**Project Title**: Adapting Agriculture to Climate Change in Konya

**Project Number:**

**Implementing Partner:** Doğa Koruma Merkezi Vakfı

**Start Date:** July 2016 **End Date:** Dec 2016 **PAC Meeting date:** 8 June 2016

|  |
| --- |
| **Brief Description** |
| The project aims at increasing the resilience of socio-ecological systems in Konya Basin, Turkey to climate change through sustainable land/water use and management within the framework of conservation agriculture and ecosystem approach. The region, situated in central Anatolia, is particularly vulnerable to desertification, aridity and drought since it displays a unique situation having the driest climate of Turkey with the lowest precipitation. Despite of the fact that water scarcity and poor soil conditions are of the main problems in the region, local people vitally depend on agriculture for living. Current practices together with the impact of climate change adversely affect and increasingly deteriorate soil conditions, in turn threatening socio-ecological system of the Basin.  Climate friendly agriculture involves site-specific decisions concerning direct seeding, crop selection, fertilizer practices, as well as planting windbreaks to combat wind erosion and land improvement. Best practices increasing organic matter content and improving water-holding capacity of soil will be introduced to the community with practical implementations. Thus crop yields and resilience of land against drought, erosion and other hazards will be improved. Throughout the project, various scientific outputs will be produced such as climate change vulnerability report, regional climate change map and a crop rotation strategy.  This project is designed as a part of and complementing the 1,7 Million USD “Life + Environment Programme Agriculture of the Future Project” which has been in operation by Nature Conservation Centre in collaboration with the Ministry of Food, Agriculture and Livestock since 2013. |

Contributing Outcome (UNDAF/CPD, RPD or GPD):

1.1. By 2020 legal and policy framework improved, institutional capacities and accountability mechanisms enhanced to enable more competitive, inclusive, innovative environment for sustainable, equitable, job rich growth and development

1.3.1: Enabling legal frameworks and models for conservation and sustainable use of biodiversity and ecosystems in place

Indicative Output(s): Developed strategies, tools and implementations on climate friendly agriculture in Turkey

|  |  |  |
| --- | --- | --- |
| **Total resources required:** | USD 352,508.37 | |
| **Total resources allocated:** |  | |
| **UNDP TRAC:** |  |
| **Donor (CC Life Plus Fund):** | USD 352,508.37 |
| **Donor:** |  |
| **Government:** |  |
| **In-Kind:** |  |
| **Unfunded:** |  | |

Agreed by (signatures)[[1]](#footnote-1):

|  |  |  |
| --- | --- | --- |
| Government | UNDP | Implementing Partner |
| Print Name: | Print Name: | Doğa Koruma Merkezi Vakfı |
| Date: | Date: | Date: |

# Development Challenge (1/4 page – 2 pages recommended)

Climate change is one of the most important challenges facing the world today. Scientists are extensively studying the effects of climate change, not only on the environment, but also in many other fields including agriculture, food, health, economy, industry, energy and social life. As such, considerable efforts have been made by many countries to assess the impacts of and vulnerabilities to climate change, as well as to integrate adaptation into their policies at all levels.

In this regard, it is agreed that maintaining and restoring healthy ecosystems play a key role in mitigating the effects of and adapting to climate change through biodiversity conservation, as well as sustainable land use and management that yield multiple environmental, economic and social benefits.

In agriculture, for example, land use and management practices have numerous impacts, primarily on the land itself and the direct land users along with their surrounding environments and ecosystems. These impacts include effects on land productivity, changes in water cycle, soil erosion, movements of nutrients and chemicals, and contamination by wastes.

It is also evident that within an ecosystem, there are manifold living and nonliving elements, such as soil, water, tree cover, crops and livestock, all of which have multiple functions and interact in numerous ways.

Therefore, there is a need to address these complex interactions in a way that benefits both the conservation of biodiversity and the sustainable land use practices and objectives in a wider perspective. However, experience so far has shown that the use of sector-by-sector approaches has not provided optimum results. Hence, there is a greater need for a more integrated approach.

This is precisely why the “ecosystem approach” (EA) is endorsed by the Convention on Biological Diversity (CBD) and the Millennium Ecosystem Assessment (MA), as the best means to tackle the impact of climate change in agriculture and related ecosystems.

The CBD defines the ecosystem approach as a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. The EA is the primary framework for delivering the three objectives of the CBD: conservation, sustainable use and benefit sharing. It is also important to note that the EA seeks to yield benefits for people using the ecosystems. Thus, the view of humans as mere exploiters of natural resources is changing to see humans as stewards, using mutually beneficial practices in synergy with ecosystem processes and functions.

The ecosystem approach has so far been successfully adopted by many international actors like specialized agencies of the UN system with a role in biodiversity management, particularly UNEP, UNDP, FAO and UNESCO as well as international, multilateral and national agencies such as the Global Environmental Facility (GEF), the World Bank, the European Community and the USAID.

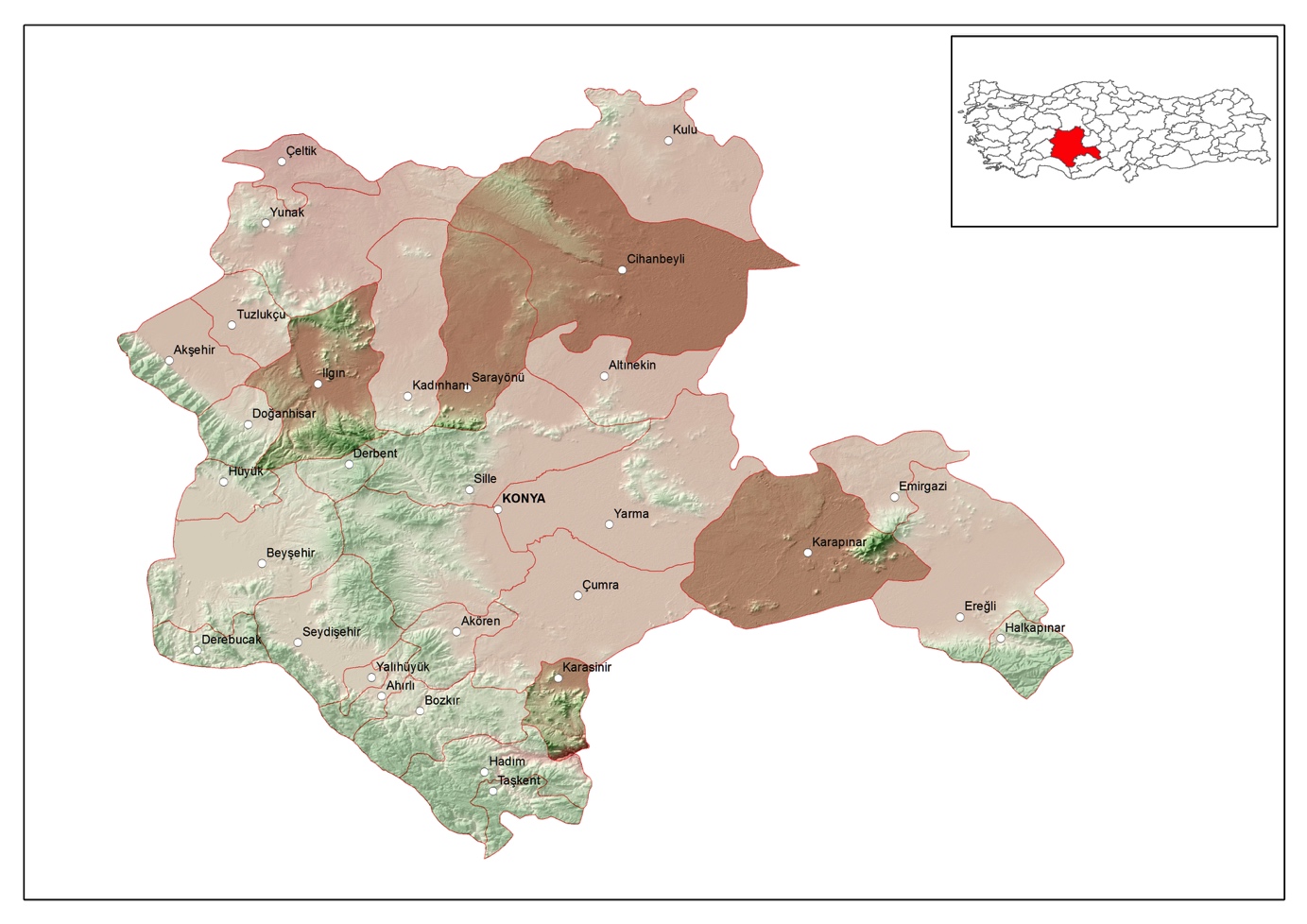
With a view to putting this internationally acclaimed approach into practice in Turkey, this project was revised on 1 August 2015 with the aim to introduce EA in the proposed project area, Konya Basin, where land rehabilitation, biodiversity and climate-friendly agriculture practices will be implemented through sustainable land/water use and management.

