

# Supporting Nepal to integrate agriculture sector into National Adaptation Plan



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## United Nations Development Assistance Framework (UNDAF)

The United Nations System is providing technical assistance through a coordinated response under the UNDAF for NEPAL to achieve its national goals. The proposed Supporting Nepal to integrate Agriculture in NAP will specifically contribute to the UNDAF Component II: Protecting development gains - Outcome 7: People living in areas vulnerable to climate change and disasters benefit from improved risk management and are more resilient to hazard-related shocks.

### Project Summary

Many developing countries and particularly LDCs like Nepal with having high impacts of climate change on development goals, especially those concerning poverty reduction, exclusion and inequality, need to integrate requirements for risk management into existing planning and budgeting processes in a comprehensive and sustained manner. Given the capacity gaps and lack of understanding of climate change impacts and adaptation needs, planning and budgeting for climate change is rather done on ad-hoc basis. The proposed project seeks to address those capacity gaps by enhancing the understanding of climate change impacts on agriculture sector of Nepal and integrating climate change risk management into the planning and budgeting processes within the agriculture sector at all levels. The project aims to build technical capacities of Ministry of Agriculture Development (MoAD) and other relevant ministries to integrate climate change concerns into relevant national and sectoral plans and budgets. The project is in line with the national development priorities relating to agriculture and climate change in Nepal as articulated in National Adaptation Programme of Action (NAPA), National Agriculture Sector Development Priority (NASDP), Priority Framework of Action (2011–2020) on Climate Change Adaptation and Disaster Risk Management of the Ministry of Agricultural Development (MOAD) and Agriculture Development Strategy (2015). The project will be jointly implemented by FAO and UNDP under the guidance of Ministry of Agriculture Development and contribute to national adaptation planning process (NAP) initiated by Ministry of Population and Environment (MoPE).

#### Project Title:

Supporting Nepal to integrate the agriculture sector into National Adaptation Plan (in short known as NAP-Agriculture in Nepal)

#### Duration:

01 January 2016 – 31 December 2018

#### Outcomes:

**Outcome 1:** Technical capacity and institutions on NAPs strengthened

**Outcome 2:** Integrated roadmaps for NAPs developed

**Outcome 3:** Evidence-based results for NAPs improved

**Outcome 4:** Advocacy and knowledge-sharing on NAPs promoted

#### Planned Resources:

Total estimated budget: **USD 700,000** of which;

Item	Amount (USD)
UNDP	280,000
FAO	420,000
<b>Grant Total</b>	<b>700,000</b>

## 1. Introduction

### 1.1 National context: Policy Conformity

Nepal, being a least developed and Himalayan country, is placed in high impact zone of climate change, where agriculture - a major base of economy and livelihood - is most vulnerable to climate change impacts. Technology development, transfer and utilization (specifically related to water-efficient irrigation, tolerant cultivars/species and low methane producing and climate-friendly agricultural practices), documentation of climate related indigenous knowledge and its utilization in technology generation, and crop insurance have been major provisions in the Climate Change Policy (2010) to be implemented by agricultural sectors. Subsequently, National Adaptation Plan of Action (2010) of the country has identified most vulnerable sectors to climate change including agriculture, and established national priorities of interventions to build resilience and adapt to possible effects of climate change.

