for recycling food waste.

The "Diversification of Farm Activities and Business Development" measure shall support establishing mechanisms for evaluating the surplus of non-consumed food. This mechanism will be supporting the creation and modernization of enterprises engaged in pet food production from food waste.

Infrastructure

13. Reducing the energy expenditures in rural infrastructure facilities.

The "Investments in Rural public Infrastructure" measure shall also support the renewable energy investments in order to reduce the operating costs of the wastewater management facilities of the local governments.

Horizontal Issues:

14. Improvement of local development capacity.

For a sustainable rural development, the LEADER measure shall provide support to the rural areas as an innovative and capacity building method in which local actors are integrated into decision-making mechanisms and aim to achieve rural development goals with a participatory approach. Thus, involvement of the local actors in the preparation of local rural development strategies and action plans shall be ensured.

15. Supporting of Innovation and Knowledge Transfer

It has become more evident with the developing technology that innovation is a very important element not only for urban economy but also for rural areas development and their economy, including agriculture. It is a necessity to support investments that will provide for innovation and knowledge transfer to contribute to the development of the rural economy, its competitiveness and modernisation. Supporting of innovation and knowledge transfer is expected to include subjects related with EU Green Deal and Circular Economy policies. The possibility of introducing a knowledge-based measure(s) as provided for in the framework of IPARD III will be considered in the course of the IPARD III programme for Türkiye implementation.

Table 38. Summary Table Showing Main Rural Development Needs and Measures Operating

Need identified	IPARD II	IPA III	Other donor – multilateral assistance	National
Production				
1. Adaptation of farms and agri-food enterprises to the EU new legislation and standards	Measure: ▪ Investments in Physical Assets of Agricultural Holdings, ▪ Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products.	None		In the scope of The Rural Development Investments Support Programme (RDISP/KKYDP) new technologies and agriculture-based small and medium scale industry are supported within the scope of this programme. Regional Development Agencies also provide financial support for investments in their regions. As of 2020, 26 development agencies have created Result-Oriented Programmes (ROP/SOP) within the framework of development agency development plans, sector strategies and National Strategy on Regional Development (BGUS); and between the years of 2020-2023, 12 development agencies shall carry out the projects involving activities directly related to rural development under the aforementioned ROPs.
2. Improvement of competitiveness in the agri - food sector	Measure: ▪ Investments in Physical Assets of Agricultural Holdings ▪ Investments in the Physical Assets Concerning the Processing and Marketing	Window 4, Competitiveness and inclusive growth.	Göksu-Taşeli basin development project aims to increase the income of the rural population living in the underdeveloped regions of Karaman and Konya provinces and to improve their quality of life. Uplands Rural Development Project is financed by IFAD and National Resources, and it will be implemented as a grant in 6	Rural Development Investment Support Programme (RDISP / KKYDP economic investments and the rural economic infrastructure investments are supported within the scope of this programme. Within the scope of the Southeastern Anatolia Project (GAP), projects are being carried out in many sectors in 9 provinces in order to contribute to the socio-economic development of the region. The Eastern Anatolia Project (DAP) is a regional project and covers a total of 15 provinces. It aims socio-economic development by supporting rural development actions.

	of Agricultural and Fishery Products. ▪ Diversification of farm activities and business development		provinces in the Eastern Mediterranean and Western Black Sea regions during 2018-2026 period in order to increase the income levels of the communities living in the higher altitude areas.	The Eastern Black Sea Project (DOKAP) is being implemented in 11 provinces. Within this scope, projects such as apiculture development activities, development of raw milk collection infrastructure, irrigation project, dissemination of medicinal and aromatic plant breeding project, dissemination of worm manure production, dissemination of oyster mushroom production, development of organic production in organic basins, etc. have been carried out. KOP (Konya Plain Project) Rural Development Programme, covers 8 provinces and it contains pilot project addressing to agri-food sector. Regional Development Agencies also provide financial support for investments in their regions. As of 2020, 26 development agencies have created Result-Oriented Programmes (ROP/SOP) within the framework of development agency development plans, sector strategies and National Strategy on Regional Development (BGUS); and between the years of 2020-2023, 12 development agencies shall carry out the projects involving activities directly related to rural development under the aforementioned ROPs. Türkiye is a member of the Mediterranean General Fisheries Commission which covers and provides guidance on many technical issues such as management plans for fish species, regulation of fishing gear, protection of marine resources, collection of fisheries data, establishment of effective control methods and ship monitoring systems for the prevention of illegal and unregulated fishing, and protection of endangered species. Recommendations adopted in this framework regarding abovementioned issues have been transferred to Türkiye's national legislation.
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				Within the scope of the Central Asia and Caucasus Regional Fisheries and Aquaculture Commission (CACFISH), the experience and achievements of Türkiye's aquaculture and sustainable use of resources are transferred to the countries of the region. In the context of work of the European Inland Fisheries and Aquaculture Advisory Commission (EIFAAC), a new strategy 2020-2024 and the Commission's work plan for the period 2020-2021 have been established, developing new projects to achieve EIFAAC goals and expected results, and contributing to the UN's Sustainable Development Goals. The Ministry of Agriculture and Forestry contributes to the activities by participating in the meetings. The issues discussed in these meetings are taken into consideration in studies conducted in Türkiye.
3. Improvement of cold chain, storage and hygienic conditions in food processing facilities and diminishing post-harvest losses.	Measure: - Investments in Physical Assets of Agricultural Holdings - Investments in the Physical Assets Concerning the Processing and Marketing of Agricultural and Fishery Products	None	Göksu-Taşeli basin development project aims to increase the income of the rural population living in the underdeveloped regions of Karaman and Konya provinces and to improve their quality of life. Uplands Rural Development Project will be implemented as a grant in 6 provinces in the Eastern Mediterranean and Western Black Sea regions during 2018-2026 period in order to increase the income levels of the communities living in the higher altitude areas	Rural Development Investment Support Programme (RDISP / KKYDP) within the scope of this programme storage facilities are supported. Within the scope of the Southeastern Anatolia Project (GAP), projects are being carried out in many sectors in 9 provinces in order to contribute to the socio-economic development of the region. The Eastern Anatolia Project (DAP) is a regional project and covers a total of 15 provinces. The Eastern Black Sea Project (DOKAP) is being implemented in 11 provinces and it also serves to increase the storage capacity. Under the KOP (Konya Plain Project) Rural Development Programme, pilot project contains storage capacity actions and it covers 8 provinces.

			which will also respond to this need by its supports	
4. Improvement of animal welfare in farms.	Measure: ▪ Investments in Physical Assets of Agricultural Holdings	Window 3, Green agenda and sustainable connectivity	Göksu-Taşeli basin development project aims to increase the income of the rural population living in the underdeveloped regions of Karaman and Konya provinces and to improve their quality of life. It also provides support for investments in physical assets of agricultural holdings which are obliged to ensure the respect of animal welfare. Uplands Rural Development will be implemented as a grant in 6 provinces in the Eastern Mediterranean and Western Black Sea regions during 2018-2026 period in order to increase the income levels of the communities living in the higher altitude areas. It also contains husbandry supports.	Rural Development Investment Support Programme (RDISP / KKYDP) supports investments in physical assets of agricultural holdings which are obliged to ensure animal welfare. Southeastern Anatolia Project (GAP), is a comprehensive Programme that includes topics such as on-farm development activities contributing to animal welfare. The Eastern Anatolia Project (DAP) is a regional project and covers a total of 15 provinces. It includes husbandry sector supports. The Eastern Black Sea Project (DOKAP) is being implemented in 11 provinces and it supports also modern livestock sector. Under the KOP (Konya Plain Project) Rural Development Programme, aims to develop animal husbandry infrastructure for the control of animal health and animal diseases and to ensure animal welfare. Within the scope of combating animal diseases, the Ministry executes various implementation that include animal disease compensation supports, support for disease-free farms, support for the protection and improvement of animal genetic resources on site, etc.

Rural Economy				
5. More employment opportunities in rural areas.	Measure: ▪ Investments in Physical Assets of Agricultural Holdings ▪ Diversification of farm activities and business development ▪ Implementation of Local Development Strategies - LEADER Approach.	Window 4, Competitiveness and inclusive growth.	Göksu-Taşeli basin development project aims to increase the income of the rural population living in the mountainous regions of Karaman and Konya provinces and to improve their quality of life. Uplands Rural Development Project To improve the living standards and income levels of communities living in high altitudes, particularly young people and women and enhancing their market integration is main objective of this Programme.	Rural Development Investment Support Programme (RDISP / KKYDP) It aims to generate alternative income sources through its supports to economic investments and the rural economic infrastructure investments. Within the scope of the Southeastern Anatolia Project (GAP), projects are being carried out in many sectors in 9 provinces in order to contribute to the socio-economic development of the region. The Eastern Anatolia Project (DAP) is a regional project and covers a total of 15 provinces which will also serve to improve agricultural capacity. The Eastern Black Sea Project (DOKAP) is being implemented in 11 provinces. It includes many investments creating new job opportunities. Regional Development Agencies also provide financial support for investments in their regions. As of 2020, 26 development agencies have created Result-Oriented Programmes (ROP/SOP) within the framework of development agency development plans, sector strategies and National Strategy on Regional Development (BGUS); and between the years of 2020-2023, 12 development agencies shall carry out the projects involving activities directly related to rural development under the aforementioned ROPs. Social Development Support Programme (SDSP/SOGEP): It has been implemented by the Ministry of Industry and Technology since 2019. Within the scope of the programme, some rural production activities, increasing employment by ensuring more active participation of the disadvantaged sections of the society in the economic and social life are implemented.

6. Promoting short supply chains.	▪ Diversification of farm activities and business development.	Window 3, Green agenda and sustainable connectivity	Göksu-Taşeli basin development project aims to increase the income of the rural population living in the underdeveloped regions of Karaman and Konya provinces and to improve their quality of life. Uplands Rural Development Prpject will be implemented as a grant in 6 provinces in the Eastern Mediterranean and Western Black Sea regions during 2018-2026 period in order to increase the income levels of the communities living in the higher altitude areas.	Within the scope of the Southeastern Anatolia Project (GAP), projects are being carried out in many sectors in 9 provinces in order to contribute to the socio-economic development of the region. It includes topics such on-farm development, agriculture and agriculture-based industry, rural tourism, agricultural extension, increasing of employment, etc. The Eastern Anatolia Project (DAP) is a regional project and covers many rural sectors such as livestock market and slaughterhouse project, project for improving plant production infrastructure, Revitalization of Historic City Regions, solar energy. The Eastern Black Sea Project (DOKAP) is being implemented in 11 provinces. Within this scope, projects such as apiculture development activities, development of raw milk collection infrastructure, dissemination of medicinal and aromatic plant breeding project, dissemination of oyster mushroom production, development of organic production in organic basins, etc. have been carried out.
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7. Supporting of small farmers	▪ Diversification of farm activities and business development.		Göksu-Taşeli basin development project aims to increase the income of the rural population living in the underdeveloped regions of Karaman and Konya provinces and to improve their quality of life. Uplands Rural Development will be implemented as a grant in 6 provinces in the Eastern Mediterranean and Western Black Sea regions during 2018-2026 period in order to increase the income levels of the communities living in the higher altitude areas.	Southeastern Anatolia Project (GAP), is based on a multi-sector policy and its one of the target group is small farmers. The Eastern Anatolia Project (DAP) is a regional project and covers agricultural irrigation project, livestock market and slaughterhouse project, project for improving plant production infrastructure, Revitalization of Historic City Regions, Project on Improving the Reading Culture and solar energy. The Eastern Black Sea Project (DOKAP) is being implemented in 11 provinces. Within this scope, projects such as apiculture development activities, development of raw milk collection infrastructure, irrigation project, dissemination of medicinal and aromatic plant breeding project, dissemination of worm manure production, dissemination of oyster mushroom production, development of organic production in organic basins, etc. have been carried out. KOP (Konya Plain Project) Rural Development Programme includes also projects improving the living conditions of breeders and many other projects targeting at small farmers. Regional Development Agencies also provide financial support for investments in their regions. As of 2020, 26 development agencies have created Result-Oriented Programmes (ROP/SOP) within the framework of development agency development plans, sector strategies and National Strategy on Regional Development (BGUS); and between the years of 2020-2023, 12 development agencies shall carry out the projects involving activities directly related to rural development under the aforementioned ROPs.
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Natural resources				
8. Prevention of the loss of biodiversity.	Measure: ▪ Agriculture Environment Climate Change and Organic Farming.	Window 3, Green agenda and sustainable connectivity		Organic Farming and Good Farming supports are being provided (applied) by the Ministry. Moreover, support is provided for the on-site protection and improvement of animal genetic resources.
9. Prevention of the loss of agricultural soil.	Measure: ▪ Agriculture Environment Climate Change and Organic Farming ▪ Implementation of Local Development Strategies - LEADER Approach.	Window 3, Green agenda and sustainable connectivity	Göksu-Taşeli basin development project aims to increase the income of the rural population living in the underdeveloped regions of Karaman and Konya provinces and it will also provide sustainable management of natural resources	Southeastern Anatolia Project (GAP), includes the land consolidation and on-farm development services conducted simultaneously with the irrigation projects Under the KOP (Konya Plain Project) establishment of modern and more efficient irrigation system will also provide indirectly a better protection of soil resources, soil protection will also be provided.
10. Preservation of water quality	Measure: ▪ Agriculture Environment Climate Change and Organic Farming ▪ Implementation of Local Development Strategies -	Window 3, Green agenda and sustainable connectivity	It is supported by the Çoruh River Basin Rehabilitation Project (JICA) and is a regional project and is carried out by the Directorate General of Forestry. The project covers the conservation, rehabilitation and sustainable management of natural resources Göksu-Taşeli basin development project and Uplands Rural	Support Payments per decare are made to the farmers, who procure solid organic- organomineral products, solid organic soil conditioner products, coating fertilizers and organic fertilizers obtained as a result of fermentation through the Fertilizer Tracking System, in proportion to their land assets registered in the Farmer Registration System (FRS). Organic Farming and Good Farming supports are provided by the Ministry.

	LEADER Approach. ▪ Investments in Physical Assets of Agricultural Holdings		Development Project are both aiming at sustainable management of natural resources and improved participation in joint activities	
11. Mitigation and adaptation to climate change	▪ “Rural Infrastructure Investments” ▪ “Diversification of farm activities and business development” ▪ “Rural Infrastructure Investments” ▪ “Diversification of farm activities and business development”	Window 3, Green agenda and sustainable connectivity	It is supported by the Çoruh River Basin Rehabilitation Project (JICA) and is a regional project and is carried out by the Directorate General of Forestry. The project covers the conservation, rehabilitation and sustainable management of natural resources Göksu-Taşeli basin development project and Uplands Rural Development Project are both aiming at sustainable management of natural resources and improved participation in joint activities	Southeastern Anatolia Project (GAP), includes some activities providing decrease in carbon emissions and some projects for adaptation to climate-change.
12. Development of mechanisms for the recycling of food waste.		Window 3, Green agenda and sustainable connectivity	No Development Program or grant system intended for this purpose has been encountered.	No Development Program or grant system intended for this purpose has been encountered.

Infrastructure				
13. Reducing energy expenditures in rural infrastructure facilities such as wastewater treatment facilities.	Measure: ▪ Rural Infrastructure Investments.	Window 3, Green agenda and sustainable connectivity	No Development Program or grant system intended for this purpose has been encountered.	
Horizontal Issues				
14. Improvement of local development capacity.	Measure: ▪ Implementation of Local Development Strategies - LEADER Approach.	None	None	

In addition to the above-mentioned national support items, Regional Development Agencies provide support to public institutions and SMEs depending on the priorities of the regional development programs. The support rate is usually 100% for public agencies and 50% for legal entities. Furthermore, some other nationally sourced studies are mentioned in detail in the section under the 10th heading of the Programme titled "INFORMATION ON THE COMPLEMENTARITY OF IPARD WITH THE MEASURES FINANCED BY OTHER RESOURCES (NATIONAL OR INTERNATIONAL)".

6.3. Objectives of the Programme

Although IPARD III is a continuation to some extent of IPARD II, it has been designed in reference to the priorities set in the framework of IPA III and being in line with the strategic objectives of NRDS (National Rural Development Strategy).

The IPARD III Programme will ensure the implementation of the measures established to meet the needs determined as the result of the analysis made on the main sectors directly related to the rural areas activities.

Objectives of IPARD III Programme are:

- Maintaining compliance with the acquis in the fields of food safety, veterinary, phytosanitary policies and fisheries,
- Modernization of agricultural enterprises,
- Establishment of new processing units for specified sectors,
- Diversification of rural economic activities,
- Increasing renewable energy investments,
- Increase the competitiveness of agricultural enterprises while ensuring their compliance with environmental and other standards
- Improving the sustainable management of natural resources, including soil and water as well as protection of biodiversity
- Shortening of value chains,
- Supporting of small farmers,
- Supporting of collective investments,
- The realization of socio-economic development in rural areas,
- The integration of women and young farmers into the rural economy,
- Mitigation and adaptation to climate change,
- Supporting of the investments that are in line with the circular economy perspective,
- Improvement of animal welfare,
- Control of the waste disposed by the enterprises to the environment,
- Elimination of the factors harmful to the human health,
- Implementation of local development strategies, in line with the LEADER approach,
- Improvement of training,
- Capacity Development through Technical Assistance.

6.4. Consistency between the Proposed IPARD Intervention and the IPA III Programme Framework and the Strategic Response

The IPARD III Programme, which will cover the years of 2021-2027, is expected to be compatible with certain objectives of the draft IPA III Programme Framework. The "Agriculture and Rural Development", the third of the four thematic priorities in the fourth window "Competitiveness and Inclusive Growth", and the "Environment and Climate Change", the first priority under the third window "Green Agenda and Sustainable Connectivity", are the main IPA III programming framework components "overlapping" with IPARD III.

IPA III Framework structure can be summarized with its windows as demonstrated in Table 39.

Table 39. IPA III Framework structure with its windows

Window 1	Rule of law, fundamental rights and democracy
Window 2	Good governance, EU acquis alignment, good neighbourly relations and strategic communication
Window 3	Green agenda and sustainable connectivity
Window 4	Competitiveness and inclusive growth
Window 5	Territorial and cross-border cooperation

The consistency between IPARD and IPA III Framework can be more understandable if the third and fourth windows of IPA Framework is detailed by its thematic priorities as in Table 40 and Table 41.

Table 40. Window 3: Green agenda and sustainable connectivity

Thematic Priority 1	Environment and climate change
Thematic Priority 2	Transport, digital economy and society, and energy

Table 41. Window 4: Competitiveness and inclusive growth

Thematic Priority 1	Education, employment, social protection and inclusion policies, and health
Thematic Priority 2	Private sector development, trade, research and innovation
Thematic Priority 3	Agriculture and rural development
Thematic Priority 4	Fisheries

The Thematic Priority 1 of Window 3 i.e., “Green agenda and sustainable connectivity” can be addressed and contributed to by many of the IPARD III measures. The actions supported under Agri-Environment-Climate Change and Organic Farming measure such as management of soil cover and soil erosion control, and improvement of biodiversity are consistent with “Green agenda and sustainable connectivity” priority.

“Investments in Physical Assets of Agricultural Holdings”, “Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products” contain support of packaging, processing and storage facilities which will diminish product losses but can also support modernization of farming and production infrastructure and equipment to make it more environmentally sustainable and better performing from the perspective of managing natural resources.

“Investments in Physical Assets of Agricultural Holdings” will also provide better conditions in terms of animal welfare and manure management. Furthermore, it contains non-productive investments modules directly related with protection of the environment.

“Diversification of Farm Activities and Business Development” measure will support short supply chains and small farmers with their local food and products often produced with the use of traditional and nature friendly practices. At the same time, such support will enhance farmers’ position in the food chain.

“Implementation of Local Development Strategies – LEADER Approach” includes some soil and water protection actions and training procedures on uncontrolled use of fertilizers, herbicides and pesticides and manure management.

With the measures “Rural Infrastructure Investments” and “Diversification of Farm Activities and Business Development”, renewable energy investments will be increased to serve the climate change mitigation.

Thematic Priority 3 of Window 4 i.e., “Agriculture and rural development” has connection with all the measures of IPARD III because all the measures are expected to result in improvement in agriculture and rural development as they all respond to the needs of agricultural sector and rural development. They will make way for higher production achieved while improving the alignment with the EU food safety, veterinary and phytosanitary and environmental standards, for an increased competitiveness, more employment and augmented local development capacity in rural areas.

With the foresight of transition to sustainable and competitive food systems, the European Union Food Safety acquis, the EU Farm to Fork Strategy and the EU Green Deal shall contribute to the effort to ensure more equitable, healthy and environmentally compatible food systems.

The NRDS (National Rural Development Strategy) document, which reveals the country's Rural Development roadmap for 2021-2023, is not only in line with the EU acquis, but also shall contribute to the new political transition pursued by the EU Farm to Fork Strategy and the EU Green Deal, and thus to contribute also to environmental protection and struggle with climate change. In this context, a further harmonization of National Agricultural Policy with the Common Agricultural Policy will be pursued.

As it is stated in Strategic Response of Türkiye, the measures and their weight in the budget is determined to ensure a balance between the goals of socio-economic development and harmonization with the acquis, advanced environmental protection and combating climate change. Ensuring complementarity between the IPARD Programme and National Rural Development Policies shall also be taken as a basis.

Additionally, some other national fundings or other fundings will be used to address IPARD objectives and priorities, providing that overlapping will be avoided but complementarity will be ensured.

The measures defined as part of the IPARD 2021-2027 Programme, which are in line with the types of actions planned for the Agricultural and Rural Development Sector, according to the propositions in NRDS, are given below, together with the share each measure shall receive from the EU contribution.

- 1) Investments in Physical Assets of Agricultural Holdings (Enterprises), %75
- 2) Investments in the Physical Assets Concerning the Processing and Marketing of Agricultural and Fishery Products, %75
- 3) Agri(culture) Environment Climate Change and Organic Farming, %85
- 4) Implementation of Local Development Strategies - LEADER Approach, %90

- 5) Rural Infrastructure Investments, %75
- 6) Diversification of Farm Activities and Business Development, %75
- 7) Technical Assistance, %85

6.5. Alignment of the selected Measures and selection criteria with key elements of the EU Green Deal and with the Green Agenda for the Western Balkans

The European Green Deal declared by the European Commission on December 11, 2019 is the new growth strategy of the EU. It aims for a transformation of the EU into a fair and prosperous structure built on the basis of a modern, resource-efficient, competitive, environmentally sustainable economy where there are no net greenhouse gas emissions in 2050 and where economic growth is decoupled from resources use.

Support to be implemented within the scope of IPARD III Programme with the strategic objective of "Development of the rural environment, sustainable use of natural resources" determined in NRDS, are fully compatible with this priority transformation strategy of the EU.

Although the "Agri- Environment-Climate and Organic Farming" measure of IPARD III corresponds to the EU Green Deal targets such as the reduction in the use of chemical pesticides and fertilizers, dissemination of organic farming methods and practices, reduction of antimicrobial consumption, and protection of biodiversity on agricultural lands; other measures shall also contribute to these strategic goals.

In the investment measures to be implemented in IPARD III, "supporting of the efficient use of resources and the widespread use of renewable energy" have been intended. Renewable energy generation offers great potential not only to increase the energy supply, but also to reduce the costs in rural settlements and to diversify rural initiatives. They will be supported through "Farm diversification and business development" measure. Dissemination of the use of renewable energy by implementing investment measures shall be complementary with the EU Green Deal.

The "Investments in the Physical Assets Concerning the Processing and Marketing of Agricultural and Fishery Products" measure will contribute to the development of storage, packaging and processing processes which will respond to the Green Deal targets concerning the prevention of product losses and food waste.

Moreover, all of the topics such as the controlled use of herbicides and pesticides, activities for the development of short supply chains, proper manure (fertilizer) management, protection of biodiversity, dissemination of organic farming, prevention of loss of agricultural land, prevention of excessive use of water resources and development of mechanisms for the utilization of food wastes, which are among the objectives of IPARD III, overlap with the fundamental elements of the EU Green Deal.

The studies to be planned under the measure of improvement of local development capacity-LEADER Approach- provide an opportunity for the stakeholders in rural areas to raise awareness about the circular economy and to develop creative behaviors and to accomplish the appropriate investments by mobilizing the common sense on this issue.

All these aforementioned activities within the scope of IPARD III represent potential to support efforts necessary to mitigate and adapt to climate change, in accordance with the climate objectives of the EU Green Deal and the EU strategies and commitments to decrease the greenhouse gases emissions.

6.6. Summary table of the intervention logic showing the measures selected for IPARD, the quantified targets

Table 42. Quantified Targets of the Programme

Measure	Quantified target	Programme targets (total as combination of indicators at measure level)
Investments in Physical Assets of Agricultural Holdings (Enterprises)	Number of farms and agri-food processing enterprises supported by IPARD in modernization: 220 Total investment on farms and agri-food sector in modernization (EUR): 165 000 000 Number of farms and food processing enterprises receiving IPARD investment support to progressively align with the EU hygiene and animal welfare standards: 345 Number of jobs created: 3 130 Number of young farmers receiving IPARD support for investment: 225 Number of supported producer organizations: 103 Number of farmers participating in supported Producer Organizations, local markets, short supply chain circuits and quality schemes: 10 300 Number of collective investments: 86 Number of IPARD recipients with support in investments related to care for the environment or climate change: 510 Number of IPARD recipients with support in investments related with manure management: 243 Number of IPARD recipients with support in investments in waste treatment or management: 138 Number of IPARD recipients with support in investments in renewable energy production: 138 Number of projects with circular economy-type investments: 69	▪ Number of projects having received IPA support in agri-food and rural development: 2 330 ▪ Total investment amount (EUR) realized in agri-food sector and rural development via IPA: 727 000 000 ▪ Number of enterprises performing modernization projects: 1 560 ▪ Number of enterprises progressively upgrading towards EU standards: 520 ▪ Employment created (gross): 11 077 ▪ Number of beneficiaries investing in improving resource efficiency in the agriculture, food and forestry sectors and supporting the transition to a low-carbon and climate-compatible economy: 1 133

	Number of IPARD recipients with support for non-productive investments: 80 Number of non-productive investment operations supported in complementarity with M4: 0 Total value of investment (EUR): 250 000 000	
Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products	Number of farms and agri-food processing enterprises supported by IPARD in Modernization: 140 Total investment on farms and agri-food sector in modernization (EUR): 102 000 000 Number of farms and food processing enterprises receiving IPARD investment support to progressively align with the EU hygiene and animal welfare standards: 175 Number of jobs created: 2 250 Number of supported producer groups/organisations: 45 Number of farmers participating in supported Producer Groups, Producer Organisations, local markets, short supply chain circuits and quality schemes: 4 500 Number of collective investments: 40 Number of IPARD recipients with support in investments related to care for the environment or climate change: 150 Number of IPARD recipients with support in investments in waste treatment or management: 80 Number of IPARD recipients with support in investments in renewable energy production: 40 Number of projects with circular economy-type investments: 35	
Agri-Environment-Climate Change	Number of contracts: 400 Number of contracts for Management of soil cover and soil erosion control: 300 Number of contracts for Biodiversity: 100	

and Organic Farming	-Total agricultural land (ha) under environmental or/and climate contracts Management of soil cover and soil erosion control: 2 100 ha Biodiversity: 1 000 ha -Total area (ha) per type of operation included in the following categories Management of inputs (including integrated production, reduction in fertilisers use and in pesticides use, comprising precision farming, manure management, etc.): 1 000 ha Cultivation practices (including crop rotation, crop diversification, soil management through conservation or no tillage, soil cover, etc.): 3 100 ha Management of landscape, habitats, grassland (including setting and management of landscape features, including wetland and peatland, species conservation, extensive grassland management, etc.): 1 000 ha Within the support for endangered breeds Number of supported species: ≥0 Number of supported animals: 0 Within the support for endangered plant varieties Total area for each supported variety: 0 Number of holdings supported for; Conversion into organic farming: 0 Maintenance of organic farming: 0 Total area supported for; Conversion into organic farming: 0 Maintenance of organic farming: 0	
Implementation of Local Development Strategies –	Number of information and publicity activities: 4 805 Number of trainings of LAGs: 1 202 Number of participants attending information and publicity activities: 96 096 Number of participants who have undergone training activities: 12 013	

LEADER Approach	Number of local development strategies: 80 Number of LAGs operating in rural areas: 80 Population covered by LAGs: 2 402 400 Number of projects recommended: 802 Number of small projects: 4 805 Gross number of jobs created: 197 Number of IPARD recipients with support in investments in renewable energy production: 3	
Rural Infrastructure Investments	Number of supported local infrastructures: 160 -Number of IPARD recipients with support in investments related to care for the environment or climate change: 80 -Number of IPARD recipients with support in investments in waste treatment or management: 60 -Number of IPARD recipients with support in investments in renewable energy production: 80 -Number of new jobs created: 1 250 - Total investment in rural diversification, business development and infrastructure (EUR): 200 000 000	
Diversification of Farm Activities and Business Development	-Number of recipients of IPARD investment support in rural diversification and business development: 1 650 -Number of farms on agri-food processing enterprises supported by IPARD in modernisation: 1 200 -Total investments on farms and agri-food sector in modernization (EUR): 100 000 000 -Total investment in rural diversification, business development and infrastructure- (EUR): 175 000 000 -Number of new jobs created: 5 000	

	-Number of young farmers receiving IPARD support for investment: 4 000 -Number of supported producer groups/organizations: 120 -Number of IPARD recipients with support in investments in renewable energy production: 420 -Number of projects with circular economy-type investments: 100 -Number of organic farms with IPARD support to investments: 50 -Number of IPARD recipients with support in investments in waste treatment or management: 50 -Number of farmers participating in supported Producer Groups, Producer Organizations, local markets, short supply chain circuits and quality schemes: 120 -Number of collective investments: 50 -Number of IPARD recipients with support in investments related to care for the environment or climate change: 450	
Technical Assistance	- Number of promotion materials for general information of all interested parties (leaflets, brochures etc.): 350 000 - Number of publicity campaigns: 7 - Number of expert assignments supported: 20 - Number of trainings, workshops, conferences, seminars: 50 - Number of meetings of the monitoring committee: 14 - Number of studies on elaboration and implementation of programme measures: 10 - Number of programme evaluation reports: 4 - Number of rural networking actions supported: 26 - Number of potential LAGs supported: 80	

7. AN OVERALL FINANCIAL TABLE

7.1. Maximum EU Contribution for IPARD Funds in EUR by Year*

Table 43. Maximum EU Contribution for IPARD Funds in EUR by Year*

Year	2021	2022	2023	2024	2025	2026	2027	2021-2027
Total	50 000 000	50 000 000	30 000 000	75 000 000	75 000 000	75 000 000	75 000 000	430 000 000

* The annual contributions are merely indicative as the actual amounts will be decided annually in the framework of EU budget.

7.2. Financial Plan Per Measure in EUR, 2021-2027

Table 44. Financial Plan Per Measure in EUR, 2021-2027

Measure	Total public aid	EU contribution	EU cont. rate	National contribution	National cont. rate
Investments in physical assets of agricultural holdings	204 000 000	102 000 000	%50	102 000 000	%50
Support for the setting up of producer groups	-	-	-	-	-
Investments in physical assets concerning processing and marketing of agricultural and fishery products	140 000 000	70 000 000	%50	70 000 000	%50
Agri-environment- climate and organic farming measure	16 470 588	14 000 000	%85	2 470 588	%15
Implementation of local development strategies - LEADER approach	50 000 000	45 000 000	%90	5 000 000	%10
Investments in rural public infrastructure	156 000 000	78 000 000	%50	78 000 000	%50
Farm diversification and business development	186 000 000	93 000 000	%50	93 000 000	%50
Improvement of training	-	-	-	-	-
Technical assistance	11 764 706	10 000 000	%85	1 764 706	%15
Advisory services	21 176 470	18 000 000	%85	3 176 470	%15
Establishment and protection of forests	-	-	-	-	-
Financial instruments	-	-	-	-	-
Innovation and knowledge transfer	-	-	-	-	-
Total	785 411 764	430 000 000	%55	355 411 764	%45

7.3. Budget Breakdown by Measure

Table 45. Budget Breakdown by Measure

Measures	Total Public Aid (EUR)	Private Contribution (EUR)	Total Expenditures (EUR)
Investments in Physical Assets of Agricultural Holdings	204 000 000	125 032 258	329 032 258
Support for the Setting up of Producer Groups**	-	-	-
Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products	140 000 000	140 000 000	280 000 000
Agri-Environment-Climate and Organic Farming	16 470 588	-	16 470 588
Implementation of Local Development Strategies – LEADER Approach	50 000 000	-	50 000 000
Investments in Rural Public Infrastructure***	156 000 000	-	156 000 000
Farm Diversification and Business Development	186 000 000	124 000 000	310 000 000
Improvement of Training**	-	-	-
Technical Assistance	11 764 706	-	11 764 706
Advisory Services	21 176 470	-	21 176 470
Establishment and Protection of Forests**	-	-	-
Financial instruments**	-	-	-
Innovation and knowledge transfer**	-	-	-

*** Has no budget as it is a measure not chosen by the beneficiary country. Therefore, it is not included in Table 46 and Table 47.*

****Due to the variability in aid intensities, an estimated weighted average rate is based.*

7.4. Budget of EU Contribution by Measure 2021-2027 in EUR for Monitoring (EUR)

Table 46. Budget of EU Contribution by Measure 2021-2027 in EUR for Monitoring (EUR)

Measures	2021	2022	2023	2024	2025	2026	2027	2021-2027
Investments in Physical Assets of Agricultural Holdings	12 000 000	12 000 000	7 200 000	17 700 000	17 700 000	17 700 000	17 700 000	102 000 000
Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products	8 000 000	8 000 000	4 800 000	12 300 000	12 300 000	12 300 000	12 300 000	70 000 000
Agri-Environment-Climate and Organic Farming	1 200 000	1 200 000	720 000	2 720 000	2 720 000	2 720 000	2 720 000	14 000 000
Implementation of Local Development Strategies – LEADER Approach	5 000 000	5 000 000	3 000 000	8 000 000	8 000 000	8 000 000	8 000 000	45 000 000
Investments in Rural Public Infrastructure	8 000 000	8 000 000	4 800 000	14 300 000	14 300 000	14 300 000	14 300 000	78 000 000
Farm Diversification and Business Development	12 800 000	12 800 000	7 680 000	14 930 000	14 930 000	14 930 000	14 930 000	93 000 000
Technical Assistance	1 000 000	1 000 000	600 000	1 850 000	1 850 000	1 850 000	1 850 000	10 000 000
Advisory Services	2 000 000	2 000 000	1 200 000	3 200 000	3 200 000	3 200 000	3 200 000	18 000 000
TOTAL	50 000 000	50 000 000	30 000 000	75 000 000	75 000 000	75 000 000	75 000 000	430 000 000

7.5. Percentage Contribution of EU by Measure

Table 47. Percentage Contribution of EU by Measure

	2021 (%)	2022 (%)	2023 (%)	2024 (%)	2025 (%)	2026 (%)	2027 (%)	2021-2027 (%)
Investments in Physical Assets of Agricultural Holdings	%24	%24	%24	%24	%24	%24	%24	%24
Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products	%16	%16	%16	%16	%16	%16	%16	%16
Agri-Environment-Climate and Organic Farming	%2	%2	%2	%4	%4	%4	%4	%3
Implementation of Local Development Strategies – LEADER Approach	%10	%10	%10	%11	%11	%11	%11	%11
Investments in Rural Public Infrastructure	%16	%16	%16	%19	%19	%19	%19	%18
Farm Diversification and Business Development	%26	%26	%26	%20	%20	%20	%20	%22
Technical Assistance	%2	%2	%2	%2	%2	%2	%2	%2
Advisory Services	%4	%4	%4	%4	%4	%4	%4	%4
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

8. DESCRIPTION OF THE SELECTED MEASURES

The measures stated in Section 8.3 will be implemented within the scope of the Programme for addressing the objectives of thematic priority regarding agriculture and rural development under Window 4 of IPA III Programming Framework.

8.1. Requirements concerning all or several measures

a. National standards relevant to the programme and in compliance with the EU standards

No later than before final payment of the investment, the entire holding/enterprise must comply with relevant national standards in force and applicable to the respective measure.

The investment, when concluded, must respect the relevant EU standards as regards environmental protection and animal welfare for measure 1 and environmental protection, public health, animal welfare, and occupational safety for measure 3.

The applicable national legislation referring to the national minimum standards are listed in the Annex III - National Legislation Relevant to the Programme.

In case, a collective investment is implemented by a legally established entity on behalf of their members, the national standards shall apply to the assets of the entity and not to the assets owned by each participant/member of this entity.

In order to be eligible for support, investment operations shall be subject to an assessment of the expected environmental impact in accordance with law specific to that kind of investment.

b. Eligible expenditure

1. Prior to the conclusion of the Financing Agreement and to the signature of the contract between the IPARD Agency and the recipient, any contracts and addenda signed or expenditure incurred by the recipients and payments made by Türkiye shall not be eligible for funding under the IPARD III programme. This rule shall not apply to actions under the Technical Assistance measure and to expenditure relating to the activities referred to in point 4, provided that the expenditure is incurred by the recipients after the IPARD III programme approval.
2. Construction or improvement of immovable property shall be eligible up to the market value of the asset,
3. The purchase of new machinery and equipment, including computer software, shall be eligible up to the market value of the asset,
4. General costs linked to collective projects that could additionally include studies, marketing and development of the products concerned and animation costs (all to be specified in the List of Eligible Expenditure (LEE)) and general costs linked to expenditure referred to in points (2) and (3), such as architects',

engineers' and other consultation fees and feasibility studies, shall be eligible up to a ceiling of 10% of the costs referred to in those points (2) and (3) under the following conditions:

- The eligible amount of the general costs shall not exceed the reasonable cost;
- for projects with eligible expenditure of the investments of more than EUR 3 million, the business plan preparation costs shall not exceed 3% of the eligible expenditure of these investments;
- for projects with eligible expenditure of the investments of at least EUR 1 million and no more than EUR 3 million, the business plan preparation costs shall not exceed 4% of the eligible expenditure of these investments;
- for projects with eligible expenditure of the investments of less than EUR 1 million, the business plan preparation costs shall not exceed 5% of the eligible expenditure of these investments.
- In no case the costs for business plan preparation can exceed 6 000 Euro for measure 1 and 7 and 9 000 Euro for measure 3.

General costs may occur before the contract for project co-financing between the recipient and the IPARD Agency is concluded or the decision on approving the project for implementation is issued, but not earlier than IPARD III programme approval. The general costs can only be considered eligible for co-financing if the applicant has requested support for general costs in the application providing detailed documentation justifying the reality and validity of the costs and if the project to which they relate is actually selected and contracted by the IPARD Agency.

- The recipient has to provide detailed documentation justifying the reality and validity of the costs with the claim for payment/s submitted to the IPARD Agency. The IPARD Agency is responsible to check the reality and validity of the costs and to publish in the recipients' guidelines the set of requirements and documents needed for justification of costs by the applicant/recipient.
- For investments in renewable energy plants, for the measures 1 and 3, the selling of electricity into the grid is allowed as far as the "self-consumption" limit is respected. The concept of "self-consumption" should be checked at the stage at which a project is submitted. In the case of investment in a sector of renewable energy (in measure 7), "self-consumption" limit will not be sought.
- For an investment in irrigation system water metering enabling measurement of water use at the level of the supported investment shall be in place or shall be put in place as part of that investment.

c. Application of the durability condition

- The investment for which the recipient has received support must not undergo a substantial modification within five years from the date of the final payment to the recipient.

- Substantial modifications to an investment are those which result in:
 - a cessation or relocation of a productive activity outside the geographical area covered by the IPARD III programme;
 - a change in ownership which gives to a firm or a public body an undue advantage;
 - a substantial change affecting its nature, objectives or implementation conditions which would result in undermining its original objectives.
- In the case of “exceptional circumstances” that might affect the investments (e.g., fire or flooding) or ‘force majeure’ (e.g., pandemic), as defined in the Sectoral Agreement, the recipient must inform the IPARD Agency within deadlines according to the Sectoral Agreement or the contract for co-financing.
- The recipients are obliged to keep all accounting records for at least 7 years after the investments take place as well as to collaborate and provide any requested information to the officials of the respective Ministry, IPARD Agency, European Commission and European Court of Auditors authorised to control and audit the implementation of the project as well as NAO/NF and Audit Authority and to other authorised organisations and institutions upon request from the IPARD Agency.

d. Ineligible expenditure for support under the Programme

- (1) The following expenditure shall not be eligible under the IPARD III programme:
- (a) taxes, including value added taxes;
 - (b) customs and import duties, or any other charges having equivalent effect;
 - (c) purchase, rent or leasing of land and existing buildings, irrespective of whether the lease results in ownership being transferred to the lessee unless the provisions of the IPARD III programme provide for it;
 - (d) fines, financial penalties and expenses of litigation;
 - (e) operating costs, except where duly justified by the nature of the measure in the IPARD III programme or in the case of force majeure or exceptional circumstances;
 - (f) second hand machinery and equipment;
 - (g) bank charges, costs of guarantees and similar charges;
 - (h) conversion costs, charges and exchange losses associated with the IPARD euro account, as well as other purely financial expenses;
 - (i) contributions in kind, including own labour costs;
 - (j) the purchase of agricultural production rights, animals, annual plants and their planting;
 - (k) any maintenance, depreciation and rental costs, except where duly justified by the nature of the measure in the IPARD III programme or in the case of force majeure or exceptional circumstances;

- (1) any cost incurred and any payments made by the public administration in managing and implementing assistance, including those of the management and operating structure and, in particular, overheads, rentals and salaries of staff employed on activities of management, implementation, monitoring and control, except where duly justified by the nature of the measure in the IPARD III programme.
- (2) The following expenditure shall also not be eligible:
 - (a) expenditure on projects which, before completion, have charged fees to users or participants unless the fees received have been deducted from the costs claimed;
 - (b) promotional costs, other than in the collective interest; collective interest should be understood as an interest bigger than the individual interest of the recipient.
 - (c) expenditure incurred by a recipient of whose capital more than 25% is held by a public body or bodies (except Union of Turkish Chambers of Agriculture and its affiliated provincial and district units). This exclusion is only valid for measure 1, 2, 3,4 and 7. The rule is not applicable for measure 11.
- (3) Investment in the tobacco and hemp sector are not eligible under IPARD.

e. Rules of origin

Under IPARD III, the rule of origin does not apply for supplies and materials. However, it remains in force as a verification of the entity signing the contracts.

In case of the entity (Article 11 of Regulation (EU) 2021/1529), this should be established in:

- (a) Member States, beneficiaries listed in Annex I to this Regulation, contracting parties to the Agreement on the European Economic Area and countries covered by the Annex I to Regulation (EU) 2021/947; and
- (b) countries for which reciprocal access to external assistance is established by the Commission.

f. Economic viability

The economic viability of the recipient making an investment is an eligibility condition for measure 1, 3 and 7.

The business plan verified at the application stage should demonstrate the economic viability of the whole agricultural holding/enterprise considered as a single legal and economic entity at the end of the realisation of the investment. The economic viability of the investment will be verified against the criteria listed in Annex IV.

For a project to be eligible according to the business plan criteria, it must be financially sustainable. The business plans must be sustainable in terms of cash flow.

While evaluating the financial sustainability, the financing resources that will meet the total investment budget of the project and the income and expense items of the project are taken into consideration. The IPARD funds granted to the recipient are taken into account when calculating the economic viability of the recipient. The total value of the

funding source to be presented in the business plan for the investment period should be at least as much as the investment budget (the sum of eligible and ineligible expenditures). The projects belonging to the applicants who cannot prove that they have sufficient financing resources or the financing resources offered are not realistic, are rejected because they are not financially sustainable.

During the business plan assessment, all conditions required for economic viability are examined in detail. Projects that do not meet the economic viability criteria are rejected as ineligible.

Ex-post verifications shall be carried out on investment operations in order to verify whether substantial modifications were made to the project. As a check of economic viability, it is verified whether the project is operational and operating or not.

g. Rules applied for payment of instalments and advanced payments

The eligible investment activities have to take place after the signature of the contract with the IPARD Agency. The payment of the public aid will be made on the basis of payment claim and justifying documents, which prove the accomplishing of the activities and their eligibility. The form of payment claim is established by the IPARD Agency as specific to the contract provisions and activities concerned.

Payments will be made to recipients upon completion of a project or part of it. The contract between ARDSI and the recipients is based on information regarding the obligations and the sanctions to be applied in cases where these obligations are not fulfilled. The contract will be signed over the amount and number of installments determined by ARDSI.

In case of public investments under measure “Investments in rural public infrastructure” implemented by public recipient (municipalities and public enterprises), the number of instalments may be extended in line with the number of construction phases, according to public recipients’ choice, stipulated in the contract.

In case of Implementation of Local Development Strategies - Leader Approach, payment claims may be submitted regularly (e.g., each month or each quarter) within the years of strategy implementation period.

In case of agri-environment-climate measures, payments shall be made on the basis of the fixed annual payment rates within the five-year commitment period. Payment claims under the measure shall be submitted as annual commitment renewal forms and/or annual specific payment claim forms after the signature of contracts. The format of annual commitment renewal forms and payment claim forms shall be established by the IPARD Agency as specific to the contract provisions and activities concerned.

Advance payments to recipients may be provided from the budget of this Programme, according to rules and conditions of advance payments being established on the basis of the Sectoral Agreement. Payments of advances qualify as eligible expenditure up to 50% of the public aid related to the investment and shall be subject to the establishment of a bank guarantee or an equivalent guarantee corresponding to 110% of the amount of the advance.

h. Deadweight

Deadweight spending is a serious indicator of inefficiency in public financing. It means that recipients receive subsidies for projects that would have been implemented even without the subsidy. To avoid from deadweight, IPARD III Programme shall target the small farmers and small-medium sized establishments. Also, existing financial situation of the recipients is evaluated at the application stage. Furthermore, IPARD III Programme prioritize the economically less attractive investments such as organic production, short supply chain, waste and effluent management, environmental protection, renewable energy, green transportation, renovation/innovation etc.

i. Use of simplified cost options

Simplified cost options are grants that are independent of the costs actually incurred. The main forms of simplified costs are:

- Standard unit costs
- Flat rate financing, determined by the application of a percentage to one or several defined categories of costs.
- Lump sums not exceeding EUR 100 000, per recipient, per year, of public contribution;

Simplified cost options shall be applicable for M5-LEADER, M6-Investments in Rural Public Infrastructure, M9-Technical Assistance and M10- Advisory Services.

For the investment measures namely M1-Investments In Physical Assets Of Agricultural Holdings, M3-Investments In Physical Assets Concerning Processing And Marketing Of Agricultural And Fishery Products, and M7-Farm Diversification And Business Development, simplified cost option may also be used.

8.2. Administrative procedure

- Applicants should not have outstanding tax and social security debts to the government (except for measure the Agri-Environment- Climate and Organic Farming). The outstanding social security rule does not apply to public administrations.
- Applicants (in case of natural person himself/herself, in legal entities the person who has to authority to represent and bind the legal entity) shall not be younger than 18 and older than 65 when the application is submitted. This rule does not apply to public institutions and to applicants of measure the Agri-Environment-Climate and Organic Farming.
- Investments on a rented property shall be eligible. The rental period should not be shorter than five years from the date of completion of the investment.
- The applicant should submit a business plan in accordance with the format to be developed by the IPARD Agency. For small investments, a simplified business plan will be submitted.
- Applicants shall submit their application to the Provincial Coordination Units (PCU) of ARDSI within the specified time period. Administrative checks and on-the-spot controls of the project shall be performed by ARDSI. Business plans of applications which passed the administrative checks and on-the-spot controls will be evaluated. The applications which are determined as viable after the

business plan evaluation shall be scored on the basis of the “Ranking Criteria for Project Selection” as stated in the IPARD programme. Contracts will be signed with selected applicants.

- *Ex-post* verifications carried out on investment operations to verify the respect of commitments laid down second subparagraph of Part c in Section 8.1 or in the IPARD III Programme. The *ex-post* verifications shall be carried out within 5 years of the date of final payment to the recipient. Agri-environment projects are normally carried out for the duration of 5 years. Therefore, verifications for agri-environment are in this period. All investments shall be checked at least once during the five-year period. The *ex-post* verifications, carried out throughout the five-year period, shall be based on an analysis of the risks and financial impact of different operations, groups of operations or measures. *Ex-post* verifications could be done by a physical visit or using alternative means.

The controllability and verifiability of the measures will be ensured by following:

MA is responsible for controllability and verifiability of the measures, in cooperation with ARDSI. MA confirms based on an opinion received from the ARDSI that the measures in the programme are controllable and verifiable.

Definition and application of clear, transparent, quantifiable, non-discriminatory and controllable eligibility and selection criteria will be ensured.

Selection criteria shall aim to ensure equal treatment of applicants, efficient use of financial resources and targeting of measures in accordance with the set up priorities of the Programme.

Selection process based on the pre-defined and publicised criteria with transparent and well-documented procedures (audit trails) and administrative capacity, ensuring compliance with the principles of sound financial management, including selection of applications, administrative and on-the-spot control of eligibility of expenditure.

On-the-spot verifications on applications and payment claims shall be performed by using physical visits or using alternative means, and shall cover all elements that can be checked at the time of the verification. However, in exceptional circumstances, duly recorded and explained, it can be decided that an on-the-spot verification is not necessary. On-the-spot verifications to be carried out by using alternative means can be performed by remote checks by mobile applications, photos or video recordings from the applicant, more document-based controls etc. Training needs of on the spot controllers shall be evaluated periodically and required training shall be provided.

The reasonableness of the costs proposed, which shall be evaluated using a suitable evaluation system, such as reference costs, standard unit costs, a comparison of different offers or an evaluation committee. Eligible expenditures on construction works, machinery-equipment, general costs and visibility costs shall be checked before the contracting period.

Proper documentation management and verification of documents – recipient shall be required to keep records of operations, invoices and accounting records.

A suitable application assessment system is established.

After the submission of the applications, administrative checks and on-the-spot controls and business plan assessment of the applications are performed by ARDSI. After the controls, eligible applications are scored on the basis of the “Ranking Criteria for

Project Selection” as stated in the IPARD programme. Contracts will be signed with selected applicants. The payments will be done according to results of the completeness and eligibility controls performed through administrative checks and on-the-spot controls of the project.

8.3. Description by Measure

8.3.1 INVESTMENTS IN PHYSICAL ASSETS OF AGRICULTURAL HOLDINGS – M1

8.3.1.1 *Title of the Measure*

Investments in physical assets of agricultural holdings – M1.

8.3.1.2 *Legal basis*

8.3.1.3 *Rationale*

The aim of this measure is to support physical investments to align to the EU standards (environment, animal welfare), improve the economic and environmental performance of agricultural holdings, provide the infrastructure needed for the development of agriculture and investments necessary to achieve environmental aims, enhance farmers' position in the food chain and promotion of the regeneration of the labour force in the farming sector.

To facilitate achievement of agri-environment-climate objectives, non-remunerative investments necessary to achieve purely environmental goals ("non-productive" investments⁴) will also be supported.

The EU Green Deal identifies climate change and environmental degradation as threats, and it is aimed at addressing these threats by transforming the EU into resource-efficient and competitive economy which decouples economic growth from resource use. Furthermore, the process of transformation should be fair and inclusive for everyone and allow transforming climate and environmental challenges into opportunities. Making investments related to circular economy as well as sustainable and renewable energy production aiming the environmental protection and building resilience to climate change is crucial but cost-increasing for many small and medium scale holdings. Hence, supporting agricultural holdings on this issue becomes a necessity.

Since March 2020, the COVID-19 pandemic has affected the main agricultural sectors (milk, meat, poultry and eggs). In this context, ensuring the continuity of the food supply based on the cooperation of all stakeholders in the food supply chain has been paramount. It has also become more important to support these sectors to guarantee the uninterrupted access to safe and healthy food for consumers.

Most of the rural population in Türkiye is engaged in operating subsistence and semi-subsistence agricultural holdings. Hence, there is a serious need for support of small-scale agricultural holdings with a view to ensure their contribution to food security, sustainability, job creation and adaptation to climate change.

The cost of feed has a very important share in the price and input costs in milk production and fattening, so it is important for the producers to grow forage plants in this respect.

⁴ 'Non-productive investments' are investments that do not lead to any significant increase in the value or profitability of the agricultural or forestry holding.

It is also important that disadvantaged areas and young population benefit from the support at a higher rate. Besides, special attention shall be given to the producer organisations via higher intensity rates for collective investments.

During recent years, demand for organic products has increased due to growing income and the public awareness have embraced the fact that organic products are healthier, their production provides better living conditions for animals and the farming methods used are environment friendly.

In Türkiye, organic agriculture has developed mostly in herbal products. Organic meat, milk and egg production, which is of great importance in a healthy and balanced diet, is not at the desired level and needs to be further supported.

In organic animal production, the number of animals is limited by the regulation in order to prevent environmental pollution caused by animal wastes such as manure. The walking area that should be allocated per animal, access of animals to the outdoor areas or pastures and use of quality feed are important factors. The transition of holdings engaged in conventional production to organic production is made within the rules determined according to the field of activity.

In order to respond to the growing demand for animal organic farming products, it is necessary to support the organic producers in their adaptation to the organic farming standards. This will take the form of supporting a redesign of livestock, including poultry, housing.

In Türkiye, the milk, meat (including poultry), and egg production sectors are main agricultural sectors. Agricultural holdings in these sectors have a great potential for an increased competitiveness, economic development, improved protection of natural resources.

Milk and Dairy

Most dairy farms are subsistence or semi-subsistence small family holdings which have limited economic sustainability. It is important for their survival to help them transform into commercial scale holdings. If the capacity of the holdings does not reach a sustainable size and the necessary modernisation is not undertaken, the risk of failing in the long term is high. If supported, these small-scale holdings will have competitive status and as such will contribute to build rural welfare.

59.7% of the dairy bovine holdings have 1-4 head animals while 21.3% of them have 5-9 head animals according to 2018 data. Based on this, nearly two-thirds of the holdings have less than 10 head animals and the rate of holdings with 50 head or more is only 0.7%. 53.0% of the dairy ovine holdings have 1-50 animals. The rate of those with 300 + heads of ovine animals is 6.2%. These data depict a structure dominated by small-scale agricultural holdings.

Although necessary steps have been taken regarding adaptation to the EU standards through setting corresponding legal regulations in the EU accession process, implementation deficiencies persist including quality and hygiene norms as well environmental standards. As production of high-quality and hygienic dairy products expected by consumers depends upon the primary production and storage being done in compliance with the relevant standards and norms, many Turkish milk producing holdings are in need of support to ensure milk production in accordance with these standards.

While there has been a quantitative increase in raw milk production in the last decade, milk production and milk yield in Türkiye may increase even more if breeding holdings develop their capacities and fulfil the requirements of modern management in the upcoming years.

The aim of the support should be to help small-scale holdings reach optimum scale and to create medium-sized, productive, market-oriented and EU standards-respecting holdings. Agricultural holdings to be supported should have the ability to continue their economic activities in the future and be willing to improve their existing production systems in a sustainable manner leading to the attainment of EU standards related to animal welfare and environmental protection.

Red Meat

With regard to the meat sector in Türkiye, livestock breeding farms operating in rural areas are small-scale or family-type farms. More than 80% of the farms have less than 10 heads of cattle and the production is maintained in a traditional structure with low productivity. The share of small-scale holdings in total production is as high as 65%. The rate of animals concentrated in the group with 1-4 heads is 44.5%, while the rate for group with 20-49 animals is 24.8% for bovine animals. The rate of animals concentrated in the group with 50-149 head is 28.5%, and in 300+ head is 36.3% for ovine animals.

There have been developments in production and consumption of red meat in Türkiye. However, these are not at the desired level to ensure productivity and profitability due to the structural problems of the sector. The problems faced may be counted as the shortage of roughage in the red meat sector, high input costs and the inability to organize effectively since production has not become widespread enough in the economy of scale.

