

LEAST DEVELOPED
COUNTRIES

STEP-BY-STEP GUIDE

FOR IMPLEMENTING
NATIONAL ADAPTATION PROGRAMMES
OF ACTION

LDC Expert Group, GEF and its Agencies 2009



STEP-BY-STEP GUIDE

UNFCCC

United Nations Framework Convention on Climate Change

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FOREWORD

The challenge of adapting to climate change, particularly in the context of vulnerable and least developed countries (LDCs), is an issue that has been well recognized in the United Nation Framework Convention on Climate Change process and in subsequent deliberations on the issue. National adaptation programmes of action (NAPAs) embody this by recognizing the urgent and immediate needs of LDCs to adapt to climate change by providing a special window for funding. NAPAs and the projects identified therein, were steps taken to address this concern at the seventh Conference of the Parties in 2001.

There are forty-two NAPAs that have been prepared and the focus now is on developing project proposals based on the needs presented in those NAPAs. These proposals are funded from the Least Developed Countries Fund (LDCF) managed by the Global Environment Facility (GEF). One of the challenges faced by project developers is how to transform urgent and immediate adaptation needs into sound project proposals for submission to the GEF and other agencies. This transition from NAPA preparation to project implementation requires a concerted effort to build the necessary skills in LDCs to ensure successful implementation of adaptation activities.

In recognition of this need, the Least Developed Countries Expert Group (LEG) has developed this *Step-by-Step Guide for Implementation of National Adaptation Programmes of Action* to assist project developers in LDCs and other stakeholders to prepare financing proposals for NAPAs that will meet the standards of the LDCF and those of other financing windows. It is our hope that through the simplified steps and tools presented in this guide, high quality project documents will be produced and this will result in shorter funding cycles and transaction times, thereby enhancing the implementation of NAPAs. I would like to congratulate the LEG for taking this initiative, which to my mind will also provide valuable inputs for the discussions on adaptation being carried out by the Ad-hoc Working Group for Long-Term Cooperative Action under the Convention.



A handwritten signature in black ink, consisting of a large, stylized 'Y' followed by a horizontal line that extends to the right and then curves slightly upwards.

Yvo de Boer, Executive Secretary

United Nations Framework Convention on Climate Change
September 2009

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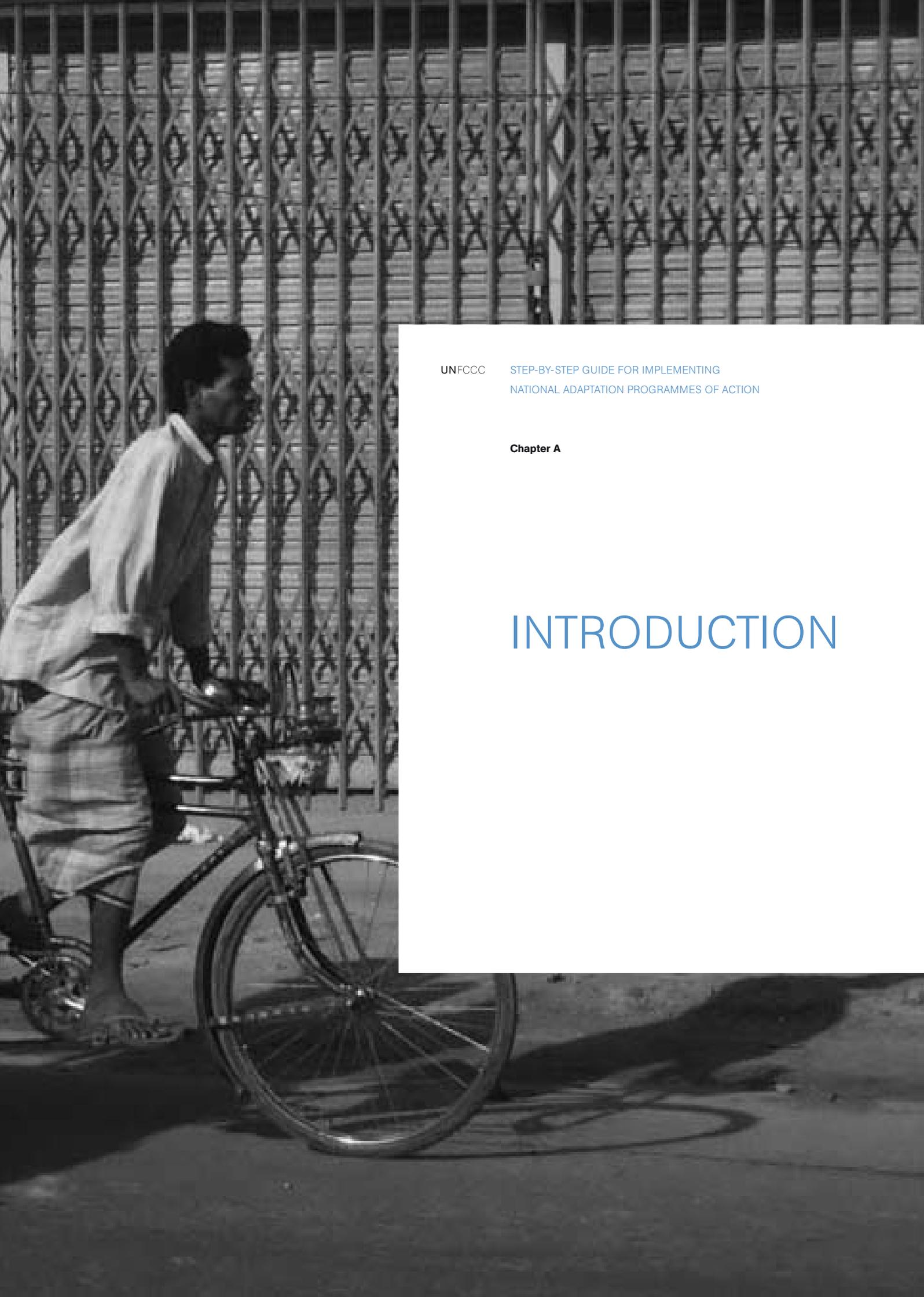
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Chapter A