National development priorities relating to agriculture and climate change in Nepal are articulated in National Adaptation Programme of Action (NAPA), National Agriculture Sector Development Priority (NASDP), Priority Framework of Action (2011–2020) on Climate Change Adaptation and Disaster Risk Management of the Ministry of Agricultural Development (MOAD) and Agriculture Development Strategy (2015). National development goals in Nepal, particularly for agricultural sector, mainly comprise of poverty reduction and food security in addition to reducing regional disparities. The National Agriculture Policy (2004) sets poverty reduction and food security as the underlying goals to be attained through higher agricultural growth based on increased productivity and commercial and competitive agricultural system. The Thirteenth Plan (2013/14 – 2015/16) identifies climate change as one of the main challenges to attaining the expected outcomes in the agricultural sector. One of the seven strategies of the plan is to implement development programmes which support climate change adaption through promotion of environment-friendly agro-technologies and climate adaptive techniques and practices to minimise the adverse impacts of climate change such as development of crops resilient to climate change and scaling up of these crops in food-insecure areas through provisions of reliable, trustworthy metrological services provided to the farmers. The Agriculture Development Strategy (ADS) provides long term strategies for agricultural development in the country with emphasis on food security through enhancing agricultural productivity, sustainable production and resource management, improved land and water management system, and strengthened climate adaptation.

Nepal's NAPA, concluded in 2010, reflects the importance of intensifying the conservation of drought-resistant crop varieties by adopting water-conserving cropping practices and by promoting crop diversification. Other pathways to decrease climate vulnerability in agriculture sector include development of improved climate scenarios, development of more suitable crop models, and search for alternative analytical approaches. Additionally, since 2013, the Nepal Climate Change Support Programme (NCCSP), funded by DFID and EU and implemented by UNDP under the leadership of Ministry of Population and Environment (MoPE), has been supporting to build national and local capacities for development and implementation of local adaptation plans and evidence-based adaptation measures for agriculture in 14 highly remote climate vulnerable districts of Nepal.

### 1.2 Global context: National Adaptation Plan (NAP) Process:

National and sectoral planning processes are crucial to identify national development priorities and ensure budgeting and implementation of activities for any country. Given that likely adverse effects of climate change on development goals, especially those concerning poverty reduction, exclusion and inequality, countries have begun to integrate requirements for risk management into existing

planning and budgeting processes in the hope of advancing integrated solutions. At present, however, these processes in many, if not all, developing countries have not fully integrated climate change risks and opportunities in a comprehensive and sustained manner, and in particular at sector levels. Rather, efforts have been ad-hoc and one-off, rather than systematic and accommodating the need to iteratively revisit and update development plans and budgets as information, capacities and understanding of climate change impacts and adaptation and the development baseline changes over time.

The process of current project formulation for NAP-Agriculture in Nepal is linked to National Adaptation Plan (NAP) process established under the Cancun Adaptation Framework of UNFCCC to promote political and financial support at the national level for countries to mainstream climate change into development planning. At the 17th Conference of the Parties (COP-17) in Durban, Parties adopted initial guidelines and principles for the NAP process and requested the relevant organizations for their support to NAP process in their respective countries. Draft conclusions of the Subsidiary Body for Scientific and Technological Advice (SBSTA) on adaptation issues related to agriculture (SBSTA/2014/L.14) emphasizes the importance of identifying and assessing agricultural practices and technologies to enhance productivity in a sustainable manner, as well as risks and vulnerability of such systems to climate change scenarios at regional, national and local levels. In line with UNFCCC-endorsed framework for NAPs, the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) of the Federal Republic of Germany launched a Trust Fund Programme under the International Climate Initiative (IKI) to support countries to integrate climate change risks and opportunities related to agriculture based livelihoods into associated national and sectoral planning and budgeting processes.

## **2. Project Strategies and Outcomes**

The project on NAP-Agriculture in Nepal will be guided by NAP guidance produced by UNFCCC and contribute to NAP objectives, established by COP 17 (Durban), namely: a) to reduce vulnerability to the impacts of climate change by building adaptive capacity and resilience; and b) to facilitate the integration of climate change adaptation in a coherent manner into new and existing policies, programmes and activities. The NAP objectives agreed in COP 17 pertain particularly to development planning processes and strategies within all relevant sectors and at different levels through provisions of:

- technical technical guidelines for advancing a NAP process;
- training activities relating to specific skill building that is required to integrate climate change into planning and budgeting;
- regional exchanges of knowledge relevant to methods, tools, processes and other aspects of integrating climate into planning and budgeting;
- syntheses of experience, good practices and lessons learned;
- technical reports and advisory services