To meet nutritional needs of the increasing population, it is expected that the meat sector competitiveness reflected in its production and productivity should further increase while its environmental impact be limited. This includes agricultural holdings with small-scale production model which have however a considerable production potential for sustainable production.

The production in red meat sector needs to be carried out in hygienic conditions caring for human and animal health, animal welfare and environmental protection. However, small-scale farms, dominant in animal sector, frequently experience problems in bringing their holdings in line with EU standards. The integration of these holdings, which have a considerable potential to be the backbone of the red meat industry in Türkiye, into the value chain is of great importance. Hence, they should be supported to switch from "subsistence" to sustainable "production-commercial" category complying with the relevant standards and conditions.

Poultry and Egg

Poultry sector is one of the fastest growing sub-sectors of the livestock sector both globally and in Türkiye. Türkiye is one of biggest producers and exporters in the poultry sector, particularly in terms of the production of chicken meat and egg.

Türkiye has a modern integrated poultry production system that employs 600 thousand people in all stages from raw material production to marketing. This also contributes to reducing the rural-to-urban migration and to the socioeconomic development of the countryside with the on-site employment it creates.

Poultry meat production is done in compliance with the EU standards and international norms and food safety principles by the “integrates” type of companies which include feed factory, breeder houses, hatcheries, poultry houses, slaughterhouses, rendering facility, waste water treatment facility and marketing network.

Poultry sector companies operating with an integrated production model, in addition to their own production, ensure that many small and medium-sized poultry farms participate in the production chain by applying the contracted production model.

Due to the increasing population, the importance of poultry production with its high reproduction rate and productivity has increased. Although the consumption of poultry meat and egg has increased, it can be argued that the desired level of consumption is not achieved in Türkiye compared to many developed countries.

Türkiye has reached a certain quality for the poultry products, ensuring sustainability, production in compliance with EU standards, and carrying out planned production. Even so, common zoonotic diseases such as avian influenza must be taken seriously to ensure a continued healthy production and avoid stopping the exportation what would cause economic losses.

For these reasons, the quality and competitiveness of the sector should be further improved by supporting investments in biosafety. In both broiler and egg production, it is deemed important to give support to the modernization of the small and medium scale holdings rather than establishment of new ones. In this context, structural changes such as renewal of buildings (better insulation) and purchase of machinery and equipment and establishment of automatic systems (feeding, watering, egg collection, etc.) should be supported. In addition, biosafety related investments for controlling access to buildings and developing adequate disinfection systems should also be eligible for the context of support.

The use of enriched cages has been increasing in egg production holdings. In newly established holdings, the use of enriched cages considering animal welfare is made obligatory in line with the harmonization with the EU. 2023 is given as deadline for transition to the enriched cages for the current holdings pursuant to the "Regulation on the Minimum Standards Regarding the Protection of Laying Hens" dated 2014. Changes in cage systems is relatively slow and existing agricultural holdings should be supported in this regard until the end of deadline mentioned above.

The main farm waste coming from milk and meat production is methane coming from manure. Livestock production is the main contributor within agricultural sector in terms of methane emissions. To minimize these negative effects, management of waste resulting from livestock farming is obligatory for the agricultural holdings supported. A projected waste management is important for both the sustainability of natural resources and the holding's economy. The livestock rearing by-product in form of manure should also become part of the farms' circular economy. In this context, the support for renewable energy investments transforming manure into energy such as biogas should be further supported along support for manure storages.

8.3.1.4 General objectives

- To increase the efficiency, competitiveness and more sustainable agricultural production in the agri-food sector, e.g., by progressive alignment to the Union standards, enhancing the position of farmers in the food chain and supporting young farmers.

- To improve the response of the agri-food sector to public demand for high-quality, safe, nutritious and sustainable food as well as animal welfare.
- To contribute to climate change mitigation as well as sustainable energy and foster sustainable management of natural resources, such as water, soil and air.

8.3.1.4.1 Specific objectives

- To enhance the prosperity and social-economic development of rural residents and areas via creating job opportunities.
- To encourage investments in agricultural holdings related to effluent and waste management, renewable energy and circular economy-type investments in line with the EU Green Deal.
- To support collective investment to ensure that more producers benefit from the supports and to improve producers' position in the food chain.

8.3.1.5 Linkage to other IPARD measures in the programme and to national measures

This “Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products” measure is linked with M3 since any improvement in production of milk, red meat, poultry meat and egg will have multiplier effect on related processing sectors.

In addition, wastes of vegetable, fruit, and other food processing industries covered under M3 can be used as roughage sources for primary production in M1 that will both contribute to reduction of input costs which is important in terms of competitiveness and environmental protection.

M1 is also strongly linked to “Farm Diversification and Business Development”. In regions where milk processing facilities are not developed and there is no milk collection system, the produced milk is converted into dairy products on farms often leading to creating local brands.

The machinery parks supported under M7 will also benefit the producers receiving support under this measure.

“Advisory Services” has also a link to the investment measure. There is a need to carry out training activities for agricultural breeder holdings operating under M1 on technical, economic and environmental issues.

The training gap in knowledge concerning selection of breeding stock, feed quality and animal feeding, procurement of hygiene and other materials, medicine, vaccination, mating materials and veterinary services such as the treatment of diseases etc. will have impact on the sectors' competitiveness.

In this context, it can be said that M10 can be used to meet the training needs of the stakeholders included within M1. The public institutions and NGOs can be made effective in training and the producers who complete related training modules can be certified.

M1 is also related to the objectives pursued by “Agri-environment-climate and Organic Farming” measure. Manure treatment becomes a focal issue in relation to current EU and national policies on environmental, climate and renewable energy matters. The huge amounts of organic waste like cow manure produced imposes to seek for a new

approach and new methods to manage organic waste dumped into natural resources. From the other side, cow manure presents many properties that can be useful as a renewable energy source (biogas) and soil organic natural amendment (bio-fertilisers). Türkiye has high animal manure potential originating from 68% bovine, 5% ovine and 27% poultry that can be used for renewable energy and bio-fertilizer production.

For poultry, among the supports mentioned above, only subsidised credits are available for investments including biosafety and renewable energy, easing the financing of the investments supported through IPARD.

8.3.1.6 Recipients

Recipients of the measure are natural persons and legal entities responsible for carrying-out and financing investments on agricultural holdings (with the exception of public legal entities) and recognised by the national law who are registered at:

- The National Farm Registry System/ Agricultural Production Registration System or
- When the recipient is not the owner of the holding on which the investment is carried out, a contract which includes provisions allowing for the structural effects of the project during at least 5 years after its conclusion should be established between the parties concerned.

Producer Organizations Eligible for Collective Investments

- In scope of the collective investments, Agricultural Development Cooperatives established in accordance with the Cooperatives Law No. 1163 (whose establishment / supervision is under the responsibility of the Ministry of Agriculture and Forestry) and operating in the milk and meat sector are eligible for support under this measure. In accordance with the law, each cooperative must be established with a minimum of 7 farmers. Distribution of income to the members of the cooperative is stated in its main contract.
- In scope of the collective investments, Breeders' Unions for Breeding Purposes established in accordance with the relevant articles of the Law No. 5996 operating in the milk, meat, and egg sector are eligible for support under this measure. In accordance with the law, each breeder union must be established with a minimum 7 farmers. Distribution of income of the breeder's union is stated in its main contract.

8.3.1.7 Common eligibility criteria

- Applicants should be registered at the National Animal Registry System by the time of final payment claim.
- "Collective investments" mean investments by producer organisations (specified under the specific eligibility criteria) in sharing facilities, machines, equipment and other infrastructure for production of agricultural products up to the EU standards.
- In case of investments targeting organic production, the related certificates / documents should be submitted before the final payment for newly established agricultural holdings and at the application stage for existing holdings for:

- o Milk
- o Red Meat

and at the application stage for agricultural holdings producing:

- o Poultry Meat
- o Egg

8.3.1.7.1 Type of eligible holdings

Small and medium sized agricultural holdings that produce milk, meat, poultry meat and eggs that are involved in primary production are within the scope of support under this measure.

8.3.1.7.2 Economic viability of the recipient

The economic viability of the recipient must be demonstrated by means of a business plan. The business plan includes a brief description of the business, its current assets and liabilities, human resources, a description of the investment proposed, its financing and projections on the future economic operation (incl. marketing).

The business plan should demonstrate the economic viability of the enterprise at the end of the realisation of the investment. The economic viability of the investment will be verified against the criteria listed in Annex IV of the Programme.

For a project to be eligible according to the business plan criteria, it must be financially sustainable. The business plans must be sustainable in terms of cash flow.

For smaller investments with an eligible expenditure amount of 180.000 EUR and below, a simplified form of a business plan can be used. The IPARD Agency shall prepare templates for such business plans to be made available to all potential final beneficiaries.

8.3.1.7.3 National standards/EU standards

Principles regarding fulfilment of applicable EU and national standards are explained under Section 8.1 of the programme. The relation between the sectors supported under this measure and the national / EU standards are given in the Annex III which includes the list of standards concerned.

In case, the collective investment⁵ is implemented by a legally established entity on behalf of their members, conditions as explained in section 8.1 of the programme apply.

By the time of the final payment claim, agricultural holdings have to fulfil the minimum national requirements on environmental protection and animal welfare listed in Annex III. At the end of the investment period, the investments supported shall achieve compliance with the relevant EU standards on animal welfare and environmental protection that apply to the scope of the investment. The national veterinary and environmental authorities must assess whether the respective EU and national standards are met and should issue a certificate confirming the above. Such a certificate should be submitted to the IPARD Agency before the final payment and will be used to verify the fulfilment of these conditions.

In case there is a national Code of Good Agricultural Practices (GAP), the national minimum standards can be the same as the ones presented under such code.

⁵ Annex II. Guidance on collective investments of the Draft Programming guidelines for IPA rural development programmes 2021-2027

Other eligibility criteria

The investment must concern production, storing and processing of agricultural products as listed in Annex I to the Treaty and described in the Section 8.1 of the programme.

- Milk, red meat, poultry meat, and egg production is supported under this measure.
- Selection of the eligible sectors to be supported under this measure are based on sector analysis. Identification of the type of recipients and specific investments needed/eligible under each sector follow the same approach and give priority to developing those weakest links identified in the agricultural production chain by the relevant sector analysis.
- In the case of investments for the purchase of tractors and farm equipment, these investments shall respect the relevant European Union legislation as regards environmental protection, in particular as regards gaseous and particulate pollutant emission limits.
- Recipient should follow the general eligibility rules as described in Section 8.1 of the IPARD programme (incl., eligible and non-eligible expenditure).
- Recipients should follow the rules regarding origin as described in Section 8.1 of the IPARD programme.
- The applicant (in the case of a natural person himself/herself, in the case of legal entities the person who has the authority to represent and bind the legal entity) should prove his/her capability with an agricultural vocational school or college or university degree (including masters or doctorate) in agriculture, veterinary medicine or any other relevant speciality or with minimum three years of working experience in agriculture or any other relevant speciality as can be documented by the relevant national registration systems.

8.3.1.7.4 Non-productive investments

Certain agri-environment-climate operations and objectives can only be put in place if preceded by non-productive investments. Non-productive investments are investments which do not generate a significant return, income, or revenue, or increase significantly the value of the recipients holding but have a positive environmental impact.

Support for non-productive investments covers capital works related to the implementation of agri-environment-climate objectives e.g., for restoration of habitats and landscapes, including setting up or re-instating the infrastructure needed to allow appropriate management of habitats. (See section on eligible expenditure for more details).

8.3.1.7.5 Investments in renewable energy plants

Under this investment support, the selling of electricity into the grid is allowed as far as the "self-consumption" limit is respected (i.e., electricity sold into the grid equals on average the electricity taken out in the course of the year). This is justified by the fact that, as electricity cannot be stored, it must, unless wasted, be sold into the grid; the

electricity grid can be conceived as a storage place for electricity where it is introduced and withdrawn during the year in the similar amount and at a different rhythm.

The concept of "self-consumption" should be checked at the stage at which a project is submitted/assessed. The investment is considered eligible when the (theoretical) power capacity of the renewable energy plant ("the investment") does not exceed 120% of the 3 years-average (self-) consumption of the farm. In addition, if the (theoretical) power capacity of the renewable energy plant ("investment"), which is the basis for the support, is more than the limit in the national legislation determined by EMRA, the excess part will not be subject to support.

In the case of new farms or in the case of farms which have substantially changed the size of their operations in the last three years, the expected consumption should be estimated by the IPARD agency. If the estimated power capacity of the renewable energy plant ("investment"), which is the basis for the support, is more than the limit in the national legislation determined by EMRA, the excess part will not be subject to support. The same concerns expected power consumption increases due to the new investments to be made as part of the same application by the potential recipient⁶. As a complement of an investment under support, renewable energy investment can be made in accordance with the Interconnection Agreement.

8.3.1.8 Specific eligibility criteria

- Investments should be in one of the eligible provinces defined in Chapter 2 of the programme.
- Investments should attain the capacity limits stated below at the end of the investment.
- The total capacity (including the capacity linked to the investment) of the agricultural holding of the applicant, which operates in the same sector subject to the investment and which is located in the district defined as the investment area, should not exceed the capacity limits stated below at the end of the investment.
- Existing and new agricultural holdings (in case of poultry and laying hen only existing holdings) are eligible under this measure.
- To be eligible for a higher intensity rate provided for collective investments:
 - Cooperatives, breeders' unions (defined below) shall apply to the sectors related to the product, which is mentioned in the actual contract of the cooperative / breeders' unions.
- For all sectors, the agricultural holding should prove that the manure is stored and managed in compliance with the relevant EU standards at the end of the investment.
- For poultry and egg sectors, the agricultural holding should prove that waste is treated according to the relevant EU standards at the end of the investment.

The eligible investment capacities at the end of the investments for agricultural holdings are defined below on sectoral basis:

⁶In line with DG AGRI guidance of Ares (2018) 6385137-12/12/2018

Milk Production (including organic production)

- Minimum 10, maximum 150 milking cows, or
- Minimum 5, maximum 50 milking water buffaloes, or
- Minimum 75, maximum 800 milking sheep, or
- Minimum 75, maximum 800 milking goats.

Red Meat Production (including organic production)

- Minimum 30, maximum 250 cattle, or
- Minimum 10, maximum 50 water buffaloes, or
- Minimum 75, maximum 500 sheep, or
- Minimum 75, maximum 500 goats.

Poultry Meat Production

(Only active existing agricultural holdings without increasing their capacity can apply):

- Minimum 15 000, maximum 100 000 broiler, or
- Minimum 3 000, maximum 20 000 broiler (for organic production) or
- Minimum 1 000, maximum 10 000 turkey (including organic production) or
- Minimum 400, maximum 4 000 geese (including organic production)

Egg Production

- Minimum 20 000, maximum 100 000 laying hens
- Minimum 2 000, maximum 15 000 laying hens (for organic production)

Eligible are only the existing agricultural holdings active in egg production⁷ who are

- in need for renovation of facilities and equipment or
- moving their agricultural holdings away from the settlement areas

without increasing their capacity (in this case, the agricultural holding should be owned by the applicant).

8.3.1.9 Eligible expenditure

Eligible investments shall be limited to:

- Construction, reconstruction, renovation and extension of immovable property (e.g., the purchase of property is excluded).
- The purchase of new machinery and equipment, including computer hardware and software up to the market value of the asset.
- Non-productive investments (linked to the achievement of agri-environment-climate objectives).

⁷ To meet the animal welfare requirements, existing agricultural holdings may expand their buildings for laying hens without increasing their capacity.

- General costs linked to investment-related expenditure, such as architects', engineers' and other consultation fees⁸, feasibility studies, shall be eligible up to a ceiling of 10% of the investment costs. Specific lower ceilings on specific items may be established namely for business plans referred to under 6.3 (according to the type of investment).
- General costs, although eligible retroactively (since they may occur before contract conclusion), can only be considered eligible if the project to which they relate is actually selected and contracted by the IPARD Agency.
- For producer organizations - for collective projects in the joint use of resources (machines, storage etc.), short value chains or adding value to agricultural produce (packing, grading etc.).

Eligible collective investments

Collective investments supported could cover:

- sharing facilities (buildings), machines, equipment and other infrastructure for production of agricultural produce, so as to achieve the EU standards; Examples: joint use of agricultural machines, milk coolers, grading and packing equipment.
- establishing and developing short supply chains* and local markets. Examples: market stall vehicle for direct sales; equipment for market stalls; fridges

*A short supply chain is “a supply chain involving a limited number of economic operators, committed to cooperation, local economic development, and close geographical and social relations between producers, processors and consumers” (Article 2 of Regulation (EU) No 1305/2013⁹). Moreover, “support for the establishment and development of short supply chains ... shall cover only supply chains involving no more than one intermediary between farmer and consumer”¹⁰.

Additional eligible costs linked to collective investments under “general costs”¹¹

Additional general costs linked to the collective investments also covers:

- Studies,
- Market and development of the products concerned,
- Animation costs (no more than 10%).

⁸ Other consultants' fees can be fees for supervising a complex construction project, preparation of technical documentation (for the final payment). In line with Article ... of the Sectoral Agreement, this expenditure should be reasonable and limited.

⁹ Regulation (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

¹⁰ Article 11 of European Commission Delegated Regulation (EU) No 807/2014 supplementing the Rural Development Regulation.

¹¹ The general costs linked to collective projects are provided for in Article 33(5)(c) of the (current) Sectoral Agreement.

Examples:

- Study on the specification for the hygiene standards and the method of production of a quality cheese (or other quality products);
- Business plan;
- Animation costs (cost of a local facilitator) for creating and running short value chain of a group of fruit and vegetable producers delivering to a local supermarket;
- Product development and marketing study for new products of medicinal or aromatic plants or similar studies for other produce.

The list of categories of the eligible expenditure per sector is provided below. A detailed list of the eligible expenditure will be provided in the List of Eligible Expenditure (LEE).

Milk

- Construction/extension/modernisation of closed, open and semi-open stables/barns,
- Construction and/or renovation of other agricultural buildings, limited to storage buildings, machine sheds, milking room, milk storage room.
- Construction of fences and gates for pasture management only.
- Purchase of machinery and equipment related to silage handling, on-farm animal feed preparation, handling, distribution systems and storage.
- Purchase of machinery and equipment related to milking room facilities, milk cooling and storage, on-farm milk transportation.
- Establishment of waste and wastewater processing facilities and systems.
- Establishment of manure storage and treatment facilities and systems, investments in the application of manure on land.
- Investments in renewable energy production.
- Establishment of facilities and purchase of machinery and equipment related to animal handling systems (e.g., weighing, disinfection).
- Purchase of electric tractor with a capacity up to 85 kW.
- Construction works and purchase of machinery and equipment and for circular economy-type investments including renewable energy production for self-consumption and waste management.
- Establishment of automatic watering systems.
- Purchase of machinery and equipment for the production of forage plants listed in Annex XI excluding motorized vehicles.
- Purchase of specialised technological machinery and equipment including IT and software (general farm management, herd management, milk registry).
- Establishment and maintenance of website to publicize activities of agricultural holdings.

Red Meat

- Construction/extension/modernisation of stables/ barns.
- Construction and/or renovation of storage buildings and machine sheds.
- Purchase of machinery and equipment related to silage handling equipment and machinery, on-farm animal feed preparation, handling, distribution systems and storage.
- Establishment of manure and waste handling, storage and treatment facilities and systems, including investments in the application of manure on land
- Establishment of facilities and purchase of machinery and equipment related to animal handling systems (e.g., weighing, disinfection).
- Purchase of machinery and equipment related to transportation equipment compatible with EU standards on animal welfare, excluding motorised vehicles.
- Construction works and purchase of machinery and equipment and for circular economy-type investments including renewable energy production for self-consumption and waste management.
- Purchase of electric tractor with a capacity up to 85 kW.
- Establishment of watering systems.
- Construction of fences and gates for pasture management only.
- Purchase of machinery and equipment for the production of forage plants listed in Annex XI excluding motorized vehicles.
- Purchase of specialised technological machinery and equipment including IT and software (general farm management, herd management, animal registry).
- Establishment and maintenance of website to publicize activities of agricultural holdings

Poultry and Egg

- Extension/modernisation of poultry houses (broiler, laying hens, turkey, and geese) and animal shelters.
- Renovation of storage buildings and machine sheds.
- Construction of fences and gates for physical biosafety of birds (avian influenza control).
- Establishment of automatic feeding and drinking, watering, heating, and ventilation, and environmental control systems including energy-saving equipment that is authorised and defined under Directive 2007/43/EC.
- Establishment of manure and waste handling, storage and treatment facilities and systems.
- Purchase of special machinery and equipment related to health control.
- Purchase of transportation equipment compatible with EU standards on animal welfare excluding motorised vehicles.

- Purchase of specialised technological machinery and equipment including IT and software (general farm management, flock management, animal registry).
- Purchase of cage systems for laying hens.
- Purchase of machinery and equipment for the production of forage plants listed in Annex XI excluding motorized vehicles.
- Purchase of machinery and equipment for picking, sorting, transport, and packaging of eggs excluding motorised vehicles.
- Construction works and purchase of machinery and equipment and for circular economy-type investments including renewable energy production for self-consumption and waste management.
- Purchase of electric tractor with a capacity up to 85 kW.
- Establishment and maintenance of website to publicize activities of agricultural holdings.

Non-productive investments

- Construction works for eligible non-productive investments defined below.
- Purchase of machinery and equipment for eligible non-productive investments defined below.

Eligible non-productive investments

- Fencing and other works needed to facilitate conservation management;
- Restoration of wetlands, moorland or peatlands;
- Restoration or creation of landscapes features such as hedges;
- Restoration of ditches;
- Traditional dry stone walls restoration;
- Building windbreaks by using trees, bushes or herbaceous plants in single or parallel rows, perpendicular to the prevailing wind direction;
- Establishing natural rain water harvesting ponds, within the context of nature-based solutions¹², using different techniques (ponds built with natural materials as stones, rocks and soil to collect water flowing along slope, terraces, berms, etc.).

8.3.1.10 Selection criteria

The criteria in Table 48 will be used for ranking small agricultural holdings to be supported under this measure whose final capacity at the end of the investment is between the limits defined above (Section 7).

¹² Nature based solutions refers to the sustainable management and use of nature for tackling socio-environmental challenges. The challenges include issues such as climate change, water security, water pollution, food security, human health, biodiversity loss and disaster risk management. Examples are restoring and protecting forests and wetlands in catchments, coastal habitat restoration, etc.

Table 48. Selection criteria and scoring table

No	Selection Criteria	Scoring Points
1	1) The total amount of eligible expenditure; -For milk, red meat and egg sector; more than 400.000 EUR: 0 points between 300.000 and 400.000 (included) EUR: 5 points between 200.000 and 300.000 (included) EUR: 10 points equal or less than 200.000 EUR: 15 points -For broiler and turkey in poultry sector: more than 200.000 EUR: 0 points between 150.000 and 200.000 (included) EUR: 5 points between 100.000 and 150.000 (included) EUR: 10 points equal or less than 100.000 EUR: 15 points -For the geese in poultry sector: more than 100.000 EUR: 0 points between 60.000 and 100.000 (included) EUR: 5 points between 25.000 and 60.000 (included) EUR: 10 points equal or less than 25.000 EUR: 15 points	15
2	If the applicant has an organic farming certificate in the applied sector	10
3	If the applicant is the owner of investment implementation area	15
4	If the applicant has not signed a contract under IPARD programme	20
5	If the applicant or its legal representative (for legal entities) is woman	10
6	If the applicant is a natural person or producer organization or the legal entities whose majority shareholder is a producer organization	20
7	If the investment includes generation of renewable energy	10

8.3.1.10.1 Targeting and principles with regard to the setting of selection criteria

Supports are designed to target defined objectives reflecting identified structural and territorial needs and structural disadvantages of this sector. Investments depending on the SWOT analysis and the identified needs of the provinces in the scope of IPARD are subject to support under this measure. It is aimed that that the agricultural holdings supported under this measure attain related EU standards with the given supports while paying attention to protect environment and building resilience to climate change in line with EU Green Deal.

In general, particular attention must be paid to minimize the risk of deadweight¹³ in line with principle explained in section 8.1 of the programme.

8.3.1.10.2 Selection of projects

The eligible projects will be ranked according to the scores they have obtained from the ranking criteria, and they will be able to benefit from the grant supports accordingly.

8.3.1.11 Aid intensity and EU contribution rate

The minimum and maximum limits for total value of eligible investments per project are EUR 20 000 and EUR 500 000 (the upper limit for milk and red meat is EUR 750 000) the upper limit for poultry is EUR 250 000, the upperlimit for geese farms is EUR 125 000).

¹³ Definition of deadweight (by the European Court of Auditors): A situation where a subsidised operation would have been wholly or partly undertaken even without public aid.

A maximum of four eligible investments per recipient are allowed within the timeframe of IPARD 2021-2027.

The recipient can only submit a new application for IPARD support when the previous investment has been finalised (after final payment), cancelled or withdrawn.

The maximum total value of eligible investments per recipient is limited to EUR 1 000 000 (EUR 500 000 for poultry and EUR 250 000 for geese) for this measure within the timeframe of IPARD III.

The basic rate of public aid under this measure shall be 60% of the total eligible cost of the investment.

- Extra 5% public aid will be given to natural person or producer organization (the person who has to authority to represent and bind the PO) if he/she is under 40 years of age at the time of submitting the application
- Extra 5% public aid will be given if the investment is on a mountainous area.
- Public aid shall be 70% of the total eligible cost of the investment for collective investments of producer organizations and certified organic farmers.
- Extra 10% public aid will be given for investments related to effluent and waste management or renewable energy or circular economy-type investments linked to waste management.

It is provided that cumulative combined support does not exceed 75%.

The EU co-financing rate is 75% of the public aid, except in case of non-productive investments aid intensity can be up to 85%¹⁴.

8.3.1.12 Indicative budget

Table 49. Indicative budget

Years	Total Eligible Investment	Total		Public Expenditures				Private Contribution	
				EU Contribution		National Budget			
	EUR	EUR	%62	EUR	%50	EUR	%50	EUR	%38
2021 *	38 709 677	24 000 000	62	12 000 000	50	12 000 000	50	14 709 677	38
2022 *	38 709 677	24 000 000	62	12 000 000	50	12 000 000	50	14 709 677	38
2023*	23 225 806	14 400 000	62	7 200 000	50	7 200 000	50	8 825 806	38
2024*	57 096 774	35 400 000	62	17 700 000	50	17 700 000	50	21 696 774	38
2025	57 096 774	35 400 000	62	17 700 000	50	17 700 000	50	21 696 774	38
2026	57 096 774	35 400 000	62	17 700 000	50	17 700 000	50	21 696 774	38
2027	57 096 774	35 400 000	62	17 700 000	50	17 700 000	50	21 696 774	38
Total	329 032 258	204 000 000	%62	102 000 000	%50	102 000 000	%50	125 032 258	%38

*The term "indicative" is not valid for the years 2021, 2022, 2023 and 2024

¹⁴ Higher EU contribution rate (up to additional 10%) for non-productive investments is set because these investments serve societal needs (provision of public goods), are non-remunerative in nature and might not be carried out in the absence of a higher contribution rate. They are also closely linked with implementation of measure 4.

Table 50. Budget for non-productive investments

Years	Total Eligible Investment	Total		Public Expenditures			
				EU Contribution		National Budget	
	EUR	EUR	%100	EUR	%85	EUR	%15
2021	1 176 470	1 176 470	100	1 000 000	85	176 470	15
2022	1 176 470	1 176 470	100	1 000 000	85	176 470	15
2023	1 176 470	1 176 470	100	1 000 000	85	176 470	15
2024	1 764 706	1 764 706	100	1 500 000	85	264 706	15
2025	1 764 706	1 764 706	100	1 500 000	85	264 706	15
2026	1 764 706	1 764 706	100	1 500 000	85	264 706	15
2027	1 764 706	1 764 706	100	1 500 000	85	264 706	15
Total	10 588 234	10 588 234	100%	9 000 000	%85	1 588 234	%15

Under the measure, a maximum of 20% of the total initial budget for the measure can be spent on purchase of electric tractors.

8.3.1.13 Indicators and targets to be used in the programme

Table 51. Indicators and targets to be used in the programme

Indicators	Targets per sector	
Number of farms and agri-food processing enterprises supported by IPARD in modernisation	Milk	113
	Red meat	165
	Poultry meat	37
	Laying hens	15
	Total	330
Total investment on farms and agri-food sector in modernisation (EUR)	Milk	82 500 000
	Red meat	123 000 000
	Poultry meat	30 000 000
	Laying hens	12 000 000
	Total	247 500 000
Number of farms and food processing enterprises receiving IPARD investment support to progressively align with the EU hygiene and animal welfare standards	Milk	180
	Red meat	255
	Poultry meat	60
	Laying hens	22
	Total	517
Number of jobs created	Milk	1 575

Indicators	Targets per sector	
	Red meat	2 250
	Poultry meat	690
	Laying hens	180
	Total	4 695
Number of young farmers receiving IPARD support for investment	Milk	116
	Red meat	167
	Poultry meat	39
	Laying hens	15
	Total	337
Number of supported producer organizations	Milk	54
	Red meat	75
	Poultry meat	18
	Laying hens	8
	Total	155
Number of farmers participating in supported Producer Organizations, local markets, short supply chain circuits and quality schemes	Milk	5 400
	Red meat	7 500
	Poultry meat	1 800
	Laying hens	750
	Total	15 450
Number of collective investments	Milk	45
	Red meat	63
	Poultry meat	15
	Laying hens	6
	Total	129
Number of IPARD recipients with support in investments related to care for the environment or climate change	Milk	300
	Red meat	330
	Poultry meat	98
	Laying hens	38
	Total	766
Number of IPARD recipients with support in investments related with manure management	Milk	126
	Red meat	180
	Poultry meat	42
	Laying hens	17
	Total	365
Number of IPARD recipients with support in investments in waste treatment or management	Milk	72
	Red meat	102
	Poultry meat	24
	Laying hens	9

Indicators	Targets per sector	
Number of IPARD recipients with support in investments in renewable energy production	Total	207
	Milk	72
	Red meat	102
	Poultry meat	24
	Laying hens	9
	Total	207
Number of projects with circular economy-type investments	Milk	36
	Red meat	51
	Poultry meat	12
	Laying hens	5
	Total	104
Number of IPARD recipients with support for non-productive investments		120
Number of non-productive investment operations supported in complementarity with M4		0
Total value of investment (EUR)	Milk	132 000 000
	Red meat	183 000 000
	Poultry meat	42 000 000
	Laying hens	18 000 000
	Total	375 000 000

8.3.1.14 Administrative procedure

Applicants shall submit their application to the Provincial Coordination Units (PCU) of ARDSI within the specified time period. Administrative checks and on-the-spot controls of the project shall be performed by ARDSI. Business plans of applications which passed the administrative checks and on-the-spot controls will be evaluated. The applications which are determined as viable after the business plan evaluation shall be scored on the basis of the “Ranking Criteria for Project Selection” as stated in the IPARD programme. Contracts will be signed with selected applicants.

Payments will be made to recipients upon completion of a project or part of it. The payments can be made in instalments upon the request of the recipient in the application form and shall be reflected accordingly in the business plan. The contract and/or its annexes shall define all related details including the identification at which stage in the implementation of the project the instalments are to be paid. The request for payment in instalments shall be made according to the eligible investments as below:

- Investments of which the total value of eligible expenditures is equal and lower than TL 500 000: 1 instalment
- Investments of which the total value of eligible expenditures is more than TL 500 000: 2 instalments.

If the investment includes construction works and can be divided into instalments according to the amounts of eligible expenditures as mentioned above, construction work expenditures regarding each individual building/structure must be requested in a single instalment.

8.3.1.15 Geographic scope of the measure

This measure is applicable in all provinces covered by the IPARD programme.

8.3.2 INVESTMENTS IN PHYSICAL ASSETS CONCERNING PROCESSING AND MARKETING OF AGRICULTURAL AND FISHERY PRODUCTS – M3

8.3.2.1 Title of the Measure

Investments in physical assets concerning processing and marketing of agricultural and fishery products – M3.

8.3.2.2 Legal basis

8.3.2.3 Rationale

Türkiye has achieved progress in the alignment of national legislation with the EU acquis falling under Chapter 12. Regulations on veterinary services, plant health and food safety were enforced in late 2011. Pursuant to these regulations, all food processing enterprises are required to meet national standards which are compliant to EU regulations. This obligation imposes an economic burden on existing enterprises. While it offers opportunities for these entities, it may also jeopardise the continuation of the operation of some of them and result in socio-economic problems. Of the establishments already complying with the national standards, some small and medium scale enterprises need to increase their capacity to improve their competitiveness. Therefore, under the IPARD 2021-2027 programme, food processing enterprises operating in the sectors defined in the following paragraphs will be supported complementarily to the National Rural Development Strategy while avoiding double funding.

The support will be aimed at increasing the capacity and productivity of existing SME enterprises, ensuring their compliance to EU standards, improving their competitiveness and constructing new enterprises in selected sectors.

The EU Green Deal aims to build resilience to climate change and to prevent environmental degradation by transforming the EU into resource-efficient and competitive economy which decouples economic growth from resource use. Besides, this process should be fair and inclusive for everyone and allow transforming climate and environmental challenges into opportunities. In this respect, making investments related to waste management, circular economy as well as sustainable and renewable energy production is crucial but cost-increasing for many small and medium scale food processing enterprises which will be supported for these purposes.

Milk Processing

The milk collection and processing enterprises needs to be supported for the increase of capacity and productivity for strengthened competitiveness on the market as well as compliance to EU standards. Milk collection centres need to be increased in both size and number to meet the increasing internal demand for milk and milk products. Milk processing enterprises, with capacities ranging between 10 and 100 tonnes per day need to invest in capacity and productivity increase, and in product diversification. This will be achieved through the utilisation of more energy efficient equipment and the generation of renewable energy for their own consumption. Although the number of milk collection centres is high, most of them are small-scale. Most of the dairy processing facilities are also small-scale and engaged in regional production.

According to 2019 data, 45.74% of cow milk was transferred to the industry in Türkiye. This rate was 94% in the EU. The utilisation rate of milk in the industry must increase

to create more added values. Therefore, the production capacity increases as well as ensuring the quality of dairy products are needed in both the milk collection centres and milk processing enterprises. In this context, it may be beneficial to prioritise enterprises owned by producer organizations. Furthermore, the increase in the knowledge and awareness of the customers on food safety and quality, and the increase in competition in the sector, necessitate the modernization of both. Milk processing enterprises also have significant deficiencies in terms of environmental protection such as treatment of waste water and animal wastes, use of renewable energy, recycling of solid wastes like packaging material and elimination of emissions resulting from processing of milk.

Meat Processing

In the context of the red meat processing sector, the focus of support should be the compliance with EU standards, mainly those concerning food safety, by medium scale slaughterhouses. Although the closing down of small slaughterhouses and imbalanced distribution of slaughterhouses in some regions might require the establishment of new ones with proper infrastructure and equipment, as the existing capacities are still underutilised, support in this sector will be limited to facilitate their compliance with the hygiene and environmental standards and meeting energy needs, without creating excess capacity.

Similarly, poultry slaughtering and processing will be supported for compliance with EU standards and for utilisation of alternative energy sources with the condition of keeping current capacities. In case of poultry sector, one of the focuses will be ensuring a well-functioning cold chain.

Investments in wastewater treatment and utilization of wastes generated during slaughtering should be supported to prevent potential public health and environmental hazards.

Egg Processing

In Türkiye, the export opportunities of eggs are increasing in recent years and this situation causes the egg stocks become even higher in some periods. Eggs have a short shelf-life of approximately one-month due to their perishable nature. To extend the shelf-life, they can be converted to liquid, dried, frozen, etc. egg products. Processed egg products are also good alternatives to increase protein content in food formulations as their protein quality remains the same during the process. When these products are stored correctly, they can maintain months of shelf-life. It is important to support liquid and dried egg production in the context of this measure not only to prevent egg loss but also to turn eggs into valuable food ingredients.

Fruit & Vegetable Processing

Fruit and vegetable processing enterprises should be supported to minimize post-harvest losses, to ensure their compliance with EU standards and promote more environmentally friendly production methods while providing higher food safety and quality. This will be achieved by enabling producers to adopt Good Manufacturing Practices and establishment of HACCP monitoring mechanisms. Cold storage facilities, drying, sorting, grading, and packaging units will be in the scope of support to improve conditions for longer-term preservation of fruits and vegetables as well as for the adoption of food safety standards.

Fish Processing

To improve fish processing sectoral capacity, IPARD support should aim to help establish new enterprises and increase the capacity and productivity of existing establishments, including through ensuring their compliance with relevant EU standards, and increasing product diversity what will help increase export opportunities. In view of high energy costs affecting the competitiveness of the enterprises, the use of renewable energy needs to be promoted.

8.3.2.4 General objectives

This measure will increase the competitiveness of the agri-food sector, improve the efficiency and sustainability of on-farm production, providing a better response of the food sector to societal demands for healthy, safe, nutritious and sustainable food, by investments in physical infrastructure in line with the relevant EU standards.

This measure will also help in addressing the challenge of climate change, by promoting renewable energy and circular economy.

Some actions in this measure will also contribute to reinforcing the farmers position in the food chain, by encouraging them to cooperate in short supply chains and produce higher added value products.

8.3.2.4.1 Specific objectives

- To contribute to employment by creating new jobs.
- To support collective investment to ensure that more producers benefit from the support.
- To encourage investments in processing enterprises related to effluent and waste management, renewable energy and circular economy-type investments in line with the EU Green Deal.

Specific to the sectors:

Milk Processing

- To improve cold chain in milk collection and processing
- To increase production capacities of small and medium size milk collection centres and milk processing enterprises
- To improve quality of dairy products
- To improve the competitiveness of small and medium scale dairy and whey processing enterprises, to improve the quality of their products and to enable the compliance of these enterprises with environmental standards (defined in Annex III).

Meat & Egg Processing

- To establish slaughterhouses for cattle, buffalo, sheep, and goat.
- To modernize existing slaughterhouses and enterprises processing cattle, buffalo, sheep, goat and poultry meat.
- To establish liquid, powder and processed egg production enterprises to extend the shelf life of egg.

Fruit & Vegetable Processing

- To reduce post-harvest losses of fruit and vegetables by improving capacities of cold stores
- To support fruit and vegetable processing for upgrading to EU standards

Fish Processing

- To enable the cold chain and minimize post-harvest waste related to fishery processing.
- To support small and medium size fishery enterprises in terms of increasing their capacities and modernizing their processes to reach EU standards.
- To improve processing technology and number of added-value products in order to increase the competitiveness of fishery processing enterprises.

8.3.2.5 Linkage to other IPARD measures in the programme and to national measures

The measure is particularly linked with the measure “Investments in Physical Assets of Agricultural Holdings” which ensures the provision of improved quality agricultural raw materials.

The measure “Farm Diversification and Business Development” supports micro enterprises which are not within the scope of this measure for the diversification of the rural economy.

The national supports linked to the sectors covered by this measure are complementary with the supports provided under IPARD considering that the national support for the processing industry is far from the level to meet marginal costs.

Supports provided by Regional Development Agencies are designed based on regional development plans and the listing of the food industry among high priority sectors in regional development programmes. Furthermore, Regional Development Agencies determine the sectors to be supported on a yearly basis and the number of investments supported is limited.

8.3.2.6 Recipients

Recipients of this measure are enterprises responsible for carrying-out the projects in their establishment(s). An enterprise can consist of one or more establishments.

This measure is open for:

- All natural persons, producer organizations and legal entities defined as small and medium enterprises¹⁵ in Regulation 2012/3834 and its future amendments.

8.3.2.7 Common eligibility criteria

- At the time of application, except for new enterprises, applicants are expected to be in line with the mentioned laws and regulation below:
 - ✓ Law 5996 on Veterinary Services, Plant Health, Food and Feed.

¹⁵ An enterprise can consist of one or more establishments.

- ✓ Law 6331 on Occupational Health and Safety.
- ✓ Law 2872 on Environment¹⁶
- Secondary legislation linked to these laws and regulations, and future amendments of these laws, regulations and secondary legislation should be respected for all sub-sectors.
- The investment supported must comply with the relevant EU standards applicable to it at the end of the investment period i.e., before the final payment.
- “Collective investments” mean investments by producer organisations in sharing facilities, machines, equipment, and other infrastructure for processing of agricultural and fishery products up to the EU standards.
- In case of the setting up of a new enterprise, the recipient should provide the certificates required pursuant to the above-mentioned laws before the final payment.
- Applicants should submit a business plan in accordance with the requested format by the IPARD Agency. The business plan should demonstrate the economic viability of the enterprise at the end of the realization of the investment. The economic viability of the investment will be verified against the criteria listed in Annex IV.
- The establishments listed on the website of the EU (DG SANTE) as an EU approved third country establishment for the specific category of food of animal origin, are not eligible for support concerning the relevant sub sector listed on that website.
- For investments in renewable energy or the circular economy, the establishments, which already are on the SANTE list of non-EU establishments authorised to export food of animal origin to the EU, can apply for the support irrespective of the national plan for upgrading to EU standards.
- Existing enterprises, which have a built-in daily capacity below the minimum capacity limit indicated under the specific eligibility criteria for the applied sub-sector, but which prove that they will have at least the minimum capacity indicated under the specific eligibility criteria for the applied sub-sector after the completion of the investment, shall be eligible.
- The setting up of a new enterprise is eligible in milk processing, whey processing, milk collection, egg processing red meat slaughterhouses, red meat cutting plants, fruit and vegetable processing and fish processing with the condition that there is no overcapacity in the province (confirmed by the Provincial Directorate of Ministry of Agriculture and Forestry) at the application stage.
- In case of a new enterprise, the new enterprise should respect the relevant capacity criteria given below for each sector at the end of the investment.

¹⁶ This regulation does not apply to milk collection centres

8.3.2.7.1 Types of enterprises and producer organisations supported

- Small and medium sized enterprises that process milk, whey, red meat, poultry meat and eggs (including milk collection centres and slaughterhouses), fruit and vegetables and fish are within the scope of support under this measure. These enterprises must comply with the national SME definition of Small and Medium Industry Development Organization included in Annex I.
- Producer Organizations defined below are eligible for support within the scope of collective investments.

Producer Organizations Eligible for Collective Investments

The overall objective of cooperatives and producer organisations are to help their members for their economic and social development, to increase their economic power, to meet their needs related to their professional activities and protecting their economic interests.

Producer unions which are highly active in milk collection sector will have a positive impact on the quality of the raw milk with IPARD supports in this sector. The number of these cooperatives and producer organisations in scope of this measure is 9 906 and the average number of the members is 166.

The details are given in specific eligibility part.

8.3.2.7.2 Economic viability of the recipient

The economic viability of the recipient must be demonstrated by means of a business plan. The business plan includes a brief description of the business, its current assets and liabilities, human resources, a description of the investment proposed, its financing and projections on the future economic operation (incl. marketing).

The business plan should demonstrate the economic viability of the enterprise at the end of the realisation of the investment. The economic viability of the investment will be verified against the criteria listed in Annex IV of the Programme.

For a project to be eligible according to the business plan criteria, it must be financially sustainable. The business plans must be sustainable in terms of cash flow.

8.3.2.7.3 National standards/EU standards

The entire enterprise must comply with the relevant national standards in force regarding environmental protection, public health, animal welfare and occupational safety at the latest before the final payment for new enterprises and at the application stage for existing enterprises.

At the latest before the final payment, all investments supported must meet the relevant EU standards applicable to the investment.

The relation between the sectors supported under this measure and the national standards/EU standards are given in the Annex III which defines relevant national standards

In case the collective investment is implemented by a legally established entity on behalf of their members, the national standards apply to the assets of the entity and not to the assets owned by each participant/member of this entity.

8.3.2.7.4 *Other eligibility criteria*

N/A

8.3.2.8 *Specific eligibility criteria*

- The total capacity of the enterprises operating in the sector that is subject of the investment, owned by the same applicant and located in the same province, should not exceed the capacity limits stated below (including the capacity of the mentioned investment) at the end of the investment.
- To have higher intensity rate for collective investments (defined in section 6.1):
 - Cooperatives, breeders' unions can apply to the sectors related to the processing and marketing of the product, which is mentioned in the actual contract of the cooperative / breeders' unions.
 - For the agricultural producer unions, the union can apply to the sectors related to the processing and marketing of the product, which is mentioned in the actual contract.

Milk Processing

- Milk processing enterprises should have minimum 10 tonnes of built-in daily processing capacity at the end of the investment.
- In scope of the collective investments, Agricultural Development Cooperatives¹⁷ and Breeders Unions¹⁸ for Breeding Purposes can apply for milk and milk products sector.
- In scope of collective investments, Agricultural Producer Unions¹⁹ can only apply for milk collection sector.
- Whey processing enterprises should have minimum 10 tonnes of built-in daily processing capacity at the end of the investment.

¹⁷ Agricultural Development Cooperatives and Aquaculture Cooperatives established in accordance with the Cooperatives Law No. 1163 (whose establishment / supervision is under the responsibility of the Ministry of Agriculture and Forestry). In accordance with the law, each cooperative has to be established with a minimum of 7 farmers. Distribution of income to the members of the cooperative is stated in its main contract.

¹⁸ Breeders Unions for Breeding Purposes established in accordance with the relevant articles of the Law No. 5996. According to their legal documents, each breeder union must be established by a minimum 7 farmers. Distribution of income of the breeder's union is stated in its main contract.

¹⁹ Agricultural Producer Unions Established according to Law No. 5200.

- At the end of the investment period, the investment should meet occupational safety, EU hygiene (with the exception of raw milk) and structural standards (referring to EC 852/2004, EC 853/2004) and EU environmental standards.

Meat and Egg Processing

In scope of the collective investments, Agricultural Development Cooperatives and Breeders Unions for Breeding Purposes can apply for meat and meat products sector.

Enterprises should have the capacities indicated below:

In the case of red meat slaughterhouses:

- If only slaughtering cattle and water buffalo, a minimum of 30 and maximum 500 heads per day,
- If only slaughtering sheep and goats, a minimum of 50 and a maximum of 4 000 heads per day,
- In case slaughtering cattle, water buffalo, and sheep/goat in the slaughterhouse, maximum and minimum limits stated for cattle, water buffalo and sheep /goat should be met.

In the case of poultry slaughterhouses:

- A capacity of minimum 2 000 broiler and maximum 7 000 broiler chickens per hour or
- A capacity of minimum 100 and maximum 1 000 turkeys or geese per hour
- Investments for capacity increase of enterprises are not eligible and establishment of new poultry slaughterhouses is not supported.
- In the case of meat processing: Minimum 0.5 tonnes, maximum 5 tonnes of built-in daily processing capacity.

For processing of red meat and poultry meat, investments for capacity increase of enterprises are not eligible and establishment of new processing enterprises is not supported. Establishment of new poultry cutting plants and slaughterhouses is not supported.

In the case of cutting plants:

- They should have a total built-in daily cutting capacity of minimum 0.5 and maximum 5 tonnes.

In the case of egg processing enterprises:

- Liquid egg production enterprises should have minimum 3, maximum 10 tonnes and powder egg production enterprises should have minimum 5 and 15 maximum tonnes of built-in daily processing capacity at the end of the investment.
- In cases where an investment includes both meat processing and slaughterhouse facilities, it should meet all the criteria required, as listed above for both slaughterhouses and meat processing enterprises.
- In cases where an investment includes meat processing and/or slaughterhouse and/or cutting plant facilities or all three, it should meet

all the criteria required as listed above for slaughterhouses, cutting plants and meat processing enterprises.

- In the case of meat processing, the enterprise should perform processing as defined in Article 2 m of Regulation (EC) 852/2004 and marketing.
- At the end of the investment period, the investment should meet occupational safety, EU hygiene and structural standards (referring to EC 852/2004, EC 853/2004) and EU environmental standards.

Fishery Processing

- Enterprise should have the production capacity of minimum 100 tonnes/year, maximum 2 000 tonnes/year of fishery products, fish oil, molluscs, bivalves and crustaceans.
- In scope of the collective investments, Aquaculture Cooperatives can apply for fishery products sector.
- The investments under this sub-sector shall be on services to be provided on land.
- Investments regarding fisheries and aquaculture products intended to be used for purposes other than human consumption are not eligible. But the investments for the processing and marketing of waste which arises from fisheries and aquaculture production (intended to be used for human consumption) process are eligible.
- At the end of the investment period, the investment should meet occupational safety, EU hygiene and structural standards (referring to EC 852/2004, EC 853/2004) and EU environmental standards.

Fruit & Vegetable Processing

- Enterprise should meet the conditions foreseen by the Law No: 5957 “Regulating the Trade of Fruit and Vegetables and Other Products with Sufficient Supply and Demand Depth” and its subsequent modifications (except for the investments related to only drying and/or freezing).
- Producer organisations (recognised by the Cooperative Law No 1163, Agricultural Credit Cooperatives Law No 1581, Agricultural Producer Unions Law No 5200, Agriculture and Marketing Cooperatives and Unions Law No 4572) should comply with the definitions given in Law 5957.
- In scope of the collective investments, Agricultural Development Cooperatives and Agricultural Sales Cooperatives²⁰ can apply for fruit and vegetable sector.
- Investments should be in line with Council Regulation No.1308/2013 Annex I, Part VII: Olive oil and table olives list.
- Total capacity of the cold store(s) should be maximum 10 000 m³. For producer organizations and the legal entities whose majority shareholder is a producer organization, this capacity control will not be applied.

²⁰ Agricultural Sales Cooperatives established according to Law No. 4572: According to the law, each cooperative must be established by a minimum 30 farmers. Distribution of income to the members of the agricultural sales cooperative is stated in its main contract.

- At the end of the investment period, the investment should meet occupational safety, EU hygiene and structural standards (referring to EC 852/2004) and EU environmental standards.

8.3.2.9 *Eligible expenditure*

In addition to the eligible expenditure referred to in section 8.1 of this programme, eligible expenditure is limited to:

- General costs linked to collective projects (see below) (all to be specified in the list of eligible expenditure (LEE)).
- Projects in renewable energy are also eligible (for self-consumption).
- Investments at retail level are not eligible.

A detailed list of the eligible expenditure shall be provided in the List of Eligible Expenditure (LEE) for the measure.

Common to all sectors

- Purchase of machinery and equipment for improvement of hygiene and product quality, in full compliance with EU standards.
- Investments necessary to introduce procedures based on HACCP principles.
- Equipment and facilities for upgrading to Community standards as regards human health, and occupational conditions.
- Investments for environmental protection, waste management, treatment and elimination of waste, waste recovery/reuse, reprocessing of intermediate products and treatable waste, waste water treatment.
- One refrigerated truck per project without curb weight limitation or maximum of 2 refrigerated trucks, each with a maximum curb weight of 8 tons per project or maximum of 3 refrigerated vehicles each with an curb weight of 3,5 tons per project. Total cooling capacity cannot exceed 90 m³ per project.
- Construction works and purchase of machinery and equipment and for circular economy-type investments including renewable energy production for self-consumption.
- Purchase of equipment for packaging,
- IT hardware and software for product and process management,
- Establishment and maintenance of website to publicize activities of enterprise.

Specific to sectors

Milk Processing

- Construction, modernization and/or extension of milk collection centres or milk processing enterprises or whey processing enterprises,
- Investments for homogenization, pasteurization, packaging, cooling, and storing of milk and milk products, including refrigerated trucks and cooling equipment
- Equipment for testing whey and whey products and testing quality of milk,
- Investments for pasteurization, concentrating, demineralization of whey,

separating lactose from whey, drying, packaging, cooling and storing of whey and whey products.

- Investments for establishment of food safety management systems,

Meat Processing

- Construction/Modernization and/or extension of slaughterhouses and cutting plants for redmeat.
- Modernization of poultry slaughterhouses and cutting plants.
- Modernization of meat processing enterprises.
- Laboratories and equipment to improve the control of the product quality, and hygiene.
- Investment for slaughtering bovine and ovine in conditions compatible with animal welfare.
- Refrigerated trucks, cold storage and cooling equipment for cutting plants and/or processing enterprises.
- Software and tracking system to implement traceability of carcass and meat inside the processing enterprise.

Egg Processing

- Construction, modernization and/or extension of liquid and powdered egg production enterprises.
- Purchase of machinery and equipment for liquid and powdered egg production enterprises.

Fruit & Vegetable Processing

- Investments in markings and traceability systems.
- Drying machinery, equipment and packing lines.
- Construction and/or modernization of pre-cooling, cooling units and cold stores, drying, cleaning, sorting, grading, packaging units, modified atmosphere cold stores and packaging units under modified atmosphere.
- Investment in packing/bottling/processing lines and in purchase of machinery and equipment for processing of olive oil and olive products (in line with Council Regulation No.1308/2013 Annex I, Part VII: Olive oil and table olives list).
- Investments in storage units for raw material and for packaging.
- Processing equipment for handling fruits and vegetables.
- Purchasing of machinery and equipment for freezing and drying of fruits and vegetables. (Council Regulation No.1308/2013 Annex I, Part IX: Fruit and vegetables list).
- Purchasing of machinery and equipment for drying and roasting of nuts (Council Regulation No.1308/2013 Annex I, Part IX: Fruit and vegetables list).
- Refrigerated trucks and cooling equipment.

Fish Processing

- Construction, modernisation and/or extension of enterprises processing fishery and aquaculture products.
- Machinery or equipment for cooling, including refrigerated trucks, processing, packaging and marketing of fishery products.

Eligible collective investments

“Collective investments” mean investments by producer organisations specified under Section 8.3.2.8 as investments made by producer organisations may cover:

- sharing facilities, machines, equipment and other infrastructure for processing of agricultural products so as to achieve the EU standards.

Examples: joint use of packing/bottling/processing machines in the fruit and vegetable sector; cool storage facility in fruit and vegetable sector; milk collection centre; press for olive oil production.

- establishing and developing short supply chains* and local markets.

Examples: market stall vehicle for direct sales; equipment for market stalls; fridges.

*A short supply chain is “a supply chain involving a limited number of economic operators, committed to cooperation, local economic development, and close geographical and social relations between producers, processors and consumers” (Article 2 of Regulation (EU) No 1305/2013²¹). Moreover, “support for the establishment and development of short supply chains ... shall cover only supply chains involving no more than one intermediary between farmer and consumer”²².

Additional eligible costs linked to collective investments under “general costs”²³

Additional general costs linked to the collective investments also covers:

- Studies,
- Market and development of the products concerned,
- Animation costs (no more than 10%).

Examples:

- Study on the specification for the hygiene standards and the method of production of a quality cheese (or other quality products);
- Business plan;
- Animation costs (cost of a local facilitator) for creating and running short value chain of a group of fruit and vegetable producers delivering to a local supermarket;

²¹ Regulation (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

²² Article 11 of European Commission Delegated Regulation (EU) No 807/2014 supplementing the Rural Development Regulation.

²³ The general costs linked to collective projects are provided for in Article 33(5)(c) of the (current) Sectoral Agreement.

- Product development and marketing study for new products of medicinal or aromatic plants or similar studies for other produce.

Investments in renewable energy production

Under this investment support, the selling of electricity into the grid is allowed as far as the "self-consumption" limit is respected (i.e., electricity sold into the grid equals on average the electricity taken out in the course of the year). This is justified by the fact that, as electricity cannot be stored, it must, unless wasted, be sold into the grid; the electricity grid can be conceived as a storage place for electricity where it is introduced and withdrawn during the year in the similar amount and at a different rhythm.

The concept of "self-consumption" shall be checked at the stage at which a project is submitted/assessed. The investment is considered eligible when the (theoretical) power capacity of the renewable energy plant ("the investment") does not exceed 120% of the 3 years-average (self-) consumption of the farm. In addition, if the (theoretical) power capacity of the renewable energy plant ("investment"), which is the basis for the support, is more than the limit in the national legislation determined by EMRA, the excess part will not be subject to support.

In the case of new farms or in the case of farms which have substantially changed the size of their operations in the last three years, the expected consumption should be estimated by the IPARD agency. If the estimated power capacity of the renewable energy plant ("investment"), which is the basis for the support, is more than the limit in the national legislation determined by EMRA, the excess part will not be subject to support. The same concerns expected power consumption increases due to the new investments to be made as part of the same application by the potential recipient²⁴. As a complement of an investment under support, renewable energy investment can be made in accordance with the Interconnection Agreement.