The agricultural practices that will be implemented throughout the project will also be in line with the basic principles of “conservation agriculture” promoted by the FAO: to minimize soil-disturbance in order to stabilize soil structure, increase fertility and balance the ecosystem.

Elements of biodiversity are insurance of sustainability of agricultural production. Therefore, each agro-ecosystem needs to develop different agricultural practices and production systems based on the principles of ecosystem based adaptation to increase its resilience to the impact of climate change, market fluctuations.

Against that backdrop, desertification, defined as resource degradation (land, water, vegetation, biodiversity), is a major environmental problem, impairing ecosystems. The direct effects of desertification include soil nutrient losses, decreased infiltration and soil water holding capacity and impaired agricultural productivity. These in turn result in the disruption of various ecosystem services, including water provisioning and regulation, climate regulation, as well as decrease in biodiversity.

Turkey’s geographical location, climate, topography and soil conditions, together with the country’s socio-economic characteristics, indicate that two-thirds of Turkey is considered arid and suffers from water shortages. As a result, Turkey is highly sensitive to desertification and drought. The Konya Province, situated in Central Anatolia, is in a particularly vulnerable position, evident by its depiction as ‘very highly sensitive and highly sensitive’ on the “World Desertification Risk Map”. Rainfed farming is especially prevalent in the region (Table 2). The problem becomes even more acute at some districts of Konya, such as Cihanbeyli, Karapınar, and Ilgın, where driest climate of the country coincides with poor soil characteristics, and thus being most affected by aridity and desertification.



Map 1: Project Area

Table 1: Agricultural land use statistics according to irrigation (Provincial Directorate of Agriculture Konya, 2010; TÜİK, 2009;DSİ)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Irrigated Land | Konya | | Turkey | |
|  | |  | |
| (Ha) | (%) | (Ha) | (%) |
| Irrigated agriculture | 517,684.0 | 23.03 | 5,420,000.0 | 22.31 |
| Rainfed agriculture | 1,730,172.5 | 76.97 | 18,874,680.8 | 77.69 |
| Total | 2,247,856.5 | 100 | 24,294,680.8 | 100 |

Agricultural economy is dominated by the grain and sugar beet production in Konya Basin. In the last years irrigated agriculture is rapidly expanding due to novel market pressure and subsidies. Therefore, due to intensive use of ground water resources for irrigation, ground water levels have been dropped dramatically. Along with using improper agricultural techniques, overgrazing in the region becomes another important cause for the desertification of the region. Moreover, the use of small trees and bushes by the local people for their fuel needs renders the region open to wind erosion, which causes loss of soil productivity, increases soil salinization, and makes life harder for farmers and herders in the region.

As an extreme example, the wind erosion had become such a big problem in Karapınar Konya that in the 1960s, the region was faced with the threat of migration. Since then, extensive efforts and projects for the preservation of land and water resources as well as pasture rehabilitation have been carried out by the related government authorities including;

* Building wooden fences on farmlands,
* Planting special meadow seeds to stabilize the sandy ground,
* Crop management,
* Forestation,
* Ground water provision to mitigate the wind-driven erosion and desertification.

There are also some individual soil surveys and joint projects with different public, private stakeholders and NGOs. However, to date desertification in general, and wind erosion in particular, remains as a major problem affecting the people and environment of the region.

# Strategy (1/2 page - 3 pages recommended)

This project, structured on two main objectives aims to increase the effectiveness of the efforts in Konya Basin mainly by promoting climate-friendly agriculture practices. This involves site-specific decisions concerning direct seeding, crop selection and rotations, fertilizer practices, as well as planting windbreaks to combat wind erosion and pasture improvement. This project will add on and contribute to the outcomes of the large scale “Life + Environment Programme Agriculture of the Future Project” which has been in operation by Nature Conservation Centre in collaboration with the Ministry of Food, Agriculture and Livestock since 2013 and disseminate the climate friendly agriculture practices to Kadınhanı District.

Throughout the project, various scientific outputs will be produced such as a Report on the Vulnerability of the Region to Climate Change, Regional Climate Change Map and a Crop Rotation Strategy.

Turkey’s Tenth Development Plan for 2014-2018 provides a vision of Turkey with equitable and inclusive human and social and economic development and a fuller integration with the international, regional and the EU community. As part of the UN System efforts to coordinate and enhance its joint development cooperation impact, UNDP contributes to selected focus areas identified for the United Nations Development and Cooperation Strategy (UNDCS) in Turkey.

According to the UNDP Country Program Document (CPD) (2011-2015), the pressure on the environment caused by Turkey’s growth and rapid urbanization continues, despite the improvements in environmental legislation and standards. Urban population growth has outstripped the development of urban and peri-urban infrastructure and reduced green spaces. The temperature is expected to rise by 2-3oC by 2100, and climate change threatens agricultural production, natural resources, ecosystems, public health and livelihoods. Even though Turkey’s greenhouse gas emissions are growing and it is still to propose an emissions reduction target, its share in the global total emissions is low, even lower than the EU average.

The Climate Change and Environment outcome of the UNDP CPD aims to ensure the voice of all stakeholders on environmental issues and enable ecosystem services to be valued and their benefits shared. This project is in line with the CPD’s focus on strengthening the “capacity to prevent and respond” to environmental degradation, particularly in relation to biodiversity, forest management and chemical waste prevention and management.