The NAP-Agriculture in Nepal project seeks to enhance understanding of what it takes to address climate change impacts and integrate climate change risk management into the planning and budgeting processes within the agriculture sector at all levels. The Programme aims to build technical capacities of Ministry of Agriculture Development (MoAD) and other relevant ministries to test adaptation options and integrate climate change concerns into relevant national and sectoral plans and budgets. The project will support improving Nepal's ability to adapt to climate impacts in agriculture sector in more systematic and planned manner with greater understanding of future vulnerabilities and means of adaptation guided by climate scenario. The project implementation will be linked to implementation of two inter-related projects: Governance of Climate Change Finance

for the Poor and Green Climate Fund Readiness Programme in Nepal, being implemented by the Ministry of Finance (MoF). Through implementation of NAP-Agriculture in Nepal project, the MoAD and the entire agriculture sector of Nepal will benefit from the concomitant process led by MoF for developing climate finance fiscal framework for Nepal and capacities for accessing green climate funds in future. Likewise, the project will be strongly linked to and support Nepal's NAP process initiated by MoPE.

The project design follows the logic and structure of global project document, developed for eight countries including Nepal, by the team of experts from UNDP and UNEP. Nevertheless, the project document has been brought to Nepal's context for better understanding of the project deliverables and interventions by the relevant ministry and stakeholders. The project Work Plan has been tuned to suit Nepal's specific needs and specialties, following a through discussion jointly facilitated by FAO and UNDP with the officials of MoAD, which was later endorsed by the technical task force chaired by the MoAD

The project will contribute to four major outcomes as outlined in Global Project Document (Annex 1)

- **Strengthening technical capacities and institutions on NAPs:** Policy and technical staff in key ministries including Agriculture, Environment and Planning, Finance, meteorological agencies, disaster management authorities, as well as key institutions in local government will be strengthened to mainstream climate change risks and opportunities into the agriculture sector. Existing methods and tools will be employed for officers to i) understand the implications of climate change on the agriculture sectors and others; ii) build capacities on how to compile and use data and tools for decision making processes at the sector level; iii) to incorporate key priorities for climate change risk management within the existing planning and budgeting process at the national and sub-national level. To ensure complementarity, the project seeks to establish close collaboration with Nepal's NAP process.
- **Developing integrated roadmaps for NAP:** Formulation of NAP that addresses priorities of the agriculture sector through strengthening and institutionalizing planning processes. Nepal will develop, in the context of their NAP process, a roadmap for incorporating economically viable adaptation options for the agriculture sector over the medium and long-term.
- **Improving evidence-based results for NAP:** Develop and introduce an impact monitoring framework for the agriculture sector that will generate evidence based results of adaptation options based on quasi-experimental design principles used in impact evaluation frameworks in many disciplines (but catered to adaptation). The results from the application of the framework will serve as an input into the policy dialogue on national adaptation planning.
- **Promote advocacy and knowledge-sharing on NAP:** Enhance the exchange of lessons on integrating climate change risks and adaptation measures into sectoral and national development plans within countries, including their relevance for ecosystem based adaptation, as well as across countries through south-south and triangular cooperation, including within the UNFCCC process.