8.3.2.10 Selection criteria

Selection criteria and scoring in Table 52 will be used under this measure.

Table 52. Selection criteria and scoring table

No	Selection Criteria	Scoring Points
1	If the applicant has not signed a contract under IPARD Programme before	20
2	If the applicant is a producer organization or the legal entities whose majority shareholder is a producer organization	15
3	The total amount of eligible expenditure	15
	-For milk, meat and egg processing;	
	More than 1.500.000 EUR: 0 point	
	Between 1.000.000 and 1.500.000 EUR: 5 points	
	Between 500.000 and 1.000.000 EUR: 10 points	
	Equal or less than 500.000 EUR: 15 Points	
	- Milk collection centres;	

More than 600.000 EUR: 0 point
 Between 400.000 and 600,000 EUR: 5 points
 Between 200.000 and 400,000 EUR: 10 points
 Equal or less than 200,000 EUR: 15 points

-Fruit and vegetables;

More than 750.000 EUR: 0 point
 Between 500.000 and 750.000 EUR: 5 points
 Between 250.000 and 500,000 EUR: 10 points
 Equal or less than 250,000 EUR: 15 points

-Fish processing;

More than 1.000.000 EUR: 0 point
 Between 750.000 and 1.000.000 EUR: 5 points
 Between 500.000 and 750.000 EUR: 10 points
 Equal or less than 500,000 EUR: 15points

- | | | |
|---|---|----|
| 4 | If the investment includes energy saving actions, renewable energy production, waste management (waste treatment, waste recovery / reuse), waste water treatment or the investment is circular economy-type | 20 |
|---|---|----|

²⁴ In line with DG AGRI guidance of Ares (2018)6385137-12/12/2018

5	If the applicant has an organic farming certificate in the applied sector	20
6	If the applicant (in case of natural person himself/herself, in legal entities the person who has the authority to represent and bind the legal person) is woman	10

8.3.2.10.1 Targeting and principles with regard to the setting of selection criteria

Supports are designed to target defined objectives reflecting identified structural and territorial needs and structural disadvantages of this sector. Investments depending on the SWOT analysis and the identified needs of the provinces in the scope of IPARD are subject to support under this measure. It is aimed that the enterprises supported under this measure attain related EU standards with the given supports while paying attention to protect environment and building resilience to climate change in line with EU Green Deal.

A particular attention must be paid to minimize the risk of deadweight²⁵ in line with principle explained in section 8.1 of the programme.

8.3.2.10.2 Selection of projects

The projects are evaluated according to ranking criteria and the eligible projects are selected.

8.3.2.11 Aid intensity and EU contribution rate

Public expenditure shall be 50% of the total eligible cost of the investment. Public expenditure shall be 70% of the total eligible cost of the investment in case of collective investments.

For investments relating to the treatment of effluents and investments in the productive use of waste materials – circular economy - and in renewable energy, the maximum aid intensity can be increased by 10%.

The minimum and maximum limits of the total value of eligible investments per project are:

- EUR 30 000 and EUR 3 000 000 for the milk (including whey) meat and egg sectors,
- EUR 30 000 and EUR 1 000 000 for milk collection centres
- EUR 30 000 and EUR 1 250 000 for fruit and vegetables.
- EUR 30 000 and EUR 1 500 000 for fish processing

A recipient may receive support for a maximum of four eligible investments during the IPARD 2021-2027 implementation period.

A recipient may not apply for funding for a new investment before completing an on-going investment. New applications can be made after the final payment of the contract related to the on-going investment or after the project has been cancelled or withdrawn.

²⁵ Definition of deadweight (by the European Court of Auditors): A situation where a subsidised operation would have been wholly or partly undertaken even without public aid.

The maximum total value of eligible investments per recipient is limited to EUR 3 000 000 for this measure.

As exception, applicable only for milk collection centres, an applicant may submit a proposal under a single call, for setting up to five milk collection centres in the same province provided that the total eligible investments value does not exceed EUR 1 000 000.

The EU co-financing rate is 75% of the public aid.

8.3.2.12 Indicative budget

Table 53. Indicative budget

Years	Total Eligible Investment	Total		Public Expenditures				Private Contribution	
				EU Contribution		National Budget			
	EUR	EUR	%50	EUR	%50	EUR	%50	EUR	%50
2021*	32 000 000	16 000 000	50	8 000 000	50	8 000 000	50	16 000 000	50
2022*	32 000 000	16 000 000	50	8 000 000	50	8 000 000	50	16 000 000	50
2023*	19 200 000	9 600 000	50	4 800 000	50	4 800 000	50	9 600 000	50
2024*	49 200 000	24 600 000	50	12 300 000	50	12 300 000	50	24 600 000	50
2025	49 200 000	24 600 000	50	12 300 000	50	12 300 000	50	24 600 000	50
2026	49 200 000	24 600 000	50	12 300 000	50	12 300 000	50	24 600 000	50
2027	49 200 000	24 600 000	50	12 300 000	50	12 300 000	50	24 600 000	50
Total	280 000 000	140 000 000	50	70 000 000	50	70 000 000	50	140 000 000	50

*The term “indicative” is not valid for the years 2021, 2022, 2023 and 2024

8.3.2.13 Indicators and targets to be used in the programme

Table 54. Indicators and targets to be used in the programme

Indicator	Targets per Sector	
Number of farms and agri-food processing enterprises supported by IPARD in modernisation	Milk	96
	Meat	36
	Fruits and vegetables	60
	Fishery products	18
	Total	210
Total investment on farms and agri-food sector in modernisation (EUR)	Milk	69 000 000
	Meat	27 000 000

	Fruits and vegetables	43 500 000
	Fishery products	13 500 000
	Total	153 000 000
Number of farms and food processing enterprises receiving IPARD investment support to progressively align with the EU hygiene and animal welfare standards	Milk	120
	Meat	45
	Fruits and vegetables	75
	Fishery products	23
	Total	263
Number of jobs created		3 375
Number of supported producer groups/organisations		68
Number of farmers participating in supported Producer Groups, Producer Organisations, local markets, short supply chain circuits and quality schemes		6 750
Number of collective investments		60
Number of IPARD recipients with support in investments related to care for the environment or climate change		225
Number of IPARD recipients with support in investments in waste treatment or management		120
Number of IPARD recipients with support in investments in renewable energy production		60
Number of projects with circular economy-type investments		53

8.3.2.14 Administrative procedure

The administrative procedure for the implementation of this measure will include the following phases:

- Administrative checks,
- Business plan assessment
- Scoring on the basis of the “Ranking Criteria for Project Selection” as stated in the IPARD programme

The administrative procedure will respect the requirements of the IPARD III regulatory framework and will be reflected in the respective manuals and procedures.

Contracts will be signed with selected applicants.

Recipients submit payment claim package upon completion of a project or part of it. The payments will be done according to results of the checks. The payments can be made in instalments upon the request of the recipient.

The request for payment in instalments shall be made according to the total eligible expenditure limits as below:

- Investments of which the total value of eligible expenditures is equal or below TL 500 000: 1 instalment.
- Investments of which the total value of eligible expenditures is more than TL 500 000 and is equal or less than TL 2 500 000: 2 instalments.
- Investments of which the total value of eligible expenditures is more than TL 2 500 000: 3 instalments.

If the investment includes construction works and can be divided into instalments according to the amounts of eligible expenditures as mentioned above, expenditures regarding each individual building/structure must be requested in a single instalment.

8.3.2.15 Geographic scope of the measure

This measure is applicable in all provinces covered by the IPARD programme.

8.3.3 AGRI-ENVIRONMENT-CLIMATE AND ORGANIC FARMING MEASURE – M4

8.3.3.1 Title of the Measure

Agri-Environment-Climate and Organic Farming Measure – M4

8.3.3.2 Legal Basis

8.3.3.3 Rationale

Agricultural developments such as modernization of agricultural holdings and improvement of product quality have positive effects on production and farmers' incomes, but also have negative effects on the environment, especially soil, water and biodiversity. Agri-environment-climate schemes have been built to prevent these negative effects. These schemes encourage farmers to adopt environmentally friendly agricultural production methods to protect and improve environment, landscape and its features, natural resources, soil, water and biodiversity by compensating the income losses and costs resulting from the implementation of the agri-environment-climate commitments accepted by the farmers.

SWOT analysis presented in Section 4 indicates the following deficiencies:

Soil degradation is one of the key problems identified in Türkiye as a result of recent studies. Soil organic matter level is very low. Erosion risk is too high, most of the measures for erosion are focused on slope and these measures do not take other factors such as soil structure or climate into account. Desertification risk is also high. Incorrect farming practices such as incorrect crop pattern or lack of application of green fallow cause salinization and alkalization, soil structure destruction and soil pollution. Lack of knowledge and skills of farmers in terms of soil preservation methods reinforces soil erosion. This measure shall be an example to implement green fallow and to show its benefits to soil organic matter and structure.

The biggest pressure on biodiversity is linked to human activities such as farming and food production, housing/residential use of farmlands and fossil fuel extraction. Industrialization, inadequate waste management (e.g., leaving waste in areas, mixing waste with water), collecting plants and bulbs, hunting, intensive input agricultural activities are other pressures damaging biodiversity. Changes in land use (conversion of farmlands into urban settlements) as well as changes in cropping patterns and abandonment of existing land use and of traditional practices, changes in environmental conditions also are the causes of the decline of biodiversity in agricultural landscapes.

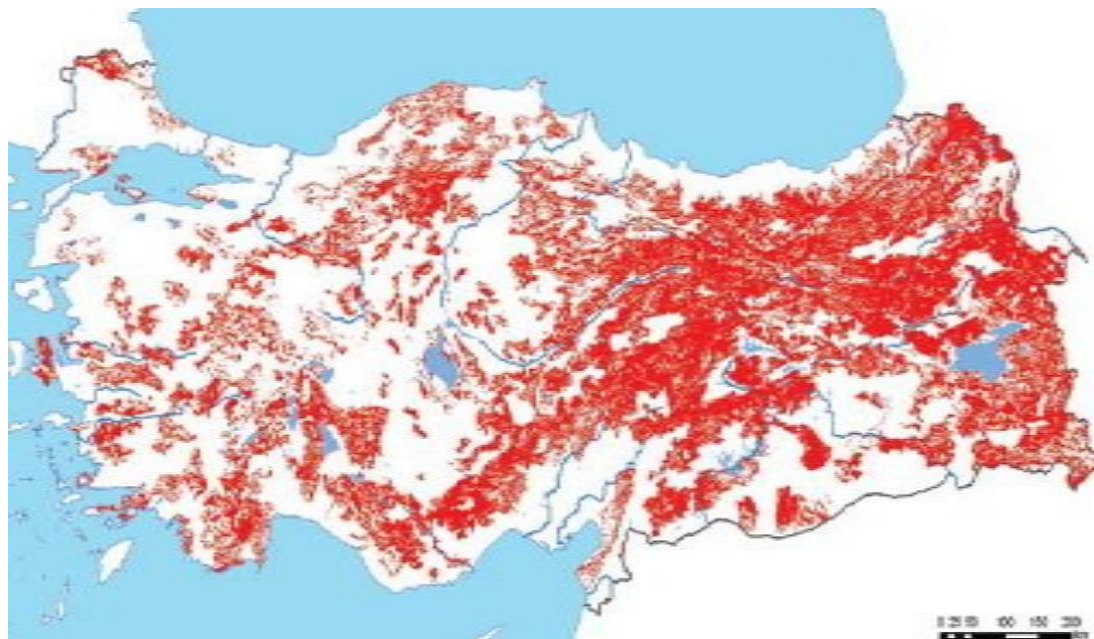
Factors such as the loss of grasslands due to the conversion into arable land use, inadequate use of pesticide (overuse), abandonment of traditional fodder crops and removal of many small habitats in farmed landscapes have contributed to the decline of many common and rare species.

Because of the different geological, geomorphological and climatic characteristics in high mountains, steppes, wetlands, forests, scrublands and caves, Türkiye has very diverse ecosystems and these ecosystems are valuable sources of different types of flora and fauna.

The immensely rich biological diversity in Türkiye is not only found in protected areas or forests but it is also largely dependent on so-called High Nature Value farming areas,

which cover large parts of Türkiye (Figure 6). The measure will include the Great Bustard, a flagship species dependent on extensively used agricultural landscapes. This action shall also have a beneficial effect on other species types and a general biodiversity, and serve as an example and trial for biodiversity measures in the future.

Figure 6. The map indicating the likely distribution of HNV farmland in Türkiye



Source: Prepared in 2008 / Agri-Environment Handbook for Türkiye

As for the use of water in agriculture, the most important problems in Türkiye are those related to over extraction of ground water for irrigation purposes, waste of irrigation water, presence of fertilizers and chemicals in water due to inadequate drainagesystems.

Consumption of water is not measured and watermeters are not used efficiently (there is a lack of knowledge for the control of water consumption). Irrigation is a threat to groundwater balance, since almost three quarters of the total freshwater extracted is used for agricultural purposes and the problem is aggravated by the fact that farmers use inappropriate irrigation systems. Agriculture's pressure on groundwater is expected to increase in the future, to meet the expanded needs of the growing population. This measure will show farmers to implement water efficient implementations by choosing crops that consume less water instead of crops that consume a lot of water.

Impact of farming on water quality is another issue to be taken into account. Over use of inorganic fertilizers, of plant protection products (pesticides and herbicides), eutrophication as a result of high-nutrient loads (mainly phosphorus and nitrogen) cause degradation of ecosystems (lakes, rivers, ground waters) as well as loss of biodiversity.

Türkiye has conditions for organic farming in terms of climate, soil, water resources, product range and labour force. Environment friendly and sustainable agricultural production methods, such as organic farming bring benefits for the environment and natural resources but have also a positive effect on climate change through no use of chemical fertilisers and proper soil management. However, inadequate knowledge of producers and ineffective training and extension activities are some of the obstacles for expanding organic farming. A lack of awareness but also trust for organic products among some consumers constitutes further barrier in the organic sector development.

Agri-environment-climate measure will help to address climate change as the commitments include some requirements relevant also for climate change mitigation and/or adaptation.

The European Green Deal has been introduced by EU in December 2019. The aim of this new EU growth strategy is to reach climate neutrality by 2050, decouple economic growth from resource use and to protect, conserve and enhance the natural capital and as such provide an environmentally sustainable economy.

There are several key actions making a roadmap to be adopted under the Green Deal. These include several actions relevant from the perspective of agriculture and rural development: increasing the EU's climate ambition for 2030 and 2050, supplying clean, affordable and secure energy, mobilizing industry for a clean and circular economy, building and renovating in an energy and resource efficient way, greening agricultural policy and designing a fair, healthy and environmentally-friendly food system in accordance with "Farm to Fork strategy, preserving and restoring ecosystems and biodiversity and pursuing a zero pollution ambition for a toxic-free environment.

From the perspective of agriculture, the EU Green Deal establishes some key targets to be achieved:

- reduce by 50% the overall use and risk of chemical pesticides and reduce use by 50% of more hazardous pesticides by 2030,
- achieve at least 25% of the EU's agricultural land under organic farming and a significant increase in organic aquaculture by 2030,
- reduce sales of antimicrobials for farmed animals and in aquaculture by 50% by 2030,
- reduce nutrient losses by at least 50% while ensuring no deterioration in soil fertility (this will reduce use of fertilizers by at least 20 % by 2030),
- bring back at least 10% of agricultural area under high diversity landscape features by 2030.

Agri-environment-climate and organic farming measure conforms with the aims of Green Deal in terms of its potential contribution to climate change mitigation and adaptation, sustainable and reduced use of pesticides, sustainable development and efficient management of natural resources, the protection of biodiversity, effective use of water in agriculture, improvement of water quality, enhancement of ecosystem services and preservation of habitats and landscapes as well as improvement of animal welfare.

The agri-environment-climate measure while pursuing the environmental and climate-related objectives will help achieve several objectives:

- raise agro-environmental awareness among farmers
- encourage farmers to adopt more environmentally friendly and sustainable agricultural practices through compensating the income forgone and costs of the farmers voluntarily undertaking commitments going beyond the relevant mandatory standards
- protect and preserve farmers' farmland and its environment
- improve monitoring and marketing possibilities.

Via agri-environment-climate measure as proposed in this Programme farmers can:

- Change their crop rotation to make the best use of available water,
- Adjust sowing dates according to temperature and rainfall patterns,
- Use crop varieties better suited to new weather conditions.

8.3.3.4 General objectives

- Contribution to the preparation of Türkiye for the future implementation of agri-environment-climate and organic farming measures under the CAP relevant programmes for Member States (NB this measure is obligatory for all Member States);
- Contribution to the sustainable management of natural resources and climate change adaptation and mitigation by the application of agricultural production methods compatible with the protection and improvement of the environment, natural resources, including water, air, soil, biodiversity, the landscape and its features, and genetic diversity, going beyond relevant mandatory standards.

8.3.3.4.1 Specific objectives

According to the explanations above, specific objectives of the measure can be identified below:

- Raising awareness about environmentally-friendly farming practices leading to decreasing the negative impact of farming on the environment,
- Decreasing soil erosion and maintaining soil quality in terms of fertility, organic matter content and soil structure,
- Improving the groundwater resources by decreasing the amount of water used for irrigation in agriculture,
- Preserving biodiversity, in particular by protecting the Great Bustard population through improving their habitats and raising awareness of farmers on the value of biodiversity.

8.3.3.5 Linkage to other IPARD measures in the programme and national measures (priorities, objectives)

The Measure is directly linked with M1 which includes non-productive investments covering capital works related to the implementation of agri-environment-climate objectives as well as with M1 objective to address possible negative impacts of agricultural activities on the environment.

Agri-environment-climate measure is also related with LEADER approach for the development of local development strategies which can be developed to address environmental needs as well as with the Measures “Improvement of skills and competences” and “Advisory services”. The needs of trainings to farmers or advisory services shall be covered from “Technical Assistance” until these two measures are provided under IPARD III.

8.3.3.6 Recipients

Recipients are the natural and legal persons who are registered under Agricultural Information System (AIS) which includes information from the Farmer Registry System (FRS) and Agricultural Production Record System (APRS), Land Registry and Cadastre Information System, Geographical Information System, etc., who on a voluntarily basis make the agri-environmental commitments for the land management for 5 years.

Farmers are defined in FRS Regulation as natural persons and legal entities engaged in continuous agricultural production or as performing at least one-production/cultivation period as property owner, tenant, partner or sharecropper.

Agricultural enterprises are defined in APRS Regulation as the economic units under single management that carry out crop production and/or livestock activities and/or aquaculture production on their own behalf regardless of the legal status and without considering the size of the land owned or cultivated by sharecropping, splitting or leasing.

8.3.3.7 Common eligibility criteria

8.3.3.7.1 Type of operation

The measure is innovative in the Turkish context as it encourages farmers to protect, maintain and enhance the environmental quality of their farmland. This implementation should be considered as pilot, which means that the measure might need to be further revised in the light of experience gathered to reflect the complex realities of Türkiye (such as extreme climate, etc.). In case the measure fiche needs revisions, these revisions will also have to be reflected in the ongoing contracts and be accepted by the farmers (recipients).

Type of operations (sub-measures) under agri-environment-climate measure is as follows:

- Management of soil cover and soil erosion control,
- Biodiversity-enhancing the great bustard population.

A TA project is planned to be carried out in 2022 to decide on other type of operations under Agri-environment-climate measure that can be included in IPARD III Programme in the course of its implementation.

Type of operation: Management of soil cover and soil erosion control

General description of the pilot area

Beyşehir is a district of Ankara Province in the Central Anatolia region of Türkiye (Figure 7), Beyşehir, on the historic Silk Road, is a place with cultural richness and natural beauties also famous for its carrots (producing nearly 60% of Türkiye's carrots) and high quality natural mineral water.

The nature of the district is characterized by plateaus, valleys, hills and important biological diversity and rare plant endemic species such as Beyşehir Geveni” (wild liquorice). The area’s wetlands, arable land, meadows, forests and steppes are important sites for breeding, food and shelter providing areas for many water birds and raptors (Nature-friendly Farming Booklet for Türkiye /Türkiye için Doğa Dostu Tarım Kitapçığı, 2008). This rich environment and biological diversity make Beyşehir an

attractive area offering the opportunity to observe this fascinating implementation.

Figure 7. Location of Beypazarı in Ankara



Description of the agricultural sector in the pilot area

The 67% of the district population is engaged in agriculture. 70% of farmers are registered in Farmers Register System administrated by MoAF. Total agricultural land is 61 257 ha. In irrigated areas, 2 or 3 crops can be harvested per year²⁶.

According to the data of 2020 taken from Beypazarı Agricultural District Directorate; the main crops grown in the region are wheat, barley, lettuce, carrot, chickpea, green onion, sunflowers and spinach. Wheat, barley, chickpea, oat, sunflower (for snack) and fallow are present in non-irrigated fields. Vegetables, particularly radish, vegetable marrow, red beet, tomatoes and pepper are also grown in irrigated fields.

Non-irrigated fields of wheat, barley, chickpea and fallow, generally have an average size of 1.5 ha. Around 1.800 farmers are cultivating non-irrigated crops (often combined with irrigated crops in smaller areas).

Average non-irrigated grain yields are 2 650-2 800 kg/ha for barley, and 2 700 – 4 500 kg/ha for wheat. Due to extreme climate conditions (in particular variable rainfall), yield can differ very significantly between years.

Fallow land is used for grazing animals (mainly sheep). Approximately 11 916 ha land is fallow which covers 19-20% of the total arable land.

²⁶ Beypazarı report for Commercialization of Local Products, 2012/ Beypazarı Yöresel Ürünleri Ticarileştirme Stratejisi Raporu, 2012

The market prices for wheat and barley are stable at around 1.74 TL/kg for bread wheat and 1.34 TL/kg for fodder barley.

According to the data of 2020 taken from Beypazarı Agricultural District Directorate; in the selected area (the whole area of Beypazarı district), there are approximately 2 305 farmers (registered in FRS), 5 Agricultural Development Cooperatives and 4 Irrigation Cooperatives.

Table 55. Land Distribution in Beypazarı

LAND DISTRIBUTION	Type of Land	Amount (ha)	Percentage (%)
	Irrigated	11 581	18 (of the total agricultural land)
	Non-irrigated	49 676	82 (of the total agricultural land)
	Total Agricultural Land	61 257	% 32,8
	Pasture	24 184	% 12,94
	Forest-Scrubland-Moor	70 275	% 37,63
	Non-agricultural	31 075	% 16,63
	TOTAL	186 792	% 100

In the district, cereals are cultivated in most of the arable lands. The area covered by field crops is 50 098 ha including fallow lands. 11 581 ha of arable lands can be irrigated corresponding to 18% of total agricultural land.

Table 56. Distribution of the agricultural land in Beypazarı

Type of Land	Arable Land (ha)	Percentage (%)
Cropland (cereal, leguminous and aromatic plants)	38 282	77.7
Vegetables (carrot, spinach, lettuce, green onion)	9 356	19
Industrial Plants (sugar beet, safflower)	158	0.3
Fodder Crops	742	1.5
Vineyards	581	1.1
Orchards	222	0.4
TOTAL	49 341	100

The figures given by the district to the Province Directorate and the TURKSTAT are above.

14 534.59 ha of the total arable land lies on slopes with more than 12 degrees gradient.

Values to protect with the type of operation

The values to protect with this type of operation are the high quality of soil with high content of soil organic matter, favourable soil structure - more resistance to the erosion, and high soil biodiversity. Soil with good properties and fertility is the greatest resource for agricultural production and hardly renewable. An adequate and balanced supply of

the elements necessary for plant growth is provided through the processes of nutrient cycling and adequate soil management. These processes underpin all other ecosystem services:

- soil is a habitat for several living organisms - both animals and plants;
- soil is a very effective water filtration system;
- carbon cycle in soil plays an important role in climate change as the majority of carbon in the atmosphere comes from biological reactions within the soil;
- soil organisms help decompose many organic compounds, such as manure, remains of plants, fertilisers and pesticides, preventing them from entering water and becoming pollutants; etc.

Agri-environmental problems in the selected pilot area

Soil problems in the selected pilot area are mainly connected to wind and water erosion, especially on non-irrigated arable land which is used for cereal production combined with traditional fallow. The erosion risk maps of Türkiye as well as Beypazarı District Erosion and Parcel Slope Maps have also been given in Annex VII.

Loss of organic matter due to erosion processes, inappropriate management of soil like deep ploughing and using traditional fallow without vegetation in the summer months, when the soil is most prone to wind erosion are leading to the degradation of soils.

These soil problems are also very closely related to the loss of biodiversity, both above and under the ground.

Objectives of the type of operation are:

- To decrease soil erosion;
- To maintain the existing values of soil such as soil fertility, organic matter content in soil, soil structure, and soil biodiversity;
- To test the effectiveness of this type of operation packages;
- To raise awareness about environmentally- and soil-friendly farming practices.

Definition of final recipients

Support is available for natural and legal persons who are registered under the Farmer Registry System and who on a voluntary basis make the agri-environmental commitments for the land management for 5 years (as described in “Section 5. Recipients”).

The recipient should follow the relevant baseline conditions including good agricultural and environmental (GAEC) standards on the area under the commitment in the selected pilot area as identified in “Section 6.2 Baseline” below.

Eligibility Criteria

Eligible land

Land eligible for the support depends on a package but should in any case be non-irrigated arable land situated in Beypazarı district.

Minimum size of the agricultural parcel in respect of which an application may be made is 0.2 ha and the minimum size of the land applied by the applicant for the support is 1 ha.

Other eligibility criteria

Land cadastre ownership or a proof of lease (at least for 5 years) should be submitted. The applicant should participate to 4 hours compulsory training on this type of operation in the first year of commitment period (training on agri-environment-climate, crop rotation, green cover maintenance, etc.).

General description of the type of operation

This soil quality -related type of operation encourages farmers to apply agricultural methods which comply with the protection and improvement of the soil.

Within the packages, the crop rotation has been taken into consideration and the crops to be used for this aim have been chosen from among leguminous species. The most suitable plants as green fertilisers are leguminous (trefoil, common vetch and clover) and gramineae species (barley, rye and oat). Legumes provide adequate ground cover to protect against soil erosion, either over winter, as in the case of an under seeded perennial, or in the late spring, as in the use of early seeded annual, have a high rate of nitrogen fixation and good biomass production,

Leguminous species provide natural nitrogen for soil and decrease chemical fertilizer (nitrogen) use for the crops within the crop rotation.

In the areas affected by erosion, it has been determined that the soil is poor in terms of organic matter and phosphor. Because organic matter connects the soil fragments (clay, silt, sand) together and provides a strong clustered structure, via organic matter, the structure of soil improves and this prevents erosion. The most suitable plants for soil to gain organic matter are leguminous plants. Another example is the stubble which ensures soil covers and prevents erosion. All the selected activities below contribute to combat erosion.

AE type of operation requirements

This type of operation consists of 2 packages applied only in non-irrigated arable land:

- 1) Package including green fallow requirements (common vetch);
- 2) Package including perennial green cover (trefoil);

Both packages aim to prevent erosion and to increase the organic matter content in the soil. The farmers who voluntarily apply for erosion sub-measure commit to combat erosion in their field by implementing the requirements below according to the package they choose.

1) Package including green fallow requirements (common vetch):

Applicant has to uptake 5-years commitment on non-irrigated arable land with less than 12 degrees slope gradient for fulfilling following requirements:

- The farmer should keep 100% of the committed land under green fallow cover every second year. During the commitment period, cereal (wheat, barley, etc.) and green cover (common vetch) are sown alternately.
- On the committed area; annual common vetch should be sown in March or April. The cereal should be sown in autumn by the end of October the latest.

- The stubble of the preceding cereal crop should be left on the field until the green fallow is sown.
- The green fallow vegetation should be ploughed and mixed with soil between May-June; first ploughing should be made in the flowering period.
- The crop of green fallow should be mixed to the soil and left on the field until the cereal is sown (not harvested/mowed).
- Grazing is not allowed.
- Applicant should keep the farm record book during the whole 5-years commitment period at the level of a plot.

2) Package including perennial green cover (trefoil):

Applicant has to uptake 5-years commitment for arable non irrigated land with a slope of 12 or more degrees slope for fulfilling following requirements:

- Support is paid for the slopes with more than 12% which are kept under green cover by permanent plant during the whole commitment period.
- The farmer should keep 100% of the committed land under green fallow.
- Green cover land should be covered with perennial trefoil and the maintenance of trefoil (especially partial re-seeding depending on the plant density on the area) shall be ensured.
- The crop should be sown in March or April.
- The crop of green cover should be left on the field (not harvested) through the commitment period (five years). The crop of green cover can be mowed from top after the third year.
- Grazing is not allowed.
- Applicant should keep the farm record book during the whole 5-years commitment period.

Table 57. Indicators and target levels

Type of the indicator	Indicator	Target
Output indicator	Number of farm holdings and holdings of other land managers receiving support	300
	Area under the type of operation, ha	2 100
	The number of contracts	300
Additional output indicator	Number of training sessions organised	For each applicant, 4 hours of training
Result indicator	Areas completed the commitment period contributing to improvement of soil quality	2 100
Additional result indicator	Number of farmers participating successfully in training courses	300
Impact indicator	Soil loss due to wind and water erosion	Soil loss has been decreased
	Improvement and preservation of soil fertility	Soil fertility has been improved

Type of Operation: Biodiversity-enhancing the Great Bustard population

General description of the pilot area

The type of operation will be implemented in Polatlı (Figure 8), one of the districts of Ankara. Polatlı is a district in Ankara province in the Central Anatolia region of Türkiye, 80 km west of Ankara, in the Upper Sakarya Region. Ankara River coming from north and Porsuk River coming from west converge with Sakarya River. The district covers an area of 3 789 km², and the average elevation is 850 m. Polatlı is situated at the heart of the high Anatolian Plateau, a large steppe area.

The natural vegetation of the region is steppe. Milk vetch root and other types of herbaceous plants are dominant in these steppes, salix, eleagnus, acacia, wild pear, sloe, pear and blackthorn can be seen in the groves near the rivers.

Figure 8. Location of Polatlı in Ankara



Eight villages of Polatlı eligible for the support cover 62 348 ha and are: Adatoprakpınar (1 253 ha), İler (11 745 ha), Özyurt (14 053 ha), Sinanlı (1 397 ha), Şeyhametli (4 067 ha), Uzunbeyli (11 978 ha), Yağcıoğlu (8 548 ha) and Yüzükbaşı (9 307 ha).

Description of the agricultural sector in the pilot area

Polatlı is one of the most productive agricultural districts in Türkiye and is best known for its cereal production, especially barley and wheat. This district is one of the largest grain stores in Türkiye. Sugar beet, melon and onion are also grown.

According to the data of 2020 taken from Polatlı Agricultural District Directorate, total agricultural area (including arable, pasture and fallow) is 352 846 ha and the distribution is shown below. Out of arable land, fallow is in 37 300 ha, cereals in 179 136 ha, industrial plants in 8 750 ha, vegetables (including melon) and fodder crops in 14 100 ha are grown.

Table 58. Land Distribution of Polatlı

LAND DISTRIBUTION	Type of Land	Amount (ha)	Percentage (%)
	Agricultural Land	219 498	% 62.27
	Pasture	24 184	% 29.15
	Forest-Scrubland-Moor	70 275	% 0.45
	Non-agricultural	31 075	% 8.13
	TOTAL	186 792	% 100

Table 59. Agricultural Land Size and Their Distribution

	Cropland Area (ha)			Vegetable Area (ha)		Vineyard and Orchard Area (ha)		Total Area (ha)
Status of the Land	Irrigated	Non- irrigated	Fallow	Irrigated	Non- irrigated	Irrigated	Non- irrigated	
Size	26 835	143 765	37 330	10 910		630	30	219 500
Total	207 930			10 910		660		219 500

Irrigated arable area is 5 050 ha in 8 villages (Şeyhametli, Özyurt, Sinanlı, Uzunbeyli, Yüzükbaşı, İnler, Yağcıoğlu ve Adatoprakpınar) selected as pilot.

According to available data, most of the parcels (fields) are with size 11-50 ha (23 438 ha) followed by parcels (fields) with size 1-10 ha (covering 7 812 ha).

According to the data of 2020 taken from Polatlı Agricultural District Directorate, important crops and production amounts are in Table 60.

Table 60. Important crops and production amounts in Polatlı

Type of Crop	Amount (ha)	Production (Tonnes)
Wheat	107 200	37 520
Barley	45 000	16 875
Sugar beet	5 500	24 750
Onion	8 600	27 520
Melon	1 200	2 040
Water melon	700	2 450
Sunflower (oil)	1 100	374

Table 61. Cultivation amount for 2020 on the basis of crop

Crop	Amount (da)	Crop	Amount (da)
Wheat	1 072 000	Sun flower (Oil)	11 000
Barley	450 000	Sun flower (Snack)	1 700
Rye	800	Safflower	150
Oat	12 000	Chickpea	30 000
Cumin	7 000	Lentils (Green)	250
Sugar beet	55 000	Melon	12 000
Onion	86 000	Watermelon	7 000

Values to protect with the type of operation

The Great Bustard (*Otis tarda* Linnaeus, 1758) is a globally-threatened species, classified as “vulnerable” by IUCN (IUCN 2016). It is also under protection in European Union and it is included in Bird Directive Annex 1 (which includes the list of species particularly threatened). Great Bustard has a “under protection” status pursuant to Bern Agreement, Convention on Migratory Species –(CMS) and the Convention on International Trade in Endangered Species-CITES Agreement.

Great Bustard is also under protection nationally, it is included among the species for which hunting is forbidden all year long by Central Hunting Commission. Türkiye has also made commitment to protect this species under Bern and CITES International Agreements mentioned above.

According to the IUCN Red List of Threatened Species, the world population of Great Bustard is estimated to be between 44 054 and 57 005 individuals. As they largely existed in Asia and Europe as well as in North Africa in the past, recently they are observed in some countries of Europe and Asia while their population continues decreasing. In Türkiye the population is between 764-1 250 (Great Bustard Action Plan-2017). The population of Great Bustard in Türkiye ranks 4th in Europe after Spain, Portugal and Hungary.

Great Bustard is a good example of species having a strong relation with farming activity. Great Bustard and its protection gain an additional role as a significant indicator in terms of the area’s natural value and characteristics. It is essential to preserve and improve the Great Bustard’s existence in the area which can only be achieved by enhancing sustainable farming practices (Akarsu 2018).

In Polatlı, the major population occurs in state farm (TİGEM) area owned by MoAF; therefore, the pilot area (pilot villages) is selected around TİGEM. This area is designated as a Key Biodiversity Area (KBA) and this is one of the areas in Central Anatolia with a known breeding population of the Great Bustard. The existence of minimum 45, maximum 75 individuals has been revealed by the literature and site visits to Polatlı TİGEM and surrounding area in 2018 within the scope of the Technical Assistance Project named “Organization for the Studies related to the Revisions of Biodiversity Sub-Measure under Agri-Environment” (Annex XII).

Problems with Great Bustard in the selected pilot area

This species has suffered rapid population reductions owing to the loss and fragmentation of its habitat, as well as hunting. In addition, the decrease in Great Bustard population is also linked with the use of pesticides, intensive industrial farming, modernization of agriculture, irrigation and changes in land use (such as housing, construction of roads).

In the Action Plan called International Single Species Action Plan for the Western Palearctic Population of Great Bustard (*Otis tarda*) prepared by Birdlife International on behalf of European Commission, the main problems the population of the Great Bustard is facing are:

- Their sensitivity towards disturbance caused by agricultural and other activities;
- Too early ploughing of set aside land in spring, resulting in problems to find nesting places;
- Too early harvesting in summer, leading towards destruction of nests and killing

of chicks;

- Reduction in food availability in the form of insects and seeds because of the use of fertilizers, pesticides and herbicides (furthermore Great Bustards consider granulated fertilizers and pesticides as food and eat them, thus they can be killed);
- Lack of legume fodder parcels for feeding (lack of food for Great Bustards is a significant threat especially in the winter, diversity of crops and a rich crop pattern should be taken into account in habitats of Great Bustard);
- Illegal hunting;
- Increased mortality caused mainly by land-use changes and infrastructure development such as powerlines (if there are electricity posts in the selected area, this can be dangerous because these birds can be killed by collision);
- Illegal stubble burning;
- Overgrazing of pastures;
- Insufficient local awareness raising activities on the priority of conservation of Great Bustard.

These problems are all valid for the selected district, Polatlı.

Objectives of the type of operation

- To provide the stability and sustainability of Great Bustard population;
- To improve the habitats for Great Bustards in the areas under biodiversity sub measure;
- To raise awareness on the value of biodiversity, particularly the Great Bustard population;
- To test if this type of operation is an effective way to improve Great Bustard habitat and to stabilize the populations; also, to provide an example for similar biodiversity implementations under agri-environment-climate measure.

Rules/requirements

Definition of final recipients

Support is available for natural and legal persons who are registered under the Farmer Registry System and who on a voluntary basis make the agri-environmental commitments for the land management for 5 years (as described in “Section 5. Recipients”).

The recipient should follow the relevant baseline conditions (including GAEC standards) as identified below on the area under the commitment in the selected pilot area as identified in “Section 6.2 Baseline” below.

Eligibility criteria

Eligible land

Lands eligible for the support are arable non-irrigated lands in Şeyhametli, Özyurt, Sinanlı, Uzunbeyli, Yüzükbaşı, İnler, Yağcıoğlu, Adatoprakpınarı villages belonging to Polatlı, Ankara (Figure 9).

Other eligibility criteria

The applicant must participate in 4 hours compulsory training about AE measures during the period of the agreement.

Great Bustard uses a complex of parcels as its habitat: set aside land and arable land to nest and feed. When considering the desired mosaic for the pilot area, the management of both the nesting areas and the winter areas could be managed in a more proper way. Also, some general requirements are listed.

In winter, arable land is also important as feeding area. In some areas the crop should be left un-harvested. In these areas birds can feed all winter. Irrigation is not allowed in order to keep the natural water balance and management in the parcels as it is now. As most of the areas are already dry, drainage is not in use.

172

insects which are the basis of the diet of the chicks during their first three months of life.

AE type of operation requirements

General requirements for all packages:

All the applicants making the 5-years commitment have to fulfil the following requirements below:

- No chemical fertilizers, herbicides, fungicides and insecticides on wheat and legumes during the 5-years commitment;
- No grazing;
- No new drainage;
- No new fences;
- Applicant should keep the farm record book during the whole 5-years commitment period.

Package 1 - Set aside (long term fallow) with wheat:

- Wheat has to be grown in the same parcel for five years consecutively;
- Wheat should be sown in the parcel in the 1st year and should not be harvested (it should be ensured that wheat remains in the field for the remaining 4 years);
- Same parcel should be left in set-aside (as non-cultivated) for the remaining 4 years;
- The stubble (the roots and stems of wheat remaining in the soil because of set-aside) should be left in the parcel during summer;
- One ploughing each year should be done in the parcel in September or October (according to the climate and soil conditions) during the five years commitment period;

Package 2 - arable land with 5 consecutive years of trefoil:

- Trefoil should be grown by 5 consecutive years in the same parcel;
- Trefoil should be sown in the parcel in the 1st year in March or April and should not be harvested (it should be ensured that trefoil remains in the field for the remaining 4 years);
- The maintenance of trefoil (especially partial re-seeding depending on the plant density on the area) should be ensured;
- The trefoil can only be mowed from top for maintenance during the flowering period with scythe (not to hurt chicks);

Package 3 - arable land with 5 consecutive years of Hungarian vetch:

- Hungarian vetch should be grown by 5 consecutive years in the same parcel;
- Hungarian vetch should be sown in the parcel every year in September or October (According to the climate and soil conditions);
- No mowing or cutting of Hungarian vetch, no harvesting;
- The stubble (the roots and stems of Hungarian vetch remaining in the soil) should be left in the field;

Table 62. Indicators and target levels

Type of the indicator		Indicator	Target
Output indicator		Number of farm holdings and holdings of other land managers receiving support	100
		Area under the type of operation, ha	1 000
		The number of contracts	100
Additional indicator	output	Number of training sessions organised	For each applicant 4 hours training
Result indicator		Areas completed the commitment period contributing to improvement of biodiversity	1 000
Additional indicator	result	Number of farmers participating successfully in training courses	100
Impact indicator		Habitat use - density of birds per habitat Changes (increase) in population of Great Bustard	Density of great bustards in habitats under AE management increases on average by X% relative to baseline (the population in 2018 was observed between 70-75) Abundance of Great Bustard is stable or increases

8.3.3.7.2 Baseline

Agri-environmental payments are given to the recipients who voluntarily agree to take up for 5 years agri-environment-climate commitments which go beyond the mandatory standards and conditions (baseline). The recipients will have to respect these relevant mandatory standards and conditions on the entire holding.

The concept of baseline embraces all the relevant mandatory standards and conditions, including good agricultural and environmental conditions (GAEC), relating to soil, water, biodiversity and landscape management. The baseline also includes relevant minimum requirements for fertilizers and plant protection products as well as normal agricultural production practices. Such baseline is to be respected by the recipients of agri-environment-climate payments as an entry condition and the respect of the baseline will be checked by ARDSI during the control procedures including the on-the-spot controls.

Table 63. Relevant mandatory standards (baseline) for the pilot agri-environment-climate measure in Türkiye

Commitments	Relevant Baseline	Legal Basis	Comparison of Commitment to Baseline and usual production methods
General – common requirements for all types of operations.			
Stubble burning is prohibited in arable land	Section 5 / Article 20 / Clause 1 Section 6 / Additional Article 6 / Clause c	Environmental Law No 2872	Stubble burning is prohibited in arable land
Terraces and other physical structures (wind curtains, terraces, flood coves and prevention structures) should not be destroyed.	Section 4 / Article 15	Soil Conservation and Land Use Law No 5403	Terraces and other physical structures (wind curtains, terraces, flood coves and prevention structures) should not be destroyed.
Farmers must maintain records on the commitments they apply on their land.	No legal obligation	No legal obligation	There is no legal requirement that obliges farmers to maintain records.
Farmers must undertake additional training or advice on the issues of direct relevance to the type of operation they apply and the commitments concerned in the first year of the commitment.	No legal obligation	No legal obligation	There is no legal requirement that obliges farmers to make use advisory services or to attend training.
Management of Soil Cover and Soil Erosion Control			
During the commitment period, cereal (wheat, barley, etc.) and green cover (common vetch) are sown alternately. The stubble of the preceding cereal crop	No legal obligation	No legal obligation	The reference crop rotation is “cereal + fallow + cereal + fallow + cereal” in the district. Cereal is harvested and the stubble is baled.

Commitments	Relevant Baseline	Legal Basis	Comparison of Commitment to Baseline and usual production methods
should be left on the field until the green fallow is sown. The green fallow vegetation should be ploughed and mixed with soil and left on the field till the cereal is sown (not harvested/mowed).			
Minimum soil cover: agricultural land under 12% slope should be covered by common vetch from March to September during the commitment year.	No legal obligation	No legal obligation	As a normal practice, cereal and fallow are implemented respectively in the area.
Green cover land should be covered with perennial trefoil and the maintenance of trefoil (especially partial re-seeding depending on the plant density on the area) shall be ensured. The crop of green cover should be left on the field (not harvested) through the commitment period (five years). The crop of green cover can be mowed from top after the third year.	No legal obligation	No legal obligation	The reference crop rotation is cereal “cereal + fallow + cereal + fallow + cereal” in the district. Cereal is harvested and the stubble is baled.
Minimum soil cover: agricultural land over 12% slope should be covered by trefoil all through 5 years.	No legal obligation	No legal obligation	As a normal practice, cereal and fallow are implemented respectively in the area.
Biodiversity-Enhancing Great Bustard Population			

Commitments	Relevant Baseline	Legal Basis	Comparison of Commitment to Baseline and usual production methods
Wheat has to be grown in the same parcel for five years consecutively without harvesting. The stubble should stay in the field	No legal obligation	No legal obligation	The reference crop rotation is “cereal + fallow + cereal + fallow + cereal” in the district. Wheat is harvested and the stubble is baled.
Trefoil has to be grown in the same parcel for five years consecutively without harvesting. Its maintenance should be provided.	No legal obligation	No legal obligation	Trefoil is not the usual practice/not the usual crop in the district.
Hungarian vetch has to be grown in the same parcel for five years consecutively without harvesting. The stubble should stay in the field.	No legal obligation	No legal obligation	Hungarian vetch is not the usual practice/not the usual crop in the district.
The use of fertilizers, herbicides and pesticides is prohibited throughout all the period of the commitment.		Notice of Code of Good Agricultural Practice No:2016/46 Regulation on the Protection of Water against Agricultural Nitrate Pollution and its Annexes No: 29779 dated 23.07.2016 Regulation on Fertilizers and its Annexes No:30341 dtd 23.02.2018	The use of fertilizers, herbicides and pesticides is common for the farmers to increase the yield. However, their use is harmful for great bustard chicks. Therefore, these should not be used at all through the commitment period and not using them goes beyond minimum requirements.

8.3.3.7.3 *Relevant knowledge*

In order to ensure that the implementation of this measure is as effective as possible, Ministry of Agriculture and Forestry (MoAF) will organize at least four publicity events in the pilot area: one to announce the opening of the measure, two during the contract period (these can include training of farmers), and one at the end of the contract period. These events will involve the potential recipients and organisations representing them (cooperatives, unions, chambers of the agriculture, environmental organisations etc.), as well as agricultural extension services.

The events will be accompanied by appropriate communication activities, such as announcements and reports on rural radio or local TV and through other appropriate channels.

Training to advisory services also will be provided. The periods for these training sessions will be given in the training plan to be prepared by MA.

The recipient must keep the farm record book in line with the format provided by ARDSI during the whole 5-years commitment period. Farm records are documents containing information on all the agricultural activities performed on the farm relevant to the commitment.

The recipient can use services by adequately trained advisors for getting information on the type of operation such as application rules, the degree of the slope of land, contract to be signed, conditions to be respected to successfully implement the sub-measures (types of operations), general information on the relations between farming practices and their impact on the environment etc.

The recipient must participate in to 4 hours of compulsory training about AEC measures in the first year of the commitment.

8.3.3.8 *Specific eligibility criteria*

- Minimum size of the agricultural parcel in respect of which an application may be made is 0.2 ha and the minimum size of the land applied for the support is 1 ha.
- Applicant should hold the land cadastre ownership or a proof of lease at least for 5 years.
- The applicant must participate in 4 hours compulsory training about AEC measures during the period of the agreement.

Management of soil cover and soil erosion control:

- Land eligible for the support should be non-irrigated arable land located in Beypazarı district of Ankara.

Biodiversity:

- Land eligible for support is the non-irrigated arable lands in Polatlı district of Ankara.

8.3.3.9 *Eligible expenditure - payments calculation*

8.3.3.9.1 *Principles and methodology*

The payments to be granted under this measure are based on the compensation of the income forgone and costs incurred resulting from undertaking the commitment of replacing the reference crop rotation in the pilot area by a specific crop rotation under agri-environment-climate measure. The income forgone is expressed as gross margin (return minus direct costs) and calculated by comparing the reference gross margin to the gross margin resulting from the commitment. Costs incurred include planting of green cover, related labour, purchase of seeds. The tables for the payments can be seen in detail in Annex V.

The standard assumptions for the methodology and the calculations for the packages under both type of operations are based on the data provided via the surveys done with the farmers in the pilot districts which have been confirmed by the local staff of District Directorates of Agriculture and Forestry of these districts.

The calculations have been done by the Soil, Fertilizer and Water Resources Central Research Institute of General Directorate of Agricultural Researches. Data used for the purpose of calculating the level of support as well as the adequacy and accuracy of the calculations have been confirmed by an independent expert, Professor Doctor Kenan Peker from the Faculty of Economics and Administrative Studies at Fırat University.

Transaction costs determined in Table 64 will be provided as part of the agri-environment-climate payments to compensate costs related to the implementation of the agri-environment-climate commitments. They are calculated per farm and are based on the amount of working hours the applicant has to spend on the knowledge- and information-related activities and on the costs related to hiring an expert (advisor who will be employed by the Agricultural Chambers of the pilot districts) to assist the applicant in preparing the application and implementing type of operations under AEC. The size of the farm does not have an impact on transaction costs. In order to prevent overcompensation, transaction cost also cannot exceed 20% of the calculated income forgone and costs incurred for a given type of operation.

Table 64. Calculation of transaction costs for the AE

	Hours	Total costs per farm, TL	Costs per year, TL	Related description
Participation of applicant to compulsory training (farm labour costs)	4	75 (150 TL / day)		Training is free for farmers but the farmers will be compensated for time spent away from farm work
Preparing farm records book (farm labour costs)	8	150 (150 TL / day)		
Advisory costs	4	300		
Total		525 TL	45 TL / year	300 TL for advisory services payable in the 1st year.

The calculations have been done according to the 2020 figures taken from Ankara Agricultural District Directorates.

8.3.3.9.2 Payments calculations

The figures used for the payments calculation might be updated every year following the data from the TURKSTAT concerning inflation rate in December of the year before the starting date of the annual application period.

From the second year of the implementation, every year a premium level might be modified (indexed) depending on changes to official inflation rate as published by in the links below:

Republic of Türkiye Central Bank: <https://www.tcmb.gov.tr/>

Turkish Statistical Institute: <http://www.turkstat.gov.tr/UstMenu.do?metod=temelist>

Major agronomic assumptions for calculations of “management of soil cover and soil erosion control” sub-measure:

Payments

Level of support

For package 1: Annual payments of 4 742.1 TL /ha + transaction costs of 45 TL/year (including 300 TL advisory service used only in the first year)

For package 2: Annual payment of 3 844.74 TL /ha + transaction costs of 45 TL/year (including 300 TL advisory service used only in the first year)

Major agronomic assumptions for calculations of “biodiversity-enhancing the Great Bustard population” sub-measure

Payments

Level of support

For the Package 1: Annual payments of 4 374.72 TL/ha + transaction costs of 45 TL/year (including 300 TL advisory service used only in the first year)

For the Package 2: Annual payments of 4 038.48 TL/ha + transaction costs of 45 TL/year (including 300 TL advisory service used only in the first year)

For the Package 3: Annual payments of 6 507.36 TL/ha + transaction costs of 45 TL/year (including 300 TL advisory service used only in the first year).

8.3.3.10 Selection criteria

Under this measure there isn't any selection criteria for the applicants. However, in case there are many recipients to benefit from the type of operations under M4, “first come first” rule will be applied.

8.3.3.11 Aid intensity and EU contribution rate

Aid intensity (public aid) will be at the level of 100% of the total eligible costs. The EU contribution shall not exceed a ceiling of 85 % of public expenditure. Indicative budget public support under this measure is 100%.

8.3.3.12 Indicative budget

Table 65. Indicative budget

Year	Total Eligible Cost	Public Expenditure					
		Total	EU Contribution			National Contribution	
	EUR	EUR	%100	EUR	%85	EUR	%15
2021*	1 411 765	1 411 765	100	1 200 000	85	211 765	15
2022*	1 411 765	1 411 765	100	1 200 000	85	211 765	15
2023*	847 059	847 059	100	720 000	85	127 059	15
2024*	3 200 000	3 200 000	100	2 720 000	85	480 000	15
2025	3 200 000	3 200 000	100	2 720 000	85	480 000	15
2026	3 200 000	3 200 000	100	2 720 000	85	480 000	15
2027	3 200 000	3 200 000	100	2 720 000	85	480 000	15
Total	16 470 587	16 470 587	100	14 000 000	85	2 470 587	15

*The term “indicative” is not valid for the years 2021, 2022, 2023 and 2024

8.3.3.13 Indicators and targets to be used in the programme

Table 66. Indicators and targets to be used in the programme

Indicators	Target Value
Number of contracts	Management of soil cover and soil erosion control: 300 Biodiversity: 100
Total agricultural land (ha) under environmental or / and climate contracts	Management of soil cover and soil erosion control: 2 100 ha Biodiversity: 1 000 ha
Total area (ha) per type of operation included in the following categories:	(a) management of inputs (including integrated production, reduction in fertilisers use and in pesticides use, comprising precision farming, manure management, etc.): 1 000 ha (b) cultivation practices (including crop rotation, crop diversification, soil management through conservation or no tillage, soil cover, etc.): 3 100 ha (c) management of landscape, habitats, grassland (including setting and management of landscape features, including wetland and peatland, species conservation, extensive grassland management, etc.): 1 000 ha

Within the support for endangered breeds:	▪ Number of supported species: ≥ 0 ▪ Number of supported animals: 0
Within the support for endangered plant varieties:	▪ Total area for each supported variety: 0
Number of holdings supported for:	▪ Conversion into organic farming: 0 ▪ Maintenance of organic farming: 0
Total area supported for:	▪ Conversion into organic farming: 0 ▪ Maintenance of organic farming: 0

8.3.3.14 Administrative procedure

Applicants submit their application to Provincial Coordination Units (PCU) within the specified period of time. Administrative checks are performed by PCUs over the AIS (Agriculture Information System). All parcels are covered by this parcel based system. Data of the agricultural land parcels such as the parcel size, irrigation conditions (irrigated or non- irrigated), type of agricultural production (arable or pasture), slope, yield, other applications of the farmer, etc. can be seen through this system. Contracts are signed with eligible recipients. Control of the commitments will be performed by ARDSI following the procedures given in Annex VI.

In case of the applications concerning the areas with a lease contract, an annotation blocking the possible sales within 5-year implementation period shall be added to certificate of ownership. In comparison with the primary commitment, when the financial budget allows, the recipient cannot increase the area of agricultural land subject to the commitment. The further call for applications and new commitments (contracts) can be applicable for the farmers in case they want to extend the area beyond the limit of 20%.

The applicant may decrease the area of agricultural land, subject to the commitment under the support up to 20%, compared to the area as determined in the first year of the commitment, without any recovery of the support already paid for this land in the previous years. The support will only be provided for the area where the commitment is actually carried out.

Where the area under commitments decreases (or increases) within the allowed limit, it has to be ensured that no exchange of agricultural parcels occur i.e., the recipients cannot exchange the location of agricultural parcels with other parcels not contracted previously.

In order to prevent instances of non-compliance, a system of sanctions will be developed in line with the principles of proportionality. System of sanctions for non-compliances will be included in Guideline of Call for Applications.

Selection criteria for the measure will be carried out based on the “first come, first served” principle. However, the maximum application number and area to be applied

by a recipient within a call for application under this measure shall be limited to only 1 application covering up to 100 hectares. There is no limit for applying to other call for applications of AEC measure within this programming period 2021-2027. Similarly, there will be no limit for the recipient for other applications under investment measures of IPARD III Programme.

Commitments may be totally cancelled or commitment area may be reduced independently of 5-year-period and the support paid will not be recovered in case of force majeure or some exceptional circumstances, in particular:

- Death of the recipient;
- Land consolidation applications of relevant state authority;
- Long-term professional incapacity of the recipient;
- Expropriation of a large part of the holding if that could not have been anticipated on the day on which the commitment was given;
- A severe natural disaster seriously affecting land on the holding;
- The accidental destruction of livestock buildings on the holding;
- An epizootic disease affecting all or part of the applicant's livestock.

8.3.3.15 Geographic scope of the measure

The measure's implementation will be ensured through pilot areas covered by IPARD Programme.

It is planned to carry out, in 2022, a Technical Assistance project concerning the expansion of agri-environment-climate measure. Under this project, the possibility of introducing or revising agri-environment-climate operations will be analysed, among them the operation on soil management and soil erosion prevention. The project will also analyse the options concerning the geographical coverage by soil-related operations.

Management of soil cover and soil erosion control:

Beyşehir measure's implementation will be ensured through pilot areas covered by IPARD Programme.

Management of soil cover and soil erosion control:

Beyşehir district of Ankara as this district represents general non-irrigated farming practices in Central Anatolia and it faces serious erosion problem.

Biodiversity:

Polatlı district in Ankara province as Great Bustard population is present in some villages of this district.

