

## **ANNEX 2 FEASIBILITY STUDY COMMUNITY-BASED AGRICULTURE SUPPORT PROGRAMME 'PLUS'**

### **Chapter II: Natural Resource Management Governance**

## Table of Contents

<b>Abbreviations and Acronyms</b>	<b>ii</b>
<b>Definitions</b>	<b>iii</b>
<b>II. Country Context</b>	<b>1</b>
A. Government strategy and regulatory framework	1
B. Policy framework related to sectors related to NRM	2
C. Public Institutions involved in NRM	2
<b>III. Sector Performance</b>	<b>3</b>
<b>IV. Ongoing Development Projects / Programmes / Govt plans</b>	<b>5</b>
A. Green Climate Funded projects	6
B. Other projects funded by International Partners	7
<b>V. Lessons Learned</b>	<b>10</b>
<b>VI. Detailed Description of Proposed Intervention for CASP+</b>	<b>10</b>
A. Rationale	10
B. Barriers addressed	11
<b>VII. Climate Relevance of proposed interventions</b>	<b>13</b>
A. Adherence with GCF investment Criteria	13
B. Adherence with Nationally Determined Contributions	14
<b>VIII. Outputs</b>	<b>15</b>
<b>IX. Activities</b>	<b>18</b>
<b>X. Cost Estimate</b>	Error! Bookmark not defined.
<b>XI. Timeframe</b>	Error! Bookmark not defined.
<b>XII. Implementation modalities / arrangements</b>	Error! Bookmark not defined.
<b>XIII. Risks and Mitigation measures</b>	<b>26</b>

## Abbreviations and Acronyms

AE	Accredited Entity
ALRI	Agency for Land Reclamation and Irrigation
CASP	Community-based Agriculture Support Programme 'plus'
CC	Climate Change
CIS	Commonwealth of Independent States
CLMG	Committee on Land Management and Geodesy
EBRD	European Bank for Reconstruction and Development
EX-ACT	<a href="#">EX-Ante Carbon Balance Tool</a>
EE	Executing Entity
FAO	Food and Agriculture Organization of the United Nations
FSC	Food Security Committee,
GCF	Green Climate Fund
GLEAM-i	Global Livestock Environmental Assessment Model
GOT	Government of the Republic of Tajikistan
HH	Household
IFAD	International Fund for Agricultural Development
JFM	Joint Forest Management
KLSP	Khatlon Livelihoods Support Project
LPDP	Livestock and Pasture Development
LDN	Land Degradation Neutrality
MEDT	Ministry of Economic Development and Trade (MEDT)
MoEWR	Ministry of Energy and Water Resources
MOU	Memorandum of Understanding
NAP	National Adaptation Process
NCCAS	National Climate Change Adaptation Strategy
NDA	National Designated Authority
NDC	National Determined Contributions
NRM	Natural Resource Management
PMP	Pasture Management Plans
PMT	Pasture Meliorative Trust
PUU	Pasture User Union
SDG	Sustainable Development Goals
SEABAI	State Enterprise for Animal Breeding and Artificial Insemination
SEPMU-LPD	State Enterprise "Project Management Unit" Livestock and Pasture Development
SFA	State Forest Agency
SME	Small and Medium Enterprises
TA	Technical Assistance
TAAS	Tajik Academy of Agricultural Sciences
TAU	Tajik Agrarian University
TOR	Terms of Reference
ToT	Training of Trainers
VO	Village Organization
WB	World Bank
WFP	World Food Programme
WUAs	Water Users Associations

## Definitions

### Definitions taken from IPCC

**Adaptation:** In human systems, the process of adjustment to actual or expected climate and its effects, to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate.

**Adaptive capacity/Readiness** The combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities.

**Climate change:** A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcing, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.

**Land use and land use change:** Land use refers to the total of arrangements, activities, and inputs undertaken in a certain land cover type (a set of human actions). The term land use is also used in the sense of the social and economic purposes for which land is managed (e.g., grazing, timber extraction, and conservation). Land use change refers to a change in the use or management of land by humans, which may lead to a change in land cover. Land cover and land use change may have an impact on the surface albedo, evapotranspiration, sources and sinks of greenhouse gases, or other properties of the climate system and may thus have radiative forcing and/or other impacts on climate, locally or globally.

**ND-GAIN Index:** The Index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. It aims to help governments, businesses and communities better prioritize investments for a more efficient response to the immediate global challenges ahead.

**Vulnerability:** The propensity or predisposition to be adversely affected.

### Definitions taken from LPDP project

**Smallholder farmers:** Smallholder farmers refer to those with small sizes of agricultural land that rely mainly on family labor. In Tajikistan, smallholder farmers usually have access to small plots (0.15-0.40 ha) for crops near the homestead ('kitchen gardens'), over which they have a permanent and heritable use right. Some of them might have received additional small plots, commonly called 'Presidential Lands'. In addition to those crop lands, the farmers would have access to communal pasture land for grazing animals

**Dehkan farms:** Dehkan farms are run by private persons at individual, family or collective levels. The size of dehkan farms varies from five to thousands of hectares. Family and collective dehkan farms appoint a head who officially holds the farm's land registration certificate and legally represents the interests of the farm. Many large collective dehkan farms, however, continue to operate as collective or state farms.

**Village Organizations:** Village Organizations (VOs) are the community-based organizations at the village level. Initially started with support from the Mountain Societies Development Support Programme (MSDSP) of the Aga Khan Foundation, creating a grassroots organizational entity to represent the village community, VOs gained momentum and their numbers have increased sharply. The VO concept and functions have been mainstreamed, and VOs currently have a legal status under the Law on Public Self-Initiative Bodies and cover basically all the country. VOs are recognized bodies by both the government and donors as focal points for linking and working with communities though are underfunded and have partly weak governance.

**Jamoat:** Jamoats are the third-level administrative divisions (below district or rayon) in Tajikistan or sub-districts. There are about 406 Jamoats in the country

**Hukumat:** Hukumat refers to a local government/state administration, operating at region and district levels

## **Chapter II: Natural Resource Management Governance**

### **I. Introduction**

1. This Working paper focuses on the activities related to Natural Resource Management and Governance within the CASP+ project and provides the rationale for the selection of the activities selected for CASP+ with reference to institutional strengthening, policy advocacy and the regulatory environment in Tajikistan at the national level. More specific information related to the forestry, pastures, animal husbandry animal health and veterinary services and the crop sector can be found in the corresponding Working Papers.

### **II. Country Context**

#### **A. Government strategy and regulatory framework**

2. The overall framework for development in Tajikistan is guided by the Government's National development strategy 2016-2030 (NDS) and Medium-term Development Strategy 2016-2020 (MDS) that define the socio-economic development priorities for the country. The strategic development goals of the NDS are: (i) ensuring energy security; (ii) development of country's communication opportunities; (iii) ensuring food security and nutrition; and (iv) enhancing productive employment. Those of the MDS are: (i) ensuring stable access to energy resources; (ii) overcoming the low level of food self-sustainability; (iii) integration of cross-border and national transport corridors and development of communication networks; and (iv) ensuring equal access to social services.
3. National engagement in climate change adaptation and mitigation: Tajikistan is an experienced country with regards to international Climate Change diplomacy and, after joining the UNFCCC framework in 1997, it fulfilled its related communications duties in a timely manner. So far Tajikistan has elaborated three National Communications, with the fourth one in preparation.
4. With its 15.4 million tons of CO<sub>2</sub> equivalent in 2012<sup>1</sup>, the country is ranked on 135th position related to total GHG emissions, with the lowest level among all CIS countries. It has therefore only a marginal role and responsibility with regards to emissions which it nevertheless takes seriously. While committing to limit its own GHG emissions in line with national growth priorities, the environmental policies focus more on adaptation than on mitigation strategies, especially concerning vulnerable sectors. The National Adaptation Process has produced a draft version of the NAP supported by the UNDP GCF Readiness proposal (see chapter 6.1). The approval is still pending.
5. Tajikistan's Intended Nationally Determined Contribution (2017), building on the previous 2003 National Action Plan for Climate Change Mitigation, offers clear guidance on climate change adaptation and mitigation investment, specifically promoting full-scale integration of climate resilience and adaptation measures into the planning and development of green infrastructure in agriculture and disaster risk reduction systems. The INDC is currently being updated (draft expected to be submitted to UNFCCC by June/July 2021)<sup>2</sup>. Similarly, the National Disaster Risk Reduction Strategy (NDSRR) 2019-2030 provides guidance on key investment priorities, including improving understanding of disaster risks; strengthening the institutional and legal frameworks of the disaster risk management system; investing in disaster risk reduction for resilience; and enhancing disaster preparedness for effective recovery, rehabilitation and reconstruction.
6. Key elements of Tajikistan's National Climate Change Adaptation Strategy 2030 (NCCAS), approved in 2019, are the risks associated with climate change and adaptation measures, and reducing the consequences of these risks for the population and key sectors of the economy. The Strategy identifies adaptation needs and options for key sectors such as agriculture, water, energy and transport. For the agriculture sector, the Strategy proposes as key priority

---

<sup>1</sup> <https://data.worldbank.org/indicator/EN.ATM.GHGT.KT.CE?locations=TJ>

<sup>2</sup> With technical support from FAO in consultation with a wide variety of stakeholders in country.

investments improved soil erosion, grazing management, promotion of climate adapted cropping patterns, improved farmer access to information, practices and technology and tree plantation as a form of adaptation and disaster risk reduction. The strategy favours cross-sectoral adaptation options such as Integrated Water Resources Management (IWRM) and ecosystem-based adaptation.