### 3. Joint Project Work Plan

Outcome 1	Technical capacity and institutions on NAP strengthened - Strengthening MOAD Capacity & Knowledge on Climate Change Adaptation (CCA)	
Outputs	Activities	Lead Agency
1.1 Training and institutional capacity building in adaptation-sensitive planning	1.1.1 Develop methods for CCA and climate change vulnerability assessment and planning and budgeting for the agriculture sector in Nepal based on a synthesis of methods already applied or suitable for the Nepal context	FAO
	1.1.2 Prepare climate change profiles for the agriculture sector in (2-3) target districts representing a cross-section of agro-ecological zones (e.g. Terai, Hills, Mountains)	FAO
	1.1.3 Conduct applied participatory vulnerability assessment and planning case studies and training exercises with support of project taskforce in (2-3) target districts	FAO
	1.1.4 Identify and document lessons learned based on training application and demonstration activities on integrating CCA into national and district –level planning and budgeting processes	FAO
	1.1.5 Conduct training of trainers on climate change adaptation and climate change vulnerability assessment and planning and budgeting for the agriculture sector in Nepal in five regional centres	FAO
	1.1.6 Conduct national level training on climate change adaptation and climate change vulnerability assessment, risk management and planning and budgeting for the agriculture sector in Nepal	FAO
1.2 Training and institutional capacity building in economic valuation and investment appraisal tools	1.2.1 Based on a synthesis of best practice materials and institutional stock taking, identify good methods and approaches for evaluating priority agricultural sector adaptation options in Nepal, using applied economic valuation of ecosystem support services and investment appraisal tools such as cost benefit analysis of agricultural adaptation practices	UNDP <i>[All 1.2 to be executed as a Joint Activity NAP-Ag &amp; GCF Readiness]</i>
	1.2.2 Conduct economic valuation of selected ecosystem services to the agriculture sector as applicable to 2-3 target districts	UNDP
	1.2.3 Conduct cost benefit analysis for selected priority CCA measures/practices in (2-3) target districts. Hands-on training and support of project taskforce.	UNDP
	1.2.4 Conduct training of trainers on applied economic valuation of ecosystem support services to the agriculture sector and cost benefit analysis of agricultural adaptation practices in Nepal in 2-3 target districts and/or regional centres	UNDP
	1.2.5 Conduct national level training on applied economic valuation of ecosystem services to the agriculture sector and cost benefit analysis of agricultural adaptation practices in Nepal	UNDP
1.3 Developed training materials based on needs	1.3.1 Prepare instructional materials including a handbook for DDCs and field extension officers on how to prioritize, promote, and mainstream CCA measures into planning processes for the agriculture sectors	FAO

identified	1.3.2 Prepare handbook/ internal guidelines for relevant MOAD staff to improve economic appraisal of programs incorporating climate change costs and benefits of priority CCA practices	UNDP
<b>Outcome 2</b>	<b>Integrated Road Maps for NAP - Mainstreaming CCA into ADS Planning &amp; Budgeting Cycle</b>	
2.1 Institutional strengthening of MOAD and district authorities to mainstream CCA into ADS planning and budgeting	2.1.1 Identify institutional gaps and elaborate planning road map with key entry points to better integrate CCA into MOAD and DDCs, with priority to be given to ADS programs.	FAO
	2.1.2 Technical assistance to improve existing climate change budget coding and expenditure tracking methods and mechanisms. Priority to be given to ADS programs.	UNDP
2.2 Consultative dialogues and planning processes supported at national and district level to mainstream CCA into sector planning and budgeting	2.2.1 Technical assistance to integrate CCA into MOAD Budget Guidelines and Budget Proposals used to advocate to/through NPC and district authorities.	UNDP
	2.2.2 Integrate Climate Change Economic and Investment Appraisal Criteria (e.g. Cost-Benefit Analysis) into internal MOAD Project Preparation Guidelines. Priority to be given to ADS programs.	UNDP
<b>Outcome 3</b>	<b>Evidence-based results for NAP improved</b>	
3.1 Design and apply impact assessment framework for existing agriculture-based livelihood projects	3.1.1 Development of related M&E tools for district authorities (DDCs) based on a stock taking of existing indicators and data collection processes within MOAD.	FAO
	3.1.2 Select 3 ongoing adaptation practices in target districts for developing adaptation impact case studies	FAO
	3.1.3 Prepare a Project monitoring framework including KPIs for enhanced CCA that for field monitoring of ADS priority programs.	FAO
3.2 Strengthened capacity of agriculture-based monitoring units for effective monitoring and adaptation budgeting	3.2.1 Train MOAD monitoring unit on approaches to improve climate risk analysis and related data monitoring and management	UNDP
	3.2.2 Prepare training modules and materials on CCA monitoring for central monitoring unit, District Planning Committees and MOAD Regional Centres.	UNDP
<b>Outcome 4</b>	<b>Advocacy and knowledge-sharing on NAP promoted</b>	
4.1 Convened exchanges on science, technology and economics of adaptation to support integration of adaptation options into national adaptation plans	4.1.1 Engage in broader NAP process in Nepal, and MoSTE-led meetings under thematic working group on agriculture and NAPs.	FAO
	4.1.2 Prepare contributions from agriculture sector to input into NAP for Nepal and contribute project knowledge and communications products to national scientific and technical workshops relevant for NAP development	FAO
	4.1.3 Organize capacity building and awareness raising events to ensure CCA options and strategies more broadly understood and appreciated by national stakeholders	UNDP