The Managing Authority commits to undertake, in the framework of Technical Assistance measure, a study on the possible implementation of other types of operations in the framework of the agri-environment-climate measure implementation in IPARD III. This will include at least studies on organic farming but also water conservation operation, new erosion control implementations/tillage conservation, local endangered plant varieties.

8.3.4 IMPLEMENTATION OF LOCAL DEVELOPMENT STRATEGIES - LEADER APPROACH – M5

8.3.4.1 Title of the Measure

Implementation of local development strategies - leader approach – M5

8.3.4.2 Legal basis

8.3.4.3 Rationale

LEADER is an integrated territorial development tool aimed to be implemented at the local level, which contributes directly to territorial coherence, long-term sustainable development and improvement of social capital of rural areas²⁷. LEADER is part of the EU rural development policy in building the capacity and experience in the policy implementation, and as such it helps the candidate countries in the preparation for EU accession. This method has the potential to improve rural livelihoods, strengthen local governance and foster multi-level policy dialogue. The LEADER approach will contribute to the sustainable use of resources, the production of agricultural inputs and their transformation into products with high added value while protecting soil and water as well as biodiversity and the overall environment in Türkiye.

The LEADER approach was included in Türkiye's Program (2007-2013), within the scope of the measure "Preparation and Implementation of Local Rural Development Strategies", to contribute to aligning with the EU Common Agricultural Policy and Rural Development Policy. As such Türkiye was introduced to LEADER through the IPARD I Program.

Capacity building activities have been implemented since 2010 in order to ensure familiarization with the LEADER approach, to promote the establishment of Local Action Groups (LAGs) and the preparation of Local Development Strategies (LDSs).

Accordingly, potential LAGs were established and the districts of Birecik/Şanlıurfa and Iskilip/Çorum were selected as pilot LAGs. Pilot studies were conducted by determining the priorities of the LDS.

During the 2014-2020 IPARD II period, efforts were intensified, and LEADER was expanded to include the provinces of Ankara, Amasya, Çanakkale, Denizli, Diyarbakir, Erzurum, Kastamonu, Manisa, Ordu and Samsun.

With the letter of the Commission dated 20.02.2019, it was specified that "Türkiye's application for the delegation of authority to execute the budget for the LEADER measure has been approved and the process may be initiated once the revised Financing Agreement enters into force" and thus, the LEADER measure was accredited.

In Türkiye, there are currently 49 LAG, which were established at the local level in 12 IPARD provinces and which signed a contract in 2020. The implementation of LDS by the LAGs continues with funds provided by the LEADER budget.

²⁷ In EU Member States LEADER is a part of a policy-overarching Community-led local development (CLLD) approach which is a tool for involving citizens at local level in developing responses to the social, environmental and economic challenges. CLLD approach cannot be used in the IPARD countries due to lack of access to EU Funds (Regional, Social etc.).

With the aim of expanding the LEADER approach, a new project has been initiated in order to provide information about the LEADER approach, to facilitate the preparation of LDSs in an attempt to create motivation and raise local awareness regarding the potential LAGs to be established in 15 further IPARD provinces (Balıkesir, Burdur, Bursa, Çankiri, Elazığ, Erzincan, Giresun, Hatay, Isparta, Karaman, Kütahya, Mardin, Muş, Uşak and Yozgat).

Within the scope of this new project, there are 49 LAGs established at local level in 14 IPARD provinces, and signed contracts in 2022 and 2023. The implementation of LDS by LAGs continues with funds provided by the LEADER budget.

8.3.4.4 General objectives

Implementation of the LEADER approach improves community development, enhances the social capital and contributes to economic, social, cultural and environmental improvements of local areas, by engaging a wide range of multi-sectoral private and public partners and by valorising community resources at the local level. The working method is based on a bottom-up, multi-level, multi-sectoral (beyond agriculture) approach strongly relying on local stakeholders' mutual learning and networking.

8.3.4.4.1 Specific objectives

This measure contributes to the following specific objectives:

- Improvement of social capital and local governance by creating private-public partnerships (LAGs), which establish and implement bottom up LDSs;
- Animation of the territory and capacity building of the local population and the LAGs;
- Contribution to rural economy, rural tourism, boosting cultural and social life of the community, improvement of public spaces in villages, improvement of environmental standards in LAGs' areas as the main themes for the LDSs;
- Networking with other LAGs, exchange of best practice, dissemination of information about IPARD programme and learning new approaches to rural development nationally, with other candidate countries and with the EU Member States.

8.3.4.5 Links with other IPARD measures in the programme

This measure is linked with measure 9 Technical Assistance, eligible expenditure category f): Expenditure associated with "acquisition of skills" to prepare potential LAGs for the implementation of the measure "Preparation and implementation of local rural development strategies - Leader approach". Technical Assistance supports potential LAGs to make them ready to apply for the measure "LEADER approach".

Networking of LAGs is also supported under the IPARD Technical Assistance measure.

This measure is also well suited to be implemented in close connection with measure 7 (Farm diversification and business development) as well as measure 4 (agri-environment-climate measure) as long as promotion of sustainable management of natural resources is concerned.

8.3.4.6 Recipients

LAGs contracted by the IPARD Agency.

8.3.4.6.1 LEADER implementation under IPARD

The LEADER approach at programme level shall comprise at least the following elements:

- (a) Area-based local development strategies intended for well-identified sub-regional rural territories;
- (b) Local public-private partnerships (Local Action Groups);
- (c) Bottom-up approach with a decision-making power for local action groups concerning the elaboration and implementation of local development strategies;
- (d) Multi-sectoral design and implementation of the strategy based on the interaction between actors and projects of different sectors of the local economy;
- (e) Networking of local partnerships;
- (f) Implementation of innovative approaches.

LAGs implement an LDS, which can contain one or more of the following **six priority themes**: The themes chosen should be complementary to each other.

- **Rural economy**: development of short supply chains and added value products including quality products, crafts and other activities for diversification of rural economy;
- **Rural tourism**: development of rural tourism products based on the use of local, natural, and cultural resources;
- **Community**: boosting the cultural and social life of the community and supporting collective local organisations, associations and NGOs;
- **Public spaces**: improvement of public space in villages;
- **Environment**: improvement of environmental standards in LAG's areas and promotion of renewable energy use by the local community;
- **Networking**: networking of LAGs, best practice exchange, dissemination of IPARD programme and learning new approaches to rural development.

The implementation of the LDS covers:

- acquisition of skills, animating the inhabitants of LAG territories" for capacity building and animation of selected LAGs;
- implementation of small projects and
- running costs for the LAG.

The activities must be linked with the selected priority themes outlined above.

Each Local Action Groups shall satisfy the following conditions:

- Must propose a LDS based on the LEADER characteristics as defined minimum content of the LDS.
- They must consist of a group representing partners from the various locally based socioeconomic sectors in the territory concerned. The gender equality should be ensured by women's participation at a decision-making level. A minimum number of women and young people will be established in the programme;

- They must show an ability to define and implement a LDS for the area;
- Local Action Group must have a legal form (e.g., association);
- Ability to administer public funds: the Managing Authority must ensure that the LAGs select an administrative and financial lead actor able to administer public funds and ensure the satisfactory operation of the partnership. Certain functions, if cannot be provided by a LAG member, such as accounting, can be outsourced.

Requirements for the LAG area covered by the LDS:

- The LAG area shall be coherent and offer sufficient critical mass in terms of human, financial and economic resources to support a viable development strategy;
- The population of each area must be, as a general rule, greater than 10 000 inhabitants and not exceed 150 000 inhabitants, including settlements with a population of less than 25 000. Deviation from this general rule would be possible in properly justified cases;
- The same location must not belong to more than one LAG, meaning one partnership, one strategy, one territory.

Minimum content of the LDS:

- Definition of the area and population covered by the LDS, incl. coherence and sufficient critical mass in terms of human, financial and economic resources;
- Analysis of the development needs and potential of the area, including an analysis of strengths, weaknesses, opportunities and threats (SWOT) - LAGs should take into consideration not only statistics, but also views of local actors;
- Description of the strategy and its objectives - LAGs prepare bottom-up strategy in the interactive model with community and define the vision and objectives in line with the IPARD priority themes;
- Description of the process of community involvement in the strategy preparation, the partnership structure and the internal decision-making rules. The strategy is translated into the projects;
- Action plan - the “heart” of the LDS. All proposed activities are linked to the selected priority themes. The Action Plan sets out the minimum (binding) level of activities (minimum level of targets). The Action Plan is later translated into more detailed Annual Plans;
- Financial plan with an indicative budget for the period of LDS duration broken down into: LAG’s running costs, animation / capacity building, small projects.

Detailed requirements for the LDS will be provided in the guidelines by the Managing Authority.

8.3.4.7 Eligible activities

This measure will cover the following activities linked with the priority theme(s) defined in the LDS:

- "Acquisition of skills, animating the inhabitants of LAG territories" for capacity building and animation of selected LAGs;
- "Running costs ": for running the selected LAGs;
- Implementation of “small projects”;
- "Cooperation projects" for inter territorial (within a country) or transnational projects (between countries); this activity should be implemented in the latest phase of implementation, by the most advanced LAGs, who have gained experience. The relevant procedure for applying for this activity will be later

developed by the Managing Authority and described in the programme.

8.3.4.7.1 Acquisition of skills, animating the inhabitants of LAG territories

- Animation, organisation of informational and publicity events including preparation of promotional materials with the participation of local communities' leaders (seminars, workshops, meetings, etc.);
- Training and education (preparation of business plans, preparation of project applications, accounting, etc.);
- Preparation of relevant studies of the area for further development (socio-economic, regional, marketing, etc.);
- Networking, participation in national and international seminars, workshops, meetings, study visits, including events of national and the European Network for Rural Development.

Acquisition of skills, animating the inhabitants of LAG territories” has to be at least 30% of the budget for the implementation of the LDS and it cannot be less than the amount allocated for running costs of the same year.

8.3.4.7.2 Running costs of Local Action Group

Running costs are linked to running the Local Action Group (LAG), such as office equipment, including IT, personnel costs, office costs and external services (such as accounting, IT services, etc.). Salaries of LAG's employee(s) often makes a major part of the running costs.

8.3.4.7.3 Small projects

Small projects are considered as those with an IPARD grant of up to EUR 10 000. They are of collective nature for the benefit of the local community, for example by social and cultural associations, sports organisations, producer organisations or the municipality. The budget can overpass EUR 10 000 if other partners or donors contribute to the small project.

Small projects must be linked with the priority theme(s) as defined in the LDS.

The choice of the small projects will be done by the LAG's Management Board based on proposals from a LAG manager or relevant stakeholders (municipality, social organisations, etc.). An overview of projects planned for a given year is set in the Annual Implementation Plan.

LAGs should be promoters of small projects: even if other organisations are involved in implementation of such small projects, the final invoice is always for the LAG.

Examples of small projects:

- Events (such as village festivals, contests, participations in fairs, and similar actions);
- Purchase of materials and equipment (such as computers, packing and marketing equipment, publicity and marketing materials, tourism information boards, signs, solar panels, composters, materials for cultural and youth groups, furniture and equipment for community rooms and similar items);
- Small scale refurbishing of community buildings, improvements of publicspaces and tourist trails and small scale infrastructure (i.e., playgrounds) and similar

- actions;
- Purchase of specialised motor vehicles (including electric tricycle, electric pickup truck, and electric vans) for LAG cooperatives and associations involved in the development of short supply chain. (The purchase of vehicles will be eligible as long as they are specialized vehicles directly related to the objectives and purpose of the supported investment. The eligibility of the purchase of specialized vehicles will be limited to projects of LAGs related to the development of short supply chains. Within the scope of small projects, LAG stakeholder NGOs such as cooperatives, associations, etc. will be provided with electric vehicle support with a budget of EUR 5,000 in relation to the purpose of the investment. EUR 5000 limit cannot be exceeded)
- Design plans for the restoration of historic buildings.

Travel costs are eligible, but due to the nature of travelling such costs should be linked and included in the categories of eligible activities mentioned above (acquisition of skills and animation, running costs or small projects).

8.3.4.8 Procedure for selecting Local Action Groups

The call(s) to select the LAGs must be open to all rural areas and ensure competition between the LAGs putting forward LDSs.

The selection procedure consists of two phases:

- eligibility check of LAGs by the IPARD Agency,
- assessment of the LDS of eligible LAGs by the Evaluation Committee according to selection criteria.

The Evaluation Committee consists of representatives from the Managing Authority and other relevant rural actors and NGOs dealing with rural development, defined in the annex of Leader Procedure. The Members of the Evaluation Committee will be appointed by the Minister or the relevant Deputy Minister on the proposal of the Managing Authority.

8.3.4.8.1 Eligibility criteria

The eligibility criteria relate to the territory covered by the LDS, the composition of the LAG and its legal form and the presentation of the LDS.

Territory:

- Territories from rural areas with sufficient coherence and critical mass, namely 10 000 – 150 000 inhabitants, including settlements with a population of less than 25 000;
- The same municipality/settlement belongs only to one LAG. No overlapping is allowed - meaning ‘one partnership, one strategy, one territory’.

Legal form:

- A LAG shall be an officially registered legal association based on means of valid relevant legal acts. In accordance with national legislation, it may be registered as organization, the constitution of which guarantees satisfactory operation of the partnership governance and management and ability to administer public funds. Internal rules of functioning and statutes of the established organization clearly outline members commitments, roles and responsibilities for the development of the territory and implementation of the strategy.

Management Board:

- At the decision-making level, the economic and social partners as well as other representatives of the civil society, such as farmers, rural women, young people and their associations, must make up more than 50% of the partnership. It has to be demonstrated how representation of the civic, social or economic groups is ensured by the respective partners when they are individuals. Moreover, a minimum 20% shall be representatives of the local authorities. However, public authorities as defined in accordance with the national rules, or any single interest group, shall represent less than 50% of the voting rights;
- At least one women member and at least one young member (young members under aged 25) in Management Board to ensure gender and age equality (this cannot be the same person);
- Members of LAG decision-making bodies are residents or otherwise demonstrably operate in the area covered by LDS. Based on the needs new members could join later to widen the partnership.

Local Development Strategy:

- The LAG must propose an integrated LDS which includes at least minimum elements and priority themes as specified in the IPARD Programme.

8.3.4.9 Selection criteria

The following selection criteria can be used:

- The quality of the partnership, its rules for representation, governance, decision making, avoiding conflict of interest, incl. participation of young people and women;
- Coherence of the LAGs territory and sufficient critical mass in terms of human, financial and economic resources;
- Quality of the intervention logic of the Strategy (including SWOT analysis etc.);
- Coherence of the actions proposed with the SWOT analysis and IPARD priority themes;
- Stakeholders' involvement in the preparation of the LDS;
- The capability of the LAG to manage the implementation of LDS, including capacity for animation;
- Projects supported by other sources (not the IPARD Programme) should be considered as added value, however double funding must be avoided.

Detailed scoring sheet is annexed (Annex X) to the IPARD programme.

8.3.4.10 Aid intensity and EU contribution rate

Aid intensity, expressed as the share of public support in the eligible expenditures amounts up to 100%, where the EU contribution rate is 90%.

The budget allocations for LDS according to LAG category are as below:

Maximum total annual amount to be allocated;

- For small LAGs 100.000 €

- For medium LAGs 120.000 €

- For Large LAGs 140.000 €

Of which:

Maximum annual amount allocated for recurring cost for small LAGs 30.000 €

Maximum annual amount allocated for recurring cost for medium LAGs 35.000 €

Maximum annual amount allocated for recurring cost for Large LAGs 40.000 €

Maximum amount per each LAG to be allocated for the purchase of assets for the whole period of LDS. 30.000 €

Contracted LAGs may receive an advance to start-up activities from the national funding, but this in no case is considered as costs incurred to be reimbursed by the Commission via IPARD.

8.3.4.11 Indicative budget

Table 67. Indicative budget

Year	Total Eligible Cost	Public Expenditure					
		Total		EU Contribution		National Contribution	
		EUR	%	EUR	%	EUR	%
2021	5 555 555	5 555 555	100	5 000 000	90	555 555	10
2022	5 555 555	5 555 555	100	5 000 000	90	555 555	10
2023	3 333 333	3 333 333	100	3 000 000	90	333 333	10
2024	8 888 888	8 888 888	100	8 000 000	90	888 888	10
2025	8 888 888	8 888 888	100	8 000 000	90	888 888	10
2026	8 888 888	8 888 888	100	8 000 000	90	888 888	10
2027	8 888 888	8 888 888	100	8 000 000	90	888 888	10
Total	50 000 000	50 000 000	100	45 000 000	90	5 000 000	10

8.3.4.12 Indicators and targets to be used in the programme

Table 68. Indicators and targets to be used in the programme

Indicator	Target
Acquisition of skills and animating the inhabitants of LAG territories	
Number of information and publicity activities	4 805
Number of trainings of LAGs	1 202
Number of participants attending information and publicity activities	96 096
Number of participants who have undergone training activities	12 013

Implementation of LDS	
Number of LAGs operating in rural areas	80
Number of Local Development Strategies	80
Population covered by LAGs	2 402 400
Number of projects recommended	802
Number of small projects	4 805
Gross number of new jobs created	197
Number of IPARD recipients with support in investments in renewable energy production	3

8.3.4.13 Administrative procedure

The IPARD Agency launches a call and selects the LAGs as recipients based on the eligibility check by the Agency and an assessment of the Evaluation Committee established by the Managing Authority. The contract is signed between the IPARD Agency and the selected LAGs for the implementation of the LDS. Accordingly, the IPARD Agency holds the authority and responsibility to make / not to make an amendment to the contract (addendum) and to terminate the contract based on the established procedures and conditions which are communicated to the recipients when signing the contract and without undermining the recipients' legitimate expectations.

Each year a Local Action Group submits an Annual Implementation Plan (detailing out the Action Plan from the LDS) to the IPARD Agency and Managing Authority.

A LAG carries out animation, capacity building and executes small projects in accordance with the Annual Plan. The LAG also ensures that the prices are reasonable and that the choice of contractors is impartial.

The LAG submits regularly (e.g., each month or each quarter) a payment claim for the reimbursement of capacity building costs, running costs and costs of small projects implemented. Each payment claim must be clearly linked with the Annual Action Plan (feeding back to the LDS). The IPARD Agency shall check the LAG in accordance with contract commitments (administrative and on-the-spot checks, including price reasonableness). The IPARD Agency makes (regular) payments to LAGs based on the approved payment claims.

8.3.4.14 Geographical scope of the measure

This measure is applicable in all provinces covered by the IPARD programme.

8.3.5 INVESTMENTS IN RURAL PUBLIC INFRASTRUCTURE – M6

8.3.5.1. *Title of Measure*

Investments in rural public infrastructure – M6.

8.3.5.2. *Legal basis*

- Article 3.2.d of IPA Council Regulation No: 2021/1529
- Article 20 of IPA Commission Implementing Regulation (EU) No: 2021/2236
- Relevant provisions of IPARD Sectoral Agreement

8.3.5.3. *Rationale*

The development of local infrastructure is an essential element of any effort to realise the growth potential, promote the sustainability of rural areas, improve quality of life and prevent migration from rural areas. Rural infrastructure primarily comprises building roads, water supply, sewage systems, providing internet access and renewable energy.

In Türkiye; Local Government Unions²⁸, District Municipalities, Provincial Municipalities, City Administrations, Managerial Bodies of Organized Industrial Zones Specialized in Agriculture²⁹ provide services within the scope of these investments. The general purpose of these institutions and organizations is to make investments to meet the infrastructure needs of rural areas and to ensure their access to basic services as well as to carry out studies to reduce the gap between these areas and cities by achieving indicators in terms of improved environmental and living conditions.

As rural settlements in Türkiye are geographically quite scattered and the population density of these places is relatively low, the costs of bringing rural infrastructure investments to these areas are high. The lack of rural infrastructure investment reduces the effectiveness of resource utilization in rural areas.

It is of vital importance for the **village road and village road network** to be of a quality that will allow transportation in every season of the year, to make investments in rural areas and to ensure that the investments are sustainable. Although the main roads are at the sufficient quality in Türkiye, in case of the village roads, 42.2% of them are stabilized, 42.1% is asphalt (36.0% is surface coating, 6.1% is bituminous hot mixture), 6.9% of them are levelling, 3.5% is parquet, 3.0% is concrete and 2.3% is the raw road³⁰. According to these data, approximately more than 50% of the village road and village road network needs to be developed. Improved access to rural areas is a key condition for economic growth and development.

Access to clean drinking water, sewage system, treatment plant, and collection of waste, meeting the energy and heating needs are of great importance for those living in rural areas.

Water losses in **water distribution networks** is a common problem. The average annual water losses in Türkiye is over 50%³¹.

Established pursuant to Law No. 5355 (Unions for Delivering Services to Villages, Solid Waste Management Unions, Tourism Infrastructure Unions etc.)

²⁸ Established in accordance with Article 26/A of Law No: 4562

²⁹ (Ministry of Environment and Urbanization, 2019)

³⁰ (Water Resources Management and Security-Special Expertise Commission Report -2018).

Water losses are caused by the erosion and corrosion that occurs over time in the pipes and connection points in the network. In order to prevent this, water network lines in rural areas should be renewed. In addition, well water is used as a source of drinking water in rural areas. Since there is a danger that well water can carry harmful contaminants such as arsenic, it is important to establish a new water supply line in rural areas ensuring safe use of well water.

About a half of the municipalities and most of the villages do not have a sewage system. Considering the villages and their affiliated units, it can be said that there is a sewage system in about 20% of them. With new investments in the **sewage system and treatment plant** in rural areas, the hygiene needs and living comfort of those living in rural areas as well as the protection of groundwater will be improved. Also; treated water can also be used for irrigation purposes.

In addition, another dimension of the wastewater problem is linked to high operating costs (mainly due to energy costs) which prevents municipalities from using their current waste treatment facilities. Investments in renewable energy are to help address this problem by reducing operating costs, hence enabling the use of waste facilities.

It is important to **collect wastes** in rural areas regularly and send them to landfill facilities in terms of protecting the environment and increasing the welfare of rural areas.

In Türkiye, only 67.2% of the waste collected by the municipalities is sent to regular storage facilities³². A contribution will be made to increase this ratio with the support to be given to the waste storage facilities to be established by the public administrations that collect the waste in the rural areas. In addition, by supporting waste recycling plants stored waste can be separated and recycled. By supporting the waste recycling facilities, it will be possible to separate the wastes according to their types such as organic (biodegradable), hazardous recyclable wastes (packaging, etc.), in the mechanical separation facilities and recycle them by making compost from biodegradable wastes. In addition, methane gas obtained from biodegradable wastes can be used in the production of electricity.

By supporting biogas facilities that can work in integration with waste storage facilities, waste will be evaluated and electrical energy will be produced that can be used by the public administration. In addition, the vehicles used for the collection of rural wastes will be included in the scope of support, which will contribute to the sustainability of this service.

In order to ensure conditions for sustainable development of rural areas, access to the performing **communication technologies** must be provided. This is a necessary condition for improving rural areas' livelihood, quality of life and for creating job opportunities. According to the OECD data for 2020, Türkiye ranks 103rd among 175 countries in the general ranking of internet speed and the rate of households accessing the internet via broadband (ADSL, cable internet, fiber, etc.) is 50.8%. These investments should be made by the public and this ratio must be substantially increased.

To contribute to the sustainable development of rural areas, it is very important to meet their energy needs particularly with **renewable energy**. Many villages in Türkiye experience the phenomenon of families' seasonal migration to cities and settlements

close to city centres (like Eastern Anatolia Region where winter conditions are rather difficult) as the villages do not have natural gas to ensure a proper winter heating conditions.

(Municipal Waste Statistics Report of TURKSTAT, 2018)

It is estimated that the rates of migration from rural to urbanized areas would decrease by at least 30% in case the villages' accommodations are equipped with heating opportunity, which could be provided via renewable energy.

The use of renewable energy sources is equally important in case of rural areas' public buildings and infrastructure as it would help improve their sustainability and decrease the budget allocated to energy use and which could be used for other priorities linked to increasing the rural areas' attractiveness. Türkiye has much potential for generating heat from renewable energy sources such as geothermal. In this context, supporting electricity generation with renewable energy investments to address heating and electricity needs of public building, street lightning etc. should be supported.

Examining rural development through its multiplier and accelerator effects, investments in rural infrastructure can be mentioned among the most urgent needs in order to ensure the growth of rural areas by creating conditions reducing migration to cities from rural areas, reducing the unemployment rate and improving the quality of life in Türkiye.

8.3.5.4. General Objectives

General objective of this measure is to support economic, social and territorial development, leading to a smart, sustainable and inclusive growth through the development of physical infrastructure in Türkiye and facilitate business and community development, growth and employment in rural areas.

In addition, it is to prevent migration to urban areas by improving living conditions in rural areas.

8.3.5.4.1. Specific Objectives

- To provide infrastructure by supporting village road and village road networks, water management and sewage management systems needed for the development of rural areas;
- To support information and communication systems improvement to enhance living standards for rural populations;
- To support renewable energy investments for reducing operating costs of public enterprises and providing heating and electricity sources to public enterprises and villages.

8.3.5.5. Linkage to other IPARD measures in the programme and national measures

Investments in Rural Public Infrastructure measure is linked to the measures "Investments in physical assets of agricultural holdings", "Investments in physical assets concerning processing and marketing of agricultural and fishery products" and "Farm diversification and business development". With the investments to be made within the scope of this measure, the living conditions of rural areas and their infrastructures will be improved. This should also lead to creating more favourable investment conditions.

The increase in infrastructure services in the investment areas of LAGs, which carry out their activities under the LEADER measure, will also encourage more activities and increase their quality and provide for complementarity between these two measures.

The scope of aid granted under this measure will not overlap with the scope of aid granted under the national support schemes such as SUKAP, started in 2011 to support the water, sewerage and infrastructure projects of municipalities and other IPA components for agriculture and rural development.

8.3.5.6.Recipients

Recipients under this measure are public administrative entities, for Türkiye this would mean:

- Village administrations
- County municipalities
- District municipalities
- Province municipalities
- Local Government Associations under the Law No. 5355 (Unions of Village Service Delivery, Unions for Solid Waste Management, Unions for Tourism Infrastructure Service etc.).
- City Administrations

8.3.5.7.Common eligibility criteria

- The project must concern infrastructure needed for the development of rural areas including community roads, local access to roads of particular importance for the local economic development, access to farm and forestland, energy supply, waste and water management, local access to information and communication technology points etc.
- Investments should be in rural areas without exception.
- All projects must be procured in accordance with the rules for external aid of the Commission contained in the Financial Regulation.
 - If the total eligible expenditure amount is less than EUR 300 000, recipients shall participate themselves in tender in accordance with the P.R.A.G. rules.
 - If the total eligible expenditure amount is equal to or more than EUR 300 000, public procurement shall be done on behalf of the recipient by a centralized competent public authority³³.
- The recipient must provide/ensure the maintenance of the project for at least five years after the final payment of the project. However, maintenance costs are not eligible for EU- co-financing.
- Each project must comply with the relevant national legal requirements and the relevant Union standards in force before final payment of the investment by IPARD Agency (physical closure).

³³ Central Finance and Contracts Unit (CFCU), Ministry of Treasury and Finance.

8.3.5.8. Specific eligibility criteria

Roads;

- roads linking community infrastructure to main roads, village bypasses, village roads, public access roads to farms, farmlands and forestry, etc. (On-farm roads are part of the assistance granted to farm holdings, therefore should not be eligible under this measure),

Water Management;

- village sewage plants, sewerage systems, water supply systems.

Waste Management;

- waste collection points and waste recycling plants, and where necessary dumping sites fulfilling all environmental requirements.

Information and Communication Systems;

- local access to information and communication technologies and the development of fast and ultra-fast broadband.

Energy Supply and Energy Efficiency:

- Energy supply to farms and villages and construction of renewable energy plants and installation to the extent that the projects are implemented by a public entity.
- If the investment aims to produce electricity from renewable energy sources, connection to the national grid is compulsory and the following requirements should be met:
 - The recipient shall submit a document / certificate given by authorised institution (electricity distribution companies, organised industrial zones, Turkish Electricity Transmission Company, etc.) confirming availability of connection to grid with the application package.
 - The recipient shall submit the acceptance certificate given by relevant authorities with the final payment claim package.
- Recipient shall request support for renewable energy investments for the public benefit, regardless of the consumption limit, for the lighting and heating needs of the public building and the public areas (village roads, parks, streets, squares, etc.) without generating net revenue. In this case, the "self-consumption" limit will not be sought.

8.3.5.9. Eligible expenditure

8.3.5.9.1. Eligible expenditure titles

For all kind of investment types;

- General costs linked to investment-related expenditure such as architects', engineers' and other consultation fees (including preparation of the procurement works), feasibility studies, shall be eligible up to a ceiling of 10% of the investment costs. Specific lower ceilings on individual items can be established according to the type of the investment,
- ICT equipment including software, if it is an integrated part of the project,
- EU-co-financing shall not cover normal maintenance interventions.

- Visibility costs.

Specific for each type:

Roads, including:

- Construction/re-construction/modernization of existing municipal roads and bridges (e.g., roads linking settlements to main roads, between settlements connections, public access roads to businesses, farms, tourism facilities, buildings or outdoor areas of local cultural, traditional or natural importance, agriculture land, forests, etc.);
- Construction of agricultural road (only access to farm and forestland) network.

Water management, including:

- Construction/re-construction/modernization of the water supply system, installations and related facilities (e.g., purification, filtration, etc.);
- Construction/re-construction/modernization of the sewage system, installations and related facilities (e.g., treatment of waste water discharge, etc.);
- Purchase of new machinery and equipment if it is an integrated part of the water management project;
- IT hardware / software, including data recording and monitoring systems if it is an integrated part of the project.

Waste management, including:

- Construction/re-construction/modernization of infrastructure for waste management (e.g., waste recycling plants, waste collection points, where necessary dumping sites fulfilling environmental requirements etc.);
- Construction/re-construction/modernization of biogas plants;
- Purchase and installation of biogas plant machinery and equipment, waste collection machinery and equipment (e.g., containers, transport trailers and vehicles) and machinery and equipment used for dumping sites and/or waste collection points;
- IT hardware / software, including data recording and monitoring systems if it is an integrated part of the project.

Information and Communication Systems, including:

- Construction or modernization of telephone, cablecast and internet infrastructure (min 30 Mbps capacity) services,
- Purchase of machinery and equipment for information and communication systems if it is an integrated part of the project

Energy supply and energy efficiency, including:

- Construction or modernization and equipping of renewable energy plants and public distribution installations (bio-fuels, energy, heat) from renewables for wastewater treatment plants;
- Construction or modernization of renewable energy installations for supplying electricity to public buildings and/or buildings which are used for provision of community services (as well as education and health); and for supplying electricity to lighten streets in rural areas;
- Construction or modernization of renewable energy plants for heating of public buildings and/or villages and individual residence in rural areas;

- Investments for improvement of energy efficiency in municipal and other buildings used for provision of community services (as well as education and health);
- Purchase of new machinery and equipment if it is an integrated part of the project;
- IT hardware / software, including data recording and monitoring systems if it is an integrated part of the project.

8.3.5.9.2. Demarcation of assistance

Investment subjects supported under this measure should have distinctive elements from other EU-funded programmes in which the same investment subjects are financed.

As a demarcation criterion, it is determined that the total maximum eligible expenditure limit of the investment should be EUR 1 500 000 and the investment should be made exclusively in rural areas. Investments above this amount can be supported from other EU-Funded programmes such as IPA II Sector Operational Programme, Environment and Climate Action.

8.3.5.9.3. Selection criteria

Selection criteria and scoring is given in Table 69.

Table 69. Selection criteria and scoring table

No	Selection Criteria	Scoring Points
1	If the applicant has not signed a contract under IPARD programme at all	25
2	If the applicant is a village administration or county municipality or district municipality with a population of less than 10 000 habitants.	15
3	If the investment is in mountainous areas	15
4	If the investment concerns, water and/or sewerage management or waste recycling facilities	25
5	If the eligible expenditure amount is less than 1 000 000 EUR	20

8.3.5.10. Aid intensity and EU-contribution rate

Maximum amount of public aid is 100% of total eligible expenditure for investments not of a nature to generate substantial net revenue; and 50% for other investments in rural infrastructure.

Eligible expenditure amount per investment is limited between EUR 15 000 and EUR 1 500 000.

EU contribution rate is 75% of the public aid.

8.3.5.11. Indicative budget

Table 70. Indicative annual allocations of the public and EU-funds

Year	Total Eligible Cost	Public Expenditure					
		Total		EU Contribution		National Contribution	
	EUR	EUR	%100	EUR	%50	EUR	%50
2021*	16 000 000	16 000 000	100	8 000 000	50	8 000 000	50
2022*	16 000 000	16 000 000	100	8 000 000	50	8 000 000	50
2023*	9 600 000	9 600 000	100	4 800 000	50	4 800 000	50
2024*	28 600 000	28 600 000	100	14 300 000	50	14 300 000	50
2025	28 600 000	28 600 000	100	14 300 000	50	14 300 000	50
2026	28 600 000	28 600 000	100	14 300 000	50	14 300 000	50
2027	28 600 000	28 600 000	100	14 300 000	50	14 300 000	50
Total	156 000 000	156 000 000	100	78 000 000	50	78 000 000	50

*The term “indicative” is not valid for the years 2021, 2022, 2023 and 2024

8.3.5.12. Indicators and targets to be included in the programme

Table 71. Indicators and targets to be included in the programme

Indicator	Target
Number of supported local infrastructures	240
Number of IPARD recipients with support in investments related to care for the environment or climate change	120
Number of IPARD recipients with support in investments in waste treatment or management	90
Number of IPARD recipients with support in investments in renewable energy production	120
Number of new jobs created	1 875
Total investment in rural diversification, business development and infrastructure (EUR)	300 000 000

8.3.5.13. Administrative Procedure

Applicant shall submit application package to ARDSI. ARDSI shall check completeness and correctness of application package. If these checks are positive, ARDSI shall select the applicants according to selection criteria and allocated budget

and a memorandum of understanding (MoU) shall be signed between ARDSI and selected applicants.

All projects must be procured in accordance with the rules for external aid of the Commission contained in the Financial Regulation.

- If the total eligible expenditure amount is less than EUR 300 000, recipients shall participate themselves in tender in accordance with the P.R.A.G. rules.
- If the total eligible expenditure amount is equal to or more than EUR 300 000, public procurement shall be done on behalf of the recipient by a centralized competent public authority.

ARDSI may participate in tender evaluation process as an observer.

Applicant shall submit all tender dossiers and evaluation documents and list of eligible expenditures to ARDSI. ARDSI shall perform administrative and on the spot controls. If these checks are positive, list of eligible expenditures is approved and decision on allocation of funds is made by ARDSI. IPARD contract shall be signed between ARDSI and applicant.

PRAG Contract is signed between recipient and contractor. Project shall be realized by contractor. During realization of project all payments shall be done by the recipient.

After implementation of project, recipient shall submit payment claim package to ARDSI. ARDSI shall perform administrative and on the spot control checks, if these checks are positive, ARDSI shall make payment to the recipient.

8.3.5.14. Geographic scope of the measure

This measure is applicable in all provinces covered by the IPARD programme for investments in rural areas, as defined in the programme.

8.3.6. FARM DIVERSIFICATION AND BUSINESS DEVELOPMENT – M7

8.3.6.1. *Title of the Measure*

Farm diversification and business development – M7.

8.3.6.2. *Legal Basis*

8.3.6.3. *Rationale*

Rural areas have a multidimensional structure including demographic and sociological differences. In these areas where the environment is natural, the population is low and the dominant economic activity is agriculture, diversification of income-generating economic activities and the participation of women and young people in the labour force have a great importance. In Türkiye rural areas are also affected by a high rural-urban migration rate. For these reason, various policies are used to strengthen the rural economy and to make life in rural areas more attractive.

Within the framework of policies and legal regulations in line with sustainable development principles, it is aimed to obtain appropriate inputs from the resources available in the rural areas such as the nature, labour, capital and entrepreneurship (including knowledge, science, technology), and to achieve growth with a cyclical approach in production, sharing, distribution, consumption, and recycling in accordance with the principles of circular economy.

In Türkiye, approximately 20% of the population lives in rural areas. In order to increase the income of households living in rural areas, it is necessary to turn to alternative agricultural or even non-agricultural activities. While encouraging rural dwellers to undertake such alternatives to farming, it is necessary to pay maximum attention to issues such as environment, climate, cultural landmarks and protection of human health to avoid possible undesirable effects of diversification.

The progressing immigration from rural to urban centres causes the separation of qualified labour force from agriculture. This leads to setting the following priorities concerning human resources in rural areas;

- Increasing the employment of young people and especially women in cooperatives and associations to improve their role in rganising and managing rural areas,
- Training people living in rural areas and increasing their ability to use technology,
- Making infrastructure investments intended for increasing socioeconomic development in rural areas,
- Creating jobs that provide added value by creating new labour demand in rural areas through activities such as eco-tourism and handicrafts,
- Building structures equipped with renewable energy in villages, in the form of multipurpose village mansions that meet the need for social infrastructure and helps initiating social capital and social entrepreneurship to disseminate rural social and economic development.

The EU Green Deal identifies climate change and environmental degradation as threats, and it is aimed at addressing these threats by transforming the EU into resource-efficient and competitive economy which decouples economic growth from resource use. Furthermore, the process of transformation should be fair and inclusive for everyone

and allow transforming climate and environmental challenges into opportunities. Making investments related to circular economy as well as sustainable and renewable energy production aiming the environmental protection and building resilience to climate change is crucial but cost-increasing for many enterprises. Hence, supporting enterprises on this issue becomes a necessity.

In this measure, unlike the M1 and M3 measures in the programme, micro and small-scale enterprises were determined as the target group.

The main interventions needed to diversify rural economic activities are summarized below.

Diversification of plant production, their processing and marketing will allow farmers to focus more on high value-added jobs and create new employment opportunities, especially among women and youth, due to its labour-intensive nature. Farmers who want to produce an alternative product/work and enter in additional business lines can do this in addition to their daily agricultural activities and generate additional income.

As the diversification of plant production very much depends on the quality and productivity of the soil, farmers should be supported for the production of organic fertilizers (compost from alternative sources), which have an enriching and yield increasing effect on agricultural land.

Türkiye has very suitable conditions for medicinal and aromatic plant cultivation due to its geographical location, climate, agricultural potential and wide surface area. Especially in response to the demands of consumers and manufacturers, it is very important for the development of the sector to determine and improve the quality of varieties in accordance with the ecological conditions of Türkiye, to collect them without harming the nature, to develop post-harvest processing technologies, to improve production and market opportunities.

The most important factors limiting the trade in medicinal and aromatic plants are the lack of production or its continuity and the inability to produce high quality products. Since the cultivation of medicinal and aromatic plants is carried out with intensive labour, their production is carried out by family businesses in small areas with insufficient capital structure and low capacity and technological level. Such a small scale of production leads to many problems such as a weak marketing, insufficient infrastructure, limited use of machinery, equipment and automatization in these enterprises, contamination due to pesticide use).

Supporting rural households engaged in **crafts and artisanal added** value products will help them improve their manufacturing capacity and marketing skills and capabilities and create motivation to continue their work and use of knowledge transferred from one generation to another. The support in renewing the equipment and machinery will allow those households to better address market's demand for higher quality products, improve their branding and find the growth opportunity.

The development of **rural tourism** through the establishment of accommodation, catering and recreation facilities and the improvement of the conditions and capacities of existing facilities will not only attract tourists interested in rural life and nature but above all it will lead to improving living conditions in rural areas, creating employment and contributing to the protection of natural assets. Activities such as horse riding, fishing, hunting, entertainment as recreation activities will also add a diversity to rural tourism.

The "Tourism Strategy of Türkiye- 2023" published by the Ministry of Culture and Tourism, emphasizes that alternative tourism will be developed to include rural tourism in all regions of Türkiye, and within this framework, accommodation capacity will be increased at newly developed destinations. Raising awareness about ecotourism, rural tourism and agrotourism, supporting the private sector to establish rural tourism facilities are among the main priorities.

Beekeeping sector, considered as a micro-finance enterprise, is one of the fields that use male-dominant labour: among members of the Turkish Central Association of Beekeepers (TAB) only 6.8% are women members. While beekeeping is an important source of employment and investment for producers, including women and youth, living in rural areas and who do not have sufficient land, it can also create employment opportunity for the labour force needed in the sector. The support for production capacities and marketing of those involved in beekeeping and marketing of apiculture products will allow to increase significantly the income level and create seasonal jobs. While the number of hives demonstrated a continuous increase in the 2010-2019, the average yield of honey per beehive decreased in the same period. While Türkiye is in good condition in terms of beekeepers and the number of beehives, it is well below the world average in bee fertilization.

Within the scope of **aquaculture**, it is necessary to support those who want to grow fresh or salt water products or to modernize their existing breeding facilities and to give priority to those who want to grow alternative aquaculture products.

Considering the effect of mechanization on productivity in agriculture, the availability of **agricultural machinery** through producer organizations will contribute to the development of local markets and to make farmers' production more efficient. In this context, by providing the machinery rental services, farmers (especially seasonal producers) who need agricultural machinery and equipment will not have to buy them at high prices but they will have a possibility to rent them from producer organisations' machinery parks providing the latter with additional income.

Türkiye is highly advantageous in terms of **renewable energy** potential due to its climate and geographical position (seas, seasonality of weather, mountainous structure, and sunshine condition). By encouraging renewable energy investments and consumption, 30% of the current energy needs are met by renewable energy. Although higher than the European average, the use of renewable energy sources is not yet at the desired level. The reason for this situation is the insufficient information on this issue, high investment costs and a lack of technical staff in the relevant regions. Considering the country's foreign dependence on primary energy, it is of great importance to use the existing renewable energy potential at the maximum level.

Renewable energy generation in rural areas will contribute to reducing the use of fossil fuels leading to high carbon emissions in accordance with EU Green Deal and to reducing costs due to improved energy efficiency. Waste recycling facilities needed in the rural areas will bring the tangible examples of introducing the principles of the circular economy and will contribute to the improvement of the environment.

8.3.6.4. General objectives

The general objective of this measure is:

- to develop existing and build new business activities and hence create new employment opportunities in rural areas, in order to increase the income and welfare level of the households thereby contributing to a better territorial balance of rural areas, both in economic and social terms.
- to strengthen the farmers' and rural households' position in the value chain with a particular focus on the position of women and youth in the rural economy. The measure should also assist young farmers who wish to diversify into new economic activities, while still keeping the farm production.
- to protect the nature and culture of rural areas and to respond to the climate change challenges through supporting clean energy and the awareness of protecting the environment and human health.
- to ensure the energy consumption of businesses and production for sale, including heating and lighting, from renewable energy within the scope of all farm activities.

8.3.6.4.1. Specific objectives

Specifically, this measure aims to create, diversify and develop rural economic activities through the modernization, expansion, reconstruction or re-establishment of investments in farm diversification and development of non-agricultural activities to be carried out in rural areas, and to enable farmers to market their products with short supply chains.

- Diversification and improvement of plant production, processing and packaging of plant products, including ornamental plants, fodder plants, medicinal and aromatic plants, mushroom, vermi-compost production, seedling and sapling, bulb, micelle, etc.
- Beekeeping and production, processing and packaging of bee products.
- Crafts and Artisanal Added Value Product enterprises investing in traditional handicrafts, processing and marketing of local agricultural (food – non-food) products.
- Rural Tourism and Recreational Activities including accommodation, catering and recreational facilities.
- Aquaculture: cultivation of water products, restaurants that serve products.
- Machinery Parks that will serve the demand of agricultural machines and equipment for the common needs of local agriculture sector.
- Renewable Energy Investments for generating of electricity, heat, light, gas etc. Eligible recipients can invest in renewable energy sources in order to produce energy for their energy needs independent from other farm diversification and business development activities under this Measure.

8.3.6.5.Linkage to other IPARD measures in the programme and national measures

This measure is complementary to "Investments in Physical Assets of Agricultural Enterprises - M1" and "Processing and Marketing of Agricultural and Fishery Products - M3" measures. It provides support for those who aim to diversify their activities in rural areas: farmers and investors performing animal and plant food processing, packaging and storage activities, and those who want to meet their energy needs with renewable energy. It is closely related to the M1 measure in terms of providing access to machinery and equipment, especially for farmers producing milk and meat as well as by providing products for higher value-added produces supported under M7.

This measure is also related with the Local Development Strategies developed by the Local Action Groups established in rural areas within the scope of the LEADER approach, in terms of strengthening economic development in rural areas and providing new labor opportunities.

The infrastructure developments to be made in rural areas in the context of the M6 measure will encourage farmers and other eligible recipients to invest in activities eligible under this measure. Regions where basic needs and conditions concerning availability of energy, waste management, lighting and heating are improved will be more suitable for investment.

“Advisory Services” has also a link to this measure considering the need to carry out training activities for occupational, and agri-based skills.

8.3.6.6.Recipients

According to definition of “Agriculture Law” numbered 5488, “Farmer” means “the natural and legal persons engaged in continuous or at least one production or cultivation period agricultural production as owner, tenant or partner.

Eligible recipients:

- Farms and / or their household members, diversifying on or off farm activities, may be eligible recipients regardless of whether they are located in urban or rural area.
- Producer organizations established in accordance with a legislation regarding investment. Producer organisations may be eligible recipients regardless of whether these are located in urban or rural areas.
- Natural persons in rural areas: Natural persons, running an economic activity, who are recipients under the measure has to be able to demonstrate that they live in a rural area.
- Private legal entities in rural areas: Private legal entities established or operating in rural areas shall include micro (an eligibility criterion only for crafts and artisanal added value product enterprises) and small-sized enterprises which have the potential for carrying out the project as well as any type of legal person established in rural areas. Legal entities established outside of rural areas can be also eligible if supported investments/activities are located in rural areas.

8.3.6.7. Common eligibility criteria

The applicant should;

- at the time of application, for existing enterprises, comply with the respective national standards defined in Annex III for a given diversification activity,
- comply with the respective national standards in case of newly established enterprises before the final payment,
- prove their occupational competence in the investment subject they apply for. In the absence of any legal legislation regarding its activity, the investment shall be deemed eligible. Occupational competence can be proved by;
 - o registration records showing that the activity related to investment has been carried out for at least 1 year,
 - o the relevant specialization certificate,
 - o the certificate showing that the trainings commonly given in the country are completed.
- have to operate within the capacity limits defined in specific eligibility criteria,
- if renewable energy investments are an integrated part of a project, the "self-consumption" limit will not be sought,
- if renewable energy investments are an integrated part of a project relevant explanations are as follows:
 - o The selling of electricity into the grid is allowed as far as the "self-consumption" limit is respected. This is justified by the fact that, as electricity cannot be stored, it must, unless wasted, be sold into the grid; the electricity grid can be conceived as a storage place for electricity where it is introduced and withdrawn during the year in the similar amount and at a different rhythm.
 - o The concept of "self-consumption" should be checked at the stage at which a project is submitted/assessed. The investment is considered eligible when the (theoretical) power capacity of the renewable energy plant ("the investment") does not exceed 120% of the 3 years-average (self-) consumption of the enterprise. In addition, if the (theoretical) power capacity of the renewable energy plant ("investment"), which is the basis for the support, is more than the limit in the national legislation determined by EMRA, the excess part will not be subject to support.
 - o In the case of new enterprises or in the case of enterprises which have substantially changed the size of their operations in the last three years, the expected consumption should be estimated by the IPARD agency. If the estimated power capacity of the renewable energy plant ("investment"), which is the basis for the support, is more than the limit in the national legislation determined by EMRA, the excess part will not be subject to support. The same concerns expected power consumption increases due to the new investments to be made as part of the same application by the potential

recipient³⁴. As a complement of an investment under support, renewable energy investment can be made in accordance with the Interconnection Agreement.

- (for farmers or members of the farm household) prove their status with an official document issued by an authorised representative of MoAF at the time of application.
- (for natural persons living in rural area) be registered to be residing in a rural area on the Address Based Population Registration System.
- location of the investments has to be in a rural area with the exception of;
 - o farmers as natural persons with no other economic activities or members of their households who are investing in diversification and improvement of plant production, processing and marketing of plant products; or beekeeping and production, processing and marketing of honey; or crafts and artisanal added value products; or aquaculture,
 - o natural persons living in rural areas who are willing to establish restaurants as an extension of their investment in aquaculture or who are willing to establish selling points (outlets) as an extension of their investments in crafts and artisanal added value products.

8.3.6.7.1. Type of Eligible Holdings

Only legal entities should be micro/small scale as defined in regulation “Definition of Small and Medium-Sized Enterprises, Regulation on Qualifications and Classification” enacted by KOSGEB (listed in Annex I) and its future amendments, at application stage.

8.3.6.7.2. Economic viability of the recipient

The economic viability of the recipient must be demonstrated by means of a business plan. The business plan includes a brief description of the business, its current assets and liabilities, human resources, a description of the investment proposed, its financing and projections on the future economic operation (incl. marketing).

The business plan should demonstrate the economic viability of the enterprise at the end of the realisation of the investment. The economic viability of the investment will be verified against the criteria listed in Annex IV of the Programme.

For a project to be eligible according to the business plan criteria, it must be financially sustainable. The business plans must be sustainable in terms of cash flow.

For smaller investments with an eligible expenditure amount of 180.000 EUR and below, a simplified form of a business plan can be accepted. The IPARD Agency shall prepare templates for such business plans to be made available to all potential final beneficiaries.

³⁴ In line with DG AGRI guidance of Ares (2018) 6385137-12/12/2018

8.3.6.7.3. *National standards / EU standards*

The investment shall be compliant with the relevant national standards no later than before the final payment for the investment. Where a collective investment is implemented by a legally established entity on behalf of their members, the national standards apply to the assets of the entity and not to the assets owned by each participant/member of this entity.

8.3.6.7.4. *Specific eligibility criteria*

Diversification and improvement of plant production, processing and marketing of plant products

- Investment must be located in rural areas except for investments undertaken by farmer (understood as natural persons who do not have economic activity other than agriculture) or a member of a farm household.
- The investment subjects to be supported within the scope of this measure are medicinal and aromatic plants, ornamental plants, forage plants (listed in Annex XI), mushroom, vermi-compost, seedlings and saplings, flower bulbs and mycelium.
- The size of the open area should be maximum 4 ha (except medicinal and aromatic plants, fodder plants, seedlings and saplings), and the greenhouse size and mushroom/micelle production area should be maximum 2 ha. For new establishments these criteria should be met by the time of a final payment claim.
- For processing and/or packaging of plants and vermi-compost production, the recipient must be recognised and hold the necessary production and registration certificates at the time of application. For new enterprises, this procedure has to be completed by the time of final payment claim.

Beekeeping and production, processing and packaging of bee products.

- Investment must be located in rural areas except for investments undertaken by farmer (understood as natural persons who do not have economic activity other than agriculture) or a member of a farm household.
- Beekeepers should be registered in the beekeeper's database.
- For honey and other bee products, the number of hives covered by the investment is limited to minimum 30 and maximum 500 per recipient to be achieved by the time of final payment claim.
- For processing and packaging of honey and other bee products and for production of hives, limitation on number of hives will not be taken into account.
- For processing and packaging of honey, recipient must be recognised and hold the necessary production and registration certificates according to Food Law No 5996 at the time of application. For new enterprises, this procedure has to be completed by the time of final payment claim.
- For queen bee production, recipient must hold a valid breeding licence by the time of final payment claim.

Crafts and Artisanal Added Value Products

- Investment must be located in rural areas.

- Legal entities shall be micro scale enterprises.
- If the applicant is a natural person living in a rural area, the investment shall be in a rural area while the promotion stands or sales points can be in either rural or non-rural areas of the province where the investment is located.
- Crafts and artisanal added value products to be supported are listed in Annex VIII.
- Primary production of agricultural products shall not be eligible.
- Final capacity of the investments in milk processing shall be maximum 8 tonnes/day at the end of the investment.
- Final capacity of the investments in meat processing shall be maximum 0.5 tonnes/day at the end of the investment.
- For production of and/or packaging of local food products, the recipient should hold the necessary production and registration certificates in accordance with the provisions of Food Law No. 5996 at the time of application. For new enterprises, this procedure has to be completed by the time of final payment claim.

Rural Tourism and Recreational Activities

- Investments under this activity have to be in a rural area regardless of the status of the recipient.
- Accommodation facilities should be certified as required by the Regulation on "Certification and Specifications of Accommodation Facilities" by the time of the final payment claim.
- Existing facilities shall submit "Business License" at the application stage and shall be certified in accordance with the provisions of the Regulation on "Certification and Qualifications of Tourism Facilities" until the final payment request.
- The capacity of the accommodation facilities at the time of final payment claim should be maximum 40 places / persons³⁵ or 20 rooms,
- For catering facilities, the applicant must be recognised and hold the necessary production and registration certificates according to Food Law No 5996 at the time of application. For new enterprises, this procedure has to be completed by the time of final payment claim.
- Eligible activities in facilities that include recreational activities are horse riding, trekking, cycling, mountaineering, picnic areas, fishing, entertainment activities for children, sports and cultural activities.

Aquaculture

- Investment must be located in rural areas except for investments undertaken by farmer (understood as natural persons who do not have economic activity other than agriculture) or a member of a farm household.
- If the applicant is a natural person living in a rural area, the investment shall be in a rural area while the restaurant or the sales point could be in a non-rural area located in the same province.

³⁵ The maximum number of tourists that can accommodate in the facility at the same time.

- If the investment includes restaurant or a sales point, the applicant shall be an aquaculture farmer as defined by Law on Fishery Products 1380. For new

enterprises, this procedure has to be completed by the time of final payment claim.

- The capacity of the investment in freshwater should be between 10 and 200 tonnes / year by the time of final payment claim. The capacity of the investment in saltwater should be between 150-500 tonnes/year.
- The aquaculture holding should be certified as defined by Law on Fishery Products 1380 at the time of application. For new enterprises, this procedure has to be completed by the time of final payment claim.
- In case of new investments, certification should be completed at the end of the investment.
- Species to be supported in freshwater are: Trout, Carp, Mussel, Snail, Wels, Crayfish, Frog, Algae, Pike-perch, Perch, Pike, Tilapia, Sturgeon, African Catfish (*Clarias Lazera*), blue crab (*callinectes sapidus*), American Catfish (*Ictalurus Sp.*).
- Species to be supported in saltwater are: Turkish Salmon, Sea Trout, Oyster, Shrimp, Seabream, Seabass, Mussel, White Grouper, Maigre/Meagre (*sciaena aquila*).

Machinery Parks

- Investments under this activity have to be in a rural area regardless of the status of the recipient.
- Facilities where agricultural machinery can be supplied to the use of farmers in need and where farmers' existing agricultural machinery is repaired and maintained are eligible.
- The applicant should be a producer organisation.

Renewable Energy Plants

- Investments under this activity have to be in a rural area regardless of the status of the recipient.
- Eligible renewable energy activities are; photovoltaic solar power system, concentrated solar power system, wind power system, geothermal, bio-mass, micro-cogeneration, for generation of electricity and/or heat.
 - Renewable energy investment with a capacity up to 5 MW (for photovoltaic solar power system and concentrated solar power system investments up to 300 kWe) (for micro- cogeneration investments up to 100 kWe) shall be supported.
- If the investment aims to produce electricity from renewable energy sources, connection to the national grid is compulsory and the following requirements should be met:
 - The applicant shall submit a document / certificate given by authorised institution (electricity distribution companies, organised industrial zones, Turkish Electricity Transmission Company, etc.) confirming availability of connection to grid with the application package.
 - Sale of electricity to the grid is eligible as long as the "self-consumption" limit is complied with. The theoretical power capacity of the renewable energy plant should not be higher than 120% of the self-consumption, which is the average of the 3-year use of the investment. In case of a new establishment, this ratio will be estimated by ARDSI.
 - The abovementioned limits should also comply with the constraints on installed power capacity limited by EMR³⁶.

8.3.6.8. Eligible expenditure

Assistance under this measure concerns only support for physical investments.