## **B. Policy framework related to sectors related to NRM**

7. With the “National Agricultural Investment Plan (NIP) for Sustainable Agriculture Development and Food Security (2021-2030)” the MoA has defined priorities for investment and for private sector involvement. The measures aim among others at leveraging investments in forestry, pasture and livestock.
8. “The Agriculture Reform Programme 2012 – 2020”, includes the enhancement of Joint Pasture and Forest Management as priority activities for the adaptation to Climate Change and is the main programmatic document of the MoA.
9. **Pasture Management:** “the Pasture law” (PL), adopted in 2013 and amended in 2019 is the centrepiece for regulation, permitting the advancement in community-based pasture management with the creation of Pasture User Unions as the main instrument.
10. The “Pasture Development Programme for Tajikistan” (2016-2020) is currently still active in support of the PL through implementation of projects enhancing the different institutions created (PUUs, Pasture Commissions, Pasture Management Plans).
11. **Livestock:** The Comprehensive Programme for the Development of the Livestock Sector (2018-2022), represents the main strategic framework dealing with breeding and pasture management. It recognizes the crucial nature of the pastures in providing up to 70% of the food of the livestock. Another crucial policy paper is “the national breeding strategy (2018-22)”.
12. **Forestry:** The aim of the Strategy for the Development of the Forestry Sector for the period 2016-2030, is to provide an integrated management of the resources with afforestation, reforestation, natural forest regeneration and fuelwood plantations as priority activities, together with a limitation of harmful livestock grazing. The document has not been approved yet and is currently under revision.
13. **Water:** The “Water Sector Reform Programme of the Republic of Tajikistan for 2016 – 2025” is based on the principles of Integrated Water Resources Management and introduces as a novelty the management according to hydrological boundaries with the river basin approach being one of the main principles. Additionally, the programme addresses also implementation of new organizations at the different levels, national and basin levels.

## **C. Public Institutions involved in NRM**

14. The **Committee for Environmental Protection (CEP)**, created in the year 2008 is the National Designated authority (NDA) for the GCF since 2014. Among its main responsibilities are the following:
  - Natural Resources Management
  - Protect land, minerals, forests, water and other resources,
  - Coordinate environmental protection among government agencies
  - Coordinate GCF project elaboration and implementation to ensure alignment with national policies
15. Embedded in the CEP is the Hydrometeorological Agency of Tajikistan (Hydromet), the lead agency for Climate Change that prepares the National Communications to the UNFCCC and is responsible for providing climate and weather information. The Climate Change Center on the other hand reports to Hydromet and engages in climate related research and reporting and is expected to play a key role for the elaboration of vulnerability assessments of local communities within CASP+.
16. **Ministry of Agriculture (MoA)**, is the responsible entity for centralized State agricultural policy. Although the Ministry has limited budget and poorly trained staff, it has been the reliable lead

partner in the different projects financed by IFAD in the country, showing that it is capable of an efficient management of resources. At the district levels, the Ministry is represented by a division head, an agronomist and livestock, horticulture and engineering specialists. Extension services are represented by the public State extension officers (belonging either to the MOA or to the Rayon and Jamoat) or by private advisory services. Related to extension and information services the emergence of mobile services is noteworthy and several donors financed initiatives are currently working on expanding its impacts.

17. **State Enterprise “Project Management Unit” Livestock and Pasture Development (SEPMU)**, created by the Ministry of Agriculture to implement agricultural investments projects. SEPMU is very instrumental for realizing the IFAD program in Tajikistan with a total envelop of USD 91.6 million for LPDP 1 and 2, KLSP and CASP. Currently it comprises a team of 33 experts specialized in a variety of topics related to sustainable rural and agricultural development.
18. **Pasture Meliorative Trust (PMT)** is one of the main agencies of the MoA. Its mandates are the monitoring of stock to summer pasture and of the application of the pasture law. Every Oblast has branches of the PMT and employs pasture management specialists.
19. The other main agency of the MoA is the **State Enterprise** for animal breeding, genetic improvement, artificial insemination and trade of improved breeds of animals. While this agency controls the implementation of breeding and Artificial Insemination (AI), the sanitary aspects of these activities is still the mandate of the Food Security Committee.
20. **The State Committee for Food (FSC)**: The Committee, created in 2017, responds directly to the Government and its main responsibilities are animal health and food safety and the control and regulation of animal breeding.
21. **The Ministry of Economic Development and Trade (MEDT)** supervises the implementation of sustainable socio-economic development priorities and integrates aspects to NRM and Climate Change as it is also the co-executive body for the National Action Plan for Climate Change Mitigation and Adaptation.
22. **The State Committee on Land Management and Geodesy (CLMG)** has the mandate for the implementation of the policy related to state land management and mapping. The committee has local units at district level responsible for spatial planning and for distributing and leasing land and monitoring the changes in land use, including in the forestry sector.
23. **Committee on Emergency Situations and Civil Defence** is responsible for early warning alerts and disaster prevention and recovery and will in this regards play a major role in defining the vulnerabilities at local level.

### III. Sector Performance

24. Tajikistan has a [ND-GAIN index ranking<sup>3</sup>](#) of 111 out of 181 countries. The ranking has constantly improved since 1995 when it was 146, the country is however still the most vulnerable one in Central Asia. Overall, it is ranked as the 91<sup>st</sup> least vulnerable one and the 48<sup>th</sup> least ready to improve its resilience, meaning that “its current vulnerabilities are manageable, but improvements in readiness will help it better adapt to future challenges.”
25. Tajikistan has an extensive regulatory framework related to natural resources, however there are also gaps and areas that overlap with several institutional roles, capacities and responsibilities. One example of these overlapping competences can be found within the forestry sector: the State Forest Agency has the mandate to manage 1.8 million ha, but only 0.4 million ha of this area is forests, while 1.4 million ha are non-forested areas, e.g. pastures.
26. Many of the challenges stem from the collapse of the Soviet Union in 1991:

---

<sup>3</sup> summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience.

- There are few institutions supporting individual farmers and the support does not reach small scale-farmers.
  - In many areas of the countries uncontrolled unsustainable practices like overgrazing and over ploughing (in particular on steep slopes) and increased deforestation are present which lead to accelerated erosion. Further to the apparent land loss of valuable land, this phenomenon has also negative impacts on water infrastructure due to the suspended particles and sediment loads that can damage infrastructure and increase in general water treatment costs. Deforestation has furthermore led to more irregular water flow patterns, with deficits in the dry season and floods in the wet season.
27. The cost of degradation of agricultural land leading to lower production due to soil erosion and higher salinity corresponds, according to the World Bank, to 3.7% of the GDP (2012). In total, environmental degradation in the country leads to losses of 10% of the GDP per year.
  28. All land in Tajikistan is government owned. However, a series of reforms, in particular since 2007 have granted private citizens increasingly more control over it. Nowadays, Dehkan farmers manage 80% of the arable land producing 90% of agricultural products. These farmers, although not owning the lands, have obtained the right to use it according to the Land Code. This legislation focuses on the rational and efficient use of land and on the conservation of soil fertility and provides furthermore that each family has access to a household plot.
  29. In recent years, different locally applied instruments for sustainable management of natural resources gained importance in the country, in particular Joint Forest Management initiatives, Pasture Management Plans developed by Pasture User Unions, Integrated Water Resources Management, Climate Smart Agriculture and Sustainable Land Management. It is however necessary to upscale these approaches and plan them within an Integrated Natural Resource Management approach spanning different areas.
  30. Following is described a brief outline of the governance aspects in the different sectors:
  31. **Pasture:** Of main importance for the agricultural development is the governance related to pastures that are a major source of income for the rural population and the basis for most of the meat and milk production: During the USSR time pastures were managed in an organized manner, this system has however not been renewed leading to an abandonment of pastures distant to settlements and increase in livestock. These phenomena lead to overgrazing of pasture in close location to settlements and a decrease in productivity of both pasture and livestock. According to UNECE, nowadays 89% of the summer pasture and 97% of the winter pasture are suffering from medium to strong levels of erosion. Pasture areas comprise 3,8 M hectares (72% of them are registered as summer pasture, the rest as winter pasture).
  32. The reference institution for pastures is the MoA and different units/departments focus on pasture degradation with potential conflicts and confusions in the roles assigned. The monitoring of the condition of the pastures is however the mandate of the Committee on Land Management and Geodesy (CLMG). There is a clear need for a monitoring tool to be developed with a protocol for data collection and describing the necessary flow of information between the institutions.
  33. Depending on the governance level, the management of the pasture is assigned to several institutions: The Pasture Meliorative Trust (PMT) is organized at regional level, while the Pasture Commissions that include representatives of the local administrations, the Pasture User Unions (PUU) and the Pasture User Associations (PUAs) are operating at district level. PUUs are a community-based mechanism for the collective management of pastures. PUAs provide technical assistance to PUUs and manage pastures that include several PUU areas.
  34. **Forestry:** There is also overlap in the management of the resources which are within the mandate of the Ministry of Agriculture, CEP, and the State Land Management Committee.
  35. The State Forest Agency (located at CEP) is considered the central executing body developing policies and technical assistance for forests. Several units within the MoA deal with different aspects of the forestry sector. CEP also has the role to promote the sound use of natural resources, including forestry. The State Land Management Committee on the other hand develops policies related to land use and ownership, including forestry.



36. On the ground, activities related to forest conservation are implemented by local forest management agencies, the Leshkhoz. The Leshkhoz play an important role in the implementation of the community based Joint Forest Management mechanisms that foresee the creation of forest user groups (private forest users). For the management of the resources, detailed management and annual plans are elaborated and the SFA provides technical advice. As is the case with many state agencies, the Leshkoz have very limited resources making it difficult to follow all their assigned responsibilities.
37. Forests cover nowadays only 2.95% of the territory and, mainly due to intensive cattle grazing and unsustainable wood fuel use, the cover is constantly declining further: the juniper forests for example at a rate of 2 to 3% per year.
38. **Water Sector:** In the last few years, the GoT achieved a substantial reform of the sector by institutionalizing the Integrated Water Resources Management. This was designed to facilitate resource management according to hydrological boundaries and not administrative ones. The reform has led to a new definition of institutional roles, with the National Water Council being the highest consultative body on policies and the Ministry of Energy and Water Resources being the key institution for IWRM.
39. Most of the water is used for irrigation purposes (77% in the period from 2009-2014). Overall the agricultural sector consumes 82%. There are 417 Water User associations (WUA) (data 2016) for the distribution of the water and maintenance of infrastructure on farm level. The WUA have inadequate financing structures.
40. While the country has made significant achievements in the period from 2000-2015 with regards to access to improved drinking water, especially in rural areas (increase of 39.6%), the infrastructure related to waste water treatment (80%) does not meet the minimum standards to allow proper biological or mechanical treatment (2017).
41. **Green Economy:** The concept of Green Economy is rather new in the policy making of the country although elements of it are present in several strategic documents. The National Review "Towards a Green Economy in Tajikistan" in 2012 highlighted that the potential of the country lies in a sustainable exploitation of its natural capital, in particular water. However, also sustainable agriculture has been identified as a key driving force for economic development and job creation. The National Development Strategy 2030 emphasized in this regard the need to enhance the Green Economy sector for achieving long-term development goals of the country, especially in the agricultural sector, for ensuring food security, raising living standards and reducing poverty.
42. There is so far little or no data available concerning the environmental pressures from productive activities, like wastewater, land uptake, degradation and soil contamination. The number of industries present however seems to increase, in the period from 2007 – 2014 from 1,320 to 2,150. In the agro-processing sector the enterprises reached in 2015 a number of 798. With regards to processed food and beverages, Tajikistan is very import dependent and reached in 2011 a negative trade-balance of USD 330 million.
43. **Climate Change:** There is no national integrated climate change adaptation policy in place and the major national strategies do not consider appropriately this topic. The same applies to existing laws and regulations related to environmental protection, drinking water supply, DRR and others.
44. Works on the National Adaptation Plan started in 2016, with approval of the draft pending. The Strategy is expected to overcome the present barriers of a clear identification of institutional responsibilities and is expected to pave the way for integrated cross-sectoral governance of climate change adaptation.