INTRODUCTION

I. SETTING THE SCENE

1.1. WHY THE STEP-BY-STEP GUIDE IS NEEDED

This guide has been written to support least developed countries (LDCs) in designing the implementation of national adaptation programmes of action (NAPAs), and to guide country teams in accessing existing funding from the Least Developed Countries Fund (LDCF) for implementing their NAPAs. The guide has been written by the LDC expert group (LEG), in collaboration with the Global Environment Facility (GEF) and its agencies.

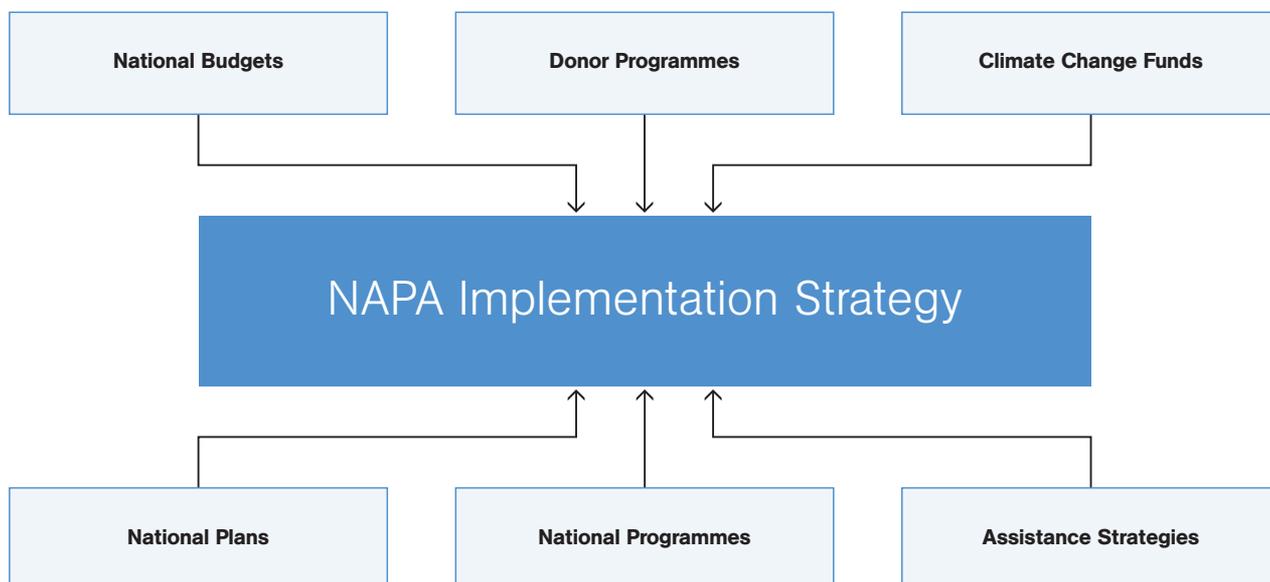
A significant portion of the guide is devoted to accessing the LDCF, which is managed by the GEF. **Parties have communicated the difficulties they face in accessing the LDCF** and the LEG has assembled this feedback through a stocktaking meeting in September 2007¹, surveys conducted on the margins of the Subsidiary Bodies meetings of the United Nations Framework Convention on Climate Change (UNFCCC), and through interaction with Parties and agencies during its meetings in different regions of the world. The main obstacles that LDC Parties face are summarized in Box I-1, based on a recent report of the LEG. **The guide was developed to address these obstacles.**