# Results and Partnerships (1.5 - 5 pages recommended)

***Expected Results***

Overall, the Life Plus Environment Programme aims to generate solution proposals to environmental issues in Turkey. The main aim of this project revision is to contribute to the environmental sustainability and management of climate change related risks in Turkey through promotion of ecosystem approach and climate change adaptation in agriculture. The objectives and the activities that will be carried out for the achievement of these objectives can be summarised and detailed as follows:

**Objective 1: Improved water holding capacity of soil; efficient use of land and water resources of Konya Basin**

Activity 1.1: Promoting and spreading direct seeding

1.1.1. Field visits to the region to choose pilot areas for implementation

1.1.2. Procurement of direct seeding machines

1.1.3. Rapid environmental and social impact assessment of direct seeding implementations

Activity 1.2 : Planting and promoting windbreaks

1.2.1. Field visits to the region to choose the area for windbreaks

1.2.2. Report on windbreak systems in drylands

1.2.3. Establishing the windbreak system

1.2.4. Windbreak and wind erosion workshop

Activity 1.3: Increasing the readiness for new agricultural techniques and capacity building

1.3.1. International panels/congress on conservation agriculture

1.3.2. Producing and disseminating leaflets and visual/digital materials on climate friendly agricultural techniques for farmers

**Objective 2: Increased individual and institutional capacity on climate friendly agriculture and ecosystem services**

Activity 2.1: Determining the vulnerabilities resulting from climate change

2.1.1. Preparing the report of the vulnerability of the region to climate change

2.1.2. Technical study visits to Yale University to establish cooperation on the integration of ecosystem services in agriculture and forestry sectors in Turkey

2.1.3. Producing a publication on freshwater related ecosystem services and agriculture

2.1.4. Conducting an international workshop on freshwater related ecosystem services and agriculture

Activity 2.2: Monitoring the effects of project implementation on biological diversity for adaptive management

2.2.1: Preparing a baseline biodiversity report to monitor the effects of project implementation

2.2.2: Producing a crop rotation strategy based on crop and harvest periods

2.2.3: Producing regional climate change map

**1-Improved water holding capacity of soil; efficient use of land and water resources of Konya Basin through practical agricultural implementations**

In order to adapt to climate change through sustainable land and water use, there is a need to introduce and promote good agricultural practices that yield multiple environmental, economic and social benefits. These practices should aim to maintain and improve crop yields and increase their resilience against drought, erosion and other hazards, while at the same time protecting and stimulating the biological functioning of the soil. Increased soil organic matter and water holding capacity raise fertility, decrease irrigation requirements and help restoration of the overall agro-ecosystem balance.

In this framework, essential agricultural practices that will be implemented throughout this project are direct seeding (no-tillage) and to promote the use of direct seeding machines, the maintenance of a cover of live or dead vegetal material on the soil surface, to promote the use of green manure and crop rotations.

## Promoting and spreading direct seeding and water conservation

Direct seeding (no tillage) aims to minimize soil disturbance and maintain as much crop residue cover as possible because:

* Low disturbance reduces soil moisture loss,
* Allows more water and nutrients to be stored in the soil profile and increases soil organic matter content,
* İncreased soil moisture and soil fertility favors root penetration which makes soil more available for plant growth,
* This in turn boosts biomass production and crop yields and contributes to carbon sequestration. It could, when applied at large scale, provide a major contribution in controlling global warming,
* The excess water filtrates to deeper soil layers, recharging groundwater supplies,
* The water conserving effect of the soil cover and the increased organic matter result in an economization of irrigation water,
* The accumulation of soil organic matter and the increased activity of soil micro-organisms lead to higher efficiency of organic and inorganic fertilizers and thus allow lower application rates. This saves costs for farmers.
* Weed seeds are less likely to germinate and grow on the undisturbed soil surface,
* Low disturbance systems use less fuel for field operations,
* Reduces the labour requirement substantially. This allows farmers to diversify their activities, including processing of agricultural products, and thus improve their incomes.
* Offers early and timely planting for farmers due to the absence of tiresome land preparation activities,
* Crop residue cover protects soil from wind erosion,
* Standing stubble traps snow.

Direct seeding is not an isolated operation, it is moving towards a completely different system of farming. To make the transition into direct seeding, producers may be required to invest in specialized machinery and equipment, which is becoming more expensive to purchase and own. For this end, in Turkey since March 2013, within the framework of Supporting Rural Development Investments Programme and the Environmentally Based Agricultural Land Protection Project (ÇATAK), it has been started to given government grants to farmers for their purchase of selected agricultural machinery and equipment. Direct seeding machines are also included in this category. However, these grants are limited for the time being, and priorities of the local farmers are on purchasing conventional field machines rather than direct seeding machines since they are not fully aware of the benefits of transition to direct seeding in their agricultural practices.

For that reason, use of direct seeding machines of both cereals and oil-seeds in agricultural practices, and field demonstrations of them to local communities and farmers during this project, will be an important phase to help transition to direct seeding system at Konya Basin.

There are a number of direct seeding machines. General Directorate of Agricultural Enterprises (TİGEM) and Konya Provincial Directorate of Agriculture have already practiced different brands and types in the region. During the preparation stage of the project, they will be consulted in order to find out the right kind of the equipment, which depends on existing farm practices.

## Promoting and spreading windbreaks

Careful consideration will also be given to reducing wind erosion since this is one of the major threats to the agricultural land in the region.

Wind erosion is most visible in dry and semi-dry areas of Turkey. About 70% (322,474 ha) of these areas are located in the Konya region.

**Table 2:** Provincial distribution of wind erosion in Turkey

|  |  |  |
| --- | --- | --- |
| **Cities** | **Wind erosion area (ha)** | **Percentage%** |
| **Konya** | 322,474 | 69.22 |
| **Niğde** | 122,741 | 26.34 |
| **Kayseri** | 12,894 | 2.77 |
| **Kars** | 2,910 | 0.62 |
| **İçel** | 2,552 | 0.55 |
| **Sakarya** | 2,342 | 0.50 |
| **Total** | **465,913** | **100.00** |

**Table 3:** Distribution of wind erosion classes in Konya and Turkey

|  |  |  |
| --- | --- | --- |
| **Erosion Vulnerability Classes** | **Vulnerable Areas in Turkey (ha)** | **Vulnerable Areas in Konya (ha)** |
| **Low** | 165,664 | 124,521 |
| **Moderate** | 231,041 | 138,794 |
| **High** | 64,385 | 56,678 |
| **Very High** | 4,823 | 2,481 |

When properly designed and maintained, windbreaks reduce wind erosion by reducing wind speed, reducing field width, and creating a stable area where the erosion process is interrupted. They improve the microclimate in a given protected area by decreasing water evaporation from the soil and plants. They also protect crops and increase the productivity of the crops they protect. In addition to these soil and water conservation effects, windbreaks can also provide wildlife habitat, and add quality and biological diversity to agricultural systems.

As windbreak vegetation, native or adaptive plants resistant to the region’s dry climate should be utilized in order to minimize irrigation and maintenance requirements. Native trees of the project region are: Russian olive-İğde (*Eleagnussp*.L), Black Locust –Yalancı akasya (*Robinia pseudeaccacia*), White Ash- dişbudak (*Fraxinus sp*.L), Elm -Karaağac (*Ulmus sp*.L), and Maple- akçaağaç (*Acer sp*.L). In this project, Russian Olive (*Eleagnus sp*.L) will be used as a windbreak vegetation.

The effectiveness of field windbreaks is dependent on their height, density, length, spacing and orientation to prevailing winds. The ideal field windbreak system consists of a series of multi-row windbreaks oriented at a 90 degree angle to prevailing winds. However due to the limitation in land availability, producers prefer to plant only one or two rows of trees of mixed species. Single row windbreaks offer limited resilience because a single dead tree can leave a gap in the windbreak. Gaps result in increased wind speeds and reduced protection. For that reason, windbreaks should be continuous and cover the full length of the field in order to avoid wind tunnel effects.

The protective and productive benefits of windbreaks at a given site should be weighed against the costs before proceeding with detailed plans and planting. Aside from the direct costs for labor and planting material, windbreaks will take some land out of crop production, and will compete for water, light, and nutrients. Therefore, the area between two windbreaks should not be an obstacle for the cultivation of the land and other action; it should not negatively affect the economic functionality of the community.

## Increasing the readiness for new agricultural techniques and capacity building

Regarding that climate change has increased pressure on agricultural production in many different countries, it became a frequently studied subject which also accumulates practical knowledge. In the process of shifting to new agricultural techniques, collaborative activities will be arranged with the following institutions to utilize their experiences:

* Wageningen University (Netherlands), known for its focus on healthy food and living environments in Europe,
* Yale University School of Forestry and Environmental Sciences, one of the oldest graduate schools in US that trains experts on environmental sciences.