#### IV. Ongoing Development Projects / Programmes / Govt plans

45. There are numerous past and ongoing projects related to natural resources management in Tajikistan

## A. Green Climate Funded projects

46. The GCF is currently financing five projects and 2 readiness projects that are implemented in Tajikistan. The projects most aligned with CASP+ are the following:
- [FP014, "Climate Adaptation and Mitigation Program For the Aral Sea Basin \(CAMP4ASB\)"](#), implemented by the World Bank in Uzbekistan and Tajikistan. Main aim is the creation of a Climate Investment Facility providing grants to rural communities for the application of climate resilient technologies and practices related to the improvement of field and horticultural crops, water resource management, land degradation control, pest and disease control, conservation agriculture, livestock improvements, agro-product processing and energy efficiency and RES measures.
  - [FP067 "Building climate resilience of vulnerable and food insecure communities through capacity strengthening and livelihood diversification in mountainous regions of Tajikistan"](#), focuses on enhancing food security by disseminating climate weather information allowing adaptive planning and implementation of agricultural practices and measures for an improved water management, capacity development diversification of livelihoods and applied training for the utilization of green houses, RES and post-harvest storage facilities.
  - [FP075 "Institutional Development of the State Agency for Hydrometeorology of Tajikistan"](#), aims at modernizing and enhancing the development of hydrological and meteorological data and information in Tajikistan. In this regard, the initiative focuses on the improvement and rehabilitation of infrastructure, the legal and structural transformation of the Hydromet Agency and the introduction of fee based Hydromet services.
47. The following 2 projects are not directly related to CASP+, the project will however pro-actively seek coordination to learn from the experiences related to GCF implementation, Climate Change, private sector involvement and energy related topics:
- [FP025, "GCF-EBRD Sustainable Energy and Climate Resilience Financing Facility \(SEFF\)"](#)
  - [FP040, "Scaling Up Hydropower Sector Climate Resilience"](#)
48. GCF Readiness initiative – "Support the Republic of Tajikistan to strengthen its capacities for monitoring and evaluation of climate finance, identifying potential Direct Access Entities and engaging the private sector on climate change related investments with the Green Climate Fund". The program, approved in December 2020 with a duration of 24 is pending disbursement of funds and start up from the FAO. The project focuses on five areas:
- Strengthen the capacities of national institutions to effectively monitor and evaluate impacts of climate finance through the following:
    - Finalization of a Monitoring and Evaluation Framework
    - Strengthening of the ecological monitoring system with the aim of incorporating Climate Change indicators for enhanced reporting to the UNFCCC
  - Engagement of stakeholders in the processes related to the GCF (awareness campaigns and transparent Country programme review)
  - Support the final identification of potential Direct Access Entities for the GCF
  - Develop a Concept Note for investment in the AFOLU Sector
  - Support the NDA to enhance private sector engagement in climate investments.
49. GCF Readiness initiative – "Enabling an Effective National Adaptation Plan (NAP) Process for Tajikistan", implemented by UNDP with a duration of 36 months to support a coherent mechanism for translating the sectoral strategy into concrete adaptation planning. Specifically, the project will support the development of the NAP process and complement the NCCAS and the NDSRR, among others through coordinating adaptation planning between international, national and local institutions. The following are the outcomes of the initiative:

- Governance for climate change adaptation and implementation strengthened
- Integration of adaptation into development planning activities
- Priority Sector Adaptation Plans developed, capacities strengthened and long term capacity development program established
- Mainstreaming climate change in day-to-day process of governance of the 3 priority sectors (energy, water resources, transportation and agriculture)
- Capacity development of priority sectors, hosted by the University of Central Asia
- Implementation capacities for climate change adaptation strengthened

#### **B. Other projects funded by International Partners**

50. [The Livestock and Pasture Development Project \(LPDP\)](#) I and II, financed by IFAD and implemented by the Ministry of Agriculture were above utilized to roll out the concept of PUU and PMP that had been introduced in 2013. The experience has shown that PMP have a significant impact on the reduction of degradation and the productivity of pastures (+15% in average).
51. The initiative [An integrated landscape approach to enhancing the climate resilience of small-scale farmers and pastoralists in Tajikistan](#), focus on landscape approaches to enhance climate resilience of rural communities, in particular in the Kofirnighan River Basin (KRB). The project has three components:
  - Integrated catchment management to build climate resilience
  - Ecosystem-based Adaptation, including Climate Smart Agriculture and Sustainable Land Management, in agro ecological landscapes
  - Knowledge management on building climate resilience through integrated catchment management and Ecosystem-based Adaptation in the KRB
52. The [European Union \(EU\)](#) will invest USD 59 mln in the second Phase (2021-27) of its investment programme in rural development that has three components, including water management and natural resource management. In this sector the initiatives target in particular isolated communities on and off- farm through wealth and job creating opportunities. There is no geographical overlapping with the CASP+, but there are synergies to be exploited with regards to the enhancement of green policies.
53. [GIZ](#) is active since more than 25 years in the country and works currently on funding from the German Government and the EU. In the sector of environment and climate, the agency is implementing initiatives for a climate resilient adaption of the agricultural sector to climate change: Among others this entails to enhance selected value chains, such as organic cotton and the training of food expert and climate-aware producers. In villages they often collaborate with village advisors that work on a fee basis.
54. Pilot Program for Climate Resilience (PPCR), implemented by WB, ADB and EBRD since 2009. The first phase implemented technical assistance projects on the following aspects:
  - Building capacity for climate resilience
  - Improving delivery of weather, climate and hydrological services
  - Developing a climate resilience modelling program
  - Enhancing climate resilience in the energy sector
  - Promoting sustainable land management
  - Increasing climate resilience in the Pyanj River basin

**Table 1 Current ongoing relevant projects**

#	Title	Details	Complementarity/Synergies
1	<a href="#">FP014, "Climate Adaptation and Mitigation Program For the Aral Sea Basin (CAMP4ASB)".</a>	I.E.: World Bank E.E.: CEP Total budget: US\$ 68.8 mln Starting date: 06/2020 Duration: 6 years Fund: GCF	<ul style="list-style-type: none"> <li>- Evaluation of lessons learned among Central Asian countries in the field of climate adaptive investments, knowledge and capacity development activities, tools for climate assessments and decision making</li> <li>- Foster a regional dialogue for an effective regional climate response</li> <li>- Collection of data on NRM that could be integrated in the remote and participatory NRM management of CASP+</li> </ul>
2	<a href="#">FP067 "Building climate resilience of vulnerable and food insecure communities through capacity strengthening and livelihood diversification in mountainous regions of Tajikistan"</a>	I.E.: WFP E.E.: CEP Total budget: US\$ 10 mln Starting date: 07/2020 Duration: 4 years Fund: GCF	<ul style="list-style-type: none"> <li>- Exchange of lessons learned in particular related to district adaptation planning and climate adaptive investments in the agricultural field</li> <li>- Evaluate the possibility for integration/dissemination of weather/climate information created by the project in CASP+</li> <li>- Collection of data on NRM that could be integrated in the remote and participatory NRM management of CASP+</li> <li>- Comparison of the most effective climate adaptive measures</li> </ul>
3	<a href="#">FP075 "Institutional Development of the State Agency for Hydrometeorology of Tajikistan".</a>	I.E.: ADB E.E.: CEP Total volume: US\$ 10 mln Starting date: 03/2019 Duration: 5 years Fund: GCF	<ul style="list-style-type: none"> <li>- Evaluate the possibility for integration/dissemination of weather/climate information created by the project in CASP+.</li> </ul>
4	Support the Republic of Tajikistan to strengthen its capacities for monitoring and evaluation of climate finance, identifying potential Direct Access Entities and engaging the private sector on climate change related investments with the Green Climate Fund.	I.E.: FAO E.E.: CEP Starting date: Approved 10/20, startup pending budget disbursement Duration: 24 years Fund: GCF	<p>Depending on the start-up of this readiness project, CASP+ will either collaborate or continue on the following:</p> <ul style="list-style-type: none"> <li>- Evaluate the possibility to incorporate Climate Change indicators for enhanced reporting to the UNFCCC in the NRM monitoring unit of CASP+</li> <li>- Policy dialogue with stakeholders in the processes related to the GCF</li> <li>- Coordinate the works of the Concept Note for investment in the AFOLU Sector with the support to the roll out of the national Green Economy strategy</li> <li>- Support the NDA to enhance private sector engagement in climate investments.</li> </ul>
5	<a href="#">An integrated landscape approach to enhancing the climate resilience of small-scale farmers and pastoralists in Tajikistan</a>	I.E.: UNDP E.E.: CEP Approved grant: US\$ 9,996,441 Approval Date: 07/08/2019 Duration: 4 years Fund: Adaptation Fund	<ul style="list-style-type: none"> <li>- Contribute to the diffusion, testing, capacity development of innovative technologies in the agricultural field.</li> <li>- Exchange of experience in developing and testing innovative solutions to implement participatory agriculture development and management and to support the rural poor to make informed choices.</li> </ul>