8.3.6.8.1. Eligible expenditures common to all sectors:

“On farm” investments (those not eligible under measure 1 “Investments in physical assets of agricultural holdings” and measure 3 “Processing and Marketing”):

- Purchase of new machinery and equipment as defined for each sector including computer software up to the market value of the asset.
- Purchase of machinery/ equipment and construction works for energy production using biomass, wind, solar and geothermal.
- Services for the establishment and management of a commercial web site for beneficiaries to participate in the value chain³⁷.
- Purchasing of machinery/equipment and construction works for renewable energy production and expenditures for electricity grid connections including transformers, energy transmission lines, circuit breakers etc.
 - In the case of investment in a sector renewable energy, the investment is considered eligible when the (theoretical) power capacity of the renewable energy plant ("the investment") exceeds the 3 years-average (self-) consumption of the farm.
 - In case where the renewable energy investment is an integrated, part of a project (for example solar panels in rural tourism or other sectors as indicated in IPARD III programme) the "self-consumption" limit does not play a role and does not need to be checked.
- Investments for environmental protection, equipment and facilities for reprocessing of intermediate products and treatable waste; treatment and elimination of waste.
- ICT equipment including software, if it is an integrated part of the project.
- Purchase of necessary IT equipment and software, if it is an integrated part of the project.

³⁷ Shall be eligible as long as the service period covers the financial closure.

- General costs linked to investment-related expenditure such as architects', engineers' and other consultation fees, feasibility studies, shall be eligible up to a ceiling of 10% of the investment costs. Specific lower ceilings on specific items, including machineries, equipment should be established namely for business plans.
- Visibility costs.

- Investments related to care for the environment or climate change.
- Circular economy-type investments.

8.3.6.8.2 *Eligible expenditures specific to sectors;*

Diversification and improvement of plant production, processing and marketing of plant products

- Construction or modernisation of storage buildings, machine sheds.
- Purchase of horticultural and farming equipment for the cultivation.
- Purchase of crop production equipment, machinery (harvester, fertilising machinery, ploughs, and the like), post-harvest supplies (precooling equipment, crates, bins, etc.).
- Purchase of vermi-compost production equipment (storage tank, fertilizer basins, sieving and packaging, humidification system, aspirator, heat treatment furnace, continuous flow systems).
- Construction, modernisation or extension of facilities and purchase of equipment for production, storage/conditioning, drying, processing and marketing of plants.
- Construction and/or reconstruction of greenhouses (exclusively installations of glass, rigid long lifespan plastic or any other material excluding short lifespan plastic) and/or mushroom/micelle production units and/or purchase of necessary machinery and equipment.

Beekeeping and production processing and marketing of bee products

- Construction of sheds and outhouses, either for storage or processing of honey and bee products.
- Purchase of working equipment for production, management and maintenance of hives.
- Purchase of processing and packaging lines or modernisation of existing ones for on-farm honey processing and packaging.
- Setting up and equipping breeding stations for production of queen bees by licenced breeders.

Crafts and Artisanal Added Value Products

- Construction and/or modernisation, establishment, extension and reconstruction of operational buildings and production facilities.
- Purchase of equipment specific for the production and packaging of the local food and agricultural products as well as handicraft activities.
- Physical investments in packaging facilities, equipment.
- Promotion and marketing related investments for artisanal added value products or handicrafts, including establishment of stores and stands, located in the same province.

Rural Tourism and Recreational Activities

- Establishment or refurbishing of pensions or micro/small-scale accommodation facilities, renovation of rooms for bed and breakfast (B&B) in existing houses, or construction of premises and facilities for accommodation in farms and in outdoor areas (i.e., camping sites, sports and recreation bases).
- Creation of catering facilities or on-farm produce promotional stands.
- Productive infrastructure investments directly linked to the organisation of recreational activities like horse-riding, sport or recreation fishing on waters exclusively, mountain biking, rafting, eco-paths etc.
- Eligible equipment:
 - Lighting and appliances, air conditioning equipment, filtering and purifying equipment, telecommunications, furniture, sanitary installations, audio-video equipment for entertainment.
 - Kitchen equipment for catering facilities.

Aquaculture

- Construction and purchasing of equipment for hatchery.
- Purchase of equipment and machinery for increasing the efficiency of farm activities, waste water treatment systems, fish selection, closed circuit systems particularly for hatcheries.
- Purchase of equipment subject to establishing aquaculture restaurants.
- Improvement of ponds and reservoirs.
- Equipment for improving the efficiency of the production process, optimisation of feeding, fish feeder or feeding automation equipment, equipment for water re-circulation systems.
- Construction and purchasing of equipment for egg and fry production.
- Equipment for improving the quality and hygiene conditions of the production and harvesting.
- Equipment for diminishing the environmental impact of the aquaculture holdings, in accordance with EU standards in this field: waste management systems, equipment for purification of waters released from ponds and reservoirs and for monitoring the characteristics of the water quality parameters.
- Installation of small cold stores for storing of product post harvesting.
- Modernisation, construction and extension of aquaculture holdings and aquaculture restaurants and selling points that are placed in the same province with the aquaculture holding.

Machinery Parks

- Construction, renovation or expansion of buildings for storage of machinery and equipment.
- Purchase of agricultural machinery, tools and equipment including self-propelled vehicles.
- Construction of maintenance stations for the maintenance of agricultural machinery-equipment and of self-propelled vehicles.
- Purchase of machinery and equipment for the maintenance of agricultural machinery-equipment and of self-propelled vehicles.

Renewable Energy Plants (Investment in renewable energy –except hydro- production to generate income independent from farm diversification and business development activities)

- The construction/modernisation/extension of renewable energy plants.
- Fixed machinery and equipment of renewable energy plants.
- IT hardware and software for operating renewable energy installations.

8.3.6.9. Selection criteria

Table 72. Selection criteria and scoring table

No	Selection Criteria	Scoring Points
1	Investments including renewable energy production and technologies	10
2	Investments in mountainous areas or forestry villages	15
3	Women as an applicant	15
4	Young farmer as an applicant	15
5	Producer organization as an applicant	15
6	Projects implemented under a local rural development strategy	10
7	If the applicant has not signed a contract under IPARD Programme before	20

8.3.6.10. Aid intensity and EU contribution rate

The amount of public aid is up to 60% of the total eligible cost. It can be increased up to 70% for:

- investments made by young farmers or
- investments made by certified organic farmers³⁸ or,

An additional 10% can be given for:

- investments related to effluent and waste management, renewable energy and circular economy-type investments (efficient reuse of waste materials).

For the above types of investments, maximum aid intensity cannot exceed 75%.

EU co-financing rate is 75 % of the public aid.

The minimum and maximum limits of total value of eligible investments per project are EUR 5 000 and EUR 500 000.

A maximum of four eligible investments per recipient are allowed within the timeframe of IPARD 2021-2027.

The recipient can only submit a new application for IPARD support, when the previous investment has been finalised (physical closure). The maximum total value of eligible investments per recipient is limited to EUR 500 000 for this measure within the timeframe of IPARD 2021-2027.

8.3.6.11. Indicative budget

Table 73. Indicative budget

Years	Total Eligible Investment	Total		Public Expenditures				Private Contribution	
				EU Contribution		National Budget			
	EUR	EUR	%60	EUR	%50	EUR	%50	EUR	%40
2021*	42 666 667	25 600 000	60	12 800 000	50	12 800 000	50	17 066 667	40
2022*	42 666 667	25 600 000	60	12 800 000	50	12 800 000	50	17 066 667	40
2023*	25 600 000	15 360 000	60	7 680 000	50	7 680 000	50	10 240 000	40
2024*	49 766 667	29 860 000	60	14 930 000	50	14 930 000	50	19 906 667	40
2025	49 766 667	29 860 000	60	14 930 000	50	14 930 000	50	19 906 667	40
2026	49 766 667	29 860 000	60	14 930 000	50	14 930 000	50	19 906 667	40
2027	49 766 667	29 860 000	60	14 930 000	50	14 930 000	50	19 906 667	40
Total	310 000 000	186 000 000	60	93 000 000	50	93 000 000	50	124 000 000	40

*The term “indicative” is not valid for the years 2021, 2022, 2023 and 2024

³⁸ If only recipients submit their organic farming certificates at the application stage.

*15% of annual budget of Measure M7 is allocated to open area plant production sub-sector and cannot exceed this amount.

8.3.6.12.Indicators and targets to be used in the programme

Table 74. Indicators and targets to be used in the programme

Indicator	Target
Number of recipients of IPARD investment support in rural diversification and business development	2 475
Number of farms on agri-food processing enterprises supported by IPARD in modernisation	1 800
Total investments on farms and agri-food sector in modernisation (EUR)	150 000 000
Total investment in rural diversification, business development and infrastructure (EUR)	262 500 000
Number of new jobs created	7 500
Number of young farmers receiving IPARD support for investment	6 000
Number of supported producer groups/organisations	180
Number of IPARD recipients with support in investments in renewable energy production	630
Number of projects with circular economy-type investments	150
Number of organic farms with IPARD support to investments	75
Number of IPARD recipients with support in investments in waste treatment or management	75
Number of farmers participating in supported Producer Groups, Producer Organisations, local markets, short supply chain circuits and quality schemes	180
Number of collective investments	75
Number of IPARD recipients with support in investments related to care for the environment or climate change	675

8.3.6.13.Administrative procedure

The administrative procedure for the implementation of this measure will include the following phases:

- Administrative checks,
- Business plan assessment

- Scoring on the basis of the “Ranking Criteria for Project Selection” as stated in the IPARD programme.

The administrative procedure will respect the requirements of the IPARD II regulatory framework and will be reflected in the respective manuals and procedures.

Contracts will be signed with selected applicants.

Recipients submit payment claim package upon completion of a project or part of it. The payments will be done according to results of the checks. The payments can be made in instalments upon the request of the recipient.

The request for payment in instalments shall be made according to the total eligible expenditure limits as below:

- Investments of which the total value of eligible expenditures is up to and including TL 500 000: 1 instalment
- Investments of which the total value of eligible expenditures is more than TL 500 000: 2 instalments
- If investment includes construction works and can be divided into instalments according to the amounts of eligible expenditures as mentioned above, expenditures regarding each individual building/structure must be requested in a single instalment.

8.3.6.14. Geographic scope of the measure

This measure is eligible for investments in rural areas, as defined in the programme. However, for the sole purpose of investments in short value chain,

- carried out by farmers and/or their household members or by producer organisations, and
- consisting in establishing facilities to sell their own products,

only such investments may be located in rural or urban areas.

8.3.7. TECHNICAL ASSISTANCE – M9

8.3.7.7. *Title of the Measure*

Technical assistance – M9.

8.3.7.8. *Legal basis*

8.3.7.9. *Rationale*

Technical assistance (TA) measure covers the provision of technical assistance and supports costs associated with the implementation of the IPARD programme. These actions will be addressed towards the preparation, management, monitoring and evaluation, communication and networking activities, and control and audit functions.

The actions regarding preparation or streamlining of implementation of measures in the programme,- to ensure their effectiveness, including those measures where application, is foreseen at a later stage,- are also included under the TA measure. Abovementioned actions will cover information and promotional campaigns, information dissemination services, printing, translation and distribution costs. Service procurements including all kinds of expertise support, trainings, meetings, seminars, workshops, openings, fairs, and study visits are covered.

8.3.7.10. *General objectives*

To contribute to build-up modern public administrations for agriculture and rural development in Türkiye, respecting good governance principles and improve community development and social capital in rural areas.

8.3.6.4.1 *Specific objectives*

The aim of this measure is to assist in particular in implementation and monitoring of the IPARD programme and its possible subsequent modifications. In support of this aim, the objectives include:

- providing support for modification, monitoring, reporting, evaluation and publication of the programme;
- providing support for preparing or streamlining of the implementation of programme's measures, including the measures application of which is foreseen at a later stage;
- ensuring an adequate flow of information and publicity on the IPARD programme;
- supporting studies, trainings, meetings, seminars, workshops, openings, fairs, and study visits to improve the capacity of IPARD administrations and of recipients;
- providing support for external expertise;
- providing support for the establishment of LEADER Local Action Groups (LAGs) and for the establishment and implementation of a national rural network;

- providing support for the improvement of the capacity of the national advisory services in so far as it prepares the implementation of M10 'Advisory Services' in IPARD III programme;
- improving the capacity of local entities (e.g., municipalities, regional entities) supporting the implementation of the IPARD programme;
- strengthening the national administrations managing the IPARD programme.

8.3.7.11. Linkage to other IPARD measures and national measures

The Technical Assistance measure will provide support to all eligible projects prepared for the technical assistance needs of all measures under the IPARD programme.

This measure has a particular link to the LEADER approach as the activities for acquisition of skills and animating inhabitants of rural territories are financed under this measure. Firstly, the activities are implemented to encourage the establishment of potential LAGs and set up infrastructure for preparing the Local Development Strategies (LDSs). For this purpose; training, seminars and workshops are organised to raise the awareness of local inhabitants on LEADER approach. After establishing potential LAGs, the expertise service is provided for the preparation of LDSs. Thus, potential LAGs will be ready to get support under the "Implementation of Local Development Strategies" measure.

Advisory Services measure which is a cross-cutting knowledge-related measure serving the purpose of improving the overall economic and environmental performance of the agricultural holdings and rural areas' businesses, is linked with TA Measure in two ways: the projects related to activities regarding the preparation of the measure and/or its implementation in a pilot region may be financed under TA Measure. Furthermore, activities related to the establishment of National Rural Network, which is another cross-cutting issue are also covered by technical support.

One activity financed under a TA project cannot be supported under another TA project to avoid overlapping and double funding between the supported activities.

8.3.7.12. Recipients

The recipient under this measure is the Managing Authority. Other IPARD III entities and related bodies (operating structure, management structure, advisory services, technical bodies, potential local action groups (LAG's) and national rural (development) networks) can benefit from the Technical Assistance activities via the Managing Authority.

8.3.7.13. Common eligibility criteria

Eligible expenditure is based on real costs, which are linked to the implementation of the co-financed operation and must relate to payments effected by the recipient, supported by receipted invoices or accounting documents of equivalent probative value³⁹. Simplified cost options can also be used as an alternative for real costs.

³⁹ 'accounting document of equivalent probative value' means any document submitted to prove that the book entry gives a true and fair view of the actual transaction in accordance with current accountancy law.

All projects must be procured in accordance with the rules for external aid of the Commission contained in the Financial Regulation. For this purpose, the application of PRAG could be adapted to the specificities of the beneficiary country. However, public procurement may be done on behalf of the recipient by a centralized independent competent public authority. The implementation of the Technical Assistance actions shall be compliant with public procurement.

Eligible expenditure shall be reported in the context of Annual Action Plan for Technical Assistance (APTA). The expenditure may also be based on flat rate amounts (such as per diem), in accordance with the terms and rates applied in the public sector of the beneficiary country concerned for similar actions where no EU co-financing is involved. All expenditure as regards experts and other participants will be limited to those travelling from EU Member States to Türkiye (IPARD beneficiary country) or vice versa or within Türkiye.

For this measure, actions financed or foreseen to be financed as part of twinning covenants or other projects supported under other IPA components will not be eligible.

Technical assistance to support the setting-up of management and control systems is eligible prior to the entrustment of budget implementation tasks for new measures, for expenditure incurred after 1 January 2021.

8.3.7.14. Specific eligibility criteria

N/A

8.3.7.15. Eligible expenditure

Under this measure, the following actions are eligible provided they are covered by the annual indicative technical assistance action plan:

- a) Expenditure on meetings of the monitoring committee, including the costs of all experts and other participants, where their presence is considered to be necessary to ensure the effective work of the committee.
- b) Other expenditure necessary to discharge the responsibilities of the monitoring committee which falls under the following categories:
 - expert assistance to consider and review programme baselines and indicators;
 - expert assistance or advise to the monitoring committee concerning implementation and functioning of the monitoring arrangements;
 - expenditure associated with meetings and ancillary tasks of working groups;
 - seminars.
- c) Expenditure on information and publicity campaigns, including costs of internet presence, printing and distribution.
- d) Cost of translation and interpretation of documents mentioned in the framework, sectoral and financing agreements and those requested by the Commission.

- e) Expenditure associated with trainings, visits and seminars for administration officials. Seminars supported shall require the submission of a timely written report to the monitoring committee.
- f) Expenditure associated with "acquisition of skills" to prepare potential LAGs for the implementation of the measure "Preparation and implementation of local rural development strategies - Leader approach".
- g) Expenditure associated with the preparation, reduction of the administrative burden for recipients or streamlining of implementation of measures in the programme to ensure their effectiveness, including those measures where entrustment/implementation is foreseen at a later stage.
- h) Expenditure for evaluations of the programme.
- i) Expenditure associated with the improving and operation of a national network for rural development. This can also cover expenditure associated with the establishment of a national rural development network in line with the EU rules for Member States as well as the expenditure linked to participation in the European Network for the Common Agricultural Policy (European CAP network).
- j) Expenditure associated with the purchase of IT equipment and software licenses (up to 5% of the TA budget) for the purpose of IPARD implementation.
- k) Expenditure associated with the implementation of a sustainable human resources policy in the IPARD III entities. Introduction of this expenditure can only be done after prior approval of the Commission and may be limited in time.
- l) Expenditure associated with capacity building of the national advisory services to perform tasks associated with implementation of IPARD.
- m) Expenditure associated with the establishment and operation of pilot projects in setting up cooperation in short value chains and value chains for quality products.

The eligible expenditure shall be further detailed in the 'list of eligible expenditure'.

Technical assistance should not be used for capacity building actions, which are not linked to the administration and implementation of the IPARD programme.

8.3.7.16. Selection criteria

N/A

8.3.7.17. Aid intensity and EU contribution rate

Aid intensity, expressed as the share of public support in the eligible expenditures amounts up to 100%, where the EU contribution rate is 85%.

8.3.7.18. Indicative Budget

Table 75. Indicative budget

Year	Total Eligible Cost	Public Expenditure					
		Total		EU Contribution		National Contribution	
	EUR	EUR	%100	EUR	%85	EUR	%15
2021*	1 176 471	1 176 471	100	1 000 000	85	176 471	15
2022*	1 176 471	1 176 471	100	1 000 000	85	176 471	15
2023*	705 882	705 882	100	600 000	85	105 882	15
2024*	2 176 471	2 176 471	100	1 850 000	85	326 471	15
2025	2 176 471	2 176 471	100	1 850 000	85	326 471	15
2026	2 176 471	2 176 471	100	1 850 000	85	326 471	15
2027	2 176 471	2 176 471	100	1 850 000	85	326 471	15
Total	11 764 706	11 764 706	100	10 000 000	85	1 764 706	15

*The term “indicative” is not valid for the years 2021, 2022, 2023 and 2024

8.3.7.19. Indicators and targets to be used in the programme

Table 76. Indicators and targets to be used in the programme

Indicator	Target
Number of promotion materials for general information of all interested parties (leaflets, brochures etc.)	350 000
Number of publicity campaigns	7
Number of expert assignments supported	20
Number of trainings, workshops, conferences, seminars	50
Number of meetings of the monitoring committee	14
Number of studies on elaboration and implementation of programme measures	10
Number of programme evaluation reports	4
Number of rural networking actions supported	26
Number of potential LAGs supported	80

8.3.7.20. Administrative procedure

The projects that are foreseen to be implemented the following year are submitted as an Action Plan of TA Measure for the approval by the Monitoring Committee.

According to the criteria included in the PRAG rules, the application form and other PRAG documents for the Terms of References (ToR) of the projects included in the approved Action Plan are prepared and submitted to ARDSI. After the controls made by ARDSI, a Support Contract is signed between MA and ARDSI. Afterwards, a Service Contract is signed with the candidate who meets the conditions as a result of the tender made according to the limits specified in the PRAG tender procedures.

Regular checks of tenderer are conducted by the MA in order to determine whether the project has been implemented in accordance with the contract requirements. After the finalization of the implementation, a payment request package containing all supporting and proving documents is prepared and a payment request is made to ARDSI.

The Managing Authority shall each year draw-up a provisional action plan for the operations envisaged under the Technical Assistance measure on which DG AGRI will be consulted. Afterwards the plan shall be submitted to the IPARD monitoring committee for agreement. DG AGRI shall be consulted on any amendment to the action plan.

Each action plan shall be the subject of a consultation with the Commission prior to submission to the IPARD monitoring committee. The outline of the action plan is as follows:

Type of expenditure	Action title and its short description incl. quantification (who will benefit, what actions, what subjects), quantification (number of activities, trainees, etc.)	Indicative budget	Indicative timetable for implementation
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All contracts should be granted after following the appropriate external aid public procurement procedures and should in that way respect the main Treaty principles, such as: transparency, proportionality, equal treatment, non-discrimination, and should ensure sound financial management (value for money).

On the spot verifications will be performed through supporting and substantiating documents, alternative means, such as, photography, video, etc. could also be used in addition to these documents. Since the recipient of the Technical Assistance Measure is the Managing Authority, the Payment Request Package will only contain the documents required for national contribution (invoices, receipts, service acceptance records, etc.). If deemed necessary, digital materials such as videos, photographs, audio recordings may also be included. In application and payment procedures, the Managing Authority and ARDSI shall fully implement the PRAG rules.

Where funding benefits an IPARD Agency, a segregation of duties in project approval will be ensured.

8.3.7.21. Geographical scope of the measure

N/A

8.3.7.22. Transitional arrangements

Technical assistance actions supported under the programming period 2021-2027 may concern preceding and subsequent programming periods. Therefore, the technical assistance allocated for the programming period 2021-2027 may be used to facilitate, e.g., the closure of the preceding programming periods, especially as regards the *ex-post* evaluations of 2014-2020 programmes or the preparation for the programming period post-2027.

9. NATIONAL RURAL DEVELOPMENT NETWORK

In the programming period 2014-2020, Türkiye established the National Rural Development Network in order to ensure sharing of information and coordination among the stakeholders regarding rural development policies and practices. The network was launched in 2017, at an introductory meeting held by the Managing Authority to cover the whole national territory, within the Ministry of Agriculture and Forestry, General Directorate of Agricultural Reform.

The “Common Agricultural Policy Network for the networking of various organizations, administrations, advisors, researchers, other innovation actors working in the field of Agriculture and Rural Development”, as provided for in the regulation on support for CAP Strategic Plan, will provide a structure for the concept of the IPARD III National rural development network.

The national CAP networks will be part of the European network for the CAP (European CAP network). Such network, which differs according to the administrative structure chosen by the EU member state or other relevant country / state, has the following purposes:

- Increase the involvement of stakeholders in the implementation of rural development,
- Improve the quality of implementation of rural development programme,
- Inform the broader public and potential recipients on rural development policy and funding opportunities,
- Support the monitoring and evaluation capacities of all stakeholders;
- Contribute to the dissemination of CAP Strategic Plans results;
- Continue efforts to ensure that innovation is developed and applied in agriculture, food production, forestry and rural areas.

National Rural Network (NRN) Membership Structure

NRN supports the effective implementation of rural development programs by facilitating information exchange, trust and cooperation between the stakeholders. Access to the network is open to all stakeholders interested in rural development issues. A list of NRN members will be available for access on the website of NRN.

NRN is composed of the organizations and administrations involved in rural development. Representatives of all relevant public institutions and organizations, chambers and professional organizations, private sector, cooperatives, local administrations, farmers, producers, entrepreneurs and local action groups take part in the national rural network.

National Rural Network Monitoring and Steering Committee

The national rural network monitoring and steering committee is an entity responsible for the decision-making process that establishes the general strategy of the national rural development network in Türkiye. It corresponds to a committee created by selecting, on the basis of Turkish NUTS level 2-Units for Territorial Statistics, a representation of NRN members.

National Rural Network Support Unit (NSU)

The support unit is responsible for facilitating the works of NRN and brings into action the activities and processes. The central NSU works in collaboration with the regional representatives. Responsibilities of the regional NSUs are similar to those of the central structure, ensuring representation of the network at local and county levels.

Activities of National Rural Network Support Unit

- Contribution to the development of agricultural policy,
- Preparation of rural development programme period,
- National rural development network meetings, regional meetings,
- Information development and training studies, thematic meetings,
- Collection and dissemination of good project samples,
- Facilitation of network and cooperation among LAGs,
- Participation in networks like fairs, festivals and local cultural activities,
- Communication, publicity and monitoring activities,
- Cooperation with European Rural Development Network; representation of Türkiye.

Funding of the National Rural Network Activities:

The network is funded by the technical assistance of rural development programme.

Activities undertaken:

Studies have been conducted with the participation of domestic and foreign experts since 2018 and they can be summarized as follows:

- By organizing workshops, structure of NRN have been discussed and thematic groups have been established.
- Thematic groups include short supply chain, medicinal and aromatic plants (MAP), LEADER approach, rural tourism, rural entrepreneurship and innovation, supporting of small farmers, definition of rural areas and development of IPARD Programme.
- Regional meetings have been held in Ankara, Balıkesir, Isparta, Manisa, Mardin, Muş, Samsun and Şanlıurfa, with a view to ensure publicity of NRN and participation in the network.
- Awareness-raising meetings have been held in Ankara Nallıhan, Samsun, Isparta and Mardin for women cooperatives.
- Local representatives of NRN have been elected. A total of 84 NRN representatives have been trained at the Provincial Coordination Units of Agriculture and Rural Development Support Institution (ARDSI) and Provincial Directorates of Agriculture and Forestry in 42 IPARD provinces.
- A widely attended online annual national rural development network meeting and UKAFEST have been organized.
- A road map has been created with Gulanta Project developed on the medicinal and aromatic plants sector. Within the framework of Gulanta, a distillation unit has been built for the Lavender Scented Village Women Cooperatives in Kuyucak and trainings have been delivered on subjects like trade, branding. Gulanta has been introduced during the World Day to Combat Desertification and Drought, Phytovision congresses and European rural network event.

- Information about the conducted activities has been shared by establishing a website (www.uka.org.tr).
- Practices in the EU member states have been taken into consideration, participation of experts from those countries has been enabled and study visits have been organized to observe certain practices on site.
- Network and cooperation among LAGs have been facilitated.
- Collection and dissemination of good project samples have been ensured.

Future activities:

- Thematic Group works,
- Annual Regional Rural Development Networking meetings,
- LEADER Networking activities,
- Developing the capacity of stakeholders on collective investments,
- Pilot projects for developing short value chains,
- Networking and innovation support activities among the agricultural consultants,
- Rewarding rural development initiatives and projects,
- International cooperation activities,
- Monitoring and steering committee meetings,
- Monitoring and evaluation activities.

10. INFORMATION ON COMPLEMENTARITY OF IPARD WITH THE MEASURES FINANCED BY OTHER (NATIONAL OR INTERNATIONAL) SOURCES

10.1. Demarcation criteria between IPARD and the supports provided under other IPA III Programming Framework Windows or within the same Window

Complementarity and avoidance of overlapping between the IPARD Programme and other rural development programmes / projects and the IPA components are first considered at the programming phase. To this end, measures are designed at the IPARD III Programme preparation phase, through organization of extensive meetings with stakeholders.

IPA Monitoring Committee analyzes the overall efficiency, quality, coherence and eligibility of all actions towards achieving the objectives foreseen in the country strategy document and Financing Agreements. Sectoral Monitoring Committees have been established by the institutions responsible for each sector or sub-sector, in order to address – in detail – the issues that will be discussed at the IPA Monitoring Committee at the level of each sector or sub-sector and to ensure that the provided fund is used efficiently and in compliance with its purpose. Sectoral Monitoring Committee for IPARD III will involve participation of authorities responsible for the issues related to IPARD and IPA.

When the IPA III issues and IPARD sectors are compared in terms of complementarity, there is a complementarity between the 1st Thematic Priority: Environment and Climate Change under the title of “Green Agenda and Sustainable Commitment” and the thematic priorities under the title of “Competitiveness and Inclusive Growth”.

Mechanisms that prevent double financing of the projects implemented under the IPARD Programme, by both IPA and projects supported by other sources of financing, and guarantee coordination among these programmes are created. By these means, financing of recipients’ same activities by multiple sources is avoided. ARDSI checks the databases to avoid double financing at the implementation phase.

A number of measures are taken by ARDSI in check lists and contract contents in order to prevent double financing:

- During the eligibility checks at PCUs, experts use Central Finance and Contracts Unit (CFCU) Grant Database, Support List of Ministry of Economy, Support Programme for Rural Development Investments of General Directorate of Agricultural Reform database to cross-check whether the applicant receives support under these support mechanisms for the same investment.
- The applicant shall sign a declaration stating that “the investment does not and will not receive any support within the framework of national and international funds and other IPA components” at the contracting stage.
- The contract includes the statement “Recipient may not use other European Union funds and other national and international funds to finance eligible expenditures supported under ARDSI Contract”.
- An additional clause within the contract indicates that “If and when, it is determined that the beneficiary benefits from any other financial mechanism for the eligible expenditures supported by ARDSI, as subject of the contract; this is

a reason for the termination of the contract”. In case of termination of the contract, payments made are recovered”.

- During pre-payment checks the above-mentioned data bases are checked again. The invoices issued are checked to see whether there is any phrase on that invoice stating it has been issued for any other grant. The invoice is stamped with the IPARD stamp.

10.2. Complementarity of IPARD with other financial instruments

Current regional development projects financed by multilateral assistance, as described in Section 5.3, are implemented in some provinces. In general, a few provinces are designated as implementation areas. These projects are intended for raising the living standards and income levels of women and young people, in particular, in rural areas and enhancing their integration into markets by enabling their access to domestic and foreign markets. Besides, they promote the self-sufficiency capacity by helping the decrease of regional disparities.

These projects improve the participation of rural people. Since cooperatives and associations are also among the target groups, the projects encourage rural organizations. In addition, they draw closer to the project culture by strengthening the coordination and cooperation between public and private sector, universities and non-governmental organizations. By contributing positively to sustainable development of rural areas and prevention of rural migration, these projects complement the practices supported in the framework of the IPARD Programme. There are mechanisms (see point 10.1 above) that guarantee prevention of double financing of projects supported by other sources of financing and IPARD projects, as well as coordination among these programmes.

Moreover, low-interest credits for various activities among which cattle/sheep breeding, pressurized irrigation systems, forage crop production, agricultural machinery also contribute to the improvement of the rural economy potential and the viability of rural establishments. The economically viable rural areas entities are also potential recipients of the IPARD Programme.

Although the Interreg IPA Programme’s geographical scope does not cover the IPARD Türkiye provinces, a lot of projects have been implemented successfully in Türkiye under this programme. This includes the Interreg-supported ENPI project MAREAS - Black Sea Joint Regional Research Centre for Mitigation and Adaptation to the Global Changes Impact. In addition, there are 25 provinces covered by the NEXT Programme in Türkiye, out of which seven (Kastamonu, Çankırı, Çorum, Amasya, Trabzon, Ordu and Giresun) are the provinces under the scope of IPARD. The cross-border cooperation projects can be taken as a model for the cooperation which may be established between LEADER Local Action Groups and the LAGs in other countries.

10.3. Complementarity of IPARD Measures with national policy and the Demarcation Criteria between them

The National Rural Development Strategy (2021-2023) (NRDS) forms the basis of the national rural development policies. The NRDS document was prepared in line with the rural development approach of the 11th Development Plan.

Strategic objectives of the NRDS are as follows:

1. Development of the Rural Economy and Increasing Employment Opportunities

The restructuring of agriculture and food sector towards production in accordance with market conditions, consumer expectations and environmental sustainability, necessitates a more balanced approach to the improvement of the sector's competitiveness on the one hand and the sustainable development of agriculture and rural areas on the other hand. The following needs are targeted: increasing productivity, including through modernization investments, product quality, increasing the level of professional knowledge and farmers' organization, strengthening agriculture-industry relations, creating and expanding the non-agricultural rural industry in rural areas, improving food security and the production of nutritious and healthy food, improving plant and animal health in agricultural production and reducing the informal economy.

2. Improvement of Rural Environment and Sustainable Use of Natural Resources

In view of protecting water and soil resources, holistic approaches that take into account physical, social, economic, and environmental priorities and features should be developed. This includes developing monitoring and evaluations capacities and better use of tools provided by science and technologies in view of improving soil analysis, determination of its properties, mapping, and creation of a database. Rural areas are home to strategically qualified natural resources and environmental services (water, food, energy and clean environment) that will become increasingly important. However, the effort to make the most of natural resources in the short term and to turn them only into economic value leads to the destruction of the natural environment and the rapid depletion of resources. Non-sustainable agricultural techniques in the use of water and soil resources lead to pollution, desertification, drought, erosion, forest fires, floods, landslides and biodiversity reduction.

To address these problems, this strategic objective is to promote environmentally friendly production methods aimed to prevent pollution from animal waste, increase the use of organic and organomineral fertilizers, encourage organic agriculture, improve efficiency in agricultural irrigation and use of agricultural land.

3. Social and Physical Infrastructure Development of Rural Settlements

In order to improve the quality of life in rural settlements and address the problem of depopulation, it is necessary to develop physical and social infrastructure that will strengthen the rural population's access to public services and the integration of the rural economy with urban markets. Measures created for the "rural settlements" strategic objective target improving villages' accessibility by ensuring a transportation network, ensuring access to drinking water and a proper waste management, providing access to information technologies and ensuring connectivity, and promoting the use of renewable energy sources. The necessary investments also comprise traditional architecture compatible with local culture and landscape of rural settlements and which is resistant to earthquakes and other natural disasters, as well social and cultural activities-related infrastructure.

4. Development of Human and Social Capital in a Rural Society and Alleviation of Poverty

Social policies for the rural population have key importance in improving Türkiye's main development indicators on an international scale. Improving the overall well-being of individuals in the rural area, strengthening access to education, health, social security and social assistance services are some of the goals to pursue. With the objective of fighting poverty and creating social inclusion in the rural area, more

structural measures covering disadvantaged groups should be applied and households below the poverty threshold and remote rural settlements should be considered a priority.

These objectives are to be achieved through uninterrupted provision of basic education and preventive health services, improving the professional qualifications and skills of the rural workforce, supporting projects aimed at improving the employment of women and young people in the countryside, improving the living and working conditions of seasonal mobile agricultural workers, including occupational safety and occupational health services.

5. Enhancement of Institutional Capacity for Local and Rural Development

The need for local and rural development capacity has two aspects. The first is to increase the level of institutionalization in local governments that provide services to rural populations, whereas the second is to improve the capacity of local development actors to prepare, implement and monitor rural development programmes. Accordingly, “local development”-related measures will ensure the institutionalization and local administration capacity needed to provide services to rural areas. They will also mobilize the rural development initiatives based on cooperation and partnership of the public and private sector and NGOs to strengthen local governance encouraging the local development initiatives and creating network platform to ensure information and experience-sharing on a national and international scale for local and rural development.

NRDS (2021-2023) and IPARD III Programme are prepared in harmony with each other. Measures of IPARD III Programme are in complementarity with the above-mentioned strategic objectives. Likewise, the agricultural supports given from the national budget enable the producers to continue their activities and complete the IPARD support as stated below.

A. Agricultural subsidies

Agricultural subsidies are applied in 81 provinces, by the Ministry of Agriculture and Forestry. These subsidies are described below in detail.

A.1. Area-based Agricultural Subsidies: Farmers must be registered at the Farmer Registration System (FBS) to receive such subsidies.

Deficiency Payments: According to Türkiye Agriculture Basins Production and Subsidies Model, deficiency payments are provided for the producers of products that are subject to the deficiency payment subsidy, on the basins specified under the Resolution for Agricultural Subsidies. The mentioned products include: Barley, Wheat, Rye, Oat, Triticale, Sweet Corn, Paddy, Cotton Unseed, Sunflower for Oil, Soy, Rapeseed (Canola), Safflower, Lentil, Chickpea, Dried Bean, Tea, Olive and Olive Oil.

Diesel-Fertilizer Subsidy: Diesel-Fertilizer Subsidies are given to farmers over different unit subsidy amounts based on products, depending on the area of agricultural land where the agricultural activities are carried out.

Organic - Organomineral Fertilizer Subsidy: A subsidy per decare is paid to the farmers who supply solid organic-organomineral products, solid organic soil grading products, coated fertilizers and organic fertilizers produced by fermentation over the Fertilizer Tracking System, in proportion to their presence of land registered on FBS.

Other than the above-described subsidies, Soil Analysis Subsidy, Small Family Business Subsidy, Hazelnut Area-Based Income Support, Organic Agriculture Support,

Good Agricultural Practices Support, Supporting Organic Beekeepers, Support for Fodder Crops and Supports under Compensatory Payments are also granted. In addition to these, rental subsidies for licensed warehouses, Farm Accountancy Data Network (FADN) supports and subsidies over the electricity consumption prices used for agricultural irrigation are also provided.

A.2. Animal Husbandry Subsidies

Direct payments are made to the members of breeder/producer organizations. The support scheme shows variations depending on the species bred.

Supports for Female Buffalo / Young Buffalo Breeding: Breeders, members of breeder/producer organizations having minimum one female buffalo or young buffalo can benefit from the supports per animal once a year. This support is complementary with the IPARD Programme in terms of improving the production levels of agricultural enterprises.

Supports for Calves: Calves registered in e-improvement and TÜRKVET database and fulfilling other conditions indicated in the notification can benefit from the support. The calves supported under regional development programmes cannot benefit from this support. This support is complementary with the IPARD Programme in terms of improving the production levels of agricultural enterprises.

Supports for rootstock sheep and goat breeding: Breeders that are members of Rootstock Sheep and Goat Breeders Associations can benefit from this support once a year per female sheep and goats aged 15 months and over as is shown in the records transferred by TÜRKVET, the recording and registration system of the Ministry, to the Sheep-Goat Information System (KKBS). This support is complementary with the IPARD Programme in terms of improving the production levels of agricultural enterprises.

Supports for Bumble Bees: Greenhouse producers receive direct support per colony in case they purchase bumble bee colony for pollination purposes. This support complements the greenhouse investments supported under the IPARD programme.

Supports for silkworm cultivation: Bursa Cocoon Agricultural Sales Cooperative Union (KozaBirlik), provides silkworm seed to silkworm producers, free of charge, and receives payment per seed box. Support per kilogram is also given to breeders selling fresh silkworm cocoon to KozaBirlik or to enterprises performing silk reeling with flator.

Support for Beef Cattles: The purpose is to reduce the production costs of carcass meat, incurred by small and medium-scale establishments engaged in stockbreeding and to ensure sustainability of production. When the breeders have their cattles (including water buffalos), which were registered at the Ministry's registration systems, born in the country and completed their stocking period, slaughtered at slaughterhouses in accordance with the relevant legislation, a subsidy payment of up to TL 250 is made per animal. As this subsidy is an income-generating action, it is complementary with the IPARD Programme.

Support for the employment of herd keeper: Support for the employment of a herd keeper is provided to enterprises having minimum 100 rootstock sheep or goat.

Supports for the animal disease compensation: In case of discovery of an animal disease, compensation payments are made to farmers for the obligatory slaughter or

annihilation of the animal. This support is complementary with the IPARD Programme in terms of protection of animal health.

Support for disease free farms: Breeders are paid TL 450/animal for all cattles, excluding the male animals over six years of age, other than breeding bulls, at establishments with a Health Certificate for Disease-Free Establishments (except for breeding centers). The payment unit amounts per disease-free cattle equals to full payment up to 500 animals and an amount corresponding to 50% for 501 animals and more. Moreover, an additional payment of TL 100 is made per animal, for all cattles that are eligible to receive subsidy for disease-free establishments with an Approved Dairy Farm Certificate. This support is complementary with the IPARD Programme in terms of supporting animals free from diseases.

Support for protection and improvement of animal genetic resources on location: Breeders or breeder unions (pure breeding, registered species) receive support per animal for sheep, goats, cattles and water buffalos and per colony for the Caucasian bees. This support helps farmers to raise high yield breeds, thus increasing productivity of the agricultural enterprises. Therefore, it is complementary with the IPARD.

Supports for aquaculture: For selected aquaculture products, direct payments are made to intensive aquaculture farming enterprises per kilogram of the fish sold. As an income support for the farmer, this support is complementary with the IPARD.

Support for the production of fodder crops: Direct payment is made to farmers producing perennial or annual fodder crops. Payments are made per hectare. This support is complementary with the objectives of IPARD Programme in terms of increasing the productivity of agricultural enterprises.

Support for Sheep-Goat Herd Book: Members of breeder unions, breeders of breeding sheep/goats registered at the sheep-goat herd book within the framework of the improvement programme, and breeders who purchase the breeding rams/billy goats raised and selected at those enterprises can benefit from this support once a year, on condition that their animals are registered at the Animal Information System (AIS) and Herd Book and Preliminary Herd Book Information System (SOYBİS). This support is complementary with the IPARD Programme in terms of enhancing the production levels of agricultural enterprises.

Support for Vaccine-Tag Implementations: The purpose of this support is efficient use of public resources, continuity of struggle against animal diseases uninterruptedly and promotion of freelance veterinarian physicians. Implementers are paid TL 1.5/animal for cattle and TL 1/animal for sheep/goats for the scheduled vaccinations and tagging implementations set by the Ministry.

Support for Waste: The purpose is to remedy the animal owners due to wastes that could be generated following the vaccinations in the fight against animal diseases as applied by the Ministry. With regard to the wastes generated following the vaccinations scheduled by the Ministry, animal owners are paid TL 1 000/animal for cattle wastes and TL 150/animal for sheep/goat wastes

A.3. Agricultural Insurance Support

Amounts of premium contributions to be provided by the State within the framework of the State-Funded Agricultural Insurances are determined by a Presidential Decree on an annual basis, depending on the products, risks, regions and enterprise scales. Producers with Agricultural Insurance are supported with state premium by 50% to

67%. This support complements the IPARD support by enabling producers to continue their activities.

A.4. Rural Finance and Credit

The Communiqué on the Implementation Principles of Low-Interest Investment and Business Loans for Agricultural Production by the main suppliers of agricultural credits, Ziraat Bank and Agricultural Credit Cooperatives, has been put into force upon Presidential Decree No.2015 and dated 02/01/2020. This support complements the IPARD support by enabling producers to continue their activities.

B. Rural Development Supports

Rural Development Investments Support Programme (RDISP) has been applied in 81 provinces since 2006. The purpose of applying the RDISP is to support projects that increase and diversify the producers' income, include new technologies and contribute to the development and dissemination of agriculture-based small and medium scale industry. In this context, in case of investment projects for agriculture-based economic activities carried out by natural and legal persons, women and young entrepreneurs in particular, 50% of the value of the supported project is provided as grant. (Grant is calculated as VAT excluded in all investments). The support thresholds for the projects are specified in the published Phase Communiqués.

The project limits subject to grant for investments are given in Table 77.

Table 77. RDISP lower and upper limits

Subject / Nature of Investment	New facilities (TL)	Existing facilities: Capacity Increase, Renewal of Technology and / or Modernizati on (TL)	Completion (TL)
Processing, Packaging and Storing of Plant Products	1 250 000 / 2 500 000	750 000 / 1 250 000	1 000 000 / 1 750 000
Processing, Packaging and Storing of Animal Products	1 250 000 / 2 500 000	750 000 / 1 250 000	1 000 000 / 1 750 000
Processing, Packaging and Storing of Aquaculture Products	1 250 000 / 2 500 000	750 000 / 1 250 000	1 000 000 / 1 750 000
Steel Silo (Storage of Agricultural Products)	1 250 000 / 2 500 000	-	-
Cold Storage	1 250 000 / 2 500 000	-	-
Greenhouses Utilizing Alternative Energy Sources	1 250 000 / 2 500 000	-	-

Fixed Investments for Agricultural Production	1 250 000 / 2 500 000	750 000 / 1 250 000	1 000 000 / 1 750 000
Renewable Energy Power Plants	-	750 000 / 1 250 000	1 000 000 / 1 750 000
Processing, Packaging and Storing of Animal-Based and Plant-Based Fertilizer	1 250 000 / 2 500 000	750 000 / 1 250 000	1 000 000 / 1 750 000
Rural Tourism Investments	500 000	-	-
Development of Farming Activities	-	500 000	-
Crafts and Added Value Products	-	500 000	-
Information System Investments	-	500 000	-

Source: GDAR

C. Regional Development Projects and Infrastructure Supports

Implementation areas of the Regional Development Projects (South-Eastern Anatolia Project (GAP), Eastern Anatolia Project (DAP), Eastern Black Sea Regional Development Projects (DOKAP), Konya Plain Project (KOP)) described in Section 5.1 include some of the IPARD provinces. The practices in these projects (e.g., support for irrigation infrastructure, land consolidation, on-farm development investments) are complementary with the IPARD Programme by contributing to the elimination of inequality among regions. Since the supports provided by the Regional Development Agencies also contribute to increasing the economic power of recipients, they positively complement the IPARD Programme objectives.

Within the framework of SUKAP (Water, Sewage and Infrastructure Projects), infrastructural supports, water, sewage and infrastructure projects of municipalities are supported. Investments for construction of village roads, drinking water supplies, wastewater collection and treatment systems are financed under KOYDES (Project for Supporting Infrastructure of Villages). As such these projects are also complementary with the IPARD Programme.

11. SUMMARY DESCRIPTION OF MANAGEMENT AND CONTROL STRUCTURE.

The IPARD management and control structure has been defined to fulfil the responsibilities described in Commission Implementing Regulation and Framework Agreement. Institutional structures are defined in Presidential Circular No.2019/20 on the Management of EU Pre-accession Funds and Participation in the European Union Programmes. This Circular will be updated for IPA III period and the Management Control Systems will be further clarified in line with the IPA III legal framework. The information about the IPA and IPARD structures within the framework of these documents are given below.

National IPA Coordinator (NIPAC): The secretariat services of the National IPA Coordinator shall be performed by the Ministry of Foreign Affairs, Directorate for European Union Affairs. According to the Commission Implementing Regulation No. Article ..., National IPA Coordinator shall;

- Carry out studies to determine the financing priorities for IPA III period,
- Manage negotiation processes regarding the contents of IPA III Financial Framework Partnership Agreement, Sectoral agreement and Financing agreement; sign such agreements,
- Convey to the European Commission, including the finalized Sectoral Operational programmes, sectoral planning documents and action instruments.

Institutions responsible for the management of annual/perennial programmes shall receive opinion from the National IPA Coordinator during the preparation of sectoral planning documents, operational programmes, action instruments and operational identification documents. The National IPA Coordinator shall ensure attendance at Monitoring Committee and steering committee meetings for the actions carried out under annual and perennial programmes, in order to facilitate coordination during the implementation process. In addition, the National IPA Coordinator shall conduct the programming, monitoring and evaluation operations of cross-border cooperation programmes and ensure coordination of the implementation process.

National Authorising Officer (NAO): The Deputy Minister of the Ministry of Treasury and Finance, to which the Directorate General of Foreign Economic Relations is affiliated, has been designated as the National Authorising Officer. The NAO shall be responsible for the financial management of the funds to be provided to Türkiye under IPA III and regular performance of transactions in accordance with the legislation. The secretariat services of the NAO shall be conducted by the Management Structure that is established within the Ministry of Treasury and Finance and that is composed of a National Fund and NAO support office.

According to the Commission Implementing Regulation No. Article ..., NAO shall be responsible in particular for the following tasks:

- The management of IPA III accounts and financial operations through the National Fund,
- The effective functioning of the internal control system for the implementation of IPA III funds in accordance with the procedures set forth in Annex B of IPA III Financial Framework Partnership Agreement,
- The monitoring of the system created within the framework of the Instrument for Pre-Accession Assistance.

Managing Authority: The Ministry of Agriculture and Forestry, General Directorate of Agricultural Reform, has been designated as the Managing Authority to prepare (draft), implement and amend, monitor and evaluate, report and promote a programme for the sub-sector of Rural Development Programme under the Agricultural and Rural Development policy area and to carry out the secretariat and coordination works of the Monitoring Committee. Duties of the Managing Authority shall be performed by the Department assigned within the General Directorate of Agricultural Reform according to the Commission Implementing Regulation No. Article ...,

Agriculture and Rural Development Support Institution (ARDSI): is responsible for making calls for application, selecting projects for which administrative and on-the-spot controls will be performed, concluding contracts, conducting administrative and on-the-spot pre-payment controls, carrying out the payment, accounting, monitoring and reporting actions. These duties performed by ARDSI according to the Commission Implementing Regulation No. Article ...,

Audit Authority: Ministry of Treasury and Finance, the Board of Treasury Controllers has been designated as the Audit Authority to supervise the functioning and efficiency of IPA management and control mechanisms. The Audit Authority shall receive no instructions from the people and institutions that are part of the management and control mechanism under IPA III Financial Framework Partnership Agreement and shall be functionally independent. According to the Commission Implementing Regulation No. Article ..., Audit Authority shall audit all the management and control systems, activities, transactions, accounts, obligations (other financial obligations like taxes, duties and charges, etc.) related to IPA, eligibility of expenditures and financial tables. Any natural and legal person and/or institution, including the public administrations that fall within this scope, must provide any information, document, record, report and information system requested by the Audit Authority with regard to the management and control systems and make the same available for audit.

Table 78. IPA III Management and Control Mechanism Institutions

Authority Type	Name of the authority	Head of the authority	Address	Telephone	E-mail
NIPAC	Ministry of Foreign Affairs, Directorate for European Union Affairs	Faruk KAYMAKÇI	Mustafa Kemal Mah. 2082 Cad. No:5 Çankaya / ANKARA.	+90 312 2181300	faruk.kaymakci@ab.gov.tr
National Authorizing Officer (NAO)	Ministry of Treasury and Finance, Directorate General of Foreign Economic Relations	Murat ZAMAN	İsmet İnönü Bulvarı No:36 Emek / ANKARA	+90 312 2047359	bymakam@hmb.gov.tr
Managing Authority	Ministry of Agriculture and Forestry, General Directorate of Agricultural Reform	Dr. Osman YILDIZ	Eskişehir Yolu 9. Km Lodumlu / ANKARA	+90 312 2588004	osman.yildiz@tarimorman.gov.tr
IPARD Agency	Ministry of Agriculture and Forestry, Agriculture and Rural Development Support Institution	Dr. Muhammed ADAK	Turan Güneş Bulvarı No:68 Çankaya/Ankara	+90 312 4091400	muhammed.adak@tkdk.gov.tr
Audit Authority	Ministry of Treasury and Finance, the Board of Treasury Controllers	Ahmet TUTAL	İsmet İnönü Bulvarı No:36 Emek / ANKARA	+90 312 2047091	ahmet.tutal@hmb.gov.tr

12. DESCRIPTION OF THE OPERATING STRUCTURE, INCLUDING MONITORING AND EVALUATION

12.1. Description of the operating structure (Managing Authority and IPARD Agency) and their main functions

The Operating Structure of the IPARD III Programme, which consists of the separate authorities operating in close cooperation, has been established in line with the requirements of the Article [10 (1)] of the FFPA:

- (a) the Managing Authority, being a public body acting at central level, to be in charge of preparing and implementing the actions, including selection of measures and their publicity, the coordination, evaluation, monitoring and reporting of the action concerned and managed by a senior official with exclusive responsibilities
- (b) the IPA Rural Development (IPARD) Agency with functions of a similar nature as a paying agency in the Member States being in charge of publicity, selection of projects as well as authorisation, control and accounting of commitments and payments and the execution of payments

The activities of MA are carried out by the “Department of Managing Authority for EU Structural Adjustment” in General Directorate of Agricultural Reform (GDAR) of Ministry of Agriculture and Forestry (MoAF). MA carries out the activities in line with the “Regulation on the Responsibilities, Procedures and Principles of the Managing Authority of the Rural Development Programme” published in the OJ numbered 29825 dated 08 September 2016.

The Agriculture and Rural Development Support Institution (ARDSI) carries out the activities as IPARD Agency in line with Section 35 of “Presidential Decree on Organization of Affiliated, Related, Associated Institutions and Organizations with Ministries and Other Institutions and Organizations (Degree No 4)” published in the OJ numbered 30479 dated 15.July 2018.

The relations between the Managing Authority and the IPARD Agency (ARDSI) are regulated through Memorandums of Understanding:

- “Memorandum of Understanding between Directorate General of Agricultural Reform (Managing Authority) and Agriculture and Rural Development Support Institution /ARDSI)” dated 22.12.2015,
- “Memorandum of Understanding between The National Authorising Officer and IPARD Operating Structure for IPARD II Programme” dated 05.04.2016, and
- “Memorandum of Understanding between Agriculture and Rural Development Support Institute and Directorate General of Agricultural Reform for the Implementation of Technical Assistance Measure Under IPARD Programme (2014-2020)” dated 04.06.2018.

In the event of a difference of views between the institutions, it is essential to resolve the problem between the ARDSI President and the Head of the Managing Authority. If there is a continuation of the difference of views between the institutions, the matter is resolved by the decision of the relevant Deputy Minister.

Managing Authority (MA)

In accordance with Annex A Clause 6a of the FFPA and Article 8 of the SA, the MA shall have the following duties and responsibilities:

- a) Preparing the programme and carrying out the studies related to the Programme modifications needed as a result of the implementation,
- b) Ensuring controllability and verifiability of the measures defined in the Programme in cooperation with ARDSI,
- c) Selecting measures under each call for applications under the Programme, their timing, the eligibility conditions and the financial allocation per measure, per call; the decision on the financial allocation per measure, per call will be made in agreement with ARDSI,
- d) Ensuring that the appropriate national legal basis for IPARD implementation is in place and updated as necessary,
- e) Assisting IPARD III monitoring committee in its activities, including by providing the documents necessary for monitoring the quality of the programme implementation, and assuming the coordinating roles,
- f) Observing the realization of the Programme implementations in accordance with the Programme criteria, and observing compatibility of the transactions within the Programme to the agreements made with the European Union, relevant EU and national legislations,
- g) Ensuring setting up, maintaining and updating of an information and reporting system for monitoring and evaluation of the implementation process of the Programme in an efficient way and for contributing to the annual and final implementation reports,
- h) Drawing up an evaluation plan and conducting studies for monitoring and evaluation of the programme implementation,
- i) Conducting studies for preparation of annual and final implementation reports in collaboration with ARDSI,
- j) Conducting communication and publicity activities for the programme included in the established visibility and communication plan,
- k) Drawing up an annual action plan for the activities under the technical assistance measure and implementing them,
- l) Implementing activities planned under implementation of Local Development Strategies / LEADER Approach.

The MA is also responsible for conducting all activities that emerge from the bilateral agreements between Türkiye and the European Union and other relevant national legislation.

Organisational chart of the MA is set out in Annex XIII.

IPARD Agency (Agriculture and Rural Development Support Institution-ARDSI)

In accordance with Annex A Clause 6b of the FFPA and Article 9 of the SA, the Agriculture and Rural Development Support Institution (ARDSI) shall have the following duties and responsibilities:

- a) Providing a confirmation to the Managing Authority on the controllability and verifiability of the measures in the IPARD III programme,
- b) Making calls for applications and publicizing terms and conditions for eligibility with prior notification to the Managing Authority,
- c) Receiving application packages and selecting the projects to be implemented,
- d) Checking applications for approval of projects against terms and eligibility conditions in accordance with the administrative checks, and compliance with the Agreements including, where appropriate, public procurement provisions,
- e) Evaluating the applications in accordance with the selection criteria and assessment of the submitted business plan,
- f) Laying down contractual obligations in writing between ARDSI and the final beneficiaries including information on possible sanctions in the event of non-compliance with those obligations and, where necessary, the issue of contract date,
- g) Monitoring the implementation of the projects and activities, following whether the beneficiaries fulfil the provisions and obligations of the contract and conducting necessary controls in this respect,
- h) Executing on-the-spot checks to establish eligibility both prior to and following signing of the contract,
- i) Carrying out authorization of payment, payment and accounting procedures regarding the projects,
- j) Follow-up actions to ensure progress of projects being implemented,
- k) Reporting progress of measures being implemented against indicators,
- l) Ensuring that the final beneficiary is made aware of the Community contribution to the project,
- m) Ensuring compliance with the obligations concerning publicity referred to in Article 24 of the FFPA and executing publicity activities with the Managing Authority,
- n) Ensuring irregularity reporting at national level,
- o) Ensuring that the NAO, the management structure and the Managing Authority receive all information necessary for them to perform their tasks,
- p) Notifying the relevant authorities of the comments and amendment proposals concerning the activation of the programme and supports,
- q) Establishing a dependable data base and information processing system regarding the duties and activities of the Institution.