In this context, expert participation in technical trainings and meetings will be supported; publications and visual materials will be produced in line with the rapidly developing digital technology, local key stakeholders will be equipped with digital equipment in line with the products of the project and the outcomes of the project will be presented in international panels and congresses.

**2-Increased individual and institutional capacity on climate friendly agriculture and ecosystem services**

Research on the effects of climate change on resource management, restoration, conservation, and development decisions has advanced rapidly and has currently become a fast-evolving area of science. This knowledge in close connection with agricultural development and freshwater related ecosystem services will be disseminated to key stakeholders.

## Determining the vulnerabilities resulting from climate change

In the light of the afore mentioned project activities included in the Objective 1, experience has shown that implementation practices in agriculture in association with the climate change are knowledge intensive. Therefore, the project is aimed to ensure that this knowledge is increasingly owned and applied by local farmers and smallholders.

In this project, map of vulnerabilities resulting from climate change of the selected districts of Konya Basin will be produced with the cooperative efforts of several experts from different disciplines in order to contribute sustainable land and water use/management in the region.

## Monitoring the effects of project implementation on biological diversity for adaptive management

Biodiversity is an important regulator of agricultural ecosystem functions. Implementation of ecosystem-based management approaches is vital to ensuring the permanence of some indispensible and biodiversity dependent economic practices. Yet, the outcomes of implementations on biodiversity are not always as expected. Therefore, it is very important to monitor the effects of activities - even those considered to support biodiversity - on ecosystem integrity and functions.

Improvement of agricultural sustainability requires effective water and crop management as well as optimal use of soil fertility and soil physical structure. Basically, all of those implementation strategies depend on the soil biodiversity, which determines the productivity and health of the soil. This will also lead to contribute positively to biodiversity through other environmental factors such as water bodies and erosion control.

Hence, a biodiversity inventory will be carried out in order to monitor the effects of this particular project’s activities. In the context of this inventory; birds, large mammals, small mammals, butterflies, endemic plants, reptiles and amphibians are the main groups planned to be studied. Additionally, certain soil and water characteristics will be examined to gather information on ecosystem health and functions. In the final phase of the project, same elements will be sampled and a comparable data set will be generated.

A crop rotation strategy containing information on locally adapted crops in a selected district of Konya Basin will also be produced in the project. Agriculture is the largest user of biodiversity and farmers are the main ecosystem managers and must be key participants in any programmes of work. Accordingly, this tool will support farmers in taking appropriate decisions on crops and their sowing period, in tune with the agro-ecological requirements. It also provides a solid base for emergency planning of the rehabilitation of farming systems after disasters.

***Resources Required to Achieve the Expected Results***

Resources required to achieve project results are mainly the human resources, expert inputs, agricultural machinery and saplings. Please see the multi-year work plan for the planned project budget. UNDP staff input is not foreseen for the project.

***Partnerships***

The project will collaborate with the Ministry of Food, Agriculture and Livestock and the local research institutes. At the local level cooperation will take place with the local chamber of commerce, local district and sub-directorates of the Ministry of Food, Agriculture and Livestock. The ministry is assumed to acknowledge and adapt the ecosystem approach in its implementations throughout Konya Province.

***Risks and Assumptions***

The key risks that can threaten the achievement of results through the chosen strategy is an abrupt change in the climate change adaptation policy of the Ministry of Food, Agriculture and Livestock, which is highly unlikely within the duration of the project. For other risks please see the full risk log, which is attached as an annex.

***Stakeholder Engagement***

The Ministry of Food, Agriculture and Livestock is the main body responsible from the management of agriculture in Turkey. The Konya Branch of the Ministry and its sub-province departments are the local legal stakeholders, which are the final decision making bodies in the region. Chambers of Agriculture are the local NGOs embodying the membership of all the farmers. The Chamber supports farmers in their daily work as well as leading them onto new approached and methods. Likewise irrigation unions are other stakeholders of the project responsible for supplying irrigation water to the farmers.

***Gender***

Women obtain more benefits from the natural resources than men and appear to attach greater value to it; furthermore, women are much more involved in the decision-making process at the household and village level. It is critical that women play an equal role in the decision-making process, that is, they are equally treated in both the planning and management of natural resources so that they can determine their own future.

This is important not just from a gender or governance perspective but also from a conservation perspective when one considers that women play an important role in the management of biodiversity and in rural circumstances women often have a high dependency on biodiversity and other natural resources for their livelihood security and its sustainable management is of real and practical concern to them.

Therefore, gender mainstreaming in environment and sustainable development will be further promoted.

***South-South and Triangular Cooperation (SSC/TrC)***

Not applicable

***Knowledge***

Leaflets, publications and visual materials will be produced in line with the rapidly developing digital technology by the project on climate friendly agriculture and freshwater related ecosystem services, local key stakeholders will be equipped with digital equipment in line with the products of the project and the outcomes of the project will be presented in international panels and congresses.

***Sustainability and Scaling Up***

The most important result of the project would be the establishment of the required technical and administrative capacity of the competent national and local institutions to ensure the knowledge and gained expertise in the field demonstrations maintained and put into practise by the key actors.

The outputs will be disseminated as strategy documents and reports will be shared within the central and local institutions of MoFAL, MoFWA. The staff of MoFAL will participate to the workshops. An international workshop and a publication in two languages on freshwater related ecosystem services will play an important role to scale up the project outcomes.

# Project Management (1/2 pages - 2 pages recommended)

***Cost Efficiency and Effectiveness***

DKM has been implementing the Agriculture of the Future-Life Plus Environmental Programme in partnership with Ministry of Food, Agriculture and Livestock and Coca-Cola Life Plus Foundation since 2013 at Konya Basin. This project builds on the lessons learned and good practices of programme mentioned. This project will also be co-funding, therefore will be leveraging activities of and activities with the GEF funded Sustainable Land Management and Climate-friendly Agriculture Project run by FAO.

***Project Management***

The project will be operationalised at selected districts of Konya Province, mainly Karapınar and Kadınhanı Districts. Project staff will serve from the DKM Office in Ankara and pay regular visits to the project area for stakeholder interactions and field implementations.

# Results Framework[[2]](#footnote-2)

| **Intended Outcome as stated in the UNDAF/Country [or Global/Regional] Programme Results and Resource Framework:**  1.3.1: Enabling legal frameworks and models for conservation and sustainable use of biodiversity and ecosystems in place | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Outcome indicators as stated in the Country Programme [or Global/Regional] Results and Resources Framework, including baseline and targets:**  Indicator 1.3.1.2: # of specific sustainable forest management indicators up-scaled to national level by integration of forestry into agriculture, water, nature conservation sectors  *Baseline:*0  *Target:*6 | | | | | | | | | | | |
| **Applicable Output(s) from the UNDP Strategic Plan:** Environment and Sustainable Development | | | | | | | | | | | |
| **Project title and Atlas Project Number:** | | | | | | | | | | | |
| **EXPECTED OUTPUTS** | **OUTPUT INDICATORS[[3]](#footnote-3)** | **DATA SOURCE** | **BASELINE** | | TARGETS (by frequency of data collection) | | | | | | DATA COLLECTION METHODS & RISKS |
| **Value** | **Year** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year …** | FINAL |
| **Output 1**  Direct Seeding and Water Conservation Implementations | ***1.1*** Direct seeding implementation area (decares) | *MoFAL Records* | 0 | 2016 | *1000* |  |  |  |  | *1000* | *MoFAL Interviews* |
| **Output 2**  Windbreaks against wind erosion | ***2.1*** Established windbreaks (km) | *Surveys* | 0 | 2016 | *7,5* |  |  |  |  | *7,5* | *Site surveys* |
| **Output 3**  Crop rotation strategy | *3.1. Rotation strategies for specific farms* | *Project Report* | *0* | 2016 | *1* |  |  |  |  | *1* | *Farmer specific forms and questionnaires* |
| **Output 4**  Vulnerabilities Report & Maps | *4.1. Vulnerability Report and Maps a district of Konya Basin* | *Report* | *0* | 2016 | *1* |  |  |  |  | *1* | *Vulnerability analysis* |