	4.1.4 Support engagement of Nepalese agricultural sector decision-makers in global NAP dialogues	UNDP
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#### **4. Management and Implementation Arrangements**

The project will be jointly implemented by FAO and UNDP with FAO as the lead implementing agency. In addition to FAO's overall role in the project as the lead agency, both FAO and UNDP will be responsible to produce the specific project outputs outlined in the joint work plan (Section 3) agreed by FAO and UNDP during the proposed timeframe of the project.

The project will be implemented under the overall guidance of the Ministry of Agricultural Development (MoAD) through the Joint Secretary of the Food Security, Agribusiness and Environment Division of the ministry, nominated as Focal Point for the project. To ensure better coordination and guidance and support for day-to-day implementation, a project Steering Committee and Technical Task Force will be formed as below:

##### **4.1 Project Steering Committee (PSC)**

The PSC will be chaired by the Secretary, Ministry of Agricultural Development (MoAD) and the National Focal Point (NFP) nominated by MoAD for this project, will act as the member secretary. The PSC will include members from National Planning Commission (NPC) and Ministry of Finance (MoF), relevant line ministries such as Ministry of Forest and Soil Conservation (MoFSC), Ministry of Environment and Population (MoEP), Ministry of Livestock Development (MoLD), Nepal Agricultural Research Council (NARC) and Ministry of Federal Affairs and Local Development (MoFALD). Representatives from GEF and UNFCCC, Farmer's organizations, UNDP, and FAO will also be the member of the PSC

The PSC will meet on a bi-annual basis and the decisions of the meeting will be minuted. The PSC will be responsible for supervision of the entire project implementation including results delivered and providing strategic guidance. More specifically the PSC will look into:

- Review and approve project annual plans and budgets, and progress reports and provide overall advice and guidance for the implementation of the project;
- Review project targets, criteria and arrangements to ensure that project outcome;
- Ensure inter-agency coordination and policy support.

##### **4.2 Technical Taskforce**

The Technical Taskforce will be chaired by the National Focal Point, representatives from key divisions of ministries and Departments (i.e. MOAD, MoPE, NPC, MoF) and DLSO, DOA, the Nepal Agricultural Research Council, DoF, DoE, academia, private sector, GEF and UNFCCC focal points.