The institution is also responsible for ensuring collaboration and coordination with relevant public and private institutions, natural persons, European Commission and international organisations.

Organisational chart of the IPARD Agency is set out in Annex XIV.

12.2. Description of monitoring and evaluation systems, including the envisaged composition of the Monitoring Committee.

The progress of the IPARD III Programme (2021-2027), as well as its efficiency and effectiveness in relation to its objectives, is measured by indicators related to the baseline situation, as well as to the financial execution of the Programme. The MA carries out IPARD Programme monitoring and assists the work of the IPARD Monitoring Committee. It does this most notably by providing the documents necessary for monitoring the quality of implementation of IPARD Programme. In this regard, ARDSI ensures that the MA receives all information necessary for performing the programme monitoring task.

Consequently, the system developed for the monitoring of the IPARD III Programme (2021-2027) encompasses the determination of physical and financial indicators and collection, registration and analysis of data concerning these indicators. All data needed for monitoring function of the IPARD Programme are based on data obtained from ARDSI and TURKSTAT. Programme monitoring will be carried out based on monitoring indicators proposed under measures.

Annual and final implementation reports drawn by MA are submitted to IPARD Monitoring Committee for the discussion and approval of the content, analyses and results presented in the reports, in accordance with the IPA Implementing Commission Regulation (EC) No 2021/2236 Article 10.

Monitoring Committee

In accordance with Article [53] of the FFPA, the IPARD III Monitoring Committee will be established not later than six months after the entry into force of the first financing agreement.

The Monitoring Committee shall meet at least twice a year to ensure that the determined strategy, objectives and targets of the Programme are being implemented successfully. In case of urgency, the approval of the documents by the Monitoring Committee members is realised through the written procedure.

Tasks and responsibilities

The tasks and responsibilities of the Monitoring Committee are defined in Article [52] of the SA and includes:

- a) examining the results of the IPARD III Programme: the achievement of the targets set for each measure and the progress on the use of financial resources allocated to those measures;
- b) reviewing progress made towards achieving the objectives set out in the IPARD III Programme;
- c) analysing and approving any proposal by the Managing Authority to amend the programme;
- d) considering and approving the annual and final implementation reports, the plan of visibility and communication activities and its updates, and the annual action plan for the implementation of technical assistance activities.

Composition

The composition and functioning of the Monitoring Committee is based in accordance with Article 53(7) of the FFPA. Prior to the establishment of the aforementioned Committee, an agreement is reached with the Commission on the composition of the Committee. As a result of this agreement, “Regulation on the Organization and Procedures and Principles of the Monitoring Committee” is published in the Official Gazette, and the works are carried out within the framework of this Regulation.

The members of the IPARD Monitoring Committee consist of the representatives of relevant public authorities and bodies (relevant ministries), other stakeholders such as economic, social and environmental partners and relevant bodies representing civil society, including non-governmental organisations, universities, international organizations; and the European Commission.

The Committee is made up of voting members, non-voting members, observers, invitees and EU Commission representatives. The number of members with an observer status and voting members is at least equal to the number of members from national authorities and bodies. Thus, a balance is achieved in the numerical representation of public and non-public members and this number is preserved throughout the functioning of the Committee.

The representatives of the Managing Authority, IPARD Agency, National Authorizing Officer (NAO) and NIPAC participate in the work of the Committee as members without voting rights. It is ensured that the members of the Monitoring Committee, who represent these institutions, are at least at executive (decision-making) level.

The envisaged composition of the Monitoring Committee consists of members selected in line with the objectives and strategies of the IPARD Programme.

One full and one substitute member from each public institutions and non-governmental organizations are determined to take part in the Monitoring Committee, and the members have equal voting rights.

In addition to the subjects requiring voting, other issues presented for information purposes are also discussed in the Monitoring Committee meeting. Decisions of the Committee are taken unanimously. Two-thirds of the voting members must be present at the Committee meetings for decisions to be taken. The minutes of the meetings are prepared at the end of the meeting. The procedural details are drawn up in the MC rules of procedures.

The Committee will monitor and oversee the implementation of IPARD Programme. MA functions as the secretariat of IPARD Monitoring Committee.

Evaluation

An evaluation system will be established in order to evaluate the relevance, efficiency, effectiveness, benefits and sustainability of the actions supported depending on the implementation phase of the IPARD Programme (2021-2027).

The ex-ante evaluation of the IPARD Programme commenced on 29/09/2021 and the final draft was submitted on 03/11/2021. As a result of the ex-ante evaluation, some recommendations were made to draft Programme for the purposes of the improvement of the Programme. Information concerning the results of the ex-ante evaluation is included in the Chapter 14.

The IPARD Programme (2021-2027) will be subject to ex-post and, where considered as appropriate by the Commission, interim evaluations carried out by independent evaluators under the responsibility of Managing Authority.

An evaluation plan will be prepared by Managing Authority and submitted to the Monitoring Committee not later than one year after the adoption by the Commission of the IPARD Programme (2021-2027).

13. RESULTS OF CONSULTATION ON PROGRAMMING AND PROVISIONS TO INVOLVE RELEVANT AUTHORITIES AND BODIES AS WELL AS APPROPRIATE ECONOMIC, SOCIAL AND ENVIRONMENTAL PARTNERS

13.1. Method Adopted to Involve Relevant Authorities, Bodies and Partners

A participatory approach was adopted while preparing the IPARD III 2021-2027 Programme. Cooperation with relevant authorities, stakeholders and non-governmental organizations was achieved through the meetings organized, sectoral analyses carried out with experts in the sector, official correspondence, and bilateral meetings.

The sectors covered by the measure fiches to be included in the programme were divided into 13 topics and analysed in the context of nearly 100 online meetings attended by experts from Türkiye's leading universities and MoAF, and the results of this analysis were transparently reflected in the programme.

The National Rural Development Strategy Document (2021-2023), which forms the basis of the programme, was prepared in cooperation with the relevant ministries, institutions and organizations (listed in Annex II), and under the coordination of MoAF with the technical support of the Strategy and Budget Office of the Presidency.

As the programme preparation process coincided with the COVID-19 pandemic, field visits, workshops and face-to-face meetings could not be carried out; instead, only online meetings were held. For online meetings, contact information and contribution were requested, through an official letter, from the relevant public institutions/organizations, the relevant General Directorates of MoAF, and NGOs. Within this scope, nearly 100 stakeholder institutions were contacted and all stakeholders were invited to various meetings in accordance with the distribution of topics in the sectoral analysis. In addition to these meetings, bilateral meetings were also held by phone or face-to-face for instant information/data sharing or corporate requests. Some stakeholders have been invited to the consultation but did not respond positively and did not participate in the consultation.

Agenda of all of the consultation process' meetings (which run between December 2020 and March 2021) included the discussions with stakeholders about their field experiences and shortcomings (omissions, errors) identified in the implementation of the IPARD II Programme (2014-2020) in order to make the IPARD III Programme more efficient. All expectations of the participants for the new programme were evaluated and, depending on the result of the evaluation, some were included in the draft programme submitted for consultations with the Commission.

Following the meetings, the minutes containing the meeting outputs and the official letters of opinion submitted by the stakeholders were evaluated by the Managing Authority in order to analyse their reflection in the Programme content.

13.2. List of Partners Consulted – Summary

Table 79. List of Stakeholder Consulted – Summary

Name of Institution / Organization / Person	Authority / Expertise	Name of Contact Person
Presidency - Strategy and Budget Office	Regulations, progress in chapter negotiations	Dr. Funda Baydu Hakan Günlü Ali Rıza Dereli Serdar Çatakçı Mustafa Şahiner
Ministry of Foreign Affairs-Presidency for European Union (NIPAC)	Compliance with the EU acquis	Erkin Soysaldı Eda Zorlu İbrahim Gündoğar
Ministry of Environment and Urbanization	-Supports on renewable energy -Practices on soil and groundwater -Infrastructure projects of the Ministry -Biodiversity	Dr. İsmail Raci Bayer Buğçe Doğan Çimentepe
Ministry of Trade	Production capacities and production figures of the sectors	Yunus Karayel
Ministry of Culture and Tourism	-Rural tourism -Tourism certificate audits	Barış Can Üstüntaş Murat Özdemir
General Directorate of Development Agencies	-Regional and rural development issues -Study on Disadvantaged Regions	Burak Yardımcı Gizem Serim
Presidency of Turkish Statistical Institute	Statistics on agricultural production	Arap Diri
General Directorate of Renewable Energy	Renewable energy sector and national legislation	Hakan Şener Akata
Presidency of Turkish Patent and Trademark Office	Local products and geographical indications	Emre Çelebi Kemal Demir Eralp
Ziraat Bank of Republic of Türkiye	Agricultural loans and financing programmes	Gökhan Güven
İller Bankası	Water Sewerage and Infrastructure Projects	Uğur Memiş

Name of Institution / Organization / Person	Authority / Expertise	Name of Contact Person
Turkish Exporters' Assembly	EU Legislation and current practices for food exporters	Caner Ortakçı
General Directorate of EU and Foreign Affairs	-EU Rural Development Policy -EU Green Deal -Farm to Fork Strategy	Adil Yüksel Perkin
General Directorate of Plant Production	-Seed supports, ornamental plants and medicinal-aromatic plants -Producer organizations in the seed sector -Organic agriculture -Farmer Registration System	Lokman Üç Nalan Altındal Öztuna İlhan Özcan
General Directorate of Fisheries and Aquaculture	Fisheries and aquaculture and processing sector	Adem Akbaş
General Directorate of Food and Control	-Hygiene requirements and approval procedures of food businesses subject to approval and registration	Halil Apaydin Gürkan Karaca Cahit Coşkun Altunoğlu Bayram Kerimoğlu
General Directorate of Livestock	-Animal Registration System -Beekeeping Registration System -Animal welfare and health issues	Yeşim Başkuş Nejat Aydın
General Directorate of Agricultural Research and Policies	-Egg and poultry sector -Aquaculture sector -Animal health, food and feed research	Dr. A. Oya Akın Recep Kodaş Assoc. Prof. Dr. Serdar Kamanlı Dr. Mesut Kırdag Serhat Dinçer
Department of Training and Extension	-Agricultural training, extension and consultancy services	Nesimi Erarslan Ali Ağören Ayşe Bayram

Name of Institution / Organization / Person	Authority / Expertise	Name of Contact Person
Presidency of Strategy Development	-Branding in agricultural products -Geographical Indications -Digital Agriculture Market (DİTAP)	Mahmut Değirmenci Tahsin Aba Cihan Nazlı Nazlı Şimşek
General Directorate of Agricultural Enterprises	Livestock and plant production sector	Elif Arslan
Directorate General of Meat and Milk Institution	Red meat and dairy sector	Dr. Neslihan Kamanlı Can
Atatürk Forest Farm	-Processing of milk and dairy products -Production and processing of beekeeping and bee products	Ayşe Erdoğan
General Directorate of Combating Desertification and Erosion	-Ground cover management and soil erosion control	İbrahim Yamaç Bayram Hopur Serpil Acartürk Hüseyin Akkuş Yusuf Kantarkaya
General Directorate of Central Union of Agricultural Credit Cooperatives of Türkiye	Financing support to producers	Harun Kırmızı Caner Çelebi
General Directorate of Water Management	Water conservation	Erdem Eroğlu M. Can Güçlü Onur Altun
Department of Rural Development and Lending	Rural Development Investment Support Projects (RDISP)	Tuba Hıdırlıgil
Department of Organization	-Agricultural Producer Organizations and Cooperatives -Agricultural Producer Unions -Breeders' Associations	Mehmet Ali Korkmaz Filiz Bilgili

Name of Institution / Organization / Person	Authority / Expertise	Name of Contact Person
Department of Agricultural Environment and Natural Resources Conservation	-Climate change -Erosion -Sustainable land management -Combating agricultural drought -Greenhouse gas emission calculations	Abdüssamet Aydın Dr. Elif Demirbaş Topçu
Department of Soil Conservation and Land Evaluation	-Agricultural land use planning -Ground cover management and soil erosion control	Nurcan Hacıalibeyoğlu Semra Yıldırım Derya Sürek
Department of Agricultural Land Management	-Ground cover management and soil erosion control	Oğuzhan Fakılı
Directorate of Antalya West Mediterranean Agricultural Research Institute	-Greenhouse cultivation of vegetables and ornamental plants, greenhouse technologies, medicinal and aromatic plants -Field crops and aftercrop cultivation (cultivation of soybean, peanut, sesame, corn and forage crops) -Cultivation of tropical and subtropical fruits -Soil and water management -Plant health	İbrahim Çelik Assoc. Prof. Dr. Muharrem Gölükcü Dr. Arzu Bayır Yeğin Mehmet Kocatürk Mehmet Özdemir Dr. Işıl Yılmaz Dr. Filiz Asrı Nazmi Dinç Nejla Çelik
Türkiye Union of Chambers of Agriculture (TZOB)	-Requirements of agriculture and food industries -Needs of producers residing in rural areas	Şemsi Bayraktar Neşe Tezer
The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)	-Local product exchanges	Yiğit Ateş

Name of Institution / Organization / Person	Authority / Expertise	Name of Contact Person
Union of Municipalities of Türkiye Presidency	Rural infrastructure and renewable energy	Ali Esener Esenboğa
Ankara University	-Rural development policies	
-The Faculty of Agriculture (The Departments of Soil Science and Plant Nutrition, Agricultural Economics)	-Rural environmental problems -Agricultural extension -Ground cover management and soil erosion control	Prof. Dr. Ayşegül Mengi Prof. Dr. Bülent Gülçubuk Prof. Dr. Erdoğan Güneş Prof. Dr. Ayten Namlı Prof. Dr. Günay ERPUL Doç.Dr. Özdal KÖKSAL Research Fellow Gökçe Karalezli
- Department of Political Science and Public Administration (The Department of Urban, Environment and Local Government Policies)		
İstanbul Technical University- Energy Institute	Solar Energy (Condensed Solar Energy Systems and Photovoltaic Power Systems)	Dr. Coşkun Fırat Dr. Sevan Karabetoğlu
Middle East Technical University- Institute of Marine Sciences	-Marine and Coastal Sciences -Aquaculture	Dr. Devrim Tezcan
Middle East Technical University (METU)- Department of Food Engineering	Food processing sector	Prof. Dr. S. Gülüm Şümnü Prof. Dr. Serpil Şahin
Ecosystem Application and Research Center (EKOSAM)	-Basin-based water management -Aquatic ecology and ecosystem management -Water management with remote sensing -Ecosystem services, - Basin-based sustainable water use	Prof. Dr. Meryem Beklioğlu Nur Filiz Gülce Saydam
National Dairy Council (DCC)	The current situation and needs of the dairy sector	Mehmet Sadi Güngör

Name of Institution / Organization / Person	Authority / Expertise	Name of Contact Person
Packaged Milk and Dairy Products Manufacturers Association (ASÜD)	Current status and needs of the dairy processing sector	Mustafa Civelek
Central Association of Cattle Breeders (CACB) of Türkiye	The current situation and needs of the cattle farming sector	Mehmet Sadi Güngör İbrahim Karakoyunlu
Central Association of Dairy Producers	The current situation and needs of the dairy sector	Ali Özgehan
Central Association of Sheep and Goat Breeders of Türkiye (DSYM)	The current situation and needs of the sheep and goat farming sector	Nihat Çelik Niyazi Sinci
Turkish Feed Manufacturers' Association	Mixed feed production and technology in the livestock sector	M. Ülkü Karakuş
Central Association of Egg Producers (YUM-BİR)	Poultry meat and egg sector	İbrahim Afyon
Development Foundation of Türkiye(DFT)	-Rural tourism -Beekeeping and honey production -LEADER approach	İbrahim Tuğrul
International Solar Energy Society – Türkiye Section	Solar energy systems	Esen Erkan
GTC SOLAR	Solar energy systems	Elif Durmaz Sümeyye Yaman
Nature Conservation Center	Biodiversity	Özge Balkız Melike Kuş
National Red Meat Council (UKON)	The current situation and needs of the red meat sector	Ahmet Hacıncı Osman Civil
Union of Dairy, Beef, Food Industrialists and Producers of Türkiye (SETBİR).	Dairy-red meat production and processing sector	Elif Yücel

Name of Institution / Organization / Person	Authority / Expertise	Name of Contact Person
Central Association of Turkish Red Meat Producers	-Businesses producing red meat -Red meat processing and marketing	Adnan Gültek
Association of Poultry Meat Producers and Breeders (BESD-BİR)	The current situation and needs of the poultry meat sector	Ahmet Ergün
Central Association of Fisheries Breeders (SUYMERBİR)	Aquaculture	Osman Parlak Buket Yazıcıoğlu Aslıhan Bektaş
Central Association of Turkish Beekeepers (TAB)	Beekeeping, production and cultivation of bee products	Alim Tutar Suat Musabeşeoğlu
Sub-Association of Ornamental Plants Producers (SÜS-BİR)	Ornamental plants sector	Hatice Ünal
Central Association of Forestry Cooperatives of Türkiye	-Forestry and afforestation -Cultivation of seedlings and saplings -Cooperative legislation	Ünal Örnek
MARMARABİRLİK	The current situation and needs of the olive and olive oil sector	Mehmet ŞEN
ÇUKOBİRLİK	Vegetable oil sector	Sıdika Şahpaz
Pankobirlik Beet Growers Cooperatives Union	-Ground cover management and soil erosion control -Diversification of plant production and processing and packaging of herbal products	Ayhan Işık Eşref Dikmen Ahmet Doğan
Turkish Veterinary Medical Society	Animal health and welfare	H. Haluk Aşkaroğlu
Union of Mohair and Fleece Agricultural Sale Cooperatives	Angora goat and fleece production	Güldane Oğuz
İstanbul Apparel Exporters' Association (IHKIB)	Textile	Selin Yeşilşerit

Name of Institution / Organization / Person	Authority / Expertise	Name of Contact Person
Aegean Exporters' Associations	Fruit and Vegetable sector	Serap Ünal Özlem Gökkan Vural
West Mediterranean Exporters' Association	Fruit and Vegetable sector	Zafer Aydın
Mediterranean Exporters' Associations	Fruit and Vegetable sector	İdil Dilan Öğüt
National Legume Council	-Legume sector -Processing and packaging of herbal products	İsmail İnam
National Tea Council	The current situation and needs of the tea sector	Oğuzhan Civelekoğlu Sadık Yıldızbayrak
National Hazelnut Council	The current situation and needs of the hazelnut sector	Sabahattin Arslantürk
National Grains Council	The current situation and needs of the grains sector	İsmail Özkan
Presidency of the National Olive and Olive Oil Council	Olive oil sector	Ferhat Çağla Yürekli
Foundation for the Support of Women's Work	Women Rights	Gökçen Durutaş
Local Action Group (LAG)	LEADER approach	50 Local Action Group (LAG) Representatives from 12 IPARD Provinces Amasya, Ankara Çanakkale Çorum, Denizli Diyarbakır Erzurum Kastamonu Manisa, Ordu Samsun Şanlıurfa

13.3. Results of Consultations – Summary

Table 80. Results of Consultations – Summary

Subject of Consultation	Date of Consultation Meetings	Time Given for Comment	Names of Institutions / Organizations / Persons Consulted	Summary of Results
M1- Investments in Physical Assets of Agrobusinesses	16.03. 2021 17.03. 2021	1 month	Presidency - Strategy and Budget of Office Ministry of Foreign Affairs-Presidency for European Union General Directorate of EU and Foreign Affairs General Directorate of Food and Control General Directorate of Livestock Directorate General of Meat and Milk Institution Atatürk Forest Farm Ziraat Bank of Republic of Türkiye Turkish Veterinary Medical Society National Red Meat Council National Dairy Council Cattle Breeders Central Association of Türkiye Union of Dairy, Beef, Food Industrialists and Producers of Türkiye General Directorate of Central Union of Agricultural Credit Cooperatives of Türkiye Central Association of Sheep and Goat	1) The programme includes regulations on the proposal to support investments in bio-economy, waste management, renewable energy and circular economy with a high grant rate and to support businesses that are not within the scope of SMEs for investments in this area. 2) The proposal to support the establishment and modernization of organic red meat production facilities was reflected in the programme. 3) The proposal to support the modernization of organic poultry meat and egg production facilities was reflected in the programme. 4) The proposal to support the production of roughage, which is a substantial expense item in livestock raising, has been reflected in the programme. 5) It was recommended to increase the grant rates

Subject of Consultation	Date of Consultation Meetings	Time Given for Comment	Names of Institutions / Organizations / Persons Consulted	Summary of Results
			Association of Poultry Meat Producers and Breeders Central Association of Egg Producers Southeastern Anatolia Exporters' Association	in collective investments. It was decided to continue the extra grant support, which had been also given in IPARD II, within the scope of the IPARD III programme.
M3 – Investments in Physical Assets Related to the Processing and Marketing of Agricultural and Fishery Products	17.03. 2021 18.03. 2021	1 month	Presidency - Strategy and Budget of Office General Directorate of Fisheries and Aquaculture Ministry of Foreign Affairs- Presidency for European Union Ministry of Trade Association of Poultry Meat Producers and Breeders General Directorate of Plant Production General Directorate of Livestock Presidency of Turkish Statistical Institute General Directorate of Agricultural Research and Policies Central Association of Egg Producers Marmarabirlik Central Association of Fisheries Breeders National Olive and Olive Oil Council West Mediterranean Exporters Association METU - Institute of Marine Sciences	1) The proposal to include value-added products, such as liquid, powder, further processed egg food, and mass storage of eggs in the scope of IPARD Programme support was covered in the programme. 2) The programme includes regulations on the proposal to support investments in bio-economy, waste management, renewable energy and circular economy with a high grant rate and to also support businesses, which are not within the scope of SMEs, for investments within this scope. 3) It was recommended to increase the grant rates in collective investments. It was decided to continue the extra grant support, which had been also given in IPARD II, within the scope of the IPARD III programme. 4) Within the scope of olive and olive oil production, the proposal

Subject of Consultation	Date of Consultation Meetings	Time Given for Comment	Names of Institutions / Organizations / Persons Consulted	Summary of Results
			Ziraat Bank of Republic of Türkiye	to include a clean (environment-friendly) advanced technology production center and smart olive and olive oil storage and processing investments (space allocation, construction, machinery-equipment, software, etc.) in the scope of support was reflected in the programme. 5) In the projects for which modernization applications were made within the scope of fruit-vegetable processing, it was recommended not to set a capacity limit for cold storage. The proposal was not reflected in the programme because there was no such limit for producer organizations and this proposal was not deemed suitable for other businesses.
M7 – Diversification of Farm Activities and Business Development	18.03. 2021 19.03. 2021 22.03. 2021 23.03. 2021	1 month	Ministry of Foreign Affairs- Presidency for European Union Ministry of Culture and Tourism General Directorate of Food and Control General Directorate of Plant Production Presidency of Strategy Development Presidency of Turkish Statistical Institute	1) Forage crop production was included in the scope of support under the “Plant Production” sector in the programme. 2) Within the scope of organic fertilizer production, from various proposals only vermicompost production was included in the scope of support.

Subject of Consultation	Date of Consultation Meetings	Time Given for Comment	Names of Institutions / Organizations / Persons Consulted	Summary of Results
			Department of Training and Extension Mediterranean Exporters' Associations Aegean Exporters' Association Antalya West Mediterranean Agricultural Research Center Central Association of Turkish Beekeepers Department of Rural Development and Lending International Solar Energy Society – Türkiye Section GTC SOLAR ITU Energy Institute İstanbul Apparel Exporters' Association Sebahat Ada	3) The request for the removal of the requirement regarding the scale of businesses within the M7 measure was not accepted. 4) The requirement for open area size for forage crops and seedling-sapling cultivation was removed. 5) The request for the removal of the requirement that a business must be certified according to the "Regulation on the Classification of Tourism Establishments" within the rural tourism sector was not accepted. 6) For the Renewable Energy sub-sector, on-grid facilities focused on sales to electricity distribution companies were included in the scope of support. 7) Within the scope of aquaculture, new species and aquaculture in salt water were included in the support. 8) Establishment of maintenance station for machinery parks was included in eligible expenditures. 9) Advisory Measure is recommended to be included in IPARD III.

Subject of Consultation	Date of Consultation Meetings	Time Given for Comment	Names of Institutions / Organizations / Persons Consulted	Summary of Results
M6 – Public Infrastructure Investments in Rural Areas	22.03. 2021	1 month	Ministry of Foreign Affairs-Presidency for European Union Department of Rural Development and Lending	1) The request to meet only the national standards before the final payment request was not accepted. It was reflected in the programme that EU Standards should also be met. 2) The request to limit general expenditures to 12% of the total eligible expenditures was not accepted. It will be included in the programme as 10%.
Website setup and management within the Short Value Chain	18.03. 2021	-	General Consultation	The setup and management of websites for commercial sales, including the financial closing period, will be included as eligible expenditures in the programme.
Disadvantaged Regions	07.05. 2021	2 weeks	General Directorate of Development Agencies	Disadvantaged regions determined according to the results of the Urban and Rural Settlement Systems Research in Türkiye will be included in the programme as a ranking criterion. In the later evaluations, this study was abandoned because it was not very comprehensive.
Geographical coverage		-	General Consultation	- Increasing the scope of the programme in a way to cover 81 provinces. Many national authorities, such as NGOs and some of public institutions, have

Subject of Consultation	Date of Consultation Meetings	Time Given for Comment	Names of Institutions / Organizations / Persons Consulted	Summary of Results
				submitted many written requests on this subject. This issue has been temporarily suspended for further consideration, considering the insufficiency of the budget in the programme and the length of the accreditation process.
LEADER Measure	06.04. 2021	6 weeks	50 Local Action Group (LAG) Representatives from 12 IPARD Provinces -Amasya -Ankara -Çanakkale -Çorum -Denizli -Diyarbakır -Erzurum -Kastamonu -Manisa -Ordu -Samsun -Şanlıurfa	1) The total budget was requested to be rearranged according to the current exchange rate. Rejected. 2) It was requested to increase the advance payment amount from 10% to 25%. Rejected.
Agri-Environment-Climate Measure	Opening meeting 29.03. 2021 Ground cover management and soil erosion control 05.04. 2021	1 Month (total)	General Directorate of Agricultural Reform -Department of Agricultural Environment and Natural Resources Conservation -Department of Soil Conservation and Land Evaluation -Department of Agricultural Land Management	1) It was recommended by the experts that, instead of applying the biodiversity sub-measure in the whole Polatlı District, the places that are the habitat of the bustard should be chosen as the pilot region. The participants have been informed that the programme will be implemented in this way. 2) Experts participating in the consultation stated

Subject of Consultation	Date of Consultation Meetings	Time Given for Comment	Names of Institutions / Organizations / Persons Consulted	Summary of Results
	Water conservation 06.04. 2021 Biodiversity 07.04. 2021 Organic agriculture 08.04. 2021		General Directorate of Plant Production -Department of Good Agricultural Practices and Organic Agriculture -Department of Agricultural Basins General Directorate of Water Management - Department of Monitoring and Water Information System -Department of Research and Evaluation -Department of Research and Evaluation General Directorate of Agricultural Research and Policies - Department of Horticultural Research (Fruit Growing and Organic Agriculture Research Working Group) -Department of Livestock and Fisheries Research -Department of Animal Health, Food and Feed Research -Department of Field Crops Research	that the use of chemical fertilizers, pesticides and insecticides should be prohibited in order to create a suitable habitat for the bustard. The participants have been informed that the programme will be implemented in this way. 3) SWOT analyzes and consultation were carried out with the stakeholders on the issues of ground cover management and soil erosion control, water conservation, biodiversity and organic agriculture in order to form the basis for designing 4 sub-measures within the scope of agri – environment-climate measure. The decision on adding sub-measures other than on soil erosion prevention and on maintenance of Great Bustard has been postponed. 4) The stakeholders requested adding information to Chapter 3.3 “Environment and Soil Management” on the following issues:
Agri-Environment-	29.03. 2021 –	1 month	-Department of Plant Health Research	1) Changes by years in the amount of soil actively used for

Subject of Consultation	Date of Consultation Meetings	Time Given for Comment	Names of Institutions / Organizations / Persons Consulted	Summary of Results
Climate Measure	02.04. 2021		-Central Research Institute of Field Crops General Directorate of EU and Foreign Affairs General Directorate of Combating Desertification and Erosion Ministry of Foreign Affairs-Presidency for European Union Nature Conservation Center METU–Ecosystem Application and Research Center (EKOSAM) Ankara University-Faculty of Agriculture	agricultural purposes in our country 2) The scale of erosion in our country in recent years. This information has been added. 3) Status of land improvement (meadow/pasture) works (number of projects) 4) Amount of irrigated agricultural land 5) Distribution of irrigated land by irrigation type 6) Climate change studies 7) Fertilizer/pesticide use 8) Biodiversity status 9) Current studies and data in the organic agriculture sector

14. RESULTS AND RECOMMENDATIONS OF THE EX-ANTE EVALUATION OF THE PROGRAMME

14.1. Description of the Process

The ex-ante evaluation study for the 2021-2027 IPARD Programme started on September 29, 2021 following the review of the 2021-2027 IPARD Programme document and other supporting documents. The final version of ex-ante evaluation report is completed on November 3, 2021. During the preparation of the ex-ante evaluation report, frequent meetings were held with Managing Authority. The ex-ante evaluation report is prepared by Güray Küçükkocaoğlu, Professor of Finance and academic member of Başkent University Department of Management, and Türker Açıkgöz, academic member of Başkent University Department of Management. The process of drafting and fine-tuning of the IPARD III Programme continued after that date. The evaluators have written the ex-ante evaluation report based on that latest version of the programme submitted by the Managing Authority to the evaluator. Therefore, when the IPARD III Programme document is finalized, there is a possibility that some of the comments included in the ex-ante evaluation report will lose their validity.

The ex-ante evaluation report is a document that evaluates the targeted needs, the intervention logic and the extent to which the needs are addressed within the IPARD III Programme and it evaluates the consistency of the Programme.

Main sources of information and documents used for the ex-ante evaluation of the 2021-2027 IPARD Programme are 2021-2027 IPARD Programme Draft, 2021-2027 IPARD III measure fiche drafts, 2021-2027 IPARD Ex-ante Evaluation Guideline, National Rural Development Strategy of Türkiye-III, 2021-2027 IPARD Sector Analysis Reports and interviews with previous IPARD Programme recipients and non-recipients. Relevant information sources, statistics and regulations were also taken into account during the ex-ante evaluation process. Furthermore, samples prepared in various EU candidate countries were also studied at the preliminary stage of preparing the ex-ante evaluation report.

The SWOT analyses prepared for the sectors were examined and the relationship between them was evaluated by comparing them with the 20 needs determined according to these analyses. By checking the general and specific objectives of the measures in the Programme and the identified needs, the compatibility between them was examined and evaluated. The justifications (intervention logic) and objectives of the 7 measures proposed within the scope of the Programme were examined and compared with the 2021-2027 IPARD III framework and its measures to determine the consistency of the proposed measures with the IPARD III legal framework.

It was examined whether the logic of each intervention applied is compatible with the national strategy, SWOT analyses of sectors and needs assessment. During the preparation of the ex-ante evaluation report, the final recipients of the measures under IPARD III, the application conditions, eligible expenses and the distribution (allocation) of the budget were examined. As a result of these studies, comparisons and evaluations were made with the measures in order to establish targets and evaluate the distribution of financial allocation. The examination of issues such as implementation, monitoring, indicators, objectives, administrative processes, the amount, distribution and geographical scope of supports provided for the IPARD III Programme has been carried out.

The work carried out was supported within the framework of meetings with the staff of the Managing Authority involved in the preparation of the IPARD III Programme. Comments and corrections of different parties, including those provided by the European Commission, on the draft 2021-2027 IPARD Programme were taken into account in the preparation of the ex-ante evaluation report. It is expected that the Managing Authority will respond to the following recommendations and, when completing the draft IPARD III Programme, will make the corrections set out in the section on ex-ante evaluation and finalize the Programme document accordingly.

14.2. Summary of the Recommendations

The National Rural Development Strategy III (NRDS III) covering the years 2021-2023 aims to identify the development dynamics of rural areas that are relatively behind the national welfare level and mobilize the economic and human resource potential in these areas within the framework of identified strategies. In accordance with this main objective, 7 sub-objectives and 6 implementation-oriented policies have been identified. The National Rural Development Strategy, which will cover the period 2021-2023, has a complementary position that corresponds to and does not conflict with the main objectives and measures of the IPARD III Programme.

Apart from some minor corrections, the SWOT analysis developed within the IPARD III Programme have been confirmed by the evaluators who prepared the ex-ante evaluation report. In the opinion of the ex-ante evaluators, the analyses reflected in SWOT and needs assessment are compatible with the EU Common Agricultural Policy as well as the Türkiye's National Rural Development Strategy. The reasons for the differences between rural and urban development were determined; main indicators related to the target, basic needs and their transformation into targets and concrete priorities for the steps to be taken have been determined.

As a result of the reviews in the ex-ante evaluation report, it was concluded that the general objectives of the Programme and the recommendations for action within the scope of the measures are harmonious with the primary and specific objectives, and they are consistent with the overall targets of the Programme. In addition, it was concluded by the evaluator that the intervention logic put forward in the implementation of the measures was determined in a manner consistent with the Programme objectives and the implementation actions envisaged. In addition, while the intervention logic was developed, the contribution of the measures to the realization of the program objectives was clearly stated.

Taking into account the context of Türkiye's socioeconomic, cultural and political structure, Türkiye is a country which is heavily dependent on the agricultural sector which requires significant investments to ensure its global competitiveness and a proper development of its rural areas. Within the scope of IPARD, it is expected that the budget created with the support from EU and additionally the financial support of the Republic of Türkiye will be distributed in the most appropriate way to support Türkiye's competitiveness in agriculture and rural development, with the planning and management of the Managing Authority.

Evaluators have the opinion that in general, good definitions of the target groups of measures are made and that the target groups are determined correctly. However, an important issue at this point is that geographical differences in the rural development of the Republic of Türkiye are ignored when determining the target groups in the measure fiches. Another aspect mentioned in the ex-ante evaluation report on the

subject is that the conditions specified for the recipients are relatively difficult to understand and complex. Due to the fact that it is a Programme based on rural development and therefore aimed at rural households, it would be appropriate that the application conditions for measures under IPARD III are simple and clear to rural households as potential recipients of the support who might have some difficulties in understanding those conditions.

The following are the main recommendations made by the evaluators to improve Türkiye's 2021-2027 IPARD Programme:

SWOT analysis, needs analysis

Recommendation No. 1;

Date: 2021/09/30

Subject: SWOT analysis

Description of the recommendation: In the SWOT analysis conducted for Milk, Red meat, Fruit and vegetable production and processing industry, Soil protection and erosion control, Rural infrastructure investments, Biodiversity areas, some contradictory, erroneous and incomprehensible statements have been identified. It is recommended to eliminate those contradictory, erroneous and incomprehensible statements.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: Contradictory statements have been revised and corrected.

Recommendation No. 2;

Date: 2021/10/03

Subject: Needs related to measures

Description of the recommendation: No connection has been established between some of the identified needs and the measures. In response to the 19th need identified within the scope of the Programme to develop financial instruments for the rural economy and the 20th need to support innovation and knowledge transfer, no measures could be identified. If measures corresponding to these needs are not available, it is recommended to exclude them from the Programme.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: The "M12-Financial Instrument" and "M13-Knowledge and Innovation Transfer" measures, which are the subject of the recommendation, were not selected by the beneficiary country. The necessary corrections are made.

Structure of the intervention logic

Recommendation No. 3;

Date: 2021/10/05

Subject: Identification of final recipients, common and special eligibility criteria

Description of the recommendation: The definitions of the final recipients in the measure fiches, the common and special eligibility criteria are difficult to understand. The identification of the beneficiary groups and application conditions covered by the

measures are quite complex and might be difficult to understand for farmers and enterprises living in rural areas. It is recommended to use a simpler language in this regard.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: The recommendation was not deemed suitable. It is considered that the definition of the final recipients is clear in all measure fiches.

Recommendation No. 4;

Date: 2021/10/07

Subject: Common eligibility criteria

Description of the recommendation: It is likely that there would be problems in obtaining some documents and information requested from the recipients under the common eligibility criteria. It is recommended to provide technical support and services to the recipients for the problems likely to be experienced in obtaining of the required documents and information on the business plan, feasibility, projections, marketing strategies, etc. requested within the scope of measures by agricultural enterprises.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: The recommendation was not deemed suitable. There is sufficient information available in the application call guides prepared for the beneficiaries. The remaining part is the responsibility of the beneficiaries.

Recommendation No. 5;

Date: 2021/10/07

Subject: Intervention logic

Description of the recommendation: The phrase “EU standards”, which is mentioned in the measure fiches, is a quite general phrase. Specifying which EU standard is referenced here will prevent possible misunderstandings.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: Annex No. 3 of the Programme indicates which national standards are in accordance with EU standards. All national regulations in Annex 3 contain the legislation that is a reference to the regulations in the EU standard.

Recommendation No. 6;

Date: 2021/10/08

Subject: Final recipients and resource allocation

Description of the recommendation: Both sector analysis reports and IPARD III Programme have mentioned at several occasions the problem of agricultural enterprises consisting of fragmented structures and usually being micro-small-scale enterprises. In this context, the positive discrimination should be applied to farmers' cooperatives and organizations in the process of selecting final recipients within the scope of the measures in such a way as not to damage the benefits of individual recipients and that additions should be made to encourage cooperative/organization applications.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: Although an extra grant rate is given to collective investments in the Programme, additional points in ranking criteria are given for producer organizations in some measures.

Recommendation No. 7;

Date: 2021/10/08

Subject: Intervention logic

Description of the recommendation: It has been considered and recommended that it is more optimal in terms of cost/benefit and considering the budget constraint, to support larger renewable energy investments at a regional scale, that will benefit many agricultural enterprises in the region, rather than supporting enterprises to produce self-sufficient renewable energy.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: Within the scope of the proposal, it is aimed to implement the measure “M6-Public Infrastructure Investments in Rural Areas”. Support also contains both self-consumption and selling the electricity to the grid.

Recommendation No. 8;

Date: 2021/10/08

Subject: Justification of the Measure for Investments in Physical Assets of agricultural Holdings

Description of the recommendation: “Disadvantaged regions and the young population will benefit more from the incentives to be given within the scope of support” is included in the justification section of the measure. It is not clear on what evidence is this statement based. If this statement is an important issue reflecting a focus of the programme, the programme has to demonstrate in a more explicit manner how this will be achieved.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: The study on disadvantaged areas was excluded from the draft programme, as it was not very comprehensive and could cause some problems. Young farmers, on the other hand, will be given extra grant rate and points in the ranking criteria.

Recommendation No. 9;

Date: 2021/10/08

Subject: The Measure for Investments in Physical Assets of Agricultural Holdings

Description of the recommendation: The red meat and poultry meat sector were briefly included in the scope of support as the “Meat Sector”. However, it has been explained in many parts of the IPARD III Programme that the poultry meat sector is highly developed in Türkiye. On the other hand, it is included in the sector analysis that the red meat sector is lagging behind due to rising prices and the low consumption amount. At this point, it is useful to determine within the text that the supports are mainly for the red meat sector.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: As part of measure M1, the poultry farming sector is covered by support only in terms of modernization of the existing entities, while in the case of red meat sector the support is to be provided for both the establishment of new entities and modernisation of the existing ones.

Recommendation No. 10;

Date: 2021/10/08

Subject: The final recipients of the Measure for Investments in Physical Assets of Agricultural Holdings

Description of the recommendation: The definition of the final recipients does not currently include “agricultural holding” and it seems unclear whether the farmers who aim to establish enterprises with support will be included or not. It would be helpful to clarify this issue.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: In Measure 1, it is stated that enterprises established by natural and legal persons who are recognized by national laws and engaged in agriculture are agricultural enterprises.

Recommendation No. 11;

Date: 2021/10/08

Subject: General eligibility criteria of the Measure for Investments in Physical Assets of Agricultural Holdings

Description of the recommendation: Under the general eligibility criteria, it is stated that certificates obtained from national authorities on compliance with the necessary EU standards will be used as documents to fulfil this condition. It is proposed to explain in more details what those certificates to be obtained from the national authorities and associated with the aforementioned standards are.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: The recommendation was not deemed suitable. Considering the possibility of a future change of application for the official documents mentioned in the proposal or similar ones, it is found more appropriate to include information about official documents in the online information at the application stage or in the call for application guidelines.

Recommendation No. 12;

Date: 2021/10/08

Subject: Special eligibility criteria of the Measure for Investments in Physical Assets of Agricultural Holdings

Description of the recommendation: One of the special eligibility criteria says that “Agricultural enterprises for all sectors must prove at the end of the investment that the fertilizer is stored and managed in accordance with the relevant EU standards”. At this point, there has been no study on whether some enterprises (especially micro- and

small-scale) have fertilizer storage areas in accordance with EU standards. In this regard, will there be, or not, incentives/supports provided to enterprises that will allow them to make an investment to store fertilizers in accordance with EU standards? The information about such possibility (availability of relevant support) or a lack of such possibility should be provided in the programme.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: While there are eligible expenditure items for fertilizer storage, they are also compulsory eligible expenditures (Minimum conditions to be met at the end of the investment) within the scope of the measure. What kind of equipment or construction the recipient needs to build in accordance with the capacity of his enterprise will be specified in the call for application guides.

Recommendation No. 13;

Date: 2021/10/08

Subject: Specific objectives of the Measure of Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products

Description of the recommendation: Within sector-specific targets under specific objectives, for the seafood processing sectors it is stated that “to increase the competitiveness of enterprises, functioning seafood-processing technology and value-added products to improve the number”. It is useful to explain the meaning of the phrase “value added products” mentioned here in the text (it may be in the seafood processing part in the justification section).

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: In the specific objectives section, one of the targets in the processing of fishery products has been implied as "to improve the processing technology and enhance the number of value-added products in order to increase the competitiveness of the enterprises that process seafood".

Recommendation No. 14;

Date: 2021/10/08

Subject: General eligibility criteria for the Measure of Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products

Description of the recommendation: It would be appropriate to provide in the annexes a section clarifying what are the laws and regulations referred to in the statement “applicants are expected to comply with the following laws and regulations” included in the first paragraph under the General Eligibility Criteria.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: The recommendation was not deemed suitable. The laws referred to have been prepared in order to determine the framework of national minimum standards. It has been prepared in this way to inform the beneficiaries about which law or regulation they should take action to. It would not be correct to write down which regulations these laws contain into the program one by one.

Recommendation No. 15;

Date: 2021/10/08

Subject: Specific objectives of Implementation of Local Development Strategies – LEADER Approach Measure

Description of the recommendation: In the section of special objectives, the statement “Contribution to rural economy, rural tourism, animating the cultural and social life of the community, improving public spaces in villages, improving environmental standards in LAGs' areas are the main themes of Local Development Strategies” is included. It would be appropriate to expand the phrase “animation of the cultural and social life of society, improvement of public spaces in villages” mentioned here. What is the purpose of the mentioned improvements and animations? In addition, will the activities of LAGs be the source of this improvement and development? This part also requires further clarifications.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

This issue has been detailed in various places under the title “Implementation of Local Development Strategies-LEADER approach” of the draft of the Programme. For example, in 7.3. Small Projects, within the scope of “animating the cultural and social life of the society, improving the public spaces in the villages”, information is available under the following topics;

- Events (such as village festivals, contests, participations in fairs, and similar actions)/Activities (village festivals, competitions, fair participation, etc.);
- Small scale renovation of community buildings, improvements of public spaces and tourist trails and small-scale infrastructure (i.e., playgrounds) and similar actions/Renovation of small-scale public buildings, improvement of public areas, tourist routes and small-scale infrastructure (such as playgrounds), etc.;
- Design plans for the restoration of historic buildings;

Therefore, it is considered that there is no need to provide duplicate information on specific goals.

Recommendation No. 16;

Date: 2021/10/08

Subject: Selection criteria for the Measure on Investments in Rural Public Infrastructure

Description of the recommendation: The phrase “25 points if the population of the smallest settlement where the investment application address located is below 10 000” is included in the selection criteria. It is known that this expression is used to encourage investments in settlements with a small population. However, although their population is low, there are more developed rural settlements than other regions. For this reason, the idea of using a different indicator instead of population that encourages underdeveloped regions for rural development is recommended here.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

In the current draft of the measure fiche, the phrase “25 points if the population of the smallest settlement where the investment application address located is less than 10 000” has been removed. It is replaced by “If the applicant is a village administration

or county municipality or district municipality with a population of less than 10 000 habitants. “

Recommendation No. 17;

Date: 2021/10/08

Subject: Special Eligibility Criteria for Measure of Farm Diversification and Business Development

Description of the recommendation: In the section on eligible expenditures for sectors, the article “Installation of small cold storages for storing the product after harvesting” is included in the section on Aquaculture. The installation of cold storages, no matter how small, is an investment that requires high investment costs. In this regard, it is suggested that it may be more correct to direct the approach to cooperative or LAGs instead of providing it to an individual holding.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: The recommendation was not deemed suitable. Cooperatives may already be recipients of this measure.

Indicators and quantified targets

Recommendation No. 18;

Date: 2021/10/10

Subject: Quantified targets for renewable energy investments

Description of the recommendation: The target of “number of enterprises/recipients investing in renewable energy generation” in the quantified targets is included in the Investments in Physical Assets of Agricultural Enterprises, Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products, Implementation of Local Development Strategies – LEADER Approach, Rural Infrastructure Investments and Farm Diversification and Business Development measures. In addition to measuring the number of enterprises in the quantified targets related to these measures, it is recommended to develop a different target on the amount of renewable energy produced. Such target would demonstrate what amount of renewable energy consumption replaces non-renewable energy and it would also show a contribution to a relevant EU Green Deal target. Seeing this effect can be included under the numerical goals for each measure, as well as in a single item under the Programme goals to show the total effect of all measures.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: The recommendation was not deemed suitable. Considering the difficulty of collecting data on the measurement of renewable energy consumed as an alternative to fossil fuels, it has been concluded that it would not be very appropriate to make this measurement specific to IPARD.

Recommendation No. 19;

Date: 2021/10/10

Subject: Information on measures that are not implemented

Description of the recommendation: Support to the Setting Up of Producer Groups, Improvement of Skills and Competences, Advisory Services, Establishment and Protection of Forests, Development of Financial Instruments, Promotion of Cooperation for Innovation and Knowledge Transfer have been evaluated as measures and they are in the table in section 6.6. However, although draft IPARD III programme does not include these measures, the quantified targets related to those measures (with the exception of measures for the development of financial instruments and Promotion of Cooperation for Innovation and Knowledge Transfer) have been left blank. In this context, it is suggested that the measures mentioned above be removed from the table (IPARD III Section 6.6).

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: The aforementioned measures are omitted from the table in section 6.6.

Recommendation No. 20;

Date: 2021/10/10

Subject: The quantified targets of the Agri-Environment, Climate and Organic Farming Measure

Description of the recommendation: The expression “total area under organic farming”, which is among the quantified targets of the Agri-Environment, Climate and Organic Farming Measure, indicates a cumulative land. However, the Programme should also specify the size land under conversion to organic farming.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: Calculation of the agricultural area converted into organic farming area is out of scope in terms of the implementation procedures of the measure.

Recommendation No. 21;

Date: 2021/10/10

Subject: Indicators and quantified targets

Description of the recommendation: The Programme objectives show the effects of all measures on a common basis, allowing the expected outputs from the Programme to be reflected and showing the level of achievement of the desired effects. Here it will be useful to add another column in which the quantified targets within the scope of all measures are collected mathematically and expressively, and the quantified targets in all measures appear as a whole for general evaluations.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: In the “6.6. In the "Summary table of the intervention logic showing the measures selected for IPARD, the quantified targets” section, there is a single column showing all indicators (as a total) included in all measures.

Recommendation No. 22;

Date: 2021/10/10

Subject: The quantified targets of the Agri-Environment, Climate and Organic Farming Measure

Description of the recommendation: Some indicators and quantified targets in the Agri-Environment, Climate and Organic Farming Measure have not been determined yet, so they are placed as "?" mark. If these are determined, they should be added.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: They are determined as 0 for now. In the future, the calculated figures will be written when the measure will be applied.

Recommendation No. 23;

Date: 2021/10/10

Subject: Implementation of Local Development Strategies/LEADER Approach and Technical Assistance Measures quantified targets

Description of the recommendation: The indicators and quantified targets included in the Implementation of Local Development Strategies/LEADER Approach and Technical Assistance measures are quite insufficient. In particular, compared to IPARD II, it is seen that there are more comprehensive indicators and quantified targets to these measures. It is thought that the indicators and quantified proposed for these measures will be insufficient to measure the targets expected to be achieved as a result of the measures.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: Additional indicators were determined on both M5 and M9.

Recommendation No. 24;

Date: 2021/10/10

Subject: Indicators and quantified targets

Description of the recommendation: It is recommended to include the climatic and environmental targets to be achieved as a result of all measures in the programme, in a manner to include each measure or the sum of all measures within the scope of the Programme.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Rejected: The recommendation was not deemed suitable. There are indicators including renewable energy, waste management and circular economy. These are literally relevant to climatic and environmental issues. They indicate the number of recipients/applications that submitting with climatic and environmental awareness. However, the impact of IPARD on the environment and climate change issues cannot be expected to be measured with the indicators to be written here.

Recommendation No. 25;

Date: 2021/10/11

Subject: Measuring the effects of the Programme

Description of the recommendation: "The proposed table of current status and impact indicators for measuring the impact of the Programme" is not yet complete in the

Programme. This table should be completed in order to analyse the current situation during the preparation of the IPARD III Programme.

Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification:

Accepted: The table mentioned in the proposal is completed in the final draft of the Programme.

Table 81. Summary of recommendations included in the Ex-ante Evaluation

Date	Subject	Recommendation	Works performed as a result of the recommendation or, if the recommendation has not been considered, its justification
SWOT Analysis and Needs Analysis			
2021/09/30	Recommendation No. 1; SWOT analysis	Elimination of the contradictory, erroneous and incomprehensible statements.	Contradictory statements have been revised and corrected.
2021/10/03	Recommendation No. 2; Needs related to measures	Revising the needs that are incompatible with the measures	Necessary corrections have been made due to unchosen measures.
Structure of the Intervention Logic			
2021/10/05	Recommendation No. 3; Identification of final recipients, common and special eligibility criteria	Simplification of the language of the application conditions in the measure fiche	Definition of the final recipients is clear in all measure fiches.
2021/10/07	Recommendation No. 4; Common eligibility criteria	Simplification of application conditions for supports or provision of technical assistance	Necessary information will be available in call for application guidelines.
2021/10/07	Recommendation No. 5; Intervention logic	Explanation and description of “EU Standards” statements	All national regulations in Annex III contain the legislation referencing EU standards.
2021/10/08	Recommendation No. 6; Final recipients and resource allocation	Supports for cooperatives and farmers' organizations in measures	Additional aid intensity and point for ranking criteria will be given in the programme for PO's.

2021/10/08	Recommendation No. 7; Intervention logic	Regional investments in renewable energy support instead enterprises level (in an individual sense) supports	This is why M6 is planned to implement in the programme including both focused on self-consumption and selling to the grid.
2021/10/08	Recommendation No. 8; Justification for the measure on investments in physical assets of agricultural holdings	Revision of the justification section of the measure on investments in physical assets of agricultural holdings	The study on disadvantaged areas was excluded from the draft programme, as it was not very comprehensive and could cause some problems
2021/10/08	Recommendation No. 9; The measure on investments in physical assets of agricultural holdings	Specifying the emphasis on the red meat sector in the meat sector in the text	As part of measure M1, the poultry farming sector is covered by support only in terms of modernization of the existing entities but red meat sector is not alike.
2021/10/08	Recommendation No. 10; The final recipients of the measure on investments in physical assets of agricultural holdings	Clarifying the issue of the final beneficiaries	Definition of the agricultural holdings are clearly indicated in the programme.
2021/10/08	Recommendation No. 11; general eligibility criteria of the measure on investments in physical assets of agricultural holdings	Clarifying issues related to certificates in the general eligibility criteria	Rather than writing the content of the relevant legislation, it would be more accurate to indicate which legislation is taken as reference for possible future changes.
2021/10/08	Recommendation No. 12; Special eligibility criteria for measure on investments in physical assets of agricultural holdings	Clarifying the issue of fertilizer management in special compliance criteria	Eligible expenditures for fertilizer management is already indicated in the programme.
2021/10/08	Recommendation No. 13; Specific objectives of the Measure of Investments in Physical Assets	Revision of the stated expression on the subject related to the fishery processing sector under specific targets	It has been implied as "to improve the processing technology and enhance the number of value-added products in order to increase the

	Concerning Processing and Marketing of Agricultural and Fishery Products		competitiveness of the enterprises that process seafood.
2021/10/08	Recommendation No. 14; General eligibility criteria for the Measure of Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products	Explanation of the statement under the general eligibility criteria	It is for informing the recipients about which law or regulation they should take action to. Writing the details will damage the narrative integrity of the programme.
2021/10/08	Recommendation No. 15; Implementation of Local Development Strategies – specific objectives of LEADER Approach Measure	Revision of the statement under special targets	Necessary information is given in the measure fiche. Duplicate information has to be avoided.
2021/10/08	Recommendation No. 16; Selection criteria for the Measure on Investments in Rural Public Infrastructure	Revision of the statement on the selection of recipients	It is replaced by “If the applicant is a village administration or county municipality or district municipality with a population of less than 10 000 habitants. “
2021/10/08	Recommendation No. 17; Special Eligibility Criteria for Measure on Farm Diversification and Business Development	Determination of the situation and recommendation regarding the expression under special eligibility criteria	Cooperatives may already be recipients of this measure.
Indicators and quantified targets			
2021/10/10	Recommendation No. 18; Quantified targets for renewable energy investments	Measurement method recommendation for quantified targets for renewable energy investments	Collecting data on the measurement of renewable energy consumed as an alternative to fossil fuels is too difficult.
2021/10/10	Recommendation No. 19; Information	Removal of undetected needs and	Removed from the table.

	on measures that are not implemented	precautionary titles for which there is no provision	
2021/10/10	Recommendation No. 20; The quantified targets of the Agri-Environment, Climate and Organic Farming Measure	Measurement method recommendation for quantified targets related to the Agri-Environment, Climate and Organic Farming Measure	Calculation of the agricultural area converted into organic farming area is out of scope in terms of the implementation procedures of the measure.
2021/10/10	Recommendation No. 21; Indicators and quantified targets	Formal recommendation for indicators and quantified targets table	There is already a column for it in section 6.6.
2021/10/10	Recommendation No. 22; The quantified targets of the Agri-Environment, Climate and Organic Farming Measure	Completion of the quantified targets left blank for organic farming	They are determined as "0" for now.
2021/10/10	Recommendation No. 23; Implementation of Local Development Strategies/LEADER Approach and Technical Assistance Measures quantified targets	Recommendation to expand the quantified targets set for the relevant measures	Additional indicators were determined.
2021/10/10	Recommendation No. 24; Indicators and quantified targets	Recommendation to set targets related to climatic and environmental targets in addition to quantified targets	Indicators for recipients investing in the environment and climate are already included in the current programme.
2021/10/11	Recommendation No. 25; Measuring the effects of the Programme	Recommendation to complete the current status and impact indicators table	Table is completed.

The summary of the ex-ante evaluation report is provided in Annex IX. The full ex-ante evaluation report can be found at www.ipard.gov.tr.