# Monitoring And Evaluation

In accordance with UNDP’s programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans: *[Note: monitoring and evaluation plans should be adapted to project context, as needed]*

**Monitoring Plan**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Monitoring Activity** | **Purpose** | **Frequency** | **Expected Action** | **Partners**  **(if joint)** | **Cost**  **(if any)** |
| **Track results progress** | Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs. | Quarterly, or in the frequency required for each indicator. | Slower than expected progress will be addressed by project management. |  | USD 2500 |
| **Monitor and Manage Risk** | Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP’s Social and Environmental Standards. Audits will be conducted in accordance with UNDP’s audit policy to manage financial risk. | Quarterly | Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken. |  |  |
| **Learn** | Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project. | At least annually | Relevant lessons are captured by the project team and used to inform management decisions. |  |  |
| **Annual Project Quality Assurance** | The quality of the project will be assessed against UNDP’s quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project. | Annually | Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance. |  |  |
| **Review and Make Course Corrections** | Internal review of data and evidence from all monitoring actions to inform decision making. | At least annually | Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections. |  |  |
| **Project Report** | A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period. | Annually, and at the end of the project (final report) |  |  |  |
| **Project Review (Project Board)** | The project’s governance mechanism (i.e., project board) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project’s final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences. | Specify frequency (i.e., at least annually) | Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified. |  |  |

**Evaluation Plan[[4]](#footnote-4)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Evaluation Title** | **Partners (if joint)** | **Related Strategic Plan Output** | **UNDAF/CPD Outcome** | **Planned Completion Date** | **Key Evaluation Stakeholders** | **Cost and Source of Funding** |
| e.g., Mid-Term Evaluation |  |  |  |  |  |  |

# Multi-Year Work Plan [[5]](#footnote-5)[[6]](#footnote-6)

*All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be identified, estimated and fully costed in the project budget under the relevant output(s). This includes activities that directly support the project, such as communication, human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. All services which are directly related to the project need to be disclosed transparently in the project document.*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **EXPECTED OUTPUTS** | **PLANNED ACTIVITIES** | **Planned Budget by Year** | | | | **RESPONSIBLE PARTY** | **PLANNED BUDGET** | | |
| Y1 | Y2 | Y3 | Y4 | Funding Source | Budget Description | Amount |
| **Output 1:** Direct Seeding and Water Conservation Implementations | 1.1.1 Field visits to the region to choose pilot areas for implementation | 250 | - | - | - | DKM  Ministry of Food, Agriculture and Livestock  Local Chambers and Unions for Agriculture and Irrigation | UNDP | Travel, accommodation | 250 |
| 1.1.2. Procurement of direct seeding machines | 25,000 | - | - | - | UNDP | Two direct seeding machines | 25,000 |
| 1.1.3. Rapid environmental and social impact assessment for direct seeding implementations | 6,000 | - | - | - | UNDP | Consultant (Agricultural Expert/Sociologist) | 6,000 |
| MONITORING |  | - | - | - |  |  |  |
| **Sub-Total for Output 1** | | | | | | | | 31,250 |
| **Output 2:**  Windbreaks against wind erosion | 1.2.1. Field visits to the region to choose the area for windbreaks | 250 | - | - | - | DKM  Ministry of Food, Agriculture and Livestock | UNDP | Travel, accommodation | 250 |
| 1.2.2. Report on windbreak system in drylands | 2,500 | - | - | - | UNDP | Consultant (Agricultural/Soil Expert) | 2,500 |
| 1.2.3. Establishing the windbreak system | 7,000 | - | - | - | UNDP | Saplings | 7,000 |
| 1.2.4. Windbreak and wind erosion workshop | 1,000 | - | - | - | UNDP | Workshop organisation | 1,000 |
| MONITORING |  | - | - | - |  |  |  |
| **Sub-Total for Output 2** | | | | | | | | 10,750 |
| **Output 3:** Crop rotation strategy | 2.2.1. Preparing a baseline biodiversity report to monitor the effects of project implementation | 18,500 | - | - | - | DKM  Bahri Dağdaş Uluslararası Tarımsal Araştırma Enstitüsü  Ministry of Food, Agriculture and Livestock | UNDP | Biodiversity Coordinator | 6,000 |
| Travel, accommodation, etc | 1,500 |
| Consultancy (bird, mammals, plants experts) | 10,000 |
| Field equipment (GPS, binocular, tablet, etc) | 1,000 |
| 2.2.2. Producing a crop rotation strategy based on crop and harvest periods | 250 | - | - | - | UNDP | Travel, accommodation, etc | 250 |
| 2.2.3. Producing annual regional climate change map | 10,000 | - | - | - | UNDP | Contract (GIS Services) | 10,000 |
| 1.3.1. International panels/congress on climate smart agriculture | 4,500 | - | - | - | UNDP | International travel, accommodation, etc | 3,000 |
| 1.3.2. Producing leaflets and visual/digital materials on climate friendly agricultural techniques | 24,500 | - | - | - | UNDP | Digital equipment ((tablets, led screens and cameras) for key stakeholders such as farmers organisations, local public offices) | 14,500 |
| Printing and dissemination | 5,000 |
| Film production | 5,000 |
| MONITORING |  | - | - | - | UNDP |  |  |
| **Sub-Total for Output 3** | | | | | | | | 56,250 |
| **Output 4:** Vulnerabilities Report & Maps | 2.1.1. Preparing the report of the vulnerability of the region to climate change | 14,800 | - | - | - | DKM | UNDP | GIS Coordinator | 4,800 |
| Contract (GIS Services) | 10,000 |
| 2.1.2. Technical study visits to Yale University to establish cooperation on the integration of ecosystem services in agriculture and forestry sectors in Turkey | 15,000 | - | - | - | UNDP | Travel, accomodation, etc | 15,000 |
| 2.1.3. Producing a publication on freshwater related ecosystem services and agriculture | 60,000 | - | - | - | UNDP | Consultancy (agriculture and ecosystem services experts) | 45,000 |
| Printing | 15,000 |
| 2.1.4. Conducting an international workshop on freshwater related ecosystem services | 40,000 | - | - | - | UNDP | Workshop organisation including travel, accomodation, etc. | 40,000 |
| MONITORING |  |  |  |  |  |  |  |
| **Sub-Total for Output 4** | | | | | | | | 129,800 |
| **Evaluation** *(as relevant)* | EVALUATION |  | - | - | - |  | UNDP |  |  |
| **Administrative costs** | Project management, project communication, general expenses (stationary, meetings, travel, etc), audit, monitoring and evaluation. | 140,977.63 | - | - | - | DKM | UNDP | Operational expenses such as stationary, cargo, incity transport, project meetings, etc | 813,08 |
| Project Coordinator | 22,000 |
| Project Manager | 20,000 |
| Project Officer | 15,000 |
| Financial&Administrative Officer | 8,000 |
| Monitoring&evaluation | 2,250 |
| Auditing and accounting | 2,250 |
| NGO Execution Fee | 25.944,62 |
| GMS | 28.200,67 |
| **Sub-Total for Administrative Costs** | | | | | | | | 124,458.37 |
| **TOTAL** |  |  |  |  |  |  |  |  | 352,508.37 |

# Governance and Management Arrangements

**PROJECT BOARD**

Doga Koruma Merkezi

UNDP

Ministry of Development

Coca-Cola (Observer)

)

Project Management Unit (PMU)

Project Manager

Consultants

Project Assurance

UNDP Portfolio Manager

Project Support

Programme Service Center (UNDP)

Portfolio Admşnistrator (UNDP)

**Project Board**: The PB will be established as the overall authority for the Project and responsible for its initiation, direction, review and eventual closure. It will be composed of the representatives of Doga Koruma Merkezi, UNDP and MoD. Coca-Cola as the donor of the Project will be invited to the PB meetings as observer.