There are numerous stakeholders in the issue of adaptation to climate change and it is hoped that the implementation of NAPAs will bring many of these together and act as the nexus for future adaptation planning, scaling up of efforts to the whole country, and in the development of approaches and practices for successfully addressing adaptation to climate change in the medium- to long-term. The implementation of NAPAs would also serve to integrate national planning and programmes with funding modalities and opportunities (see FIGURE I-1).

This guide has been developed for a very specific audience, in particular, the LDC NAPA teams, including officers in government agencies and the non-governmental community, as they plan the implementation of NAPAs, and GEF agency officers working on NAPA projects at the country level.

¹ FCCC/SBI/2007/32.

Figure I-1. NAPA implementation at the nexus of national planning and funding



Box I-1. Summary of obstacles that LDC Parties face in implementing NAPAs

The following specific challenges are based on the results of a survey conducted during the twenty-eighth session of the Subsidiary Body for Implementation (source: FCCC/SBI/2008/14):

- Lack of human capacity at the national level in the offices of the agencies, government and other organisations that may be involved in national adaptation programmes of action (NAPAs) implementation and in the areas of project development and implementation;
- Long delays in delivering funds for project implementation after formal Global Environment Facility (GEF) approval at the various stages has been received (project identification, project document preparation, etc.);
- For least developed countries (LDC) Parties that completed their NAPAs early, the introduction of the new procedures in accessing GEF funding caused additional delays – the project development fund (PDF) forms and procedures were replaced by the project identification form (PIF) and project preparation grant (PPG). Since the NAPA guidelines gave guidance on developing project profiles based on information requirements for the older PDF-A grant application, re-formulation of project proposals using the PIF (including for previously approved projects), led to excessive delays;
- Other specific issues raised in relation to the GEF project cycle for the Least Developed Countries Fund (LDCF) include:
 - (i) The practicalities of choosing or changing an implementing agency;
 - (ii) The number of projects a Party can submit to the LDCF for funding;
 - (iii) The eligibility of different sources of funds to meet co-financing requirements, including from non-project sources such as national budget support in a specific sector;
 - (iv) The nature and scope of additional assessment work required before NAPA projects can be implemented;
 - (v) The degree of access to other funds managed by the GEF (in addition to the LDCF) to support adaptation and NAPA implementation;
 - (vi) How GEF agencies can best involve national sectoral institutions in the implementation of projects;
 - (vii) Coordination of budgeting and implementation of projects funded by the LDCF with those funded by other GEF funds, such as enabling activities or full-scale projects;
 - (viii) How a Party's access to the LDCF for NAPA implementation is affected after it graduates from the LDC group.

1.2. DEFINING ADAPTATION

There are many definitions of adaptation. In this guide we take a practical approach and define adaptation in the context of each system that is under consideration. Most activities are related to human systems or systems that are managed by humans. In a few cases, such as in ecosystems, recognition is made of how the system would adjust itself without human intervention, although human actions can facilitate the processes or provide enough space for the natural ecosystem processes of adaptation and change to proceed.

The preparation of NAPAs allows for selection of the system or systems to be targeted, and the scale in which they will be addressed, such as a region, community or a particular sector. In some cases, especially for the smaller countries, NAPAs will select a the whole country approach, addressing an issue that cuts across all sectors, NAPAs also take into account the process of learning that is necessary in order to deal with new threats, where the initial response is to cope with the situation, and gradually design and implement plans that build resilience and longer-term capacity to deal with the problem, including, potentially, changing the overall approach to the situation.

For example, in the case of increasing drought, a community first copes with the situation to survive the drought, which may include increasing its use of water to improve agricultural productivity. In the medium term, the community may then implement measures to improve efficiency in the use of water resources or shift to other existing species that can withstand drought conditions. For the long-term, the community may develop new crop cultivars such as more drought-resistant strains or change species to those that are drought-resistant. This progression of adaptation activities over time is dependent on the level of investment and time it takes to develop long-term solutions. For example, the development of new crop cultivars would take 20–30 years before returns on investments are realised.