Table 82. Identification of all relevant authorities and a brief description of the management and control structure

Authority Type	Name of authority / organization and, where appropriate, name of department or unit	Authority / organization officer (position or task)	Address	Telephone	E-mail
National IPA Coordinator (NIPAC)	Ministry of Foreign Affairs- Presidency for European Union	Faruk KAYMAKCI Ambassador Deputy Minister of Foreign Affairs and President of the European Union	Mustafa Kemal Mah. 2082 Cad. No: 5 06530 Çankaya / ANKARA	+90 312 218 16 42	faruk.kaymakci@mfa.gov.tr
National Authorizing Officer (NAO) (Management Structure)	Ministry of Treasury and Finance, General Directorate of Foreign Economic Relations	Murat ZAMAN Deputy Minister Acting Authority for the Office of National Authorizing Officer	İnönü Bulvarı No:36 06510 Emek / ANKARA	+90 312 204 53 00	bymakam@hmb.gov.tr
	Ministry of Treasury and Finance, General Directorate of Foreign Economic Relations, National Fund Department	Ali DOĞAN Head of Department	İnönü Bulvarı No:36 06510 Emek / ANKARA	+ 90 312 204 73 60- 61	ali.dogan@hmb.gov.tr

Authority Type	Name of authority / organization and, where appropriate, name of department or unit	Authority / organization officer (position or task)	Address	Telephone	E-mail
	Ministry of Treasury and Finance, General Directorate of Foreign Economic Relations, National Authorizing Officer (NAO) Support Department I	Harun GÜNER Head of Department	İnönü Bulvarı No:36 06510 Emek / ANKARA	+ 90 312 204 73 60- 61	harun.gurer@hmb.gov.tr
	Ministry of Treasury and Finance, General Directorate of Foreign Economic Relations, National Authorizing Officer (NAO) Support Department II (IPARD)	Aygün CİLAN Head of Department	İnönü Bulvarı No:36 06510 Emek / ANKARA	+ 90 312 204 73 60- 61	aygun.cilan@hmb.gov.tr
Managing Authority	Ministry of Agriculture and Forestry, General Directorate of Agricultural Reform	Dr. Osman YILDIZ Head of Managing Authority Deputy General Director	Eskişehir Yolu 9. Km Lodumlu / ANKARA	+ 90 312 258 80 04	osman.yildiz@tarimorman.gov.tr ipard.Turkiye@tarimorman.gov.tr

Authority Type	Name of authority / organization and, where appropriate, name of department or unit	Authority / organization officer (position or task)	Address	Telephone	E-mail
Paying Agency	Agriculture and Rural Development Support Institution	Muhammed ADAK Deputy Chairperson of ARDSI	Turan Güneş Bulvarı No:68 Çankaya / ANKARA	+ 90 312 409 14 00	muhammed.adak@tkdk.gov.tr
Audit Authority	Ministry of Treasury and Finance, Presidency of Board of Treasury Controllers	Ahmet TUTAL Chairperson of the Board of Treasury Controllers	İsmet İnönü Bulvarı No:36 06510 Emek / ANKARA	+ 90 312 204 70 91	ahmet.tutal@hmb.gov.tr

15. PUBLICITY, VISIBILITY AND TRANSPARENCY IN ACCORDANCE WITH IPA LEGISLATION

15.1. Actions foreseen to inform potential recipients, professional organizations, economic, social and environmental partners, bodies involved in promoting equality between men and women and NGOs about possibilities offered by the programme and rules of gaining access to funding.

Publicity activities are conducted in accordance with the Article ... of the Financial Framework Partnership Agreement, as well as Articles ... of IPARD Sectoral Agreement, to target general public and recipients for the purposes of:

- Publishing call for proposals including informing applicants about the terms of contract and relevant sections.
- Informing recipients about the EU contribution.

While ARDSI is responsible for preparing call for proposals and publishing the documents used for submitting proposals, MA and ARDSI are jointly responsible for conducting publicity activities to increase awareness about the programme among potential recipients.

Main target groups of publicity activities are:

- General public,
- Potential recipients: Legal entities, natural persons, producer groups, local action groups,
- Stakeholders: public bodies, professional chambers and organizations, economic and social partners, relevant non-governmental organizations including bodies promoting equality between men and women and environmental organizations, banks, consulting companies etc.,
- People with multiplier effect/opinion leaders like local and regional authorities, chambers of commerce, chambers of agriculture, people offering consultancy services, universities, research institutes and journalists.

Publicity and Visibility Tools:

Publicity and visibility tools for IPARD III Programme cover media (radio and tv programmes, local newspapers, press releases), seminars, workshops, fairs, website, printed materials (brochures, guides, posters, leaflets and booklets etc.), publicity movies, publicity meetings and trainings, on site visits, publicity stands, help desk, promotion materials. Publicity and visibility tools are further detailed in the Communication and Publicity Plan.

Target groups are informed about funding opportunities and publication of calls for application, eligibility conditions regarding the expenditures that need to be covered, description of the examination procedure of applications and relevant periods, selection criteria for the activities to be supported, contact points at national, regional or local level that could provide detailed information about the programme, projects and calls for application.

According to the [legal references], ... operating structures are responsible for organising the publication of the list of the recipients, the names of the operations and

the amount of EU funding allocated to operations. Distribution of publicity instruments will be based on the following principles:

1. Before the IPARD III Programme implementation starts, a general Communication and Publicity Action Plan is prepared for IPARD III visibility and publicity actions. This Action Plan defines the publicity activities to be carried out is to be adopted in the first Monitoring Committee of the Programme. The publicity activities and publicity instruments included in this plan are selected, transmitted to the Annual Publicity Action Plan and submitted for the approval of IPARD Monitoring Committee. MA and ARDSI shall carry out the publicity and communication activities by using those publicity instruments separately.
2. ARDSI and MA shall ensure that printed publicity and information material are delivered to organizations such as producer groups, chambers related to trade, agriculture and industry, provincial coordination units of ARDSI, provincial directorates of MoAF and other related institutions.
3. Potential recipients shall be delivered the publicity and information materials free of charge.

The budget allocated for publicity and visibility activities is part of the budget under the Technical Assistance measure of the programme.

15.2. Actions foreseen to inform the recipients of the EU contribution

ARDSI shall be responsible for the publication of the list of the recipients, the names of the operations and the amount of EU funding allocated to operations in accordance with the Article ... of the Financial Framework Partnership Agreement. ARDSI shall ensure that adequate publicity, with a clear reference to EU co-financing, is done about the availability of support and that the recipient is informed that acceptance of funding means an automatic inclusion of the recipient's name in the published list of IPARD III support recipients.

ARDSI carries out the informing activities about:

1. Aim of the Programme,
2. Measures and sectors in the context of the Programme,
3. Eligible investments in the context of the Programme,
4. Amount of the grant,
5. The role played by European Commission in the IPARD III Programme,
6. National and local contact points relevant for the implementation of the Programme,
7. Approval of the Programme by the European Commission, updating of the Programme, the main achievements in the implementation of the Programme and its closure,
8. Application criteria, application process, rules for collecting offers for the preparation of business plan, evaluation and selection of projects to be granted, eligible and ineligible expenditures, public contribution, payments process, responsibility of the final recipient and on other necessary matters.
9. Shall inform potential recipients, general public and intermediary organizations via press statement, e-bulletin, radio, TV, local and national newspapers in IPARD provinces, about the ARDSI activities, the Programme implementation and EU support.

15.3. Responsibilities of the recipients

Responsibilities of the recipients are:

- a. providing on the recipients' website (if only exists), a short description of the operation, proportionate to the level of support, including its aims and results, and highlighting the financial support from the EU;
- b. placing at least one poster with information about the project (minimum size A3), including the financial support from the EU, at a location readily visible to the public, such as the entrance area of a building;
- c. providing visibility equipment for a description of the project/operation such as billboards, posters, (explanatory) plaques and websites, including the IPARD logo in addition to the EU emblem.

15.4. Actions to inform the general public about the role of EU in the programmes and the results thereof

The visibility of the IPA assistance programmes and their impact on the citizens is essential to ensure public awareness about EU role, actions and assistance under the IPARD programme and to create a consistent image of the IPARD measures in accordance with Article ... of the Financial Framework Partnership Agreement.

Information on the list of the final recipients, the names of the operations and the amount of EU funding allocated to those operations shall be published on the Programme's websites by Managing Authority and ARDSI.

The visibility activities will be conducted based on the communication plan which is evaluated by the Monitoring Committee in accordance with the Sectoral Agreement. These activities will be aimed at notifying the public about co-financing possibilities and investments provided for in the IPARD Programme.

Actions will be taken to ensure that all stakeholders, including administrative bodies, public and private sector as well as potential recipients are informed about the programme content and implementation procedures in detail, so as to increase the capacity for understanding and use of this pre-accession programme. This will be managed through the use of media, leaflets/guidebooks, broadcasting on national and local TV channels, meetings, seminars, posters, brochures, handbooks, short films and websites. Additionally, orientation and training activities for potential recipients will be widely organized.

Key persons from the involved administrative bodies will be informed and trained during specific workshops on the content and implementation of the programme and will be provided with knowledge and tools to distribute the information and advice to potential recipients. The capacity to provide such training is very high within the MoAF organizations at both central and provincial levels. Acting as help desks and information offices, most departments provide relevant information services to citizens. Moreover, different stakeholders, including NGOs and advisors who have a direct contact with potential recipients, will help communicate and publicise IPARD III programme.

16. EQUALITY BETWEEN MEN AND WOMEN AND NON-DISCRIMINATION PROMOTED AT VARIOUS STAGES OF PROGRAMME (DESIGN, IMPLEMENTATION, MONITORING AND EVALUATION).

16.1. Description of How Equality Between Men and Women will be Promoted at Various Stages of Programme (Design, Implementation, Monitoring and Evaluation)

In accordance with the ... Regulation, the IPARD programme promotes positive discrimination and gives a particular priority in the ranking criteria to projects submitted by women in the area of modernization of farms/enterprises as well as in the diversification of economic activities. Women constitute the recipient group to be particularly targeted and promoted under the programme which provides for alternative employment opportunities and as such addresses the need to improve employment conditions for women in agriculture and rural areas.

Within the scope of IPARD III preparation, especially in the framework of thematic studies, suggestions of disadvantaged groups and women cooperatives were received. In addition, relevant NGOs such as the Foundation for the Evaluation of Women's Work are included in the Monitoring Committee.

In Türkiye⁴⁰, women make 280 749 (13%) of the 2 127 957 registered producers, 118 (4.88%) of 2 418 new establishments and 4 030 (6,1%) of 66 101 beekeepers.

The population and age structure of men and women living in rural areas are comparable (approximately 50%).

Women and young people are prioritized both in terms of selection criteria under IPARD, including under LEADER measure. The objective of this measure is, among others, to empower local communities, with a particular focus on the role of women and youth, to propose local rural development strategies.

One of the thematic priorities mandatorily required while preparing the Local Development Strategies is to revive cultural and social lives of the society and to support collective local organizations, associations and NGOs, including groups of women.

The management board of the Local Action Groups (LAGs) implementing the local strategies is to ensure adequate age diversity and gender equality: at least one woman and at least one young person equal to or below the age of 25 have to be part of the management board. In the evaluation of LAGs, scoring is done in consideration of these criteria.

Turkish National Rural Network (NRN) members are composed of stakeholders' individual representatives and institutions interested in the vast number of issues concerning rural development. In this context, rural women organizations will be encouraged to become individual or organizational members of the network together with cooperatives or non-governmental organization and women farmers, producers and entrepreneurs and as such have a say in the design and implementation of rural development policy in Türkiye.

⁴⁰ According to Agricultural Information System created by the Ministry of Agriculture and Forestry, 2020.

16.2. Description of How Any Discrimination Based on Sex, Race, Origin, Religion, Age, Sexual Orientation, will be Prevented during Various Stages of Programme Implementation

Any discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation shall be prevented during the various stages of the implementation of assistance in accordance with Articles 122 of the Turkish Penal Code. MA and ARDSI will take necessary measures to ensure prevention of any discrimination during all the stages of implementation of the Programme.

Relevant articles of the Constitution of the Republic of Türkiye concerning gender equality have been strengthened by introducing relevant amendments. The New Turkish Civil Code, which entered into force in 2002, establishes legal equality of men and women, ends gender discrimination and make women equal to men in the family and society. It also provides ground for non-discrimination in employment.

The “Women's Empowerment Strategy Document and Action Plan”, which was prepared and put in force under the coordination of the General Directorate on the Status of Women under the Ministry of Family and Social Services, was prepared for the 2018-2023 period. This Strategy aims to strengthen women's participation in economic and social life, ensure equal rights and opportunities and provides basis and comprehensive action plan to reflect equality of opportunities between women and men in all policies and the related initiatives.

17. TECHNICAL BODIES AND ADVISORY SERVICES

The Ministry of Agriculture and Forestry, Department of Training and Publication, is in charge of providing farmers with knowledge and information about new technologies and new developments and improving overall knowledge of all actors involved in agricultural and rural development policy.

Agricultural extension services for training of farmers are provided, free of charge, to all farmers engaged in agricultural production and living in rural areas. Training of farmers and extension services are coordinated by Provincial/District Directorates of the MoAF in provinces and districts as well as by the Education Centers.

Extension and advisory services tasks include organization of farmer courses, meetings, demonstrations and field days, enterprise visits etc., as well as preparation of printed and visual materials and the use of printed and electronic mass media to reach farmers, women and young people, in line with the national policies.

Under each Provincial Directorate of MoAF and Provincial Coordination Unit of ARDSI, there are departments in charge of coordination and agricultural data and, in coordination with those departments, services are offered also by other departments and district directorates. These include organizing training programmes, seminars and extension services for farmers within the framework of the national support schemes. These departments also support farmers by providing information about the preparation of applications, procedures linked to the support programmes, and the principles of preparing business plan. They also assist farmers in the interpretation of handbooks and leaflets, and provide them with the relevant documentation.

The existing advisory services can be divided into two categories:

1. Services providing advice on the preparation of applications for the IPARD programme support and advice on projects implementation. This service is mostly provided by private companies and secondly by NGOs.
2. Field/land advisory (group/individual advisory) services coordinated by the Department of Education and Publication of the MoAF. This service is provided by agricultural chambers, producer and/or breeder unions, agricultural cooperatives, self-employed agricultural advisors (freelancers) and advisory associations.

Training and meetings on various thematic topics are organized for agricultural advisors. The subjects of advisory services are prepared in line with the farmer's needs these mostly concern information on the subjects of agricultural production and the environment e.g., advice on horticulture, animal production, plant production, protection and health, food safety, animal health, animal welfare, environment, work safety, climate change, irrigation, effective use of natural resources etc. Agricultural advisors, through direct contacts with farmers, communicate the advisory thematic needs of farmers allowing to update regularly the list of topics covered by advisory services in line with current issues and needs.

The MoAF websites also provide information on the application and implementation principles of national support schemes, and answer the queries under the "frequently asked questions" sections. Farmers and other stakeholders are offered services through Agriculture and Forestry Academy, Web Tarım TV (Web Agriculture TV), digital channels on web. Information is provided by Agricultural Communication Centre, upon

request of farmers via a phone call method. MoAF Agriculture Bulletin and Turkish Journal of Agriculture and Forestry are another means used to inform the stakeholders.

The organizations providing advisory services under the Regulation on Organisation of Agricultural Extension and Advisory Services are granted “Agricultural Advisor License” in compliance with the conditions set in the regulation. Moreover, these organizations also employ personnel certified as “Agricultural Adviser Certificate” under the aforementioned regulation and prove their qualifications and competences.

In the 42 IPARD Provinces, there are currently 447 authorized Advisory Service Providers and 838 advisors. Of this number, 370 advisors work in agricultural chambers, 7 in cooperatives, 257 in producer unions and 204 advisors work as freelancers.

In the whole country (not only in 42 IPARD provinces), there are in total 648 authorized Advisory Service Providers and 1 170 Advisors. Of this number, 542 advisors work in agricultural chambers, 8 in cooperatives, 360 in producer unions and 260 advisors have a freelancer status.

Strengthening the information infrastructure of the advisory sector is crucial to contribute to better implementation of IPARD objectives. In this context, a “Capacity-Building Technical Advisory Project for the IPARD II Programme Advisory Services Measure” introduced in IPA 2014 action document was carried out in 2019 by MA, with a view to improve the capacities of advisory service providers. Trainings were delivered in two modules to form the infrastructure of certain practices which will be included in the “Advisory Services” measure foreseen to be implemented in the IPARD III Programme.

Public personnel working at the Provincial Directorates of Agriculture and Forestry located in 42 IPARD provinces and advisors working at Türkiye Union of Chambers of Agriculture, Cooperatives and other concerned Producer Unions participated in the trainings. The subjects covered were those often addressed by advisory services: sustainability concept, cross compliance, environment, food safety, animal health and welfare as well as the preparation and implementation of the programme content, project proposal, payment package and application package.

The extension services will be developed to meet the following requirements:

- Information on IPARD, conditions to fulfil in order to submit an application, rules and procedures to be followed for the use of funds;
- Practical advice on the preparation of business plans and properly documented applications;
- Sound and consistent management practices to meet the requirements of investment and development activities;
- Specific know-how and improved agricultural or food-processing practices related to the investments made – e.g., advice on properly localized irrigation management linked to an investment in drip irrigation system;
- Organization of close collaboration with other extension projects which are already well established at village level;
- Strengthening existing advisory services to improve trainers’ efficiency in providing advice and information to farmers and other applicants;
- Meeting the advisory requirements of farmers.

ANNEXES

[ANNEX I. DEFINITION OF MEDIUM AND SMALL SCALE ENTERPRISES](#)

[ANNEX II. INSTITUTIONS REPRESENTED IN THE CORE GROUP ASSIGNED TO DRAFT THE NATIONAL RURAL DEVELOPMENT STRATEGY \(2021-2023\)](#)

[ANNEX III. NATIONAL LEGISLATION RELEVANT TO THE PROGRAMME](#)

[ANNEX IV. GENERAL CRITERIA FOR EVALUATION OF THE ECONOMIC VIABILITY OF THE BENEFICIARY \(FOR M1, M3 AND M7\)](#)

[ANNEX V. PAYMENT CALCULATIONS OF TYPE OF OPERATIONS UNDER AGRI-ENVIRONMENT-CLIMATE MEASURE](#)

[ANNEX VI. CONTROLLABILITY AND VERIFIABILITY OF AGRI-ENVIRONMENT-CLIMATE COMMITMENTS](#)

[ANNEX VII. BEYPAZARI DISTRICT EROSION AND PARCEL SLOPE MAPS AND EROSION RISK MAPS OF TÜRKİYE](#)

[ANNEX VIII. LIST OF ELIGIBLE CRAFTS](#)

[ANNEX IX. SUMMARY OF THE EX-ANTE EVALUATION REPORT](#)

[ANNEX X. SCORING SHEET FOR SELECTION OF LDS](#)

[ANNEX XI. LIST OF FORAGE PLANTS](#)

[ANNEX XII. TECHNICAL ASSISTANCE PROJECT NAMED “ORGANIZATION FOR THE STUDIES RELATED TO THE REVISIONS OF BIODIVERSITY SUB-MEASURE UNDER AGRI-ENVIRONMENT” REPORT](#)

[ANNEX XIII. THE ORGANIZATION CHART OF MA FOR FULFILMENT OF ITS TASKS AND RESPONSIBILITIES](#)

[ANNEX XIV. THE ORGANISATION CHART OF IPARD AGENCY \(ARDSI\) FOR FULFILMENT OF ITS TASKS AND RESPONSIBILITIES](#)

ANNEX I. DEFINITION OF MEDIUM AND SMALL SCALE ENTERPRISES

The definition of an SME was confirmed in Turkish law, and brought into line with the EU definition, through Regulation No. 2005/9617, introduced on the 18th November, 2005. This regulation is repealed with “Small and Medium-Sized Enterprises Regulation” that entered the force and the definition was published in the Official Gazette No 32201 dated 25 May 2023. Under the current definition, SMEs are “economic entities, which employ less than 250 persons and which have an annual turnover or an annual balance sheet not exceeding 500 million TL”. According to TURKSTAT's 2020 data, the number of SMEs is 3.2 million, making up 99.8% of the enterprises in Türkiye. SMEs constitute 73.8% of employment, 64.5% of total turnover and 56.3% of total exports in Türkiye.

In the current legislation the sub-division of SMEs are defined as follows:

- Enterprises employing less than 10 persons throughout the year with turnover or total balance sheet less than 10 million TL are micro establishments.
- Enterprises employing less than 50 persons with turnover or total balance sheet less than 100 million TL are small establishments.
- Enterprises employing less than 250 persons with turnover or total balance sheet less than 500 million TL are medium establishments.

ANNEX II. INSTITUTIONS REPRESENTED IN THE CORE GROUP ASSIGNED TO DRAFT THE NATIONAL RURAL DEVELOPMENT STRATEGY (2021-2023)

1. Republic of Türkiye Ministry of Agriculture and Forestry (Coordinator-Secretariat),
2. Republic of Türkiye Presidency of Strategy and Budget (Technical Coordinator),
3. Republic of Türkiye Ministry of Foreign Affairs (Directorate General of European Union),
4. Republic of Türkiye Ministry of Family, Labour and Social Services,
5. Republic of Türkiye Ministry of Environment and Urbanization,
6. Republic of Türkiye Ministry of Treasury and Finance,
7. Republic of Türkiye Ministry of National Education,
8. Republic of Türkiye Ministry of Interior
9. Republic of Türkiye Ministry of Culture and Tourism,
10. Republic of Türkiye Ministry of Health,
11. Republic of Türkiye Ministry of Industry and Technology,
12. Ankara University,
13. Selçuk University,
14. Agriculture and Rural Development Support Institution,
15. Turkish Statistical Institute,
16. Turkish Employment Agency,
17. Turkish Patent and Trademark Office,
18. Development Foundation of Türkiye.

ANNEX III. NATIONAL LEGISLATION RELEVANT TO THE PROGRAMME

Table 83. National legislation relevant to the programme, Laws

Laws																							
No	Official Journal Date and No	Subject	Production				Processing and Marketing				Bee Keeping & Honey	Ornamental Plants	Medicinal and Aromatic Plants	Mushroom	Artisanal added value	Crafts	Rural Tourism	Aquaculture	Machine Parks	Renewable Energy	Leader	Agri - Environment-Climate	Rural Infrastructure
			Milk	Red Meat	Poultry	Egg	Milk	Meat	Fishery Products	Fruits and Vegetables													
1380	04.04.1971 - 13799	Aquaculture*																X					
2872	11.08.1983 - 18132	Environment*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X
Decree 555	27.06.1995 - 22326	Protection of Geographical Indications												X	X								
5253	23.11.2004- 25649	Associations Law *																		X			
5262	03.12.2004- 25659	Organic Agriculture	X	X	X	X					X		X	X									
5393	13.07.2005 - 25874	Municipalities									X		X	X	X	X	X	X	X				X

Laws																			
No	Official Journal Date and No	Subject	Production				Processing and Marketing												
			Milk	Red Meat	Poultry	Egg	Milk	Meat	Fishery Products	Fruits and Vegetables									
5346	18.05.2005 - 25819	Utilisation of Renewable Energy Resources for the Purpose of Generating Electrical Energy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5403	19.07.2005 - 25880	Soil Protection and Land Use																X	
5488	25.04.2006- 26149	Agriculture	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5957	26.03.2010 - 27533	Trade of Fruits and Vegetables and Other Goods Having Sufficient Supply and Demand Depth *							X										
5996	11.06.2010- 27610	Veterinary Services, Plant Health, Food and Animal Feed	X**	X**	X**	X**	X	X	X	X	X		X	X	X		X	X	

Laws																		
No	Official Journal Date and No	Subject	Production				Processing and Marketing											
			Milk	Red Meat	Poultry	Egg	Milk	Meat	Fishery Products	Fruits and Vegetables								
6331	30.12.2012 - 28339	Occupational Health and Safety	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6446	30.03.2013 - 28603	Energy Market	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 84. National legislation relevant to the programme, Secondary Legislation

Secondary Legislation																						
Official Journal Date and No	Subject	Production				Processing and Marketing				Bee Keeping & Honey	Ornamental Plants	Medicinal and Aromatic Plants	Mushroom	Artisanal added value	Crafts	Rural Tourism	Aquaculture	Machine Parks	Renewable Energy	Leader	Agri - Environment-Climate	Rural Infrastructure
		Milk	Red Meat	Poultry	Egg	Milk	Meat	Fishery Products	Fruits and Vegetables													
05.11.1995 - 22454	Implementation of Decree No: 555 on Protection of Geographical Indications													X	X							
18.02.2004 - 25377	Protection of Waters Against Farming Based Nitrate Pollution	X	X	X	X																X	
29.06.2004 - 25507	Aquaculture*																X					
31.03.2005 - 25772	Regulation on Associations *																			X		
21.06.2005 - 25852	Certification and Specifications of Tourism Facilities (only for accommodation facilities) *															X						
10.08.2005- 25902	Regulation on Business and Working Permit Licence*									X		X	X	X	X	X	X	X				
10.09.2014 - 29115	Regulation on Environmental Permits and Licensing*	X	X	X	X	X	X	X	X	X		X		X	X	X	X					

Secondary Legislation																						
Official Journal Date and No	Subject	Production				Processing and Marketing				Bee Keeping & Honey	Ornamental Plants	Medicinal and Aromatic Plants	Mushroom	Artisanal added value	Crafts	Rural Tourism	Aquaculture	Machine Parks	Renewable Energy	Leader	Agri - Environment-Climate	Rural Infrastructure
		Milk	Red Meat	Poultry	Egg	Milk	Meat	Fishery Products	Fruits and Vegetables													
18.08.2010 - 27676	Principles of Organic Farming and their Implementation	X	X	X	X					X		X	X									
30.11.2011 - 28128	Bee Keeping*									X												
17.12.2011 - 28145	Special Rules for Official Control of Animal Source Foods	X	X	X	X	X	X	X														
17.12.2011 - 28145	Inland Transportation of Live Animals and Animal Products	X	X	X	X		X	X														
17.12.2011 - 28145	Border Declaration and Veterinary Control of Incoming Live Animals	X	X	X	X		X															
17.12.2011 - 28145	Residual Materials in Live Animals and Animal Products and Precautions for their Monitoring	X	X	X	X		X	X														
17.12.2011 - 28145	Registration and Approval of Food Businesses *					X	X	X	X	X		X	X	X		X						
17.12.2011 - 28145	Regulation on Food Hygiene					X	X	X		X		X	X	X		X						

Secondary Legislation																						
Official Journal Date and No	Subject	Production				Processing and Marketing				Bee Keeping & Honey	Ornamental Plants	Medicinal and Aromatic Plants	Mushroom	Artisanal added value	Crafts	Rural Tourism	Aquaculture	Machine Parks	Renewable Energy	Leader	Agri - Environment-Climate	Rural Infrastructure
		Milk	Red Meat	Poultry	Egg	Milk	Meat	Fishery Products	Fruits and Vegetables													
17.12.2011 - 28145	Regulation regarding Official Controls of Food and Feed					X	X	X	X													
23.12.2011 - 28151	Welfare of Farm Animals	X	X	X	X																	
27.12.2011 - 28155	Regulation on Special Hygienic Rules for Animal Source Foods	X			X	X	X	X														
18.11.2005 – 25997	Identification, Specification, Classification of Small and Medium Size Enterprises and its Implementation (The Regulation on Amendment of The Regulation on the Classification of Small and Medium Size Enterprises 04.11.2012/28457) *					X	X	X	X	X	X	X	X	X	X	X	X	X	X			
16.01.2014 - 28884	Regulation of poultry hatcheries and breeders			X																		
27.05.2014 - 29012	Farmer Registration System *	X	X	X	X					X	X	X	X	X	X	X	X	X	X		X	

Secondary Legislation																						
Official Journal Date and No	Subject	Production				Processing and Marketing				Bee Keeping & Honey	Ornamental Plants	Medicinal and Aromatic Plants	Mushroom	Artisanal added value	Crafts	Rural Tourism	Aquaculture	Machine Parks	Renewable Energy	Leader	Agri - Environment-Climate	Rural Infrastructure
		Milk	Red Meat	Poultry	Egg	Milk	Meat	Fishery Products	Fruits and Vegetables													
02.12.2011 - 28130	Identification, Registration and Monitoring of Bovine Animals *	X	X							X	X	X	X	X	X	X	X	X	X			
02.12.2011 - 28130	Identification, Registration and Monitoring of Sheep and Goats *	X	X							X	X	X	X	X	X	X	X	X	X			
09.05.202131479	The Regulation for Unlicensed Generation of Electrical Power in the Energy Market *	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
19.08.2021 31537	Regulation regarding Documentation and Support of Renewable Energy Resources *	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
09.05.2021 31479	Electricity Market License Regulation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X

* Certification of compliance is mandatory (except agri-environment-climate).

** “Animal Husbandry Activity Certificate” regarding Animal Welfare is mandatory due to the Decree on Combating Animal Diseases and Control of Animal Movements based on Law 5996

ANNEX IV. GENERAL CRITERIA FOR EVALUATION OF THE ECONOMIC VIABILITY OF THE BENEFICIARY (FOR M1, M3 AND M7)

Applicants should demonstrate in the business plan the economic viability of the Project at the end of the investment. The following criteria will be used in determining the level of economic viability:

A- Assessment of the Applicant's Present Situation

For Applicants who are taxed by "Balance Sheet Method"	For Applicants who are taxed by "Operating Account Method"	For Applicants who are taxed by "Single Entry Method"	For Applicants who are taxed by "Deduction at the Source"
Equity Capital Ratio (<i>Equity Capital/Total Liabilities</i>)	Operating Result (<i>Profit or Loss</i>)	Operating Result (<i>Profit or Loss</i>)	Annual Sales Volume
Currents Assets/Total Assets Ratio	Net Profit Margin (<i>Net Profit/Total Sales Revenue</i>)	Net Profit Margin (<i>Net Profit/Total Sales Revenue</i>)	Collaterals Given (<i>R/Total Sales Revenue</i>) *
Current Ratio (<i>Current Assets/Short Term External Resources</i>)	Collaterals Given (<i>R/Total Sales Revenue</i>) *	Collaterals Given (<i>R/Total Sales Revenue</i>) *	
Acid-Test ratio (<i>(Current Assets-Inventories)/Short Term External Resources</i>)			
Operating Profit Margin (<i>Operating Profit/Net Sales</i>)			
Net Profit Margin (<i>Net Profit/Net Sales</i>)			
Collaterals given (<i>R/Total Liabilities</i>) *			

* $R = (\text{Mortgage} \times 0.25) + (\text{Pledge} \times 0.50) + (\text{Other Collaterals} \times 0.75)$

If the applicant is a producer group, assessment for "Deduction at the Source" taxing will apply.

B- Assessment of the Applicant's Project

SIMPLIFIED FORM OF BUSINESS PLAN

Liquidity: Cumulative Net Cash Flow must not be negative

COMPLETE BUSINESS PLAN

Liquidity: Cumulative Net Cash Flow must not be negative

Profitability: Net Present Value for the Investment must not be negative

**ANNEX V. PAYMENT CALCULATIONS OF TYPE OF OPERATIONS UNDER AGRI-
ENVIRONMENT-CLIMATE MEASURE**

**MANAGEMENT of SOIL COVER and SOIL EROSION CONTROL -
BEYPAZARI**

1. INTRODUCTION

Bey pazarı is a district of Ankara Province in the Central Anatolia region of Türkiye. Bey pazarı, on the historic Silk Road, is a place with cultural richness and natural beauties also famous for its carrots (producing nearly 60% of Türkiye's carrots) and high quality natural mineral water.

The nature of the district is characterized by plateaus, valleys, hills and important biological diversity and rare plant endemic species such as Bey pazarı Geveni” (wild liquorice). The area’s wetlands, arable land, meadows, forests and steppes are important sites for breeding, food and shelter providing areas for many water birds and raptors.

In this study, the payments to be made for packages under “soil cover management and soil erosion control” type of operation within the scope of IPARD III Programme to compensate the income losses of the farmers implementing these packages are calculated. Surveys and interviews have been conducted with the farmers in the region in order to determine their costs and incomes.

2. MATERIAL and METHOD

The basic material of this study is the data obtained through the surveys from the farmers engaged in agricultural production in dry conditions in Bey pazarı district of Ankara province, who were selected for the application of the sub-measure, and the cost data obtained from the District Directorate of Agriculture and Forestry. Interviews have been made with 10 producers from different villages in the region, information have been obtained from the mukhtars⁴¹.

In the cost calculation, variable expenses (DM) have been calculated. Variable Expenses (DM) are the costs incurred for the realization of production, and they include material costs, maintenance and labour costs used in a production period. It is calculated by multiplying the amount of material used and the price during the production period. Fixed Costs (SM) are the costs that must be met even if there is no production, and they consist of field rent, general administrative expenses and amortization. The sum of the variable and fixed costs constitutes the Total Costs (TM).

In agricultural economics calculations, the revolving fund interest is calculated as 5% of the total costs and 3% of the general administrative expenses.

Wheat income (wheat production value) was calculated by multiplying the amount of main and by-products obtained with the sales price of the product. Net Income (Net Profit) is obtained by subtracting Total Costs (TM) from wheat income. Field rent is not included in the calculations.

⁴¹ The mukhtar is the person appointed via election by the residents of the village or neighbourhood to carry out legal affairs of that village or neighbourhood.

While calculating the compensation payments for the packages, calculations have been made according to the requirements of the relevant package. For this reason, factors such as fertilizer and pesticide costs are included in accordance with the package requirements.

3. PACKAGES and COMPENSATION PAYMENT CALCULATIONS

Within the scope of the IPARD Programme, 2 different packages are implemented for “soil cover management and soil erosion control” type of operation. Calculations have been made for the wheat, common vetch and trefoil that will be used as the basis for the calculations. Wheat cost, yield and net profit calculations according to surveys and Beypazarı District Directorate of Agriculture and Forestry data are given in Table 85. Unfortunately, the number of farmers keeping business records in Ankara and its districts is almost non-existent. For this reason, the data provided by them were compared with the data of the District Directorate of Agriculture and Forestry and the most optimum results have been tried to be obtained. While calculating the wheat cost, field rent has not been included.

Table 85. Cost and Profit Calculations of Wheat cultivation

Operation	Material	Price (TL/Da)
1st ploughing	plow	43.00
2nd ploughing	sweep	25.00
3rd ploughing	sweep	17.00
Sowing	grain drill	20.00
Sowing	bottom fertilizer (20x3.25)	65.00
Sowing	Seed (20x2.7)	54.00
Fertilization	fuel	15.00
Fertilization	top fertilizer (15x2.5)	37.50
Pest control	weed (0.12x45)	5.40
Pest control	fuel	15.00
Labour costs		14.00
Harvest	combine harvester	25.00
TOTAL		335.90
Working capital interest		16.80
COSTS		
Variable costs (DM)		352.70
Field rent		0.00
General administrative costs		10.58
Fixed costs (total)		10.58
TOTAL COSTS		363.28
INCOMES		
Yield of wheat (kg)		310.00
Marketing Price of wheat (per kg)		2.75
Income of wheat (total)		852.50
Income of the by-product of wheat		25.00
TOTAL INCOME		877.50
Net profit		514.22

Cost calculations of common vetch according to the surveys and the data of the Beypazari District Directorate of Agriculture and Forestry are given in Table 86.

Table 86. Cost and Profit Calculations of Common Vetch

Operation	Material	Price (TL/Da)
1st ploughing	plow	35.00
2nd ploughing	cultivator	30.00
Sowing	machine rent	22.00
Sowing	seed (16x6.5)	104.00
Sowing	fuel	20.00
Labour costs		30.00
TOTAL		255.00
Working capital interest		12.75
Variable costs		267.75
Field rent		0.00
General administrative costs		8.03
Fixed costs (total)		8.38
Total costs		276.13

Table 87. Cost and Profit Calculations of Trefoil

Operation	Material	Price (TL/Da)
1st ploughing	plow	40.00
2nd ploughing	cultivator	35.00
Sowing	labour cost	45.00
Sowing	seed (20x0.80)	16.00
Mowing	machine	25.00
TOTAL		161.00
Working capital interest		8.05
Variable costs		169.05
Field rent		0.00
General administrative costs		5.07
Fixed costs (total)		5.07
Total costs		174.12

Package including green fallow requirements (common vetch):

Applicant has to uptake 5-years commitment on non-irrigated arable land with less than 12 degrees slope gradient for fulfilling following requirements:

- The farmer should keep 100% of his committed land under green fallow cover every second year. (During the commitment period, cereal (wheat, barley, etc.) and green cover (common vetch) are sown alternately.
- On the committed area; annual common vetch should be sown in March or April. The cereal should be sown in autumn by the end of October the latest.
- The stubble of the preceding cereal crop should be left on the field until the green fallow is sown.
- The green fallow vegetation should be ploughed and mixed with soil between May- June; first ploughing should be made in the flowering period.
- The crop of green fallow should be mixed to the soil and left on the field till the cereal is sown (not harvested/mowed).
- Grazing is not allowed.
- Applicant should keep the farm record book during the whole 5-years commitment period at the level of a plot.

Wheat-fallow-wheat rotation is implemented in the region. Therefore, the calculations have been made according to this rotation system. Thus, the minimum compensation payments to be paid to the farmers during a period of 5 years are given in Table 88.

Table 88. Package 1 Compensation Payments According to the Years

Year	Wheat Income (TL/Da)	Wheat Sowing Cost (TL/Da)	Common Vetch Sowing Cost (TL/Da)	Amount to be Compensated in TL/Da	Amount to be Compensated in TL/Ha
1	514.22		276.13	790.35	7 903.5
2		0		0	0
3	514.22		276.13	790.35	7 903.5
4		0		0	0
5	514.22		276.13	790.35	7 903.5
Total					23 710.5
Amount to be paid annually (TL/Ha)					4 742.1

Package 2 including perennial green cover (trefoil)

Applicant has to uptake 5-years commitment for arable non irrigated land with a slope of 12 or more degrees slope for fulfilling following requirements:

- Support is paid for the slopes with more than 12% which is kept under green cover by permanent plant during the whole commitment period.
- The farmer should keep 100% of his committed land under green fallow.
- Green cover land should be covered with perennial trefoil and the maintenance of trefoil (especially partial re-seeding depending on the plant density on the area) shall be ensured.
- The crop should be sown in March or April.

- The crop of green cover should be left on the field (not harvested) through the commitment period (five years). The crop of green cover can be mowed from top after the third year.
- Grazing is not allowed.
- Applicant should keep the farm record book during the whole 5-years commitment period.

Calculations were made according to the package content, taking into account the wheat-fallow-wheat rotation in the region. For trefoil maintenance, costs have been included in the calculation considering that 25% of the field will be planted and mowing will be done by cutting with a scythe. Thus, compensation payments for the 2nd package have been elaborated for the 5-year plan and are given in Table 89.

Table 89. Package 2 Compensation Payments According to the Years

Year	Wheat Income (TL/Da)	Trefoil Sowing Cost (TL/Da)	Maintenance Cost (TL/Da)	Amount to be Compensated in TL/Da	Amount to be Compensated in TL/Ha
1	514.22	174.12	-	688.34	6 883,4
2	0.00	-	-	0	0
3	514.22	43.53	25.00	582.75	5 827.5
4	0.00	43.53	25.00	68.53	685.3
5	514.22	43.53	25.00	582.75	5 827.5
Total					19 223.7
Amount to be paid annually (TL/Ha)					3 844.74

* As of the date of calculations (08.11.2021), 1 Euro is equal to 11.23 Turkish Liras.

BIODIVERSITY-ENHANCING GREAT BUSTARD POPULATION-POLATLI

1. INTRODUCTION

Great Bustards, an endangered species, have been detected in 67 areas in Türkiye. One of these areas is the Polatlı district of Ankara province. A large part of the population is within the territory of the General Directorate of Agricultural Enterprises (TİGEM)/Polatlı Agricultural Enterprise Directorate, and the area surrounding the TİGEM land has been selected as the pilot area for the implementation of Agri-environment-climate type of operation “Biodiversity-enhancing Great Bustard population” within the scope of IPARD III Programme. The selected pilot area includes the following villages: Şeyhahmetli, Özyurt, Sinanlı, Uzunbeyli, Yüzükbaşı, İnler, Yağcıoğlu and Adatoprakpınar.

In this study, the payments to be made for “biodiversity-enhancing the great bustard population” type of operation within the scope of IPARD III Programme to compensate the income losses of the farmers are calculated. Surveys and interviews have been conducted with the farmers in the region in order to determine their costs and incomes.

2. MATERIAL and METHOD

The basic material of this study is the data obtained through surveys from the farmers engaged in agricultural production in dry conditions in the villages of Şeyhahmetli, Özyurt, Sinanlı, Uzunbeyli, Yüzükbaşı, İnler, Yağcıoğlu and Adatoprakpınar in Polatlı, which were selected as the pilot for the implementation of this type of operation, and the cost data obtained from the Polatlı District Directorate of Agriculture and Forestry. Data were obtained from 10 producers, with at least one farmer from each village.

In the cost calculation, variable expenses (DM) have been calculated. Variable Expenses (DM) are the costs incurred for the realization of production, and they include material costs, maintenance and labour costs used in a production period. It is calculated by multiplying the amount of material used and the price during the production period. Fixed Costs (SM) are the costs that must be met even if there is no production, and they consist of field rent, general administrative expenses and amortization. The sum of the variable and fixed costs constitutes the Total Costs (TM).

In agricultural economics calculations, the revolving fund interest is calculated as 5% of the total costs and 3% of the general administrative expenses.

Wheat income (wheat production value) was calculated by multiplying the amount of main and by-products obtained with the sales price of the product. Net Income (Net Profit) is obtained by subtracting Total Costs (TM) from wheat income. Field rent is not included in the calculations.

While calculating the compensation payments for the packages, calculations have been made according to the requirements of the relevant package. For this reason, factors such as fertilizer and pesticide costs are included in accordance with the package requirements.

3. PACKAGES and COMPENSATION PAYMENT CALCULATIONS

Within the scope of the IPARD Programme, 3 different packages are planned to be implemented under the “Biodiversity - enhancing the great bustard population” type of operation. Cereal production is carried out intensively in the region. Calculations have been made for wheat, Hungarian vetch and trefoil products, which will be used as the basis for the calculations. Wheat cost, yield and net profit calculations according to surveys and Polatlı District Directorate of Agriculture and Forestry data are given in Table 90. Unfortunately, the number of farmers keeping business records in Ankara and its districts is almost non-existent. For this reason, the data provided by them were compared with the data of the District Directorate of Agriculture and Forestry and the most optimum results have been tried to be obtained. While calculating the wheat cost, field rent has not been included.

Table 90. Cost and Profit Calculations of Wheat

Operation	Material	Price (TL/Da)	Price (TL/Da) under commitment
1st ploughing	plow	45.00	45.00
2nd ploughing	sweep	21.00	21.00
3rd ploughing	sweep	21.00	21.00
4th ploughing	harrow	20.00	20.00
Sowing	grain drill	19.00	19.00
Sowing	bottom fertilizer 20x3.25	65.00	0.00
Sowing	seed (20x2.7)	54.00	54.00
Fertilization	fuel	15.00	0.00
Fertilization	top fertilizer (15x2.5)	37.50	0.00
Pest control	weed (0.12x45)	5.40	0.00
Pest control	fuel	15.00	0.00
Labour costs		14.00	14.00
Harvest	combine harvester	25.00	0.00
TOTAL		356.90	194.00
Working capital interest		17.85	9.70
COSTS			
Variable costs (DM)		374.75	203.70
Field rent		0.00	0.00
General administrative costs		11.24	6.11
Fixed costs (total)		11.24	6.11
TOTAL COSTS		385.99	209.81
INCOMES			
Yield of wheat (kg)		330.00	
Marketing Price of wheat (per kg)		2.75	
Income of wheat (total)		907.50	
Income of the by-product of wheat		25.00	
TOTAL INCOME		932.50	
Net profit		546.51	

Cost calculations of Hungarian vetch according to the surveys and the data of the Polatlı District Directorate of Agriculture and Forestry are given in Table 91.

Table 91. Cost and Profit Calculations of Hungarian Vetch

Operation	Material	Price (TL/Da)
1st ploughing	plow	35.00
2nd ploughing	cultivator	30.00
3rd ploughing	harrow	25.00
Sowing	machine rent	22.00
Sowing	seed (16x6.5)	104.00
Sowing	fuel	20.00
Labour costs		30.00
TOTAL		266.00
Working capital interest		14.93
Variable costs		280.93
Field rent		0.00
General administrative costs		9.40
Fixed costs (total)		9.40
Total costs		290.33

Table 92. Cost and Profit Calculations of Trefoil

Operation	Material	Price (TL/Da)
1st ploughing	plow	40.00
2nd ploughing	cultivator	35.00
Sowing	labour cost	45.00
Sowing	seed (20x0.80)	16.00
Mowing	machine	25.00
TOTAL		161.00
Working capital interest		8.05
Variable costs		169.05
Field rent		0.00
General administrative costs		5.07
Fixed costs (total)		5.07
Total costs		174.12

Package 1 - Set aside (long term fallow) with wheat:

- Wheat has to be grown in the same parcel for five years consecutively;
- Wheat should be sown in the parcel in the 1st year and should not be harvested (it should be ensured that wheat remains in the field for the remaining 4 years);
- Same parcel should be left in set-aside (as non-cultivated) for the remaining 4 years;
- The stubble (the roots and stems of wheat remaining in the soil because of set-aside) should be left in the parcel during summer;
- One ploughing each year should be done in the parcel in September or October (according to the climate and soil conditions) during the five years commitment period;

Wheat-fallow-wheat rotation is implemented in the region. Therefore, the calculations have been made according to this rotation system. Thus, the minimum compensation payments to be paid to the farmers during a period of 5 years are given in Table 93.

Table 93. Package 1 Compensation Payments According to the Years

Year	Wheat Income (TL/Da)	Wheat Sowing Cost (TL/Da)	Ploughing Cost (TL/Da)	Amount to be Compensated in TL/Da	Amount to be Compensated in TL/Ha
1	546.51	209.81	45	801.32	8 013.20
2	0	0	45	45	450.00
3	546.51	0	45	591.51	5 915.10
4	0	0	45	45	450.00
5	546.51	0	45	591.51	5 915.10
Total					20 743.40
Amount to be paid annually (TL/Ha)					4 148.68

Package 2 - Arable land with 5 consecutive years of trefoil:

- Trefoil should be grown by 5 consecutive years in the same parcel;
- Trefoil should be sown in the parcel in the 1st year in March or April and should not be harvested (it should be ensured that trefoil remains in the field for the remaining 4 years);
- The maintenance of trefoil (especially partial re-seeding depending on the plant density on the area) should be ensured;
- The trefoil can only be mowed from top for maintenance during the flowering period with scythe (not to hurt chicks);

Calculations were made according to the package content, taking into account the wheat-fallow-wheat rotation in the region. For trefoil maintenance, costs have been included in the calculation considering that 25% of the field will be planted and mowing will be done by cutting with a scythe. Thus, compensation payments for the 2nd package have been elaborated for the 5-year plan and are given in Table 94.

Table 94. Package 2 Compensation Payments According to the Years

Year	Wheat Income (TL/Da)	Trefoil Sowing Cost (TL/Da)	Mowing Cost (TL/Da)	Amount to be Compensated in TL/Da	Amount to be Compensated in TL/Ha
1	546.51	174.12	-	720.63	7 206.3
2	0	-	-	0	0
3	546.51	43.53	25	615.04	6 150.4
4	0	43.53	25	68.53	685.3
5	546.51	43.53	25	615.04	6 150.4
Total					20 192.4
Amount to be paid annually (TL/Ha)					4 038.48

Package 3 - Arable land with 5 consecutive years of Hungarian vetch:

- Hungarian vetch should be grown by 5 consecutive years in the same parcel;
- Hungarian vetch should be sown in the parcel every year in September or October (according to the climate and soil conditions);
- No mowing or cutting of Hungarian vetch, no harvesting;
- The stubble (the roots and stems of Hungarian vetch remaining in the soil) should be left in the field;

Calculations were made according to the package content, taking into account the wheat-fallow-wheat rotation in the region. Compensation payments for this package have been established for the 5-year plan and given in Table 95.

Table 95. Package 3 Compensation Payments According to the Years

Year	Wheat Income (TL/Da)	Hungarian vetch Sowing Cost (TL/Da)	Amount to be Compensated in TL/Da	Amount to be Compensated in TL/Ha
1	546.51	290.33	836.84	8 368.4
2	0	290.33	290.33	2 903.3
3	546.51	290.33	836.84	8 368.4
4	0	290.33	290.33	2 903.3
5	546.51	290.33	836.84	8 368.4
Total				30 911.8
Amount to be paid annually (TL/Ha)				6 182.36

* As of the date of calculations (08.11.2021), 1 Euro is equal to 11.23 Turkish Liras.

ANNEX VI. CONTROLLABILITY AND VERIFIABILITY OF AGRI-ENVIRONMENT-CLIMATE COMMITMENTS

All parcels are covered by the Agriculture Information System (TBS), which is a parcel-based system. Data of the agricultural land parcels such as the parcel size, irrigation conditions (irrigated or non-irrigated), type of agricultural production (arable or pasture), slope, yield, other applications of the farmer, etc. can be seen through this system.

All commitments of erosion type of operation are controllable and verifiable as explained below:

ELIGIBILITY CONDITIONS	Control method (administrative)	Control method (on the spot)
<i>Size of eligible area</i>	TBS; Farmer Registration System	GPS, ...
<i>Land cadastre ownership or a proof of lease</i>	TBS; Lease contract submitted by the farmer with the application	Identification on the spot office controls
<i>Arable land</i>	TBS	Visual inspection
<i>Non irrigated land</i>	TBS	Visual inspection
<i>Slope</i>	TBS	
COMMITMENTS	Control method (administrative)	Control method (on the spot)
<i>Land under green cover every second year/permanently with given sowing dates</i>	Not controllable by administrative means	GPS etc. Remote Sense applications of TBS Visual inspection of the state of vegetation at a certain growth stage Timing of control
<i>Stubble left on field Green fallow vegetation ploughed at certain date</i>	Not controllable by administrative means	Visual inspection of the state of vegetation at a certain growth stage Timing of control
<i>Grazing not allowed</i>	Not controllable by administrative means	Visual inspection
<i>No mowing</i>	Not controllable by administrative means	Visual inspection
<i>Keeping parcel records</i>	None	Document check on the spot
OTHER OBLIGATIONS - BASELINE	Control method (administrative)	Control method (on the spot)
<i>GAEC - Stubble burning prohibited on arable land</i>	Not controllable by administrative means	Visual inspection (for the commitment area)

GAEC - Terraces and other physical structures (wind curtain, terrace, flood cove and prevention structures) should not be destroyed	Not controllable by administrative means	Visual inspection (for the commitment area)
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All commitments of biodiversity sub-measure are controllable and verifiable as explained below:

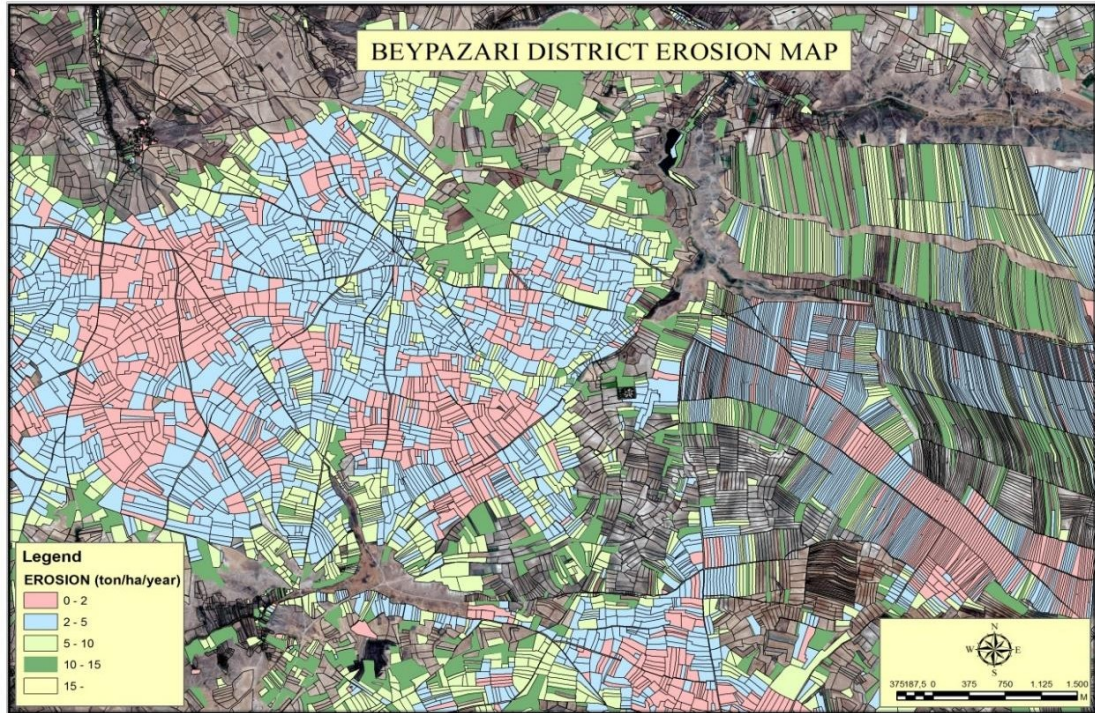
ELIGIBILITY CONDITIONS	Control method (administrative)	Control method (on the spot)
Size of eligible area	TBS; Farmer Registration System/Agricultural Production Record System	GPS, ...
Land cadastre ownership or a proof of lease	TBS; Lease contract submitted by the farmer with the application	Identification on the spot, office controls
Arable land	TBS	Visual inspection
Non irrigated land	TBS	Visual inspection
COMMITMENTS	Control method (administrative)	Control method (on the spot)
No chemical fertilizers, herbicides, fungicides and insecticides during the 5-years commitment for any crops during 5-years commitment	Not controllable by administrative means	Visual inspection
No new drainage	Not controllable by administrative means	Visual inspection
No new fences	Not controllable by administrative means	Visual inspection
No irrigation	Not controllable by administrative means	Visual inspection
Keeping parcel records	None	Document check on the spot
<i>Size of eligible area</i>	TBS; Farmer Registration System/Agricultural Production Record System	GPS, ...
<i>Land cadastre ownership or a proof of lease</i>	TBS; Lease contract submitted by the farmer with the application	Identification on the spot, office controls
<i>Arable land</i>	TBS	Visual inspection
<i>Non irrigated land</i>	TBS	Visual inspection
<i>Wheat sown in the same parcel for five consecutive years and left in the same parcel not mowed or harvested</i>	Controllable by administrative means	Visual inspection
<i>One ploughing for each year for wheat in September or October</i>	Not controllable by administrative means	Visual inspection
<i>Trefoil sown in the same parcel in</i>	Not controllable by administrative means	Visual inspection

<i>March or April in the 1st year not harvested</i>		
<i>Maintenance of trefoil ensured and mowing possible from top in the flowering period with scythe</i>	Not controllable by administrative means	Visual inspection
<i>Hungarian vetch sown five consecutive years in the same parcel and left in the parcel not mowed or harvested</i>	Not controllable by administrative means	Visual inspection
<i>Hungarian vetch sown in the parcel every year in September or October</i>	Not controllable by administrative means	Visual inspection
<i>No grazing</i>	Not controllable by administrative means	Visual inspection
OTHER OBLIGATIONS - BASELINE	Control method (administrative)	Control method (on the spot)
<i>GAEC - Prohibition of stubble burning on arable land</i>	Not controllable by administrative means	Visual inspection (for the commitment area)
<i>Legal requirements concerning the use of fertilisers, herbicides and pesticides as referred to in the baseline</i>	Not controllable by administrative means	Visual inspection (for the commitment area)

* As of the date of calculations (08.11.2021), 1 Euro is equal to 11.23 Turkish Liras.