Within the confines of the Project, the PB is the highest authority. The PB plays a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. Based on the approved Annual Work Plan, the PB can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans.

In order to ensure ultimate accountability for the project results, PB decisions will be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.

The PB represents at managerial level the interests of the following roles and the respective organizations:

* **An Executive**: individual representing the project ownership to chair the group.
  + *A Representative of the Doga Koruma Merkezi will fill this role and will be the Project Coordinator*
* **Beneficiary**: individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary’s primary function within the PSC is to ensure the realization of project results from the perspective of project beneficiaries.
  + *Doga Koruma Merkezi will fill the Beneficiary role on this project.*
* **Supplier**: individual or group representing the interests of the parties concerned, which provide funding for specific cost sharing projects and/or technical expertise to the project. The Supplier’s primary function within the PB is to provide guidance regarding the technical feasibility of the project.
  + *The Supplier on this project will be UNDP.*
* **The Project Assurance** role supports the PB by carrying out objective and independent project oversight and monitoring functions.
  + *UNDP Portfolio Manager will hold the Project Assurance role.*
* **Project Manager**: The Project Manager (PM) has the authority to coordinate the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager’s prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.
  + *Project Manager will be recruited by Doga Koruma Merkezi.*

* **Project Support**: The Project Support role provides project administration, management and technical support to the Project Manager as required by the needs of the individual project or Project Manager.
  + - *Support role will be undertaken by Programme Service Center and Portfolio Administrator*
* **Expertise**: Depending on the requirements, both short term international and national consultants will be recruited. Team A
* **Audit**: The project will undergo annual audit by a certified auditor according to UNDP rules and regulations.

UNDP will provide its relevant knowledge and expertise in facilitating the capacity building and technical know-how activities. UNDP will be the responsible for coordinating the activities with the relevant stakeholders.

The Project activities will be implemented in line with UNDP financial rules and regulations and report to the national designated agency on quarterly expenditures through the Combined Delivery Report.

**Visibility**

The parties of the Project Board hereby agree on the implementation UNDP’s agreement on intellectual property rights and use of logo on the project deliverables.

# Legal Context and Risk Management

Select the relevant one from each drop down below for the relevant standard legal text:

1. Legal Context:

* + **Country has signed the Standard Basic Assistance Agreement (SBAA)**
  + Country has not signed the Standard Basic Assistance Agreement (SBAA)
  + Regional or Global project

2. Implementing Partner:

* Government Entity (NIM)
* UNDP (DIM)
* **CSO/NGO/IGO**
* UN Agency (other than UNDP)
* Global and regional projects

**Legal Context Standard Clauses**

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Turkey and UNDP, signed on 21 October 1965. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by the agency İŞKUR and GAP RDA (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply**.**

**Risk Management Standard Clauses**

1. Consistent with the Article III of the SBAA *[or the Supplemental Provisions]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
2. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
3. assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.
4. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document [and the Project Cooperation Agreement between UNDP and the Implementing Partner][[7]](#footnote-7).
5. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml>. This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document.
6. Consistent with UNDP’s Programme and Operations Policies and Procedures, social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).
7. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
8. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

# ANNEXES

1. **Project Quality Assurance Report**

|  |  |  |  |
| --- | --- | --- | --- |
| **OUTPUT:** Developed strategies, tools and implementations on climate friendly agriculture in Turkey | | | |
| **Activity Result**  **(Atlas Activity ID)** | Improved water holding capacity of soil; efficient use of land and water resources of Konya Basin  Increased individual and institutional capacity on climate friendly agriculture | | Start Date: July 2016  End Date: December 2016 |
| **Purpose** | To contribute to the environmental sustainability and management of climate change related risks in Turkey through promotion of ecosystem approach and climate change adaptation in agriculture. | | |
| **Description** | The region, situated in central Anatolia, is particularly vulnerable to desertification, aridity and drought since it displays a unique situation having the driest climate of Turkey with the lowest precipitation. Despite of the fact that water scarcity and poor soil conditions are of the main problems in the region, local people vitally depend on agriculture for living. Current practices together with the impact of climate change adversely affect and increasingly deteriorate soil conditions, in turn threatening socio-ecological system of the Basin.  Climate friendly agriculture involves site-specific decisions concerning direct seeding, crop selection, fertilizer practices, as well as planting windbreaks to combat wind erosion and land improvement. Best practices increasing organic matter content and improving water-holding capacity of soil will be introduced to the community with practical implementations. Thus crop yields and resilience of land against drought, erosion and other hazards will be improved. Throughout the project, various scientific outputs will be produced such as climate change vulnerability report, regional climate change map and a crop rotation strategy. | | |
| **Quality Criteria**  *how/with what indicators the quality of the activity result will be measured?* | | **Quality Method**  *Means of verification. what method will be used to determine if quality criteria has been met?* | **Date of Assessment**  *When will the assessment of quality be performed?* |
| Increase in the number of individual and institutional projects/practices on climate friendly agriculture throughout Konya. | | Activity reports of the Ministry of Food, Agriculture and Livestock | 2016 |

1. **Social and Environmental Screening**

**Project Information**

|  |  |
| --- | --- |
| ***Project Information*** |  |
| 1. Project Title | Adapting Agriculture to Climate Change in Konya |
| 1. Project Number | TO BE FILLED |
| 1. Location (Global/Region/Country) | Konya, Central Anatolia Region, Turkey |

**Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability**

|  |
| --- |
| **QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?** |
| ***Briefly describe in the space below how the Project mainstreams the human-rights based approach*** |
| The project aims at increasing the resilience of socio-ecological systems in Konya Basin, Turkey to climate change through sustainable land/water use and management within the framework of conservation agriculture and ecosystem approach. The region, situated in central Anatolia, is particularly vulnerable to desertification, aridity and drought since it displays a unique situation having the driest climate of Turkey with the lowest precipitation. Despite of the fact that water scarcity and poor soil conditions are of the main problems in the region, local people vitally depend on agriculture for living. Current practices together with the impact of climate change adversely affect and increasingly deteriorate soil conditions, in turn threatening socio-ecological system of the Basin.  Climate friendly agriculture involves site-specific decisions concerning direct seeding, crop selection, fertilizer practices, as well as planting windbreaks to combat wind erosion and land improvement. Best practices increasing organic matter content and improving water-holding capacity of soil will be introduced to the community with practical implementations. Thus crop yields and resilience of land against drought, erosion and other hazards will be improved. Throughout the project, various scientific outputs will be produced such as climate change vulnerability report, regional climate change map and a crop rotation strategy. |
| ***Briefly describe in the space below how the Project is likely to improve gender equality and women’s empowerment*** |
| The project will largely incorporate technical and knowledge sharing through joint research, as well as capacity building via exchange and workshops. Women’s participation in all mentioned activities will be encouraged with the aim to empower more women to engage in introduced new climate friendly agricultural techniques, as well as wider climate change, desertification and ecosystem services related awareness raising. |
| ***Briefly describe in the space below how the Project mainstreams environmental sustainability*** |
| The project will address the impact of the changing climate, ecology and environment as well as reducing vulnerabilities of local people, livelihoods and ecosystems to climate change, desertification and drought risks. Environmental sustainability is a major focus of the project. |