#	Title	Details	Complementarity/Synergies
6	Rural Development Programme Phase II	I.E.: European Union E.E.: local and international organizations grant: US\$ 59 mln Duration: 2021-2027 Fund: European Union	<ul style="list-style-type: none"> <li>- Exchange of experience with Rural Development initiatives in different regions</li> <li>- Coordination with regards to Green Economy Policies and advocacy for sustainable policy making</li> </ul>
7	<a href="#">Environment and Climate Program of the GIZ</a>	I.E.: GIZ duration: Since more than 25 years Fund: German Government and European Union	<ul style="list-style-type: none"> <li>- Collaborate in the ground-truthing of NRM data</li> <li>- Exchange of know related to the involvement of local communities</li> </ul>
8	Livestock and Pasture Development Phase II (2016-22)	I.E.: IFAD E.E.: SEPMU	<ul style="list-style-type: none"> <li>- Building up on the experience of the projects and integrating data retrieved in the frame of the project.</li> </ul>
9	Pilot Program for Climate Resilience (PPCR)	Implemented by WB, ADB and EBRD since 2009.	<ul style="list-style-type: none"> <li>- Of particular importance for the CASP+ is the core components "Promoting sustainable land management", which focusses on incorporating climate resilience into all sectors of land management.</li> </ul>

## V. Lessons Learned

55. Tajikistan has implemented several important projects related to natural resource management that have been at times successful in reshaping sectoral NRM Governance Frameworks. This is particularly the case in the water sector that has been able to entirely reform its institutional set-up and management approach and to align it to internationally recognized ones like the Integrated Water Resources Management. This shows that the country is open to change and to choose sustainable development pathways.
56. Within a context of increasing climate stressors and related hazards, an integrated approach to natural resource use is a key adaptive strategy particularly for the rural areas. While important steps and relevant pilot programmes are ongoing (including the climate Readiness programme in Tajikistan, led by CEP with technical support from UNDP and FAO), key agriculture and related sectoral policies are still missing the opportunity for a consistent and coordinated approach to deal adequately with climate change risks.
57. For a holistic approach, several barriers have to be removed, among others that include conflicting regulation and lack of coordination and partnership between the institutions responsible for natural resource management and economic development. The problems of managing the natural resource base are further exacerbated due to fragmented governance of pastures, forests and water resources at the national and local levels. There is so far limited appreciation in the public sector of the importance of integrated natural resource management that spans over several development areas.
58. Further lessons identified are the following:
- Lobbying for policy change enhancement is a difficult endeavour. It is more efficient to apply bottom-up approaches by implementing innovative projects and disseminate the results to key stakeholders for dialogue and reform.
  - It is crucial to involve district-level decision makers to promote initiatives for sustainable land management and climate resilience
  - The planning of climate adaptive practices is more effective if applied on a catchment and river basin level and with an ecosystem-based management approach
  - Effective implementation is often hindered by limited technical capacity of staff
  - Besides its incomplete adoption of decrees and orders, as pointed out by several stakeholders, one of the main barriers for the improvement of the pastures system is that the Pasture law does not consider land tenure
  - Problems in management of natural resources are exacerbated by insufficient information, which is scattered between the different sectors and agencies. The implementation of systems to share and disseminate information should start as early as possible in the project phase.
  - CEP and SEPMU are reliable partners and are experienced in implementing projects related to financing from GCF (CEP) and IFAD (SEPMU).

## VI. Detailed Description of Proposed Intervention for CASP+

### A. Rationale

59. Component 1 of the project is focused on enhancing evidenced based planning, management, evaluation and policy making of natural resources at national level with a focus on the adaptation to Climate Change. This is crucial for the sustainable development of the Tajik population, since the agricultural sector is responsible for 20% of the country's GDP<sup>4</sup>. The 0.8 million ha of arable land is however exposed to the impacts of climate change particularly via land degradation and erosion of fertile topsoil. Already in 2010, 11% of the total population was living on degraded land<sup>5</sup>.

---

<sup>4</sup> Mid-Term Development Plan Review. 2020. Agriculture Sector. Chapter 3. Development of sectors of national economy.

<sup>5</sup> UNDP. 2013. Human development report 2013. The rise of the South: human progress in a diverse world.

60. Tajikistan has achieved important progress in developing a strategic vision for some of its development priorities such as water and disaster management. However, the integration of a climate change perspective in the agriculture sector and in the management of natural resources particularly pastures, forests, livestock is not very strong. There is limited technical capacity and lack of tools for evidence-based planning, management and evaluation of natural resources and the impact of climate change. This leads to fragmented governance of natural resources and limits the opportunities and potential for sustainable development for rural livelihoods. This component is designed to address some of these issues and includes two specific outputs focused on capacity development and improving the policy environment:
61. Output 1.1: Capacities of relevant national institutions for climate-resilient natural resource management strengthened.
62. Output 1.2: Enabling environment for climate adaptive, inclusive and integrated management of pasture, forestry and livestock resources is enhanced
63. As the Climate vulnerability analysis of CASP+ shows (Annex 6) the regions in the Eastern and Centre Khatlon and in the South East of Sughd have a higher vulnerability to Climate Change. There is on one side increasing temperature with significant impact on animal health and agricultural productivity, erratic rainfall patterns with consequences on grazing seasons as well as higher risk from natural disasters (droughts, mudslides, landslides) which can negatively influence soils and human health. From a socio-economic perspective, these areas present weaker adaptive capacity of the population, lower quality of life (access to water and electricity) and income. Khatlon accounts for the highest percentage of extreme poverty at 21% and almost 2/3 of the poor are in the regions of Sughd (30.2%) and Khatlon (36.7%).
64. The beneficiary areas of CASP+ are therefore also in urgent need for sustainable planning of natural resources at the local level. For this purpose, at the beginning of the investment planning in component 2, District Climate Resilience Diagnostics (DCRD) will be elaborated for each of the 21 beneficiary districts enhancing eco-system-based approaches to climate adaptation planning on local level that will also increase the capacities of the national institutions.

## B. Barriers addressed

Barriers/Gaps	Measures proposed by project
---------------	------------------------------



<ul style="list-style-type: none"> <li>- Limited climate-sensitivity of the policy and regulatory framework to natural resource management</li> </ul> <p>Republic of Tajikistan Community-based Agriculture Support Programme 'Plus' (CASP+)</p>	<ul style="list-style-type: none"> <li>- Regular workshops involving all stakeholders will be held to enhance the mainstreaming of climate adaptive management practices of natural resources in all national institutions.</li> </ul>
<p>Project Design Report Annex 2: Feasibility Study Chapter II: Natural Resource Management Governance</p> <p>Limited capacity of evidence-based planning, management and evaluation of natural resources at national and local levels</p>	<ul style="list-style-type: none"> <li>- District Climate Resilience Diagnostics (DCRD) will be elaborated for each of the 21 targeted districts promoting ecosystem based approaches to climate adaptation planning at the local level</li> </ul>
<ul style="list-style-type: none"> <li>- Limited understanding of climate change and its slow onset – particularly felt in rural areas</li> </ul>	<ul style="list-style-type: none"> <li>- Development of specialised CC curriculum/modules for universities, technical schools and academy of Public Administration. Scholarships will be given to Youth coming from target rural areas to attend CC training.</li> </ul>
<ul style="list-style-type: none"> <li>- Fragmented governance of the diverse natural resources, at local, as well as national level (e.g., pastures and forests are under different institutions regulating the access in different ways);</li> </ul>	<ul style="list-style-type: none"> <li>- Through the implementation of the DCRDs the collaboration between national and sub-national institutions will be enhanced.</li> <li>- CASP+ will facilitate greater collaboration between CEP and MoA in the governance of NRM.</li> <li>- Policy dialogues will clarify the roles of the different agencies.</li> </ul>
<ul style="list-style-type: none"> <li>- Low productivity of agricultural systems and lack of stimuli to revert the trend of unproductive livestock population growth, hampering efficient and sustainable rangeland management;</li> <li>- Significant governance challenges with increasing livestock numbers and over-grazing.</li> </ul>	<ul style="list-style-type: none"> <li>- Review of sectoral policies focus on increasing the productivity of the livestock sector and encourage the small holders to adopt more sustainable and climate resilient strategies.</li> </ul>
<ul style="list-style-type: none"> <li>- Public investment does not always fully capitalise on integrated ecosystem management.</li> <li>- Limited financial options (products, system) in rural areas for productive investments in forestry, livestock/rangeland management and income diversification.</li> </ul>	<ul style="list-style-type: none"> <li>- The preparation of the DCRDs will analyse present management plans and provide a long- term perspective that assists with integrated ecosystem management.</li> </ul>
<ul style="list-style-type: none"> <li>- High climate vulnerability and adaptation deficit in rural areas, particularly for poor households and especially female headed households (9% of the total)</li> </ul>	<ul style="list-style-type: none"> <li>- The DCRDs will analyse vulnerability on local level and leverage investment for protecting poor HH</li> </ul>
<ul style="list-style-type: none"> <li>- Limited systematic and ongoing monitoring of natural resources. A clear missed opportunity exists in the lack of linkage between state capacity in remote sensing with state agency responsible for land degradation monitoring needs.</li> </ul>	<ul style="list-style-type: none"> <li>- Creation of a NRM monitoring unit within CEP that will apply remote and participatory monitoring.</li> </ul>
<ul style="list-style-type: none"> <li>- Incomplete awareness of the potential of ecosystem-based approaches for NRM</li> </ul>	<ul style="list-style-type: none"> <li>- Integrated planning and monitoring of Natural resources on local level</li> </ul>
<ul style="list-style-type: none"> <li>- No overarching NAP strategy in place defining clear responsibilities in the sector</li> </ul>	<ul style="list-style-type: none"> <li>- The project will support the NAP process with its policy dialogues</li> </ul>
<ul style="list-style-type: none"> <li>- Information related to the creation of natural resources is scattered between different sectors and within sectors within agencies.</li> </ul>	<ul style="list-style-type: none"> <li>- Establishment of flow of information between the different agencies</li> <li>- Implementation of a Monitoring unit at CEP</li> </ul>
<ul style="list-style-type: none"> <li>- Missing Natural Resource Maps</li> </ul>	<ul style="list-style-type: none"> <li>- Creation of the NRM monitoring unit that will provide PUU and Leshkoz with maps of their territory in exchange for information</li> </ul>
<ul style="list-style-type: none"> <li>- Lack of climate risk information</li> </ul>	<ul style="list-style-type: none"> <li>- Systematic collection and sharing of climate risk information.</li> </ul>
<ul style="list-style-type: none"> <li>- Lack of institutional technical capacities on climate change adaptive planning</li> </ul>	<ul style="list-style-type: none"> <li>- Capacity Development of institutions related to livestock, veterinary, forestry and pasture resources</li> </ul>
<ul style="list-style-type: none"> <li>- Limited knowledge of communities for ecosystem based natural resource management.</li> </ul>	<ul style="list-style-type: none"> <li>- Dissemination of information collected within the project at district and village level</li> </ul>
<ul style="list-style-type: none"> <li>- Research activities are suffering from chronic underfunding and limited international exchange, representing a barrier for innovative approaches and inclusion of young researchers</li> </ul>	<ul style="list-style-type: none"> <li>- Introduction of CC curriculum/modules</li> <li>- Research grant for innovative technologies.</li> </ul>