Under the guidance of the PSC the Technical Taskforce will have technical oversight and support role in project implementation. The Technical Taskforce will meet four times a year and the decisions of the meeting will be minuted. The overall functions of the Technical Task force will be to:

- Provide technical oversight and guidance to support project implementation
- Ensure national ownership and alignment with Nepal's development priorities

- Ensure the priorities of the agricultural sectors (including crops, livestock, fisheries, forestry and aquaculture) are integrated into the national NAP process
- Review outputs produced during the project implementation as well as progress and annual reports
- Monitor performance towards achievement of Project targets
- Identify synergies, collaborative and strategic partnerships to improve Project outreach, scale and impact
- Provide advice and guidance on technical matters relating to Project implementation
- Act as a conduit and multiplier for capacity building of national stakeholders for Project sustainability

#### 4.3 National Project Management Unit (PMU)

To run the project on day-to-day basis, a Project Management Unit (PMU) will be set up at the center with its office in the capital city of Kathmandu. The PMU will be comprised of two technical staff: National Project Coordinator recruited by FAO and Climate Change Adaptation Officer recruited by UNDP. As per the role specifically identified for FAO and UNDP in project implementation and delivery of results, both these staff, representing the two agencies, will work in one team, and be responsible for producing results and implementation of activities assigned to each respective agency as per the joint work plan agreed by FAO and UNDP. As a representative of the lead implementing agency in the PMU, the national project coordinator will be responsible for overall coordination with the government and creating an enabling environment for project implementation. The PMU will work under the overall guidance of the National Focal Point.

The primary responsibilities of the PMU will include the following:

- Prepare Project work plans and budgets
- Facilitate implementation of Project activities and ensure operational efficiency
- Ensure resources are effectively used to achieve set Project outputs and outcomes
- Define Project baseline information to enable sound monitoring and evaluation,
- Establish and implement adequate Project reporting mechanisms
- Ensure integration of work plans, budgets, reports, and other Project related documents,
- Prepare Project progress and financial reports
- Provide recommendations on re-allocation of budget provisions
- Address management and implementation challenges, and identify emerging lessons.
- Establish and implement a Project communication strategy for the country

To ensure better coordination with the MoAD, the PMU will be housed within MOAD premises at Singha Durbar as far as possible. In case, because of space limitation within the ministry premises, an alternative arrangements will be explored and finalized before the inception of the project.

#### 4.4 Fund Flow, Reporting and Monitoring

Both FAO and UNDP will be responsible for managing the project funds received to them as agreed at the HQ level. At the country level, each agency will use its own specific modality of fund management, monitoring and reporting set for direct implementation of project activities. Following the joint project work plan (Section 2) agreed between FAO and UNDP, each agency will prepare its own annual work

plan and budget for approval of PSC each year. For implementation of specific project activities as envisioned in the joint work plan, each agency will use its own operational system and procedures set for project management. In addition, each agency will be responsible for producing agency specific progress and financial reports as required against the agreed work plan budget. As per the need, the two agencies (FAO and UNDP) will work together to produce joint progress and financial report as required by the government and donor.

Each agency will ensure adequate technical and managerial support and oversight is provided to the PMU to ensure timely implementation of project activities and quality assurance of results produced. From UNDP side, this support will be made available through a project finance assistant and climate change programme analyst under the guidance of Assistant Country Director of Energy Environment, Climate and Disaster Risk Management (EECDRM) of UNDP.

#### *4.5 Mechanism for Coordination between FAO and UNDP:*

In order to ensure smooth implementation of the project activities in coordinated manner, for clarifications of roles and responsibilities of the two agencies during implementation of the project, and resolution of any sort of issues not anticipated at the time of project design or inception, a regular meeting between FAO and UNDP is deemed necessary throughout the implementation of the project. For this both agencies will meet at least once every quarter at technical levels and once a year at senior management level. The decision of the meeting will be minuted.

#### *4.6 Project Inception:*

Once the project document is signed and PMU established, an Inception meeting of the project will be organized in Kathmandu, which will be participated by the key government partners, project staff and UNDP and FAO regional, global and country teams. The purpose of the Inception meeting will be to build common understanding about the project results, deliverables, and modality of operation among the project partners and stakeholders. The Inception meeting will also be an opportunity to discuss openly and agree upon reporting and monitoring requirements, template of reporting and roles and responsibility of each partner. The Inception meeting will be organized within two months since the date of project document signed by the government and lead implementing agency of the project.