**Part B. Identifying and Managing Social and Environmental Risks**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **QUESTION 2: What are the Potential Social and Environmental Risks?**  *Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any “Yes” responses). If no risks have been identified in Attachment 1 then note “No Risks Identified” and skip to Question 4 and Select “Low Risk”. Questions 5 and 6 not required for Low Risk Projects.* | **QUESTION 3: What is the level of significance of the potential social and environmental risks?**  *Note: Respond to Questions 4 and 5 below before proceeding to Question 6* | | | | **QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?** | |
| ***Risk Description*** | ***Impact and Probability (1-5)*** | ***Significance***  ***(Low, Moderate, High)*** | ***Comments*** | | ***Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.*** | |
| *No Risks Identified* | I =  P = |  |  | |  | |
|  | I =  P = |  |  | |  | |
|  | I =  P = |  |  | |  | |
|  | I =  P = |  |  | |  | |
|  |  |  |  | |  | |
|  | **QUESTION 4: What is the overall Project risk categorization?** | | | | | |
| **Select one (see** [**SESP**](http://www.undp.org/content/undp/en/home/librarypage/operations1/undp-social-and-environmental-screening-procedure.html) **for guidance)** | | | | | **Comments** |
| ***Low Risk*** | | |  | |  |
| ***Moderate Risk*** | | | **☐** | |  |
| ***High Risk*** | | | **☐** | |  |
|  | **QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?** | | | | |  |
| Check all that apply | | | | | **Comments** |
| ***Principle 1: Human Rights*** | | | **☐** | |  |
| ***Principle 2: Gender Equality and Women’s Empowerment*** | | | **☐** | |  |
| ***1. Biodiversity Conservation and Natural Resource Management*** | | | **☐** | |  |
| ***2. Climate Change Mitigation and Adaptation*** | | | **☐** | |  |
| ***3. Community Health, Safety and Working Conditions*** | | | **☐** | |  |
| ***4. Cultural Heritage*** | | | **☐** | |  |
| ***5. Displacement and Resettlement*** | | | **☐** | |  |
| ***6. Indigenous Peoples*** | | | **☐** | |  |
| ***7. Pollution Prevention and Resource Efficiency*** | | | **☐** | |  |

**Final Sign Off**

|  |  |  |
| --- | --- | --- |
| ***Signature*** | ***Date*** | ***Description*** |
| QA Assessor |  |  |
| QA Approver |  |  |
| PAC Chair |  |  |

### SESP Attachment 1. Social and Environmental Risk Screening Checklist

|  |  |
| --- | --- |
| **Checklist Potential Social and Environmental Risks** |  |
| **Principles 1: Human Rights** | **Answer  (Yes/No)** |
| 1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups? | No |
| 2. Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? [[8]](#footnote-8) | No |
| 3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups? | No |
| 4. Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them? | No |
| 5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project? | No |
| 6. Is there a risk that rights-holders do not have the capacity to claim their rights? | No |
| 7. Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process? | No |
| 8. Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals? | No |
| **Principle 2: Gender Equality and Women’s Empowerment** |  |
| 1. Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls? | No |
| 2. Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits? | No |
| 3. Have women’s groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment? | No |
| 4. Would the Project potentially limit women’s ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?  *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being* | No |
| **Principle 3: Environmental Sustainability:** Screeningquestions regarding environmental risks are encompassed by the specific Standard-related questions below |  |
|  |  |
| **Standard 1: Biodiversity Conservation and Sustainable** [**Natural**](#SustNatResManGlossary) **Resource Management** |  |
| 1.1 Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?  *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes* | No |
| 1.2 Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities? | No |
| 1.3 Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5) | No |
| 1.4 Would Project activities pose risks to endangered species? | No |
| 1.5 Would the Project pose a risk of introducing invasive alien species? | No |
| 1.6 Does the Project involve harvesting of natural forests, plantation development, or reforestation? | No |
| 1.7 Does the Project involve the production and/or harvesting of fish populations or other aquatic species? | No |
| 1.8 Does the Project involve significant extraction, diversion or containment of surface or ground water?  *For example, construction of dams, reservoirs, river basin developments, groundwater extraction* | No |
| 1.9 Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development) | No |
| 1.10 Would the Project generate potential adverse transboundary or global environmental concerns? | No |
| 1.11 Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?  *For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.* | No |
| **Standard 2: Climate Change Mitigation and Adaptation** |  |
| 2.1 Will the proposed Project result in significant[[9]](#footnote-9) greenhouse gas emissions or may exacerbate climate change? | No |
| 2.2 Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change? | No |
| 2.3 Is the proposed Project likely to directly or indirectly increase social and environmental [vulnerability to climate change](#CCVulnerabilityGlossary) now or in the future (also known as maladaptive practices)?  *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population’s vulnerability to climate change, specifically flooding* | No |
| **Standard 3: Community Health, Safety and Working Conditions** |  |
| 3.1 Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities? | No |
| 3.2 Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)? | No |
| 3.3 Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)? | No |
| 3.4 Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure) | No |
| 3.5 Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions? | No |
| 3.6 Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)? | No |
| 3.7 Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning? | No |
| 3.8 Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)? | No |
| 3.9 Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)? | No |
| **Standard 4: Cultural Heritage** |  |
| 4.1 Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts) | No |
| 4.2 Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes? | No |
| **Standard 5: Displacement and Resettlement** |  |
| 5.1 Would the Project potentially involve temporary or permanent and full or partial physical displacement? | No |
| 5.2 Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)? | No |
| 5.3 Is there a risk that the Project would lead to forced evictions?[[10]](#footnote-10) | No |
| 5.4 Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources? | No |
| **Standard 6: Indigenous Peoples** |  |
| 6.1 Are indigenous peoples present in the Project area (including Project area of influence)? | No |
| 6.2 Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples? | No |
| 6.3 Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?  *If the answer to the screening question 6.3 is “yes” the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.* | No |
| 6.4 Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned? | No |
| 6.5 Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? | No |
| 6.6 Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? | No |
| 6.7 Would the Project adversely affect the development priorities of indigenous peoples as defined by them? | No |
| 6.8 Would the Project potentially affect the physical and cultural survival of indigenous peoples? | No |
| 6.9 Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? | No |
| **Standard 7: Pollution Prevention and Resource Efficiency** |  |
| 7.1 Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or [transboundary impacts](#TransboundaryImpactsGlossary)? | No |
| 7.2 Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)? | No |
| 7.3 Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?  *For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol* | No |
| 7.4 Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health? | No |
| 7.5 Does the Project include activities that require significant consumption of raw materials, energy, and/or water? | No |

1. **Risk Analysis**:

**Annex 3.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Project Title: Adapting Agriculture to Climate Change | | | | | Award ID: | Date: 04.04.2016 | | | |
| # | Description | Date Identified | Type | Impact &  Probability | Countermeasures / Mngt response | Owner | Submitted, updated by | Last Update | Status |
| 1 | Reluctancy of farmers to new techniques at the risk of loosing profit. | April 2016 | Operational | Targets associated with direct seeding implementation area may not be reached by projected dates.  Probability: 3  Impact: 4  (on Scale of 5, 5 being the highest) | Step by step approach will be taken and implementation areas will be increased gradually demonstrating the results.  State owned land in control of project partners (Bahri Dağdaş Uluslararası Tarımsal Araştırma Enstitüsü) will be used as pilot implementation area where desired number of farmers cannot be reached. | Doga Koruma Merkezi | Doga Koruma Merkezi |  |  |
| 2. | Unanticipated interruption of ongoing state incentives towards better farming initiatives. |  | Political | Achievement of project target that aims to enable legal frameworks and models for conservation and sustainable use of biodiversity and ecosystems in place.  Probability: 1  Impact: 3  (on Scale of 5, 5 being the highest) | Political trends will be monitored closely and target areas will be modified accordingly. | Doga Koruma Merkezi | Doga Koruma Merkezi |  |  |