## VII. Climate Relevance of proposed interventions

### A. Adherence with GCF investment Criteria

65. **Impact Potential:** The activities have the potential to positively influence mitigation and adaptation measures in the country:
- Tools like Ex-ACT and Gleam-I are effective instruments to evaluate the CC impact of initiatives and policies and can therefore positively influence decision making towards a low carbon development
  - The review of different policies and the policy dialogues promote Climate Adaptive Agricultural practices in the regulatory framework of the country and provide an exchange of know-how for best practice application.
  - On a local level, the District Climate Resilience Diagnostics (DCRD) are providing the beneficiaries with climate vulnerability assessment paving therefore the way for informed climate adaptation investments.
  - The result of the project will be monitored via georeferenced remote sensing plus ground truthing activities. This is expected to significantly improve the management of land and forest areas contributing to emission reductions
66. **Paradigm shift potential:** The activities will lead to the integration of adaptation and mitigation aspects in the policy making in the country, by promoting a policy dialogue and reviewing different sectoral policy frameworks with a specific climate change lens. Essential in this regard is the involvement of different ministries and state institutions like MEDT, CEP, MoA that will benefit from the integrated and ecosystem approach.
67. Furthermore, the project will establish a flow of information between the different authorities to allow nature resource monitoring for more efficient management of climate change impacts. The ground-truthing of centralized data analyses through the involvement of the local communities will enhance transparency of data.
68. At the local level, the diagnostics will ensure that investment planning is based on scientific facts and catchment areas rather than administrative boundaries and that the assessment of climate risks anticipates future CC impacts.
69. Support to the implementation of the Green economy strategy will provide a conducive framework to invest in sustainable innovation and contribute to job creation. In the agricultural sector this implies the reduction of imported material (e.g. fertilizers and chemicals), use of more water efficient and drought resistant crop varieties and production technologies such as grow bags, drip irrigation, and sprinklers systems and use of renewable energy sources in the country.

### Sustainable development

70. **Environment:** The activities involve stakeholders on the ground (village organizations, PUU) and all competent national and sub-national institutions to improve monitoring and management practices of NRM, which is expected to have a very positive effect on biodiversity and environmental conservation. With the elaboration of the DCRDs ecosystem-based approaches for climate change investments will be provided. The NRM Unit will institutionalize reporting for international commitments like SDGs and LDN. The review of all policies will focus on minimizing environmental/Climate Change impacts. Training on the Biodiversity Integrated Assessment and Computational Tool (B-Intact) which uses geo-referenced maps and tools will increase accuracy and account for the ecological value and biodiversity sensitivity of project sites.
71. **Social co-benefits:** The integrated Management of natural resources will have a positive effect on the resilience of the local population and therefore in particular counteract migration phenomena. Furthermore, the integrated and inclusive systems implemented will ensure that all stakeholders, including local communities are consulted in a transparent way in order to ensure informed decision making.
72. **Economic impacts:** The DCRDs will provide the basis for long term planning and are expected to drive investments beyond the CASP+ project. The support to rolling out the Green Economy

strategy will provide the basis for ensuring that investments are sustainable and use resources more efficiently.

73. **Gender sensitive development impact:** The activities foresee the implementation of thematic publications workshops on gender and climate change at national level for policy makers to ensure mainstreaming of related topics in policy and decision making.
74. **Needs of the recipient:** The Agricultural sector is of main importance for the Tajik Society, providing 19% of the country's GDP and 51% of its employment in 2018<sup>6</sup>. The sector is however very vulnerable to Climate Change and studies suggest that by 2050, the population living in climatically vulnerable areas will increase by 77%, and that some regions will decrease agricultural yields by 30% by the end of this century<sup>7</sup>. What is needed therefore is sound analysis of Climate vulnerability and its investments needs. The Policy framework related to Climate Change is still incomplete and the project will therefore enhance and continue the different readiness and NAP processes currently taking place.
75. Adherence with Relevant National Policies

Strategy	Alignment
<b>National Development Strategy 2016–2030 (NDS)</b>	The activities are line with the objectives of the NDS, in particular i) poverty eradication; ii) sustainable economic growth; iii) promotion of sustainable consumption and production patterns; and iv) sustainable use of natural resources.
<b>National Strategy and Action Plan on the Conservation and Sustainable Use of Biodiversity (CBD Strategy)</b>	The policy dialogue and the capacity development is ensuring the mainstreaming of the CASP+ related approaches for transformative climate adaptive management of natural resources. In this regard it will apply sustainable agricultural practices and restoration and reforestation practices, which is priority for the CBD and is enhancing erosion control, one of the main vulnerabilities outlined in the NDRMS
<b>National Strategy on Disaster Risk Management for 2010–2015 (NDRMS)</b>	
<b>The National Climate Change Adaptation Strategy (NCCAS)</b>	The principles of CASP+ are well responding to the content of the strategy given that it indicates the need to adapt the agricultural sector to climate change for the development of the Tajik society and to apply integrated ecosystem based approaches for analysing and implementing measures.
<b>National Determined contribution</b>	Agriculture and forestry are among the vehicles identified by the INDC to ensure a progressive reduction of vulnerability to the impacts of climate change, and are part of the solution to enhance the carbon sequestration potential.
<b>Water Sector Reform Programme of the Republic of Tajikistan for 2016 – 2025</b>	Although the water sector is not at the centre of activities of CASP+ it is intrinsically connected. The project will therefore actively seek collaboration with the implementation of the programme and related coordination groups and promote the adoption of the IWRM principles

## B. Adherence with Nationally Determined Contributions

76. The activities are aligned to the priority measures of the NDC, namely to:
- the reduction of impacts from weather events and climate change by improving the process of serving the needs of the economy and its citizens' reduction of vulnerability by "means of full-scale integration of the climate resilience and adaptation measures into the planning and development of the green infrastructure", among others in the agricultural sector
  - support the increased role of women in solving climate change issues and the dissemination of knowledge about the topic on different levels.

<sup>6</sup> World Bank. (2019). Open Data Platform. Tajikistan Data Set. Retrieved from: <https://data.worldbank.org/country/tajikistan>.

<sup>7</sup> Tajikistan's 2019 National Strategy of Adaptation to Climate Change of the Republic of Tajikistan for the Period Until 2030

## VIII. Outputs

77. Output 1.1: Capacities of relevant national institutions for climate-resilient natural resource management strengthened.
78. National capacities to plan, manage and monitor the natural resource base at central and at lower administrative tiers will be strengthened with a focus on forests and pastures. The capacity of the **State Forestry Agency (SFA)** will be strengthened. A forestry curriculum recently developed for Tajikistan with the assistance of GIZ will be rolled out to the 14 project Leskhozi. The **Pasture Meliorative Trust (PMT)** and a range of community-based institutions dealing with pasture management such as the **Pasture User Unions (PUUs), Pasture User Associations (PUAs) and Pasture Committees (PCs)**, which entails among others formulating, updating and monitoring of Pasture Management Plans. Operational capacities of both PMT headquarters and its decentralized office in Khatlon region will be enhanced.
79. **Mapping and monitoring of natural resources** is currently only partially undertaken and needs to be strengthened to allow proper decision making on ecosystem services management. It is therefore important to introduce a system that combines remote and participatory natural resources monitoring and management. The project will build strong linkages between the Agency for Land Management, Geodesy and Cartography of the Republic of Tajikistan and those who are responsible for preventing further land degradation to establish a flow of information. By introducing participatory monitoring techniques in combination with low-cost remote sensing, the project will put in place the basis of a system by which annual reporting can be institutionalized.
80. Given the importance of the livestock sector in the country, it is critical to enhance the **technical capacities of national livestock institutions** to ensure efficient provision of veterinary public health and production services to smallholder farmers through partnership between public and private institutions. The Food Security Committee (FSC) currently designated as a National Veterinary Authority (NVA) will be provided with technical assistance and equipment to enhance its capacity to carry out its functions qualitatively as well as in line with One Health approach. The State Enterprise for Animal Breeding and Artificial Insemination (SEABAI) will be strengthened to provide AI services to smallholders for increasing animal productivity.
81. The project will build the capacity of research and academic institutions through integrating climate change in the curricula. With a view to build the future capacity of decision-makers and technical specialists on understanding and planning for climate risks. The Tajik Agrarian University, Tajik Academy of Agricultural Science and the Public Administration Academy will be assisted in developing education curricula and in the review of existing curricula of technical specialists for training of climate change specialists as well as for civil servants who are expected to be in key decision-making and planning positions in the Government. Both young men and women from the project area will be encouraged to enrol for a Master's degree in a climate related specialization through scholarships at one of the selected Universities. To encourage the generation of knowledge and the practical application of innovations, the project will encourage research institutions to produce evidence on effective approaches to NRM through a call for proposals. The private sector will also be invited to present proposals for the production of technical innovations that can help in climate adaptation which can then be disseminated through the market and facilitate the adoption of climate adaptation technologies and practices. These could include the following;