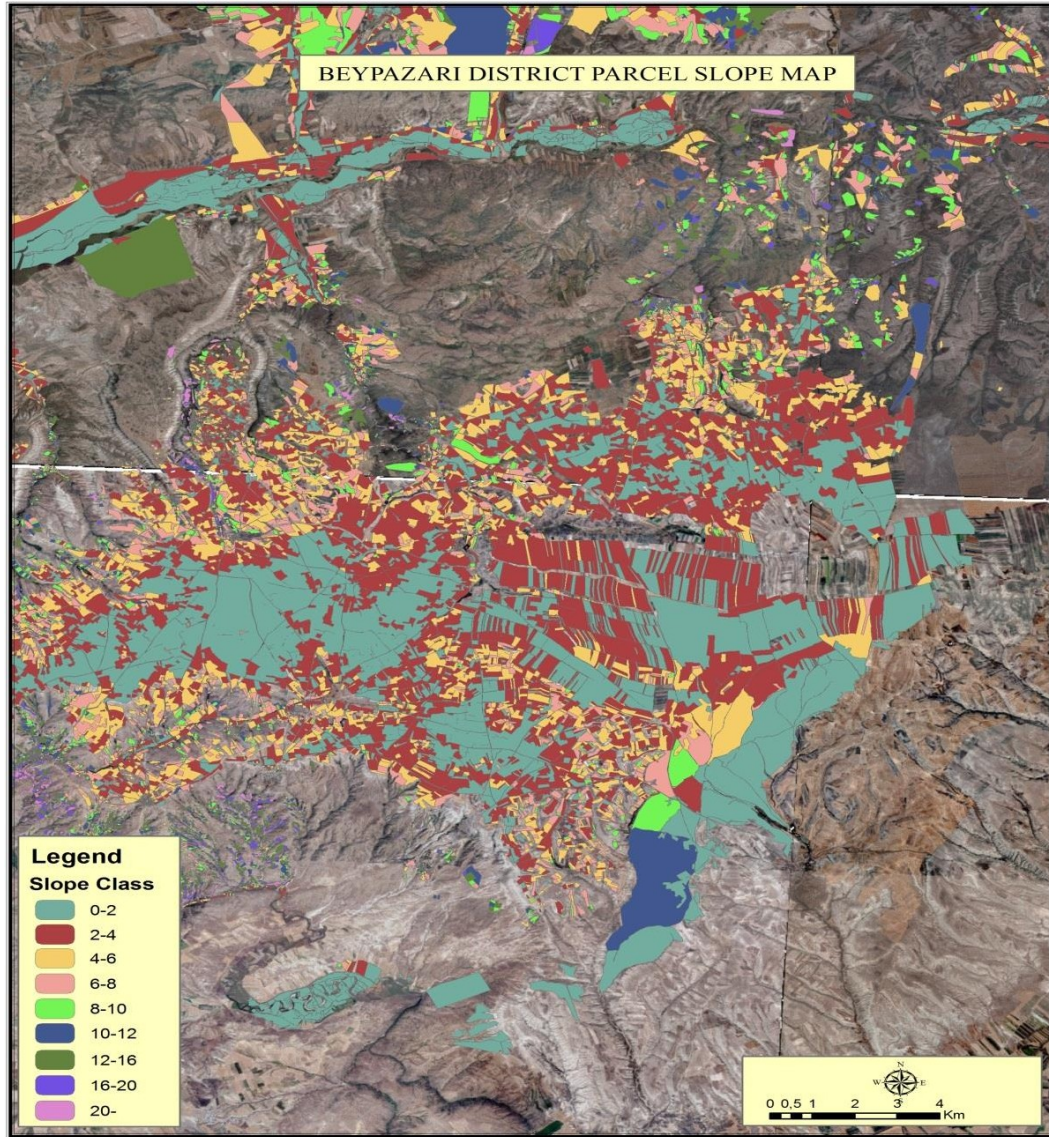
ANNEX VII. BEYPAZARI DISTRICT EROSION AND PARCEL SLOPE MAPS AND EROSION RISK MAPS OF TÜRKİYE

Figure 10. Beypazari District Erosion Map



Erosion Classification ton / ha / year	Parcel Figures	Area / m ²
0-2	27 598	12 634 480
2-5	9 755	8 110 620
5-10	8 011	8 196
10-15	5 866	11 812
15+	49 628	29 603 673

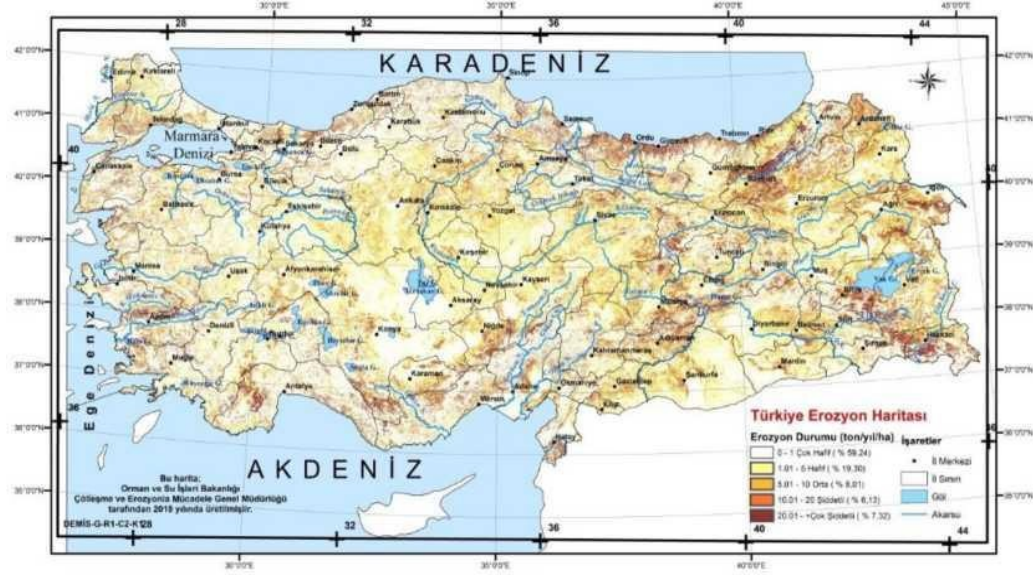
Figure 11. Beypazari District Parcel Slope Map



Middle Slope %	Parcel Figures	Area / m ²
0-2	17 941	117 782 139
2-4	20 637	134 443 224
4-6	14 829	88 271 859
6-8	10 558	56 971 697
8-10	8 275	41 652 036
10-12	6 452	41 330 818
12-16	9 463	58 877 992
16-20	6 151	35 896 497
20+	6 552	50 571 401

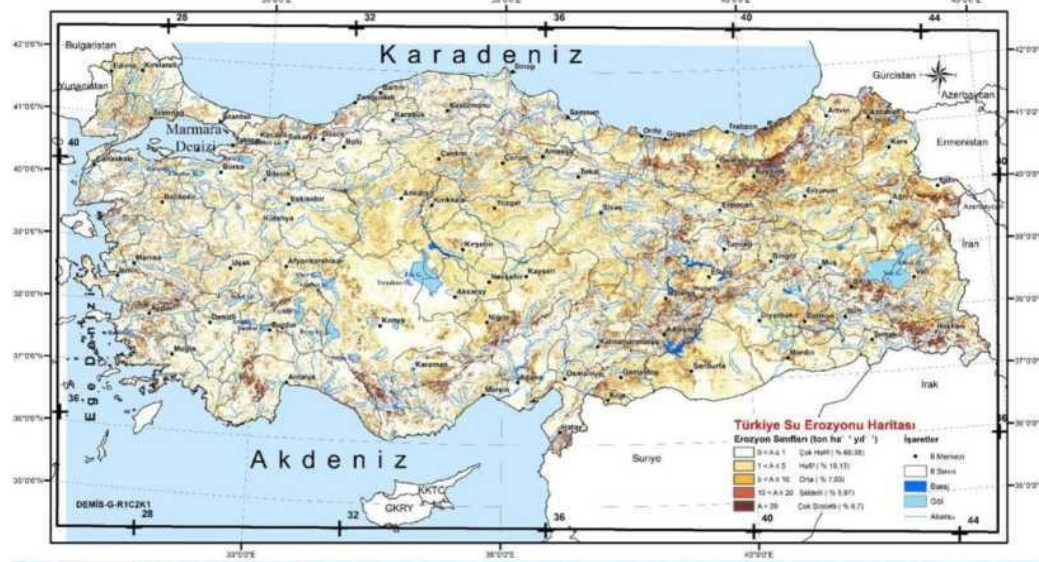
Erosion Risk Maps of Türkiye

Figure 12. Wind Erosion Risk Map of Türkiye (2018)



Source : www.tarimorman.gov.tr/CEM/Link/9/Izleme-Sistemleri

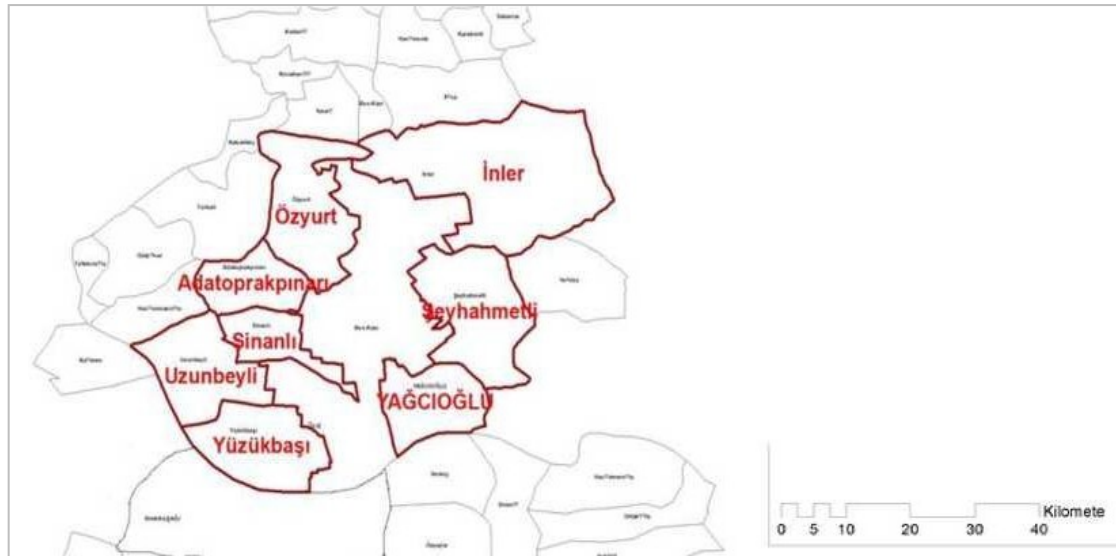
Figure 13. Water Erosion Risk Map of Türkiye (2019)



Source:

[https://www.tarimorman.gov.tr/CEM/Belgeler/yay%C4%B1nlar/yay%C4%B1nlar%202019/T%C3%BCrkiye%20Su%20Erozyonu%20Haritas%C4%B1%20\(resim\).jpg](https://www.tarimorman.gov.tr/CEM/Belgeler/yay%C4%B1nlar/yay%C4%B1nlar%202019/T%C3%BCrkiye%20Su%20Erozyonu%20Haritas%C4%B1%20(resim).jpg)

Figure 14. Villages of Polatlı eligible for the type of operation: Biodiversity-enhancing the Great Bustard population



ANNEX VIII. LIST OF ELIGIBLE CRAFTS

NAME OF THE HANDICRAFT	DEFINITION
1 <i>Wood work</i>	Wood work is classified in two groups according to relation with architecture. Wood is used for household goods such as tripods, drawers, chests, spoons, walking sticks, thrones, Koran protectors, cradle, cedar and so on and architectural objects such as windows, doors, joists, consoles, column heads, ceilings, mosque niches and minbars and so on. Walnut, apple, pear, cedar, ebony and rosewood are particularly popular, worked with different techniques such as coloring, relief, carving, damasked and caging, embossing and so on and firing tree is used in drawing.
2 <i>Metal work</i>	Metal works: metal works transforms crude metal into manufactured metal by using different tools and equipment. Technique which is applied and conditions of workshop changes according to metal's hardness and type of the product. Gold works: different techniques are used in particular for sets with valuable and semi valuable germ. Copper, which occupies an important place in Anatolian art, is easily obtained and widely used in daily life for pots, jewelry, helmets, and doorknockers and to decorate doors. Silver work: to give it shape different techniques are used in particular for producing sets, ornaments etc. Iron works (iron-steel): is used in knives, garden equipment (axe, adze, pickaxe, plow, hook etc.), hand tools and pots and pans, sets, casque, and doors.
3 <i>Glassware</i>	Production of accessories and implements such as oil lamps, tulip vases, sugar bowls, stained glass panels, goblets and blue beads by using glass as a raw material. Blowed glass-ware, relief work, painted and sealed stained glass are some of the techniques used.
4 <i>Production of Ceramics</i>	Ceramics means the formation and firing of inorganic materials by various means. The main component of ceramics is clay, which can either be shaped in a mold or on a lathe and cooked in oven.
5 <i>Pottery (Earthenware pot, jug making)</i>	Earthenware pots and jugs are made by mixing clay and water, and can either be shaped in a mold or on a lathe and cooked in oven. After the firing stage, objects made from it become hard and maintain their shape.
6 <i>Tile making</i>	Tile is used with a cooked biscuit panel or object of which basic material is quartz and one side is glazed. Tiles are classified in two groups according to usage in architecture or not.
7 <i>Weaving</i>	Creation of cloth on a loom by using wool, cotton and silk threads such as handkerchief, puşu, Trabzon cloth, loin cloth, hand printing scarf, Vezirköprü cloth etc.

8 Wickerwork	It is made by using rush or corn cobs (Black Sea region). Rushes and corn cobs are placed on a rectangular counter. The woof is run up and down in the warp of the same material. This technique used as plate, ground covering, wall covering, prayer rug, basket, today is principally used for decoration.
9 Basket weaving	A basket is a handled pot used to carry different objects and made of rushes, thin tree stems or plastic materials. Rough, thin baskets are produced from different raw materials such as willow, chestnut, nuts, straw, strawberry cane, raffia or bamboo. The moistened material is placed on the ground in a “+” shape reflecting the intended size of the basket. Further quantities of the same material are then added and knitted.
10 Music Instrument making	These instruments are made by using wood, plants, intestine of animals, animal hair, bone and horn. They are classified as wind, string instruments, percussion.
11 Felt making	Felt is a tissue obtained by joining animal fibers, especially wool, under heat, dampness and pressure with the help of soap, oils and acid. Felt is produced by the kicking method or in factories. Besides lamb’s wool, rabbit, camel, mohair and goat bristles are all used. Natural colors (black, white, brown) are usually used for the surface, and designs are applied with felts colored with synthetic dyes. Most of the designs have geometric shapes, but figures from nature can also be seen.
12 Rug weaving	This is a weft surfaced weaving, in which the weft threads are passed through the warp threads, one to the front and the other behind, and in which the warp threads are tightened and hidden. In rugs, on special areas where designs exist, colored weft threads continue until they reach the borderline of another design and then return. In this way, designs begin to appear when same-colored wefts go and come between the warps. Rug, light rug, bag, ground covering, prayer rug are some examples of products produced by this technique.
13 Carpet weaving	A warp skeleton is constituted by placing bristle, cotton, silk and wool threads side by side. Every double thread in the skeleton is tied with silk or floss silk by means of various techniques and is tightened with the weft thread. In carpet production, there may be two or three wefts. After completing a few lines, weaving is cut to the desired length with the help of carpet scissors.
14 Saddle making	The wooden pillow placed on the backs of animals used for riding, such as donkeys, mules or carthorses is called a packsaddle. It can be made of wood, metal, sedge, leather or woven fabric. Strong cords are used in order to tie the packsaddle together.
15 Stone working	Stone used in the art of stone-working can be classified according to the differing construction techniques such as carving, relief and scraping. Ornamental elements are generally plants, geometric designs and writing. In traditional

	architecture, stone-working plays an important role in the construction and decoration of internal and external walls. Another common use is for gravestones, hand mill, pileki and mosaic stone art.
16 Decorative stonework	Production of products like jeweler, chaplets, cigarette holders and walking stick handles by using decorating natural stones stone, such as emerald, ruby, amethyst, jade, cornelian, amber, coral, etc.
17 Mother-of-pearl inlay	Making decoration on expensive woods such as ebony, mahogany, and walnut to create different motifs by embedding mother-of pearl. Used in door, window, cupboard, chair, drawer, Quran protector, table, seat, gun handle, coffee set, patten etc.
18 Paper arts (Penmanship (calligraphy), marbling art, illumination)	Calligraphy is a kind of writing art made by Arabic letters. This art emerged in 6th and 10th centuries after a period in which Arabic letters made a progress. Calligraphy means “line” in Arabic. Marbling art; marbling means colors and drawings penetrated each other but not mixed. It is the art of random shapes arose by liquid paint dotted in water and figures made by these shapes transferred on paper. Illumination means gilding. It is the art of decoration made by usage of gold and paint. It is decoration made by traditional figures made on books, calligraphy panels, letters, leather and wooden works.
19 Saddlery	<u>Saddlery</u> is the art of producing goods such as harness, belt, gun case, bag, decoration materials, shoes, and by using tick leather and thin leather. And <u>furriery</u> is another technique using leather.
20 Folkloric doll and cloth making	It is the production of traditional clothes and <u>accessories</u> one-to-one or in <u>miniature</u> size. Traditional clothes differ in each province. During production of these clothes different clothes, beads, and different metals are used.
21 Quilting	It is the decoration of blanket made by wool, cotton, or feather put into coating made by different clothes using different sewing techniques.
22 Comb making	It is production of combs and mirrors by traditional techniques using by bone, shell of some animals and metals before modern techniques.
23 Plaster Works/floor furnace making	Decorations made by plaster is called “mala kari”. Plaster works is a mix of stone work and ceramic techniques. Some examples of architectural decoration are <u>banister</u> , ceiling, dome, pulpit, mihrab, floor furnace etc.
24 Needlecraft, cloth decorating, Embroidery edging, knitting	It is made by using needles, shuttles, crochet hooks, hairpins. The techniques are extending by using a chain, connecting to each other, knotting and sometimes using sequins, beads and spangles. There are types such as crochet, shuttle, hairpin, cocoon, wool, wax and bead.

Needle works: China needle, brocading, cross needle, herringbone , basilisk ,elder needle works are some examples of famous needle works.

Needlecraft; Combining texture in order to produce home textile or clothes in hand or by using machine. Needlecraft for decorative aim is made in different colors and figures to make handkerchief, scarf, prayer rug, bundle, napkin, and like that using frame or other hand tools.

Cloth dyeing is transferring each kind of figure on a cloth by using paint and brush. It is generally used for dower materials, curtains, clothes, bag and other objects which main material is cloth.

Knitting is used in sweater, stocking, bootee, glove, heading, scarf.

25 Sweeper making Heather picked up in fields are cut to make a sweeper and made a bunch and watered. Watered heater is whitened by sulfur, cleaned by winder and collected as bunches and bound with ropes and draft sweeper is made.

ANNEX IX. SUMMARY OF THE EX-ANTE EVALUATION REPORT

The ex-ante evaluation of the IPARD 2021-2027 started on September 29, 2021 following the review of the 2021-2027 IPARD Programme document and other supporting documents. The final version of ex-ante evaluation report is completed on November 3, 2021. Since writing of the programme document is under process and evolving while ex-ante report is written, the evaluators had to take the latest versions of the programme documents available at the end of the ex-ante evaluation and base evaluation on these versions. Thus, some comments and recommendations under this ex-ante evaluation report may be invalid after finalization of the draft programme. The ex-ante evaluation should be seen as a complementary document to the IPARD 2021-2027 programme – presenting an account of the targeted needs, the intervention logic and an evaluation framework for assessing the extent to which the needs are addressed. The ex-ante evaluation of the IPARD 2021-2027 programme is prepared by Güray Küçükkocaoğlu, Professor of Finance and academic member of Başkent University Department of Management and Türker Açıkgöz, academic member of Başkent University Department of Management.

The main documents, references, sources and evidence mentioned following were used in the preparation of the ex-ante evaluation report; IPARD 2021-2027 draft schedule, Sector analysis reports, T.R. National Rural Development Strategy (NRDS 3) (2021-2023) report, T.R. Ministry of Agriculture and Forestry 2019-2023 Strategic Plan, 2021-2027 IPARD Programme draft measure fiches. Relevant sources of information, statistics and regulations were also referred in the course of ex ante evaluation. Statistics and data are mainly obtained from official government agencies of Türkiye.

SWOT analysis of each sector were reviewed, analyzed and compared with 20 needs identified based on the SWOTs in order to evaluate correlation among them. General and specific objectives of the IPARD III 2021-2027 programme measures were analyzed and crosschecked with the identified needs to evaluate relevance among them. Under the IPARD 2021-2027 programme, 7 measures are planned for implementation. Rational and objectives of the suggested 7 measures were analysed and compared with that of the rural development measures for IPA III 2021–2027 in order to find harmony between them and intervention logic applied. In addition to that, it was also checked whether intervention logic is coherence with national strategy of Turkish Republic, SWOT analysis and needs assessment. For each measures; final beneficiaries, eligibility criteria, eligible expenditures and budget allocation were analyzed. These were also compared with rural development measures in order to evaluate establishment of targets and distribution of financial resources. Indicators, targets, administrative procedures, aid intensity and geographic scope of the measures were analysed in order to evaluate implementing, monitoring, evaluation and financial arrangements of the IPARD 2021-2027 Programme. For detailed implementing, monitoring and evaluation arrangements the relevant chapters (11-12) of the IPARD 2021-2027 Programme were also assessed. Desktop studies were supported by meetings with professionals taking part in planning process of IPARD 2021-2027 Programme and Managing Authority.

During the preparation of the ex-ante evaluation report, the opinions, suggestions and corrections of the managing authority, the EU Commission and different stakeholders were taken into consideration. The report presented in this annex is the final version of the IPARD 2021-2027 programme ex-ante evaluation report. It should be expected that Managing Authority responds below recommendations and finalise ex ante evaluation section at final programme document.

The evaluators analyzed Türkiye's National Rural Development-III (NRDS-III) which covers 2021-2023 period and comment that all NRDS objectives are coherent with 7 measures of IPARD 2021-2027 programme. It can be said that NRDS III and IPARD 2021-2027 are complementary to achieve the common goals.

Evaluators find SWOT analysis of the programme complete with some minor revisions. With an overview, SWOT analysis are in line with the Community's agricultural policy and National Rural Development Strategy, contributing objective related baseline indicators, identified needs and their translation into objectives and concrete priorities for action.

The targets expected to be achieved within the scope of the IPARD III draft programme have been determined in line with the IPA III and the National Rural Development Strategy. IPARD III is a continuation of IPARD II, but it was created on the priorities in line with the strategic purposes of the National Rural Development Strategy (NRDS) and IPA III. The strategic objectives, related priorities and projected impacts are consistent.

The structure of the IPARD III Program has been determined in such a way as to allow evaluators to conclude that the actions and priorities proposed for the measures are in line with the objectives and that they are compatible with the overall objectives of the programme. The specific and operational objectives are also in line with the objectives and structure of the program. However, the expected results were developed within a rather narrow framework. It is recommended to correct the expected results to be more target-based and with clear boundaries.

The indicators and quantified targets to measure overall impact of the IPARD III programme was evaluated. The expected overall effect of the expected creation in accordance with quantified targets and program objectives under certain criteria for each measure planned under the IPARD III Programme is reported. While these targets are consistent and achievable, some shortcomings have been observed and are noted in the full version of the ex-ante report.

IPARD 2021-2027 programme consists of 7 measures. These measures are in line with the IPARD III Programme objectives. The measures are balanced and fixed (not too general or not too specific) so that it is possible to actually reach the intended beneficiaries and the desired types of activities can be mobilized. The desired results and planned measures are linked to national strategic priorities and the smart, sustainable and comprehensive growth goals of the EU strategic goals.

The information of the resource transfer made for each measure within the scope of the IPARD III Programme (given in IPARD 2021-2027 programme chapter 7) were examined. The evaluators concluded that financial plan and budget allocation of IPARD III programme is consistent with programme objectives and targets. In addition to that determination of final beneficiaries and target groups were also coherence with programme objectives and targets.

The Managing Authority and the IPARD Agency are responsible for the creation and implementation of monitoring and evaluation systems of the programme.

ANNEX X. SCORING SHEET FOR SELECTION OF LDS

EVALUATION CRITERIA	SCORING
Quality of partnership (max 8 points):	
a) The number of women in the management board of LAG. (1-3 points)	1=1 points, 2=3 points
b) The number of young members under age of 25 in the management board of LAG. (1-3points)	1=1 points, 2=3 points
c) The number of NGO(s) in the management board of LAG. (1-2 points)	1=1 points, 2=2 points
Coherence of the LAGs territory and sufficient critical mass in terms of human, financial and economic resources (max 17 points):	
a) The LAG territory and its natural, geographical and administrative boundaries is defined. (1-2 points)	not sufficient=1, partially defined=2,
b) The data and information on population of LAG territory (age, gender, etc.) are defined. (1-2 points)	not sufficient=1, partially defined=2,
c) The data and information on economic structure (agriculture, tourism, infrastructure, labour force and employment, etc.) and social structure (poverty, education, NGO's, etc.) of the LAG area are defined. (1-4 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=4
d) The features that distinguish the LAG area from others areas are explained. (1-5 points)	not sufficient=1, partially defined=3, defined in detail=5
e) The historical, cultural and tourism activities specific to the LAG area are identified. (1-4 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=4
Quality of the SWOT analysis (max 15 points)	
a) The strengths, weaknesses, opportunities and threats analysis of area is presented as part of the LDS and is of an adequate quality. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
b) The SWOT analysis is prepared with the involvement of local stakeholders. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
c) The main development issues established a link between the summary of the SWOT and selection of the priorities of the LDS. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
Evaluation of proposed priorities and activities for their coherence with SWOT and correspondence with LAG's human and financial resources (max 20 points)	

a) The defined vision is clearly based on the SWOT's key statements including area's current situation and actual needs. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
b) The priorities are defined in line with SWOT analysis. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
c) The activities are defined in line with the priorities. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
d) The proposed number of activities and allocated budget are proportioned. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
Stakeholder Involvement (max 15 points)	
a) Local stakeholders' representatives have participated in LDS' first preparatory meetings (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
b) Draft LDS has been discussed with wider group of local stakeholders. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
c) LDS includes the processes regarding the meetings with local representatives, public opinion polls and consulting. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
Ability of the LAG to implement the LDS; (max 10 points)	
a) The management of public funds are explained. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
b) It is explained how the LAG ensures animation and implements small projects. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
Mobilisation of additional resources for the LDS implementation such as national funding, voluntary work etc. (double funding will be avoided); (max 15 points)	
a) The role of the other national/regional development programmes in the LAG territory is explained. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
b) The voluntary contribution of the community is explained. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
c) Financial contribution of local stakeholders for the implementation of the LDS. (1-5 points)	not sufficient=1, partially defined=2, defined in detail=3, fully defined=5
TOTAL SCORE	100
Assessment of the Result/Comments and Justifications:	

ANNEX XI. LIST OF FORAGE PLANTS

Category	Forage Plants
Perennials	Alfalfa (aqueous) Artificial meadow pasture Sainfoin (aqueous /dry) White clover (aqueous) Purple clover (aqueous) Lotus corniculatus (aqueous)
Annuals and silages made from	Vetch Hungarian vetch Tare/bitter vetch Grasspea Fodder beet Fodder turnip Wheat/trigo (green herb) Barley/hordeum (green herb) Fodder pea Forage pod Alexandrian clover Lolium Multiflorum Oat/avena (green herb) Rye (green herb) Triticale (green herb)
Silage plantings	Silage soybean (aqueous) Sorghum (aqueous) Sudan grass (aqueous) Sorghum - Sudan Grass crossbreed (aqueous) Silage corn (aqueous)
Forage Crops Cultivated in Dry Conditions	Silage soybean (dry) Sorghum (dry) Sudan Grass crossbreed (dry) Silage corn (dry) Trefoil (dry) White clover (dry) Purple clover (dry) Lotus corniculatus (dry) Awnless brome grass (dry) Orchard grass (dry) Lolium Perenne (dry) Randall grass (dry) Agropyron / crested wheat grass (dry)

ANNEX XII. TECHNICAL ASSISTANCE PROJECT NAMED “ORGANIZATION FOR THE STUDIES RELATED TO THE REVISIONS OF BIODIVERSITY SUB-MEASURE UNDER AGRI-ENVIRONMENT” REPORT

**Ministry of Agriculture and Forestry
Report on Great Bustards (*Otis tarda*) in
Polatlı**



Sunrise and Great Bustards - Surrounding of Yüzükbaşı Village - Cansu Özcan

Ferdi Akarsu

Senior Biologist (Ornithologist)

Introduction

Anatolia is very important both geopolitically and geographically. While Türkiye lays at the nexus of Mediterranean, Russia-Caucasus, Asia and Africa geographically, it serves as a bridge among Asia and Europe. Türkiye's location, mountains, and its encirclement by three seas have resulted in high terrestrial, fresh water, and marine biodiversity (Sekercioğlu et al, 2011). Türkiye is confined with the Caucasus, Irano-Anatolian, and Mediterranean hotspots which are defined globally within 35 biodiversity hotspots. As a result of all these characteristics, it becomes important in terms of biodiversity and there are many special species living in Türkiye as Great Bustard (Mittermeier et al. 2005).

The Great Bustard (*Otis tarda* Linnaeus, 1758) is a globally-threatened species, classified as “vulnerable” by IUCN (IUCN 2016). This species has suffered rapid population reductions, apart from Iberian Peninsula, owing to the loss and fragmentation of its habitat, as well as hunting (Birdlife International 2016). Some reasons for the decrease in Great Bustard population are intensive industrial farming, modernization of agriculture and irrigation methods, changes in land use, pesticides (Cramp 1998). The current world population of Great Bustard is estimated between 44,000 – 57,000 individuals, while Türkiye's population was estimated as 3000-4000 by Goriup and Parr (1985), 800-3000 by Kollar (1996), 145-4000 by Kasperek and Bilgin (1996), 764-1250 by Kılıç and Eken (2004) and about 700 - 1180 individuals by Karakaş and Akarsu (2009).

Great Bustard is among important living things, particularly bird species in terms of the relation with farming which is an important activity for human to produce food. As sustainable farming is an important issue for future, Great Bustard becomes important related to its role in this issue. This species provides ecosystem services such as pest control, fertilization and becomes an indicator in terms of the area's natural value and characteristics. It is also essential to provide the continuation of Great Bustard existence in the area and if possible, the enhancement for sustainable farming practices of future.

Under this scope; the scientific researches and their results realized in natural steppes and agricultural lands around Polatlı TİGEM has been tried to be presented. Number of individuals, using status of the species related to the seasons has been specified for the breeding areas in the fields around Polatlı TİGEM Agricultural Enterprises and its surrounding. In addition, all the threats for the species in these areas have defined via reviews realized with people living in local, key persons, TİGEM staff and shepherds.

A. General Information on Great Bustard

A.1 Description

Great Bustard (*Otis tarda* Linnaeus, 1758) is one of the most attractive bird families among 10 thousand bird species in the world. It is also one of the well-known bird species because of its imposing physical appearance and flirting behaviour in the breeding period. It belongs to “Gruiformes” Order (there are 25 different Great Bustard species under this Order) and it is the heaviest flying bird in the world. It is estimated that Great Bustard is originated from Africa approximately 50 million years ago, there are still 21 species living in Africa, 4 of them in Western Palearctic and 3 of these 4 exist in Europe. There are two species, Great Bustard and Little Bustard (*Tetrax tetrax*), being observed regularly in Anatolia. Houbara Bustard is assessed as a random species in our country.



Coloration of Great Bustard – Cansu Özcan

The interest for Great Bustards globally increases day by day. The populations of Austria and Slovakia in Europe, especially in Spain, are also a touristic value in terms of tourists coming to take photos and watch them. The attention on this species in our country also increases. Nevertheless, it is a threatened species both globally and, in our country, classified as “vulnerable” by IUCN (IUCN 2016).

A.2 Biology of the Species

Great Bustard (*Otis tarda*) prefers open areas and it is a steppe bird living in the natural steppes and arable lands around these steppes. They mostly are in groups; these groups are formed particularly in early breeding season and after the chicks reach the maturity for flying. Males start their flirting behaviour “lek” for breeding at the end of winter. Females play an important role on the selection of nests and incubation. The care of the chicks is also the responsibility of the females. They lay their eggs mostly in April or May, this period can extend to June for breeding populations in the cold north latitudes. Females reach to reproduction maturity between 2-4 ages, they mostly have 2 eggs and the incubation period is 25 days. Males reach to reproduction maturity between 5-6 ages (Morales ve Martin, 2002). Chicks stay with their mothers till the next breeding season. Soil is preferred for nest and is formed generally around “lek” area. Great Bustard is among the species whose chicks’ survival rate is too low. As this rate differs according to the region, it is 0,14 in Spain. In other words, only 14 of each 100 chicks survive. This species is associated with partridge in Anatolia and therefore it is thought that nearly 10 eggs are occurred at a time. This is a wrong information needs to be corrected.

As the species generally prefers vegetative diet, particularly seeds, invertebrates such as bugs are found in their breeding season diets in 40%. Chicks also eat invertebrates, especially in the early periods of their lives. Great Bustard feeds with crops such as clover during spring and eats mostly seeds during autumn and winter (Birdlife, 2018).



Feeding behaviour of the species in the study area – Cansu Özcan

Great Bustard is both migratory and native according to the weather conditions of its living environment and food capability. While the Europe population is specified as native, it is known that some populations migrate to short distances (5-200 kms) for ideal weather conditions and food (Birdlife, 2018).

A.3 Species' Distribution in the World

As they were largely existing in Asia and Europe as well as North Africa in the past, recently they are observed in some countries of Europe and Asia while continue to decreasing. Only 91-108 pairs are left from North Africa population in Morocco. It is estimated that the population of Europe is between 31 000 – 36 000 most of which is existed in Spain (nearly 23 000) as well as 5 500 – 8 000 in Russia, 1 100 – 1 200 in Hungary, 1 500 in Portugal, around 500 – 750 individuals in Ukraine. It is extinct in Britain, France, Sweden, Switzerland, Italy and Greece. It is thought that the whole population in the world is between 44 000 – 57 000 (Alonso, 2014).

A.4 Species' Distribution in Türkiye and Konya

The loss of population effective globally related to the species also corresponds to Anatolia and a big change has been observed in their distribution areas for the last century. As it was a steppe bird, it was recorded in nearly all steppe areas in the past in Türkiye. While East and South-east Anatolia as well as Middle Anatolia populations were existed, recently the records are taken from Muş, Diyarbakır, Batman and Van within East Anatolia population. Muş receives the biggest population. Especially up-to-date records are available for Muş, Bulanık, Malazgirt and Patnos Plains. Middle Anatolia population ranges over Konya, Ankara, Kırşehir (around Seyfe Lake and less than 10 individuals), Yozgat (in the plain areas near to Seyfe Lake, but no updated info for their number), Aksaray (the last population was in the area between the province and Tuz Lake, but there isn't any updated info), Eskişehir, Kütahya and Afyon in different numbers. The updated info is for Afyon population around Acı Lake, the population around Eskişehir-Sivrihisar, the population around Kütahya Altıntaş Plain as well as the populations in the plains around Kulu, Altınova and Sarayönü and lastly around Ankara-Polatlı.

A.5 Threats

Great Bustard is a steppe bird, however it adapted to the agricultural lands as habitats during the past centuries. On the other hand, this species couldn't adapt completely to the industrial farming practices in which machinery is predominantly used as a result of the technical developments in the last century. This causes loss of nests, chicks and eggs in its entire living environment depending on the agricultural equipment. Pesticides and chemical fertilizers being used in conventional farming are also threats affecting the species. One of the most important problems is the fragmentation of lands by railways and highways. The accidents as they crash to powerlines and power poles because of their limited capability in terms of movement are also negative for the species. The illegal hunting both in developed and developing countries is one of the biggest problems. It is one of the intensely illegally hunted bird species in Anatolia.



Electric wires and Greta Bustard – Cansu Özcan

A.6 International and National Protection Status of Species

Great Bustard is an attractive bird species in its distribution areas; therefore, it is affected both positively and negatively because of this situation. Great Bustard is a globally-threatened species classified as “vulnerable (A3cd+4cd)” by IUCN. It is also under protection in European Union scale and it is included in Bird Directive List 1. Great Bustard is protected by international agreements; it is described in this status under Annex 2 pursuant to Bern Agreement. According to Convention on Migratory Species – CMS, this species is again under protection and included in Lists 1-2. The Convention on International Trade in Endangered Species-CITES Agreement (established for the trade of species vulnerable and under protection) also includes Great Bustard in its Annex II.

Great Bustard is also under protection nationally, it is included among the species for which hunting is forbidden all year long by Central Hunting Commission.

B. General Information on the Study Area

Polatlı and its surrounding is in Middle Anatolia and it is involved in Iran-Turan flora. It is also in the West borders of Iran-Turan Hot Spot (one of the 34 hot spots) going through Middle Asia. There are also halophilous steppes around some wetlands as Tuz Lake in the region where plain and mountain steppes dominate in terms of habitat diversity. The existence of forests is very limited in the area and the current types are oak species and thin hawthorn and similar steppe trees. Polatlı and its environment are mostly surrounded by agricultural lands and plain steppes in the non-cultivated areas. When the biodiversity in the study area is observed, some bird species in the fragmented small steppe habitats as grouse and Eurasian thick-knee and skylark species adapted to the agricultural lands are seen. Lesser kestrel, long-legged buzzard, Montagu's harrier and short-toed eagle are some of the predators breeding in the area.



The study area – Ferdi Akarsu



The study area – Ferdi Akarsu

B.1 Protection Status in the Study Area

Most of the areas great bustards exist are belong to TİGEM, private areas and pastures of some villages such as Yüzükbaşı, Uzunbeyli, Yağcıoğlu, İnler and İshakuşağı around TİGEM area are also used by the species. There isn't any legal protection status within this distribution area except from areas protected by TİGEM.

C. Methodology

Great Bustard ranges over large areas and it is a species adapted itself well to the steppes and agricultural areas physically to the contrary of its big size. It is really hard to recognise the species at rest/motionless because of its dorsal colorization. However, it became very vulnerable to threats as it is seen as a hunting species and as it lives in open areas. These adaptations necessary for its population's continuity makes Great Bustard a species hard to search in scientific studies. TİGEM Polatlı area and the suitable areas around for the species have been determined via literature and GIS in order to identify its current status in the area, the population density, periodic representation, threats and area use status. Transects were formed to cover all the area with the car and telescope and binoculars were used to scan the area in every 1 km periods. In addition to this methodology, for spring, the topographic highs such as hills suitable for "lek" behaviour were determined by using GIS, literature and the info taken from villagers. These areas were privately searched at sunrise and sunset. Especially sunrise and the following four hours that human activity is less, birds' activities are more and also three hours before sunset were observed. The team was made of 2 ornithologists. The site visits were realized as; four days at the end of April/in the beginning of May as "lek" season, four days both in June and July for breeding season

and observation of chicks, four days in September for after breeding and early migration period.

Under site visits; GIS, GPS, telescope (20x), binoculars (10x) and a professional camera with 400 mm tele lens were used. The records including the population info and the areas on spot basis were written to GPS software.

D. Findings

At the end of this study, the existence of minimum 45, maximum 75 individuals have been revealed by the literature and site visits in Polatlı TİGEM and surrounding area in 2018. Under the studies, 2 active “lek” areas (one between TİGEM area and İler Village, another around Yüzükbaşı Village) have been specified. When the seasonal distribution was searched, it has been identified that they were especially in the area around TİGEM and İler Village during spring and summer as well as around Yüzükbaşı Village and TİGEM irrigated farming areas, they were mainly staying around Yüzükbaşı Village and TİGEM irrigated farming areas during autumn.

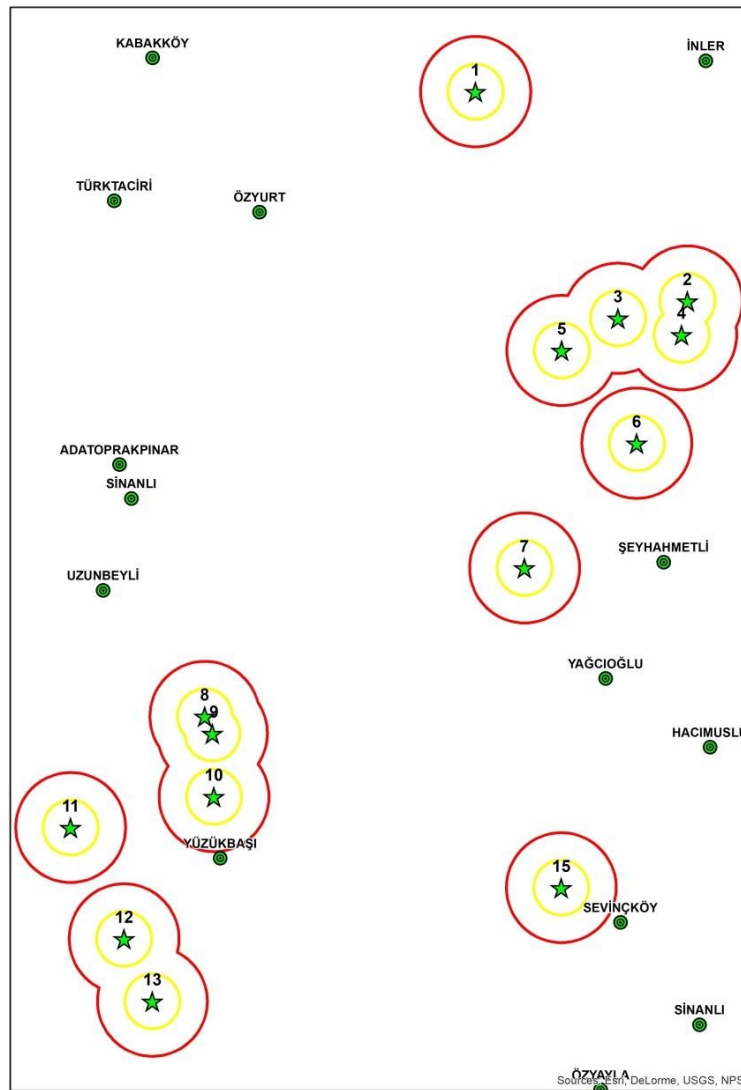
Considering the area use in terms of activities, all the “lek” records have been taken from natural hills. This shows that even though they adapt themselves to agricultural areas and activities; they are dependent on the natural areas for the vital “lek” behaviour. The study area is an important breeding area for the species. It has been proved via the info given by TİGEM wardens and the video recording that at least one pair bred and a chick was born in 2018. According to the info given by the Mukhtar of Yüzükbaşı, a nest and 2 eggs were found during the mowing activities in his field in 2017. These all show that the species use the area actively for breeding.

Another element vital necessary for the species in its habitat is the water source. Under this cope, the valley and the wetland on the south of TİGEM centre become important. The records taken in this study and the info given by shepherds are corroborative of this necessity. It has been also observed and confirmed by the TİGEM authorities that the population around Yüzükbaşı Village satisfies this need in the TİGEM irrigated farming areas and especially in clover and common vetch fields in early morning.

D.1 Important Regions for the Species and Proposed Areas for the Project

As a result of the study realized in Polatlı TİGEM land and its surrounding during the period of spring, summer and autumn, the records of great bustard from private lands in the south and north of the study area and partly in TİGEM lands have been provided (Map 1). When the records have been observed, it has been determined that the great bustards are centred around Inler Village and TİGEM Administrative Centre (Map 2), as well as in the surrounding of Yüzükbaşı Village (Map3). This implies that great bustards centre in two active use area.

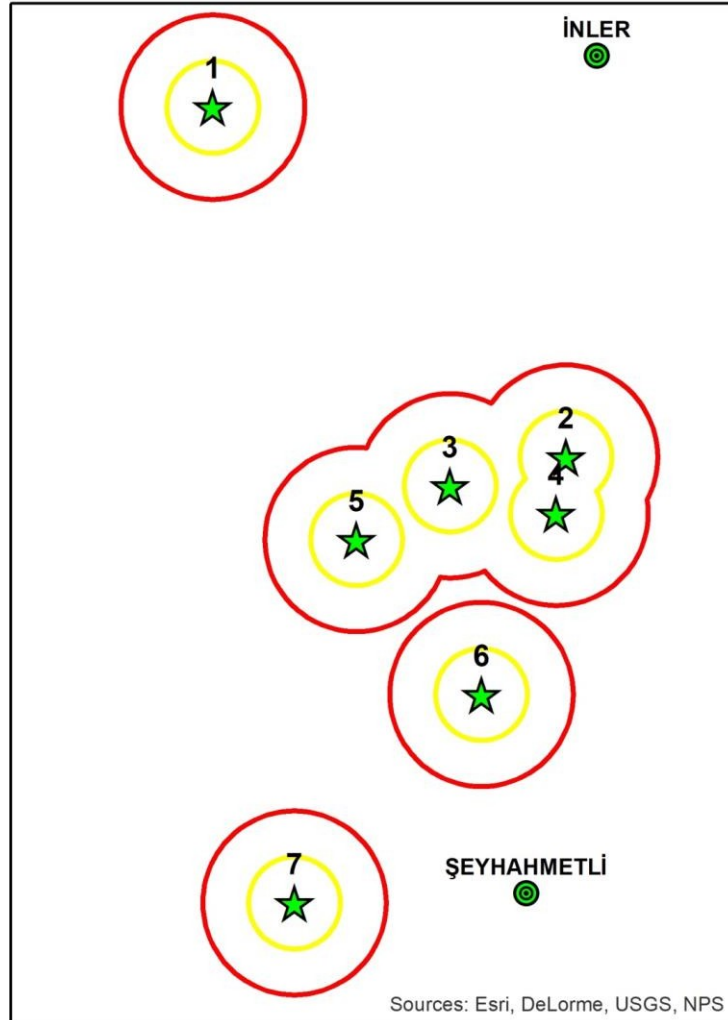
In the maps below; three categories have been used to propose the implementation areas under this project. The areas primarily to be selected for the study include the areas the species have been observed directly and these are shown with pins. The second areas to be studied stay in a 1 km diameter ring and are shown with yellow circle. The third one is the areas with a 2 km diameter circle and shown with red.



Map 1. All Records

D.2 Polath TİGEM – İler Köyü Area

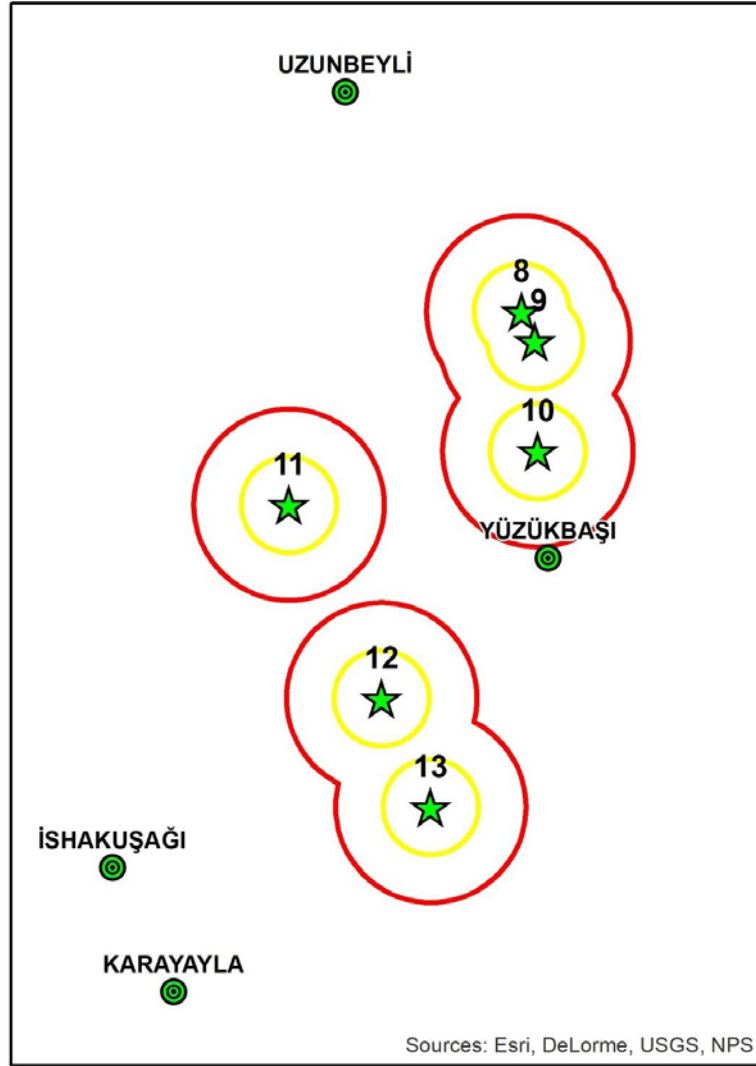
The recorded species in the region have mostly been seen in spring and summer. Most of the records are from TİGEM land and particularly the record in the northernmost of the map includes private lands. Here is an important breeding ground (lek) for great bustard and one of the largest areas.



Map 2. Surrounding of İler Village

D.3 Surrounding of Yüzükbaşı Village

This area represents the region between Yüzükbaşı Village and TİGEM irrigated lands, it includes termly important areas for the species. Great bustards are seen around the village within the day and can be observed surrounding the clover and common vetch fields in TİGEM irrigated lands during sunrise and following few hours.



Map 3. Yüzükbaşı Village and Its Surrounding

E. Discussions and Proposals

The Great Bustard is both globally and nationally threatened species being protected by many national and international legislation and agreements. This species is also defined as a flagship species meaning that its extinction shows that many other creatures are under threat. Great Bustard is an indicator for the sustainability in farming and it comes forward as an important value and stakeholder for the success of the activities for sustainability and these activities' monitoring.

As told in the related section, at the end of the site visits, 2 active groups have been identified. Moreover, there are still records for the species in the villages located around Polatlı TİGEM and mentioned in the sub-measure fiche. It is possible for these villages to be used by Great Bustards; therefore, it is important to include these villages under sub-measure implementations. Under this scope, the villages proposed to be addressed at the first stage are particularly Yağcıoğlu, İshakuşağı, Uzunbeyli and Adakasım etc.

There are intense farming activities both in TİGEM and the villages around TİGEM within the study area. natural steppes are existed around agricultural lands, especially on the peaks of the hills and their surroundings, valleys and a few plains. At the end of this study, it has been observed that hills and topographic highs vital for "lek" behaviour were ploughed and converted into agricultural areas. It is very important to leave these areas naturally.

It is observed that the powerlines and poles which are very threatening for the species are particularly intense around "lek" and feeding areas. It is known that death of the species, both in Türkiye and in all distribution areas, occurs because of getting caught by powerlines and electric shocks.

The species mostly makes the nest into the natural grasslands and crops and it lays the eggs. During mowing, nests, eggs and chicks fall under threat. Therefore, it is important to raise awareness among farmers in the species' distribution area. It is also necessary to put specially produced making noise tools to the mowers in order to provide their run during mowing.

Great Bustard friendly farming products and methods, as the subject and the objective of this project, should be preferred both in distribution areas and the areas the species seen before.

Hunting is still one of the biggest problems for Great Bustard even though it is illegal in Türkiye. It is also valid for Polatlı and its surrounding. It is understood that illegal hunting continues (as told by the villagers of Yüzükbaşı and its surrounding). It is necessary to inform the related stakeholders such as local people, hunting clubs and law enforcement officers.

Stubble burning is also an important threat for the species. Although stubble burning is prohibited, this illegal activity continues. While directly causing Great Bustard to face with burning danger, this harmful activity indirectly affects the species by destroying their feed. So, it is important to prevent stubble burning in the areas they lived before and also in their current existence area around Polatlı TİGEM. It is recommended to perform training and awareness raising activities for this aim.

TİGEM areas both under this study and in Türkiye are important for the species as habitat. It is recommended to make controls in the area by the wardens to prevent the hunters' access to TİGEM areas and to provide the hunting ban. TİGEM areas are the last sheltered habitats for Great Bustard, therefore, it is necessary for the future of the species to implement Great Bustard friendly production methods including crop pattern.

F. References

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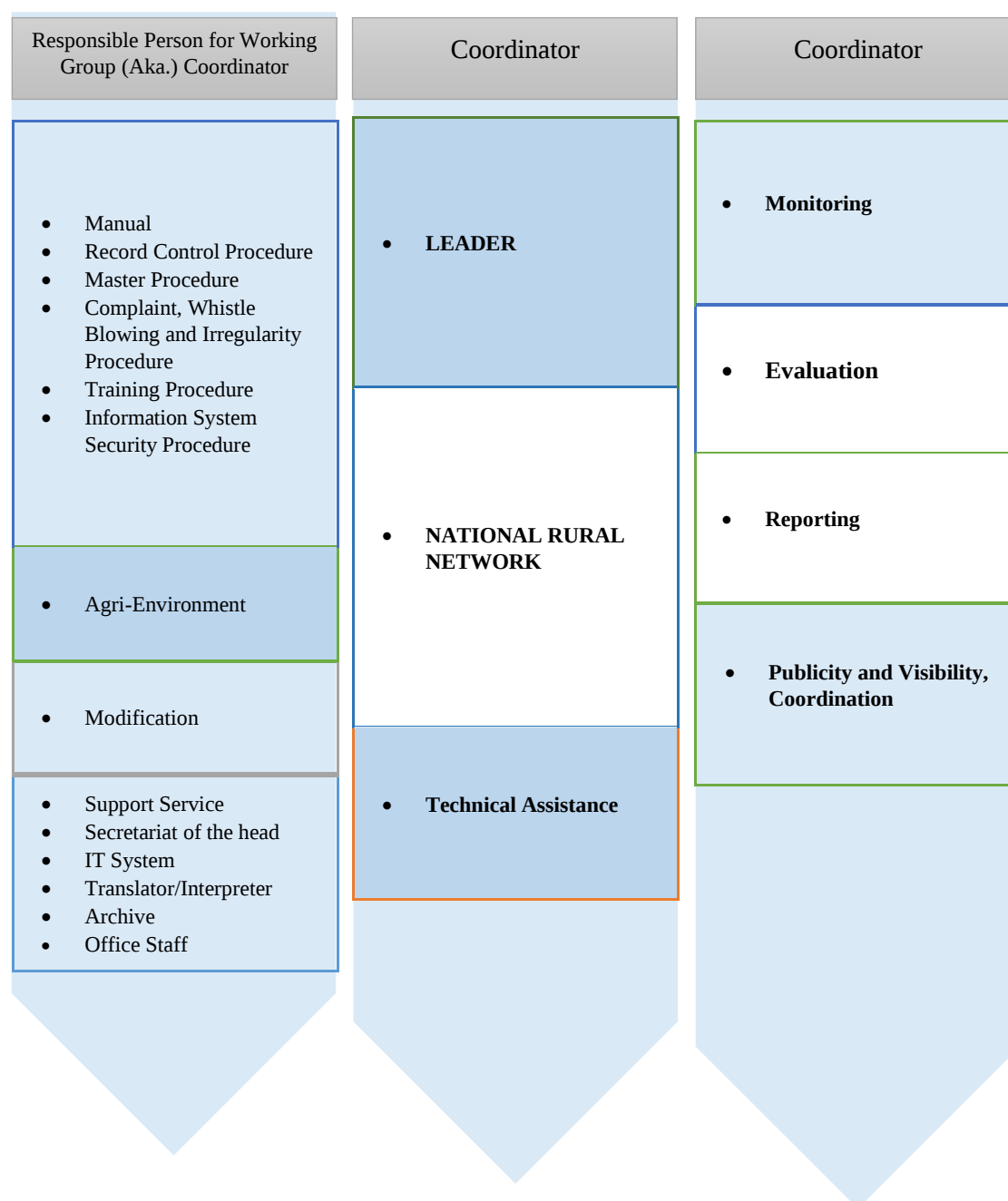
ANNEX XIII. THE ORGANIZATION CHART OF MA FOR FULFILMENT OF ITS TASKS AND RESPONSIBILITIES

DEPARTMENT OF MANAGING AUTHORITY FOR EU STRUCTURAL ADJUSTMENT GENERAL DIRECTORATE OF AGRICULTURAL REFORM

Deputy General Director of Agricultural Reform / Head of MA

Internal
Auditors

Head of Managing Authority for EU Structural Adjustment Department /
Process Owner



ANNEX XIV. THE ORGANISATION CHART OF IPARD AGENCY (ARDSI) FOR FULFILMENT OF ITS TASKS AND RESPONSIBILITIES

AGRICULTURE AND RURAL DEVELOPMENT SUPPORT INSTITUTION (ARDSI)