1. **Capacity Assessment**

**Capacity Assessment Checklist (CACHE) For Nature Conservation Centre Foundation**

**(Doğa Koruma Merkezi Vakfı (DKM))**

|  |  |  |
| --- | --- | --- |
| **Topic** | **Areas of Inquiry**  **Please Attach Supporting Documentation for Each Question** | **Response** |
| 1. Funding Sources | 1. Who are the CSO/NGO’s key donors?  2. How much percentage share was contributed by each donor during the last 2 years?  3. How many projects has each donor funded since the CSO/NGO’s inception?  4. How much cumulative financial contribution was provided for each project by each donor?  5. How is the CSO/NGO’s management cost funded? | 1. The key sponsor of DKM are:  International Organizations (UNDP Turkey), Embassies (British Embassy), CSOs (Ege Derneği, Coca Cola Foundation, WWF-Turkey).  2. Percentage share of financial support made by each donor for the last 2 years:  UNDP Turkey: 26,97%  British Embassy: 9,15%  Ege Derneği: 16,57%  Coca Cola Foundation: 41,20%  WWF-Turkey: 6,11%    3. Each donor funded the below stated number of project since the inception of DKM:  UNDP Turkey: 1 project.  British Embassy: 2 projects.  Ege Derneği: 1 project.  Coca Cola Foundation: 1 project.  WWF-Turkey: 1 project.  4. Each donor made cumulative financial contribution for each project:  UNDP Turkey: 26,97%  British Embassy: 2 projects.  Project 1: 5,33%  Project 2: 3,82%  Ege Derneği: 16,57%  Coca Cola Foundation: 41,20%  WWF-Turkey: 6,11%  5. DKM’s management cost is funded by project overheads and management fees. |
| 2. Audit | 1. Did the CSO/NGO have an audit within the last two years?  2. Are the audits conducted by an officially accredited independent entity? If yes, provide name. | 1. No. |
| 3. Leadership and Governance Capacities | 1. What is the structure of the CSO/NGO’s governing body? Please provide Organigramme.  2. Does the CSO/NGO have a formal oversight mechanism in place?  3. Does the CSO/NGO have formally established internal procedures in the area of:   * Project Planning and Budgeting * Financial Management and Internal Control Framework * Procurement * Human Resources * Reporting * Monitoring and Evaluation * Asset and Inventory Management * Other   4. What is the CSO/NGO’s mechanism for handling legal affairs?  5. Ability to work (prepare proposals) and report in English | 1. DKM is legally a foundation (Vakıf) reporting to the General Directorate of Foundations with its legal boards (board of trustees, management board, auditing committee) and project staff (Please see attached organigramme.)  2. Yes, DKM has an auditing board for the formal oversight.  3. Yes, DKM has internal procedures for the following areas, which were approved by the management board:  - Project planning and management (including project budgeting, procurement)  - Financial management (including internal control framework)  - General operation procedures (including human resources, reporting, monitoring and evaluation, asset and inventory management)  - Archiving  - Field operations  4. Legal consultation for legal affairs is sought case by case in need.  5. DKM has been working with international donors since its inception and each staff member has the experience in preparing project proposals and reporting in English. |
| 4. Personnel Capacities | 1. What are the positions in the CSO/NGO that are empowered to make key corporate decisions? Please provide CVs of these staff.  2. Which positions in the CSO/NGO lead the areas of project management, finance, procurement, and human resources? Please provide CVs of these staff. | 1. Management Board: Uğur Siyami Zeydanlı, C. Can Bilgin, Bahtiyar Kurt (please see attachments for the CVs)  2. Director General (Uğur Siyami Zeydanlı) lead the areas of project management, finance, procurement and human resources, specific project staffs are assigned for each project. |
| 5. Infrastructure and Equipment Capacities | 1. Where does the CSO/NGO have an official presence? Please provide details on duration and type of presence (e.g. field offices, laboratories, equipment, software, technical data bases, etc.)  2. What resources and mechanisms are available by the CSO/NGO for transporting people and materials? | 1. DKM has an office in Ankara full with office equipments, hardware and software for personal use and specific for GIS, Remote Sensing and database work.    2. DKM has a car for transporting people and fielwork. |
| 6. Quality Assurance | Please provide references who may be contacted for feedback on the CSO/NGO’s performance regarding:   * Delivery compared to original planning * Expenditure compared to budget * Timeliness of implementation * Timeliness and quality of reports * Quality of Results | Dr. Uğur S. Zeydanlı can be contacted for feedback on DKM’ performance. |

1. **Project Board Terms of Reference and TORs of key management positions**

**Annex 5.**

**Terms of Reference of the Project Coordinator**

* The National Project Coordinator is the President of Doga Koruma Merkezi (DKM), which is the implementing partner.
* The National Project Coordinator ensures the coordination of project inputs and outputs between the DKM, Ministry of Development on one hand, and UNDP on the other.
* Maintains close contacts with UNDP indicating foreseeable changes in work-plan and proposing realistic amendments and budget revisions.
* Ensures that suitable working conditions are maintained at the duty station for project management and that project manager performs in accordance with his/her job description.
* Monitors progress of the project according to the work-plan and informs UNDP in time of any foreseeable.
* Ensures that the respective interest, active involvement and contributions of all project partners are sustained through the project period.
* Ensures that project activities are conducted and concluded in a timely, satisfactory and coordinated manner.
* Ensures compliance with UNDP’s NEX procedures.
* Facilitates procurement of goods and services and recruitment of project personnel in accordance with UNDP rules and regulations.
* Develops and oversees monitoring and evaluation efforts.

**Terms of Reference for the Project Manager**

The Project Manager will be recruited by DKM and responsible for day-to-day management and implementation of the project activities. He/she also provides technical and administrative support to the project activities. More specifically, his/her responsibilities are as following.

* Ensures the timely and effective management of the activities as scheduled;
* Develops scope of work and respective activities;
* Prepares technical, policy and briefing papers as requested;
* Helps organize the scheduled trainings/consultations/workshops and Project Board meetings;
* Prepares quarterly progress report of the activities performed;
* Controls the expenditures and otherwise ensure adequate management of the resources provided;
* Coordinates and supports the work of all project support teams;
* Interacts closely with all relevant stakeholders and the Project Board members;
* Facilitate, guides and organizes all relations with the local stakeholders, local administrations, and governors within the target regions
* Fosters/Facilitates and establishes and maintains links with other UNDP or Coca-Cola’s relevant projects and other related national and international projects;
* Oversees and contributes to finalization of project outputs

Project Manager will be contracted by DKM and regularly reports to President of DKM.

1. Note: Adjust signatures as needed [↑](#footnote-ref-1)
2. UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project. [↑](#footnote-ref-2)
3. It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant. [↑](#footnote-ref-3)
4. Optional, if needed [↑](#footnote-ref-4)
5. Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32 [↑](#footnote-ref-5)
6. Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years. [↑](#footnote-ref-6)
7. Use bracketed text only when IP is an NGO/IGO [↑](#footnote-ref-7)
8. Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to “women and men” or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals. [↑](#footnote-ref-8)
9. In regards to CO2, ‘significant emissions’ corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.] [↑](#footnote-ref-9)
10. Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections. [↑](#footnote-ref-10)