- New varieties and species of drought and heat resistant fodder (E.g. saxaul, kochia prostrata, agropyron for dry land areas of Khatlon region)
- Introduction of new livestock breeds, that are at the same time more productive (dairy and meat), and resilient to climate change effects
- Affordable and simple fodder conservation techniques, such as small-scale silage technologies affordable and adequate for farms with 2 or 3 cows, in order to reduce seasonality of production and dependence on pasture in winter
- Composting and manure management techniques that improve fertility of soils and reduce GHG emissions
- Husbandry of alternative livestock species, not or less dependent of pasture resources, and resilient to climate change: poultry, small ruminants, yaks
- Prevention and management of animal diseases (control of mastitis and parasitic diseases, implementation of basic biosecurity measures)
- Reproductive management (detection of heats<sup>[1]</sup>, management of calving and calf care<sup>[2]</sup>, drying off management)

82. Output 1.2: Enabling environment for climate adaptive, inclusive and integrated management of pasture, forestry and livestock resources is enhanced.
83. CEP has the mandate for enhancing the enabling environment for addressing climate risks and is already engaged with the preparatory work for the National Adaptation Plan (NAP) readiness. To facilitate coordination among the main stakeholders, the project will organize regular workshops to facilitate interaction and enhance the mainstreaming of climate adaptive natural resource management practices. Support will be provided to existing thematic platforms such as the Pasture Working Group and the National River Basin Organization to better understand the changing trends and prepare to deal with growing risks. These activities are expected to enhance coordination among sector agencies and encourage synergies between the various investments and approaches.
84. CASP+ has chosen high pay off areas for policy engagement from the climate perspective and will focus on specific policy aspects related to animal husbandry and animal health, pasture management, implications of promoting the Green Economy on the existing system of incentives and regulation and any lessons derived from the experience of joint forestry management and monitoring of pastures. The current breeding strategy (2018-2022) requires review in particular to address issues related to conservation of indigenous genetic resources, and introduction of exotic breeds, that need to be navigated in the context of climate change and provide clear guidelines to mitigate the risks associated with transformation from local breeds to high productivity breeds. While the 2019 version of the pasture law addresses most of the gaps of the previous version (2013) related to rights of PUUs in the scope of the secondary user's lease agreements, it does not address aspects related to control of livestock inventories. One of the possible entry point to address this issue from a policy and regulatory point of view would be to include in the law, provisions to enable PUUs to establish systems (grazing permits, quotas) that ensure that carrying capacities are observed and that stock accumulation is penalized. If these types of measures were framed in the Pasture Law and applied by all PUUs, the impact on animal inventories would be expected to be substantial.
85. Given the importance of the livestock sector for rural livelihoods and the concerns regarding its contribution to CO<sub>2</sub>, this sector has been selected for special focus by the project. CASP+ will improve the regulatory frameworks for livestock health services through the organization of an OIE<sup>8</sup> mission on veterinary legislation and by a review of the breeding strategy to assess the various options of conserving indigenous genetic resources, introduction of exotic breeds and cross-breeding in the context of climate change. The project will provide technical assistance by helping decision-makers understand how farming practices and production systems contribute to emissions at the farm level and along the production value chain and how to enhance climate resilience through climate-smart agriculture and biodiversity preservation. The project will provide assistance in the use of decision tools such as the EX-Ante Carbon Balance Tool (EX-ACT) for

<sup>8</sup> World Organization for Animal Health

the Agriculture, Forestry and Other Land Use (AFOLU) sector, the Biodiversity Integrated Assessment and Computational Tool (B-Intact) which uses geo-referenced maps and tools to increase accuracy and account for the ecological value and biodiversity sensitivity of project sites and the Global Livestock Environmental Assessment Model (GLEAM).

86. The Ministry for Economic Development and Trade (MEDT) is especially committed to ensuring that the pathways that it encourages are based on sustainable principles that encourage the growth of a green economy. However, there is limited understanding of how to operationalize the concept of a Green Economy adapted and well suited to Tajikistan's socio-economic context and history, its unique geographic attributes and asset base. The MEDT is committed to ensure implementing and propagating this approach for national development planning and green growth. In addition, MEDT staff will be trained and oriented on the basic precepts of Green Growth and how to best promote it at various levels. While the national mechanisms for carbon markets are still under definition (including via large efforts from major IFIs such as ADB), the conditions for utilization of (voluntary) carbon markets are still under development.

Project outputs	NRM specific outputs	Indicators	Targets
<b>Component 1: Strengthening enabling conditions for transformative management climate adaptive management of natural resources</b>			
<b>Output 1.1: Capacities of relevant national institutions for climate-resilient natural resources management are strengthened</b>	Combined remote and participatory Natural Resources monitoring and management introduced and tested	- Number of participatory and remote NRM monitoring units established	1
		- ha. of pasture under detailed scientific monitoring	3,500
		- N. of Agencies collaborating for an active exchange of data and information related to remote and participatory NRM	6
		- N. of national and subnational level staff capacitated NRM monitoring and management	45
<b>Output 1.2: Enabling environment for climate adaptive, inclusive and integrated management of pasture, forestry and livestock resources is enhanced</b>	- Inclusive and integrated policy dialogue on NRM promoted	- Number of NRM policy tools on which training is delivered	2 (EX-ACT and B-INTACT)
		- N. state agencies influenced by CASP+ insights and knowledge products	9
	- Green Economy supported	- N. of sectoral regulatory frameworks reviewed following the CASP+ Approach	1
		- Adapted training carried out to support the roll out and action plan on the Green Economy and METD staff.	1
		- The existence of a MIS for green investments	1

		and trained staff at the MF	
<b>Component 2: Investments in community capacity for adaption and resilience to climate change</b>			
<b>Output 2.1: Climate-sensitive Community Action Plans (CsCAP) developed</b>		- Plans influenced by District Climate Resilience Diagnostic (DCRD)	21

## IX. Activities

87. Activities implemented under Component 1 “Strengthening public sector capacity for transformative climate-resilient management of natural resources” related to NRM are described underneath. For activities focusing specifically on Pasture, livestock and animal health, kindly refer to the corresponding Working Papers.

### ***Output 1.1: By year 7, Capacities of relevant national institutions for climate-resilient natural resource management strengthened.***

#### Activity 1.1.2: Introduce combined remote and participatory Natural Resources monitoring and management.

88. Mapping and monitoring of natural resources including forests, pasture and protected areas is currently only partially ensured and needs to be strengthened to allow proper decision making on ecosystem services management. The project will in this regard support the completion of the mapping of natural resources, above all the finalization of the pasture land mapping, and the establishment of a combined remote and participatory monitoring system.
89. The activities will build strong linkages between the Agency for Land Management, Geodesy and Cartography of the Republic of Tajikistan and those who are responsible for preventing further land degradation (Committee on Environmental Protection), and establish a flow of information through regular updates. The relevant state agencies have the mandate to report on the status of the environment for national and international purposes (e.g. SDGs, LDN targets). By introducing participatory monitoring techniques in combination with low cost Remote Sensing (e.g. PRAGA from IUCN, PICSA from University of Reading) the project will establish, via Memorandum of Understanding, the method by which annual reporting may be institutionalized. The activity will build up directly on the results of the FAO readiness activities establishing national MRV capacity, will address the capacity building related to conducting land use cover monitoring and will also address ex-post evaluation of the mitigation action of the project itself.
90. Sub-activity 1.1.2. / 1.1.2.2 . (Kick off and Roll-out) Training on remote and participatory NRM. Two international experts will carry out simultaneously and in synergy training and ToTs to all governmental agencies of competence. One expert is concentrating on GIS tools and the other on participatory assessment and analysis of remote sensing data. The trainers will elaborate in collaboration with each other a manual to follow for NRM and build up the web portal in 1.1.2.3&4. This system will be based on open-source software and free international datasets will be utilized– for reducing operational costs and ensure sustainability and will be linked to certain tools which have been applied in similar context for climate sensitive monitoring and decision making e.g. Earth Map, Collect Earth.
91. Sub-activity 1.1.2.3. / 1.1.2.4 (Kick off and Roll-out) Field testing of NRM approaches. Within the activity CEP will create a NRM unit, led by a National GIS specialist (trained by the experts of 1.1.2.1&2). This unit will represent the point of reference for everything related to Remote Sensing within the CASP+ project and enhance activities for data retrieval from the local community.
92. The participatory mechanisms for NRM monitoring will be linked to the evidence-based district level climate and natural resources diagnostic and monitoring and will involve pasture users and Leshkhoz. The national GIS specialist maintains the web portal and updates it by obtaining

information from local experts (from component 2). To increase precision, satellite images will be purchased.

93. In addition, the project will pilot test an innovative approach to pasture monitoring. This will entail using hives on a pilot area of 3.500 ha and undertaking scientific analysis of the pollen collected by the bees, which can be utilized as bio indicators. This analysis enables the recording of precise qualitative and quantitative data on the type and number of plant species present in the area. The analysis enables the project to clearly identify the impacts and effects of the measures applied. Geobotany experts will contribute to ground-truthing of the data elaborated.

***Output 1.2: By year 7, Enabling environment for climate adaptive, inclusive and integrated management of pasture, forestry and livestock resources is enhanced***

94. Relevant upgrades in evidence-based policy and regulatory framework improvements for a climate resilient planning will be introduced, in particular related to animal husbandry and health and green economy. Inclusive policy dialogue will accompany the process, and will complement with a specific angle on agriculture adaptation to climate change the ongoing efforts such as GCF-funded Readiness and NAP.

Activity 1.2.1: Promote an inclusive and integrated policy dialogue.