NAPAs are mainly concerned with activities designed to cope with urgent and immediate needs brought by the changing climate, designed in such a way that they address the immediate need, while building a foundation for the medium- to long-term adaptation. A careful mix of investments is therefore needed to meet immediate needs while building the necessary capacity and planning to address the issues in a sustainable manner.

We apply the following definition of adaptation:²

Adaptation to climate change is defined as human-driven adjustments in ecological, social or economic systems in response to actual or expected climate stimuli and their effects or impacts.

Each of these systems has multiple levels and components that cascade multiple temporal and spatial scales, often interacting with each other in complex ways. The adjustments and interventions can thus be at any appropriate entry point in these interacting multi-disciplinary and multi-scaled systems.

Further, adaptive capacity then refers to the potential or ability of a system (social, ecological, economic, or an integrated system such as a region or community) to minimise the effects or impacts of climate change, or to maximise the benefit from positive effects of climate change.

Adaptation can take the form of activities designed to enhance the adaptive capacity of the respective system, or actions that modify socio-economic and environmental systems to avoid or minimize the damage caused by to climate change. Methods for achieving these include implementing new activities that are exclusively in response to climate change, or the modification of existing activities to make them more resilient to future climate change risks (climate-proofing).

² Modified after Smit *et al.* (1999).

Adaptation planning and design is closely linked to development planning. In most practical cases, adaptation to climate change is naturally embedded in a development fabric, since all countries are addressing management of the main social, ecological and economic systems in one way or another towards sustainable development. These issues are often addressed separately, however, mainly as a result of separate sources of funding for the development of the plans and for the implementing planned activities. If we focus on the beneficiaries of the adaptation or development, then it becomes clear that implementation should be closely coordinated and integrated with development efforts.

1.3. FRAMING ADAPTATION IN LDCS AND THE NAPA

The Intergovernmental Panel on Climate Change (IPCC) provides a synthesis of the issues surrounding impacts of climate change, vulnerability and adaptation. These three concepts are interlinked, and without going into the rich background that exists, adaptation activities can be designed to minimise the impacts or to reduce vulnerability and address the risks brought on by climate change. Vulnerability is defined by the IPCC to be a function of exposure to climatic hazards, impact potential, and adaptive capacity. Therefore, adaptation would also include any efforts to address these components.

The preparation of NAPAs took all of these factors into account and arrived at priority adaptation needs that must be addressed in the immediate term, with the emphasis on coping and enhancing adaptive capacity and with the understanding that medium- to long-term adaptation planning would be addressed in the future.

In the present guide, we take a very broad approach to implementation that encompasses any framework that a country may choose, or one that best suits the issue being addressed. There is clearly no one correct or recommended approach, as this depends on the entry point and intended focus. **Two distinct approaches are: to consider an activity to address challenges in one particular area or community or, to take a national level approach and target development and economic growth at a broader level. The framing of issues is academic to a certain extent, and what matters in the end is that there are clear goals and objectives for the adaptation efforts and that such efforts can lead to real, and if possible, quantifiable results and outcomes** in reducing current vulnerability and enhancing adaptive capacity for the future.

II. THE LDC WORK PROGRAMME

2.1. OVERVIEW

During the implementation of NAPAs, countries may wish to incorporate elements of the LDC work programme in their projects as well as the elements of the scope for capacity-building in designing projects. In such a case, reporting should reflect this, and appropriate information be submitted to the regular monitoring of capacity-building pursuant to the COP decision 4/CP.12.

In addition, LDC Parties may also submit project proposals for funding under the LDCF to implement elements of the LDC work programme, using modalities that will be prepared by the GEF in response to the recent decision 5/CP.14 on further guidance on the LDC Fund.

NAPAs are part of the LDC work programme that was defined through decision 5/CP.7 of the seventh session of the Conference of the Parties (COP 7) in 2001. In this decision the COP acknowledged the specific needs and special situations of LDCs, in that they are least capable of dealing with the adverse effects of climate change, and established an LDC work programme with the following elements:

- (i) strengthening existing and, where needed, establishing, national climate change secretariats and/or focal points;
- (ii) providing training, on an ongoing basis, in negotiating skills and language;
- (iii) supporting the preparation and implementation of NAPAs;
- (iv) promotion of public awareness programmes;
- (v) development and transfer of technology, particularly adaptation technology;
- (vi) strengthening the capacity of meteorological and hydrological services.