95. Regular workshops involving all stakeholders will be held aiming at enhancing the mainstreaming of climate adaptive management practices of natural resources in all national institutions. Furthermore, this activity should provide support to existing thematic Platforms (e.g. Pasture Working Group, National River Basin Organization, National Platform for climate change adaptation, Donor Coordination Council), ensure a continuous update of all institutional stakeholders through e.g. policy briefs and newsletters, and also provide advocacy and lobbying opportunities for the adoption and enforcement of integrated policy measures. The workshops will be supported by International Experts needed for stocktaking and for the integration of policy aspects of complementary initiatives, in particular from the NDC enhancement process, the GCF Readiness projects and the NAP process. In the process will be also integrated the lessons learned and recommendations from component 2 and 3 of the CASP+ and hence the experience related to local Community actions plans and private sector involvement.
96. Further international experts will be mobilized to provide technical assistance facilitating the use of decision making/policy tools on climate change and livestock (e.g. EXACT, B-INTACT, GLEAM, LSPIT) and will support Gender and climate mainstreaming in background studies.
97. Sub-activity 1.2.1.1. Stock taking of policy development and mainstreaming of Climate Adaptive agricultural practices among institutions
98. Sub-activity 1.2.1.2. Training on in the utilization of policy support tools (e.g. SIPT, GLEAM, EXACT, B-INTACT). Next to the livestock related tools, the following 2 tools could play a significant role in guiding policies related to Natural resource management, pasture management and livestock: Ex-Ante Carbon-balance Tool | EX-ACT is a free open source accounting tool for the impact on Climate Change/GHG emissions of agricultural, forestry, and other land-use (AFOLU) investments and policies.
99. Biodiversity Integrated Assessment and Computation Tool | B-INTACT makes use of various geo-referenced maps and tools to increase accuracy and account for the ecological value and biodiversity sensitivity of project sites.
100. Sub-activity 1.2.1.3. Kick off workshops for institutional networking.
101. Sub-activity 1.2.1.4. Kick-off workshops for institutional networking (SFA funded)
102. Sub-activity 1.2.1.5. Roll-out workshops for institutional networking

Activity 1.2.3: Support government's capacity to coordinate and monitor Green investments.

103. In line with the National Development Strategy 2030, the Government of Tajikistan endorsed the Green Economy Strategy to contribute achieving long-term development goals of the country,



- especially in the agricultural sector, for ensuring food security, raising living standards and reducing poverty.
104. The activity foresees relevant assessment of the required legislation and regulatory framework related the Green Economy and provide related training to government officials, and strengthen Ministry of Finance capacity to monitor relevant projects and resource mobilization (management info system – MIS), including exposure to similar countries' experiences (study tours).
  105. Sub-activity 1.2.3.1. Support Development of the Green Economy strategy. In collaboration with the Ministry for Economic Development and Trade (MEDT), the activity foresees the comprehensive analyses of the industry related (in particular community based agro-industry activities in line with the CASP+ approach), including legislation and international and national best practices in this area by international and national experts. While the national mechanisms for carbon markets are still under definition (including via large efforts from major IFIs such as ADB), the conditions for utilization of (voluntary) carbon markets are still under development, and this activity will include also a relevant. A consultation workshop will support the finding process and the experts will present their analysis and recommendations in the form of a draft concept for the enhancement of the Green Economy at a validation workshop to all stakeholders.
  106. Sub-activity 1.2.3.2. Capacity Development of MEDT staff: it is foreseen to carry out capacity development events on Green Economy for national and sub-national civil servants and to organize a study tour to a partner country to promote and exchange of know-how and experiences in the sector.
  107. Sub-activity 1.2.2.3. Capacity Development of Ministry of Finance staff: The project will implement a Management Information System in order for the Ministry to be able to better coordinate Green Investments among all stakeholders and organize a study tour to learn from best practices in the sector.
  108. Sequencing of activities in Component 1 related to NRM:
    - Sub-activity 1.1.2.1. Kick off Training on remote and participatory NRM  
 CEP is the executing entity and will therefore organize the following:  
 Year 1:
      - Organize a training on remote and participatory NRM. This will include the following:
        - Provision of a space to hold the training
        - Recruit the consultancies of the GIS expert and of the Participatory expert to hold the training. The technical experts are also required to provide the basis of the web portal and system and the technical specifications for the equipment to be purchased for the NRM unit in 1.1.2.2.
        - Invite 20 representatives of state agencies to participate in the trainings (2 training for 2 weeks each)
    - Sub-activity 1.1.2.2. Roll out Training on remote and participatory NRM  
 Year 3
      - Refresher course will be organized with the same aforementioned duties to be repeated. The experts are required to evaluate the functioning of the Web portal and recommend adjustments if needed.
    - Sub-activity 1.1.2.3. Kick off Field testing of NRM approaches  
 CEP is the executing entity and will therefore organize the following:  
 Year 1:
      - CEP will provide office space for the NRM Monitoring Unit
      - Based on the recommendations of the international experts of 1.1.2.1 & 2, equip the Monitoring Unit with computers, plotters and a server for storing data
      - Recruit a National GIS experts in charge of maintaining the WEB portal for the whole duration of the project.
    - Sub-activity 1.1.2.4. roll-out Field testing of NRM approaches  
 Year 3



- Identify together with the International and national experts the pilot area to be monitored
- Based on the recommendations of the international experts of 1.1.2.1 & 2 purchase satellite images for the pilot areas
- Recruit a national botany expert to carry out field monitoring in Y3, Y5 and Y7
- Procure Service provider to carry out field monitoring for Y3, Y5, Y7 to carry out field monitoring

Year 5

- Coordinate the collaboration between the SP and the National Botany expert Year 7
- Coordinate the collaboration between the SP and the National Botany expert

Sub-activity 1.2.1.1. Stock taking of policy development and mainstreaming of gender sensitive climate-adaptive agricultural practices

FAO will be the E.E. and procure the following experts (Y2, Y4):

- International policy expert
- International Gender expert
- The missions aforementioned missions will be organized in order for the experts to be able to participate in the workshops of Y2 and Y4, where they will give technical presentations related to their topics. The experts shall also provide a structural proposal for the same workshops to be followed from Y3 onwards (topics to be treated, data to be analyzed etc.).

Sub-activity 1.2.1.2. Training on the utilization of policy support tools

FAO will be the E.E. and procure the following experts (Y2, Y4):

- Recruitment of International Specialists on Carbon Accounting Tools
- Recruitment of International Specialists on Livestock Planning Related Tools (GLEAM-I and LSIPT)
- The aforementioned missions will be organized in order for the experts to be able to participate in the workshops of Y2 and Y4, where they will give technical presentations related to their topics. The experts shall also provide a structural proposal for the same workshops to be followed from Y3 onwards (topics to be treated data to be analyzed etc.).

Sub-activity 1.2.1.3. Kick off workshops for institutional networking

Sub-activity 1.2.1.4. Kick off workshops for institutional networking (SFA funded)

Sub-activity 1.2.1.5. Roll out workshops for institutional networking

CEP is the E.E. for the three sub-activities

- Policy dialogue workshops involving all competent state agencies and international partners.
- In conjunction with the policy dialogue workshops conduct thematic workshops on gender and climate change at national level for policy makers (through dissemination of findings from gender study, diagnostic, assessment) to ensure CC and NRM policies/ legal frameworks consider gender-specific recommendations (each Year)
- Purchase and printing of communication materials (each Year)
- Gender and Climate Change in Tajikistan (based on CASP+ experience) (last Year)
- study tour in Year 3 for the 10 representatives of state agencies to project locations. The costs include travel, overnight stays, food, meeting costs

Sub-activity 1.2.3.1. Support the development of the Green Economy strategy

FAO is the E.E. and organizes the following in Y2:

- Recruitment of an international carbon market and energy expert, leading the review of the related regulatory framework
- A team of 5 national sectoral experts (agriculture, agroindustry, energy etc.)
- 1 consultation workshop inviting all the state agencies of competence and starting up the works for the elaboration of the concept
- 1 validation workshop in which the outcomes will be presented and that will serve for fine tuning the concept

Sub-activity 1.2.3.2. Capacity Development of MEDT staff

CEP is the E.E. and organizes the following in Y2:

- Organize a training of the trainers course to 10 staff of the MEDT, utilizing the national and international experts of 1.2.3.1. The staff can then train the sub-national staff at district level.
- 1 study tour involving 10 representatives of the public administrations to a partner country to learn from good/best practices

Sub-activity 1.2.3.3. Capacity Development of Ministry of Finance staff

MoA (via PMU) is the E.E.

- in Year 2 10 participants of Government agencies (Min Fin and others) participate in study tours on key project topics
- in Year 2 Software for Monitoring and Analysis of Public Investment Projects (including advisory and instalment)

## Activities implemented under Component 2: Investments in community capacity for adaption and resilience to climate change

### Output 2.1: By year 3, 400 Climate-sensitive Community Action Plans (CsCAP) developed

Activity 2.1.1: District Climate Resilience Diagnostic

109. A Service provider (SP) supports CEP in the elaboration of District Climate Resilience Diagnostic (DCRD) for each of the 21 beneficiary districts. Given the importance of water control, conservation and of the topography in disaster risk reduction and climate change resilience, each district will be divided into planning units based on sub-catchments. This will allow a landscape management approach, linking activity in the upper parts of a given catchment to 'passive' beneficiaries in the lower parts of the same catchment and managing the interrelationships between land use. The process will be based on geospatial analysis of climate change vulnerability, key threats and potential adaptation solutions. The findings will be validated and disseminated with stakeholders at district level workshops.
110. The DCRDs, based on the risks and opportunities emerging in each district, will provide the basis for the subsequent Community Planning in 400 CASP+ target villages. Ultimately it will be the basis to define the CsCAPs and the potential Adaptation Investment for (a) pasture improvement/ restoration (pasture management plans), (b) climate-resilient infrastructures strengthening / rehabilitation, (c) procurement of agricultural machineries and Forestry Investment for (d) Joint Forest Management, and (e) Direct leskhoz forestry. The draft ToRs for the Service provider are included in the Annex.
111. An overview on the deliverables is given in Section E6 of the FP, and in Chapter 4.1 of the PIM.

Activities	Description	Sub-activities	Deliverables
<b>Component 1: Strengthening public sector capacity for transformative climate-resilient management of natural resources.</b>			
<b>Activity 1.1.1:</b> Capacity Development of public institutions on climate resilient ecosystem management	Develop capacities of public institutions to streamline climate sensitive, participatory and gender inclusive ecosystem management approaches such as landscape approach, integrated watershed management, joint forest management, community-based pasture management	1.1.1.1. Strengthen capacities of Pasture Meliorative Trust to roll out Pasture Law at community level and provide technical assistance to PUUs, PUAs and PCs	<ul style="list-style-type: none"> <li>- Regional PMT Office in Kulob refurbished and equipped.</li> <li>- Recruitment of Pasture specialists seconded to PMT.</li> <li>- 2 vehicles for field missions delivered to PMT</li> </ul>
		1.1.1.2. Rolling out and Strengthen capacities of Pasture Meliorative Trust to roll out Pasture Law at community level and provide technical assistance to PUUs, PUAs and PCs	<ul style="list-style-type: none"> <li>- 2 Pasture specialists seconded to PMT</li> </ul>

Activities	Description	Sub-activities	Deliverables
		1.1.1.3. Upgrade the technical skills of the Forestry Department	<ul style="list-style-type: none"> <li>- 1 curriculum for foresters carried out in each of the 14 project leshkhov and service provider for training</li> </ul>
Activity 1.1.2: Introduce combined remote and participatory Natural Resources monitoring and management	Establish remote and participatory management of natural resources as the basis for climate adaptive development and enable exchange of information between the different competent state agencies and communities	1.1.2.1. Kick-off Training on remote and participatory NRM	<ul style="list-style-type: none"> <li>- Recruitment of International GIS expert (travel included)</li> <li>- Recruitment of International Expert for participatory NRM planning</li> </ul>
		1.1.2.2. Roll-out Training on remote and participatory NRM	<ul style="list-style-type: none"> <li>- Follow up support of technical assistance: International Expert for Participatory NRM planning and International Expert for participatory NRM planning</li> </ul>
		1.1.2.3. Kick-off Field testing of NRM approaches	<ul style="list-style-type: none"> <li>- Recruitment of National Botany Expert and National GIS specialist</li> <li>- Purchase of computer plotter and server (to store data)</li> <li>- Recruitment of M&amp;E consultant for CEP (including social fund and travels)</li> <li>- Kick-off annual outcome survey</li> </ul>
		1.1.2.4. Rolling-out Field testing of NRM approaches	<ul style="list-style-type: none"> <li>- Follow up TA: National Botany Expert, National GIS specialist, NRM monitoring with bees, M&amp;E consultant</li> <li>- Purchase of satellite images</li> <li>- Roll-out of annual outcome survey</li> </ul>
Activity 1.1.3. Enhance technical capacities of national livestock institutions to ensure efficient provision of public animal health and production services to smallholder farmers through efficient partnership between	Strengthen capacities of public agencies under the MoA and FSC in charge of animal health and breeding services to improve the outreach of their activities through provision of logistical support and technical assistance	1.1.3.1. Step up veterinary public health services of the National Veterinary Authority through provision of technical assistance and equipment.	<ul style="list-style-type: none"> <li>- The organizational structure of the state veterinary management has been developed in line with OIE's recommendations</li> <li>- Veterinary surveillance system based on One Health</li> </ul>

Activities	Description	Sub-activities	Deliverables
public and private institutions.			<p>approach has been established</p> <ul style="list-style-type: none"> <li>- A mini truck-refrigerator as well as a disinfection machine delivered to FSC</li> <li>- Interpreter/translator available</li> </ul>
		1.1.3.2. Improve the outreach of breeding services provided by State Enterprise for Animal Breeding and Artificial Insemination to areas and communities targeted by the Project	<ul style="list-style-type: none"> <li>- Kulob regional Center for AI and breeding refurbished and equipped (semen processing equipment, liquid nitrogen machine).</li> </ul>
Activity 1.1.4: Build capacities of research and academia institutions on climate resilient ecosystem management.	Streamline Climate Change and Ecosystem management approaches in the training curricula and research programmes of National and Research Institutions and academia	1.1.4.1. Integrate climate change issues in university and training institutions curricula:	<ul style="list-style-type: none"> <li>- 1 new curriculum on CC developed and rolled out at TAU and TAAS</li> <li>- 1 CC module developed &amp; include in curricula of agronomists, agricultural engineers, foresters, zootechnicians and veterinarians of TAU and TAAS, as well as in the training curriculum of public administrators at PAA</li> <li>- Training of diploma level trainers on CC</li> </ul>
		1.1.4.2. Promote enrollment of male and female youth in training curricula on climate-resilient natural resources management	<ul style="list-style-type: none"> <li>- 118 students from project area enrolled in newly developed curriculum on CC during project implementation</li> </ul>
		1.1.4.3. Enable research institutes and the private sector to produce evidence on NRM and Climate Change for policy dialogue and climate sensitive technical innovations	<ul style="list-style-type: none"> <li>- 2 research projects on climate sensitive innovations supported every 2 years (6 in total)</li> </ul>
		1.1.4.3. Enable research institutes and the private sector to produce evidence on NRM and Climate Change for policy dialogue and climate sensitive technical innovations	<ul style="list-style-type: none"> <li>- Provision of batches of grants for research projects</li> </ul>
Activity 1.2.1: Promote an inclusive and	Enhance the mainstreaming of climate adaptive management practices of natural resources in	1.2.1.1. Stock taking of policy development and mainstreaming of gender	<ul style="list-style-type: none"> <li>- 7 policy briefs elaborated and disseminated among</li> </ul>

Activities	Description	Sub-activities	Deliverables
integrated policy dialogue	all national institutions and verification of the effectiveness of policies on the ground	sensitive climate adaptive agricultural practices.	<ul style="list-style-type: none"> <li>institutional stakeholders</li> <li>- 7 reports on the effectiveness of national adaptation policies verified on the ground</li> </ul>
		1.2.1.2. Training on the utilization of policy support tools e.g. SIPT, GLEAM, EXACT, B-INTACT.	<ul style="list-style-type: none"> <li>- 45 representatives of governmental agencies trained on policy tools in the frame of 3 trainings</li> </ul>
		1.2.1.3. Kick-off workshops for institutional networking	<ul style="list-style-type: none"> <li>- One workshop promoting policy dialogue implemented.</li> <li>- Purchase communication material</li> <li>- Conduct two workshops on gender and CC</li> </ul>
		1.2.1.4. Kick-off workshops for institutional networking (in-kind)	<ul style="list-style-type: none"> <li>- SFA staff time to be involved in policy dialogues (in-kind)</li> </ul>
		1.2.1.5. Roll-out workshops for institutional networking	<ul style="list-style-type: none"> <li>- Roll-out workshops on policy dialogue, and gender and CC (one per year)</li> <li>- Purchase communication material for the annual workshops</li> </ul>
Activity 1.2.2: Technical assistance for review of livestock related regulatory frameworks.	Review and update of animal health and breeding regulatory and strategic framework to ensure compliance with international guidelines and ensure streamlining of measures supporting climate resilience and environmental protection	1.2.2.1. Improvement of the Pasture Law	<ul style="list-style-type: none"> <li>- Refined Pasture Law.</li> </ul>
		1.2.2.2. Improvement of the Pasture Law	<ul style="list-style-type: none"> <li>- Two consultative workshops on the refined pasture Law.</li> </ul>
		1.2.2.3. Mobilizing technical assistance of the OIE	<ul style="list-style-type: none"> <li>- OIE Mission on veterinary legislation has been conducted</li> <li>- An analysis of the legislation was carried out, gaps were identified</li> </ul>
		1.2.2.4. Improvement of veterinary legislation	<ul style="list-style-type: none"> <li>- Veterinary legislation improved in line with OIE recommendations (workshops, round tables, conferences, and TA)</li> </ul>
		1.2.2.5. Review of the national breeding strategy	<ul style="list-style-type: none"> <li>- Breeding strategy revised</li> </ul>

Activities	Description	Sub-activities	Deliverables
Activity 1.2.3. Support government's capacity to coordinate and monitor Green investments	Review of the legislation and regulatory framework related the Green Economy for MoDT and provide training to government officials, and strengthen MoF to monitor projects and resource mobilization	1.2.3.1. Support Development of the Green Economy strategy	<ul style="list-style-type: none"> <li>- 1 draft of the sectoral strategy elaborated.</li> <li>- 1 consultation workshop</li> <li>- 1 validation workshop</li> </ul>
		1.2.3.2. Capacity Development of MEDT staff	<ul style="list-style-type: none"> <li>- 1 training for MEDT staff</li> <li>- 1 Training of Trainer module developed for training MEDT staff at subnational level</li> <li>- 1 study tour (TBD)</li> </ul>
		1.2.3.3. Capacity Development of Ministry of Finance staff	<ul style="list-style-type: none"> <li>- 1 software for Monitoring and Analysis of Public Investment Projects</li> <li>- 10 participants in one study tour for selected MEDT officials.</li> </ul>

### XIII. Risks and Mitigation measures

Selected Risk Factor 1		
Category	Probability	Impact
Governance	High	Medium
Description		
<b>Lack of Cooperation between the different institutions for an exchange of knowledge on NRM in the frame of Climate Change:</b> Responsibilities for retrieving and managing data on NRM is fragmented and the establishment of information exchange will require time and a paradigm shift in collecting and analyzing data. Furthermore, although there is consensus about the magnitude of challenges ahead in the sector, the different institutions have different approaches on how to address it.		
Mitigation Measure(s)		
The project will involve all relevant institutions in training and capacity development and ensure a smooth flow of information with clear assigned responsibilities and protocols and that the results of the activities are increasing the efficiency of the operation of all involved agencies and ministries. Furthermore, CASP+ will actively support the NAP process that will further enhance the capacities and role of CEP and other competent agencies and to clearly delineate the different roles and responsibilities to allow a proper and efficient coordination in the sector. CASP+ will further ensure that national institutions involve key agencies at local level in planning and that the needs of the communities are properly addressed.		
Selected Risk Factor 2		
Category	Probability	Impact
Technical and operational	low	high
Description		

<b>Weak knowledge and capacities of local population to plan climate adaptive investments</b>		
Mitigation Measure(s)		
The project will provide a series of tools and guidelines for the local population/administration to analyse climate risk and to be capacitated for climate adaptive planning of investments		
<b>Selected Risk Factor 3</b>		
Category	Probability	Impact
Technical and operational	Low	medium
Description		
<b>National government does not implement new policy framework.</b>		
Mitigation Measure(s)		
The design mission has involved all stakeholders in the elaboration process and established a close relationship with all relevant stakeholders. Some of the request, like the one related to the enhancement of the Green Economy sector have been directly and proactively send by the Ministry of Economic Development and Trade, testifying hence the availability to collaborate with the CASP+. The project will maintain this close relationship and ensure that all partners are informed in a transparent and timely way.		
<b>Selected Risk Factor 4</b>		
Category	Probability	Impact
Technical and operational	Low	high
Description		
<b>Weak capacities in implementing agencies</b>		
Mitigation Measure(s)		
CASP+ main approach is the enhancement of capacities in implementing and partner agencies and of a variety of other stakeholders, like universities and technical schools.		