When the LDC work programme was established, the following were also established: the LDCF to support its implementation, the LEG to support preparation and implementation strategy for NAPAs, and guidelines for the preparation of NAPAs.

Completed NAPAs are submitted to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat, where they are posted on a website. A copy of the NAPA is also sent to the GEF. Since June 2006, LDC Parties have then been able to apply for funding for the implementation of the NAPA under the LDCF.

Full background to the LDC work programme is available in recent LEG publications.³ The evolution of decisions on matters relating to LDCs is shown in FIGURE II-2.

Elements of the framework for capacity-building in developing countries, which gives an initial assessment of needs and priority areas for capacity building in LDCs and small island developing States as follows (highlights added), as given in the annex to decision 2/CP.7, paragraph 17, are closely interrelated with the elements of the LDC work programme:

- (a) *Strengthening existing and, where needed, establishing national climate change secretariats or focal points to enable the effective implementation of the Convention and effective participation in the Kyoto Protocol process, including the preparation of national communications;*
- (b) *Developing an integrated implementation programme which takes into account the role of research and training in capacity-building;*
- (c) *Developing and enhancing technical capacities and skills to carry out and effectively integrate vulnerability and adaptation assessment into sustainable development programmes and develop national adaptation programmes of action;*
- (d) *Strengthening existing and, where needed, establishing national research and training institutions in order to ensure the sustainability of the capacity-building programmes;*
- (e) *Strengthening the capacity of meteorological and hydrological services to collect, analyse, interpret and disseminate weather and climate information to support the implementation of national adaptation programmes of action;*
- (f) *Enhancing public awareness (level of understanding and human capacity development).*

³ The LDC Programme, a brochure, and the LEG technical paper, NAPA: Overview of preparation, design of implementation strategies and revision of project lists and project profiles, are available at the Least Developed Countries Portal at <www.unfccc.int/lcdc>.

Figure II-2. The evolution of decisions on LDC matters



2.2. THE LEG

The Conference of Parties (COP), at its seventh session, decided to create the LEG, to be nominated by Parties, with the objective of supporting the preparation and implementation strategy of NAPAs. The current mandate of the LEG is based on a COP decision at its thirteenth session (decision 8/CP.13) in 2007.

The LEG is mandated as follows (based on decisions 29/CP.7, 4/CP.11 and 8/CP.13):

- (a) To provide technical guidance and advice on the preparation and implementation strategy of NAPAs, including the identification of possible sources of data and its subsequent application and interpretation, upon request by LDC Parties;
- (b) To develop a work programme that includes the implementation of NAPAs;
- (c) To serve in an advisory capacity for the preparation and implementation strategy of NAPAs through, inter alia, workshops, upon request by LDC Parties;
- (d) To advise on capacity-building needs for the preparation and implementation of NAPAs and to provide recommendations, as appropriate, taking into account the Capacity Development Initiative of the GEF and other relevant capacity-building initiatives;
- (e) To facilitate the exchange of information and promote regional synergies, and synergies with other multilateral environment conventions, in the preparation and implementation strategy of NAPAs;
- (f) To advise on the mainstreaming of NAPAs into regular development planning in the context of national strategies for sustainable development;
- (g) To develop a work programme that takes into account the Nairobi work programme.

WORK PROGRAMME OF THE LEG

Key priority activities of the work programme of the LEG for the period 2008 – 2010 are given in document FCCC/SBI/2008/14, and the complete work programme is available in document FCCC/SBI/2008/6.

2.3. THE LEAST DEVELOPED COUNTRIES FUND

The GEF, as an operating entity of the financial mechanism of the Convention, was entrusted to operate the LDCF under decision 27/CP.7. Under this decision, guidance was provided to the GEF on the operation of the fund with an initial focus on support for the preparation of NAPAs.

The GEF released “Operational Guidelines for Expedited Funding for the Preparation of National Adaptation Programs of Action by Least Developed Countries” in April, 2002, and GEF agencies were able to submit proposals on behalf of LDC Parties for the preparation of NAPAs. As of May 2009, 48 LDC Parties, including Cape Verde which graduated in December 2007, had received funding for the preparation of NAPAs.

The COP, at its eleventh session (December 2005), agreed on provisions to operationalize the LDCF to support the implementation of NAPAs. The COP provided further guidance with regard to priority areas and provisions for full-cost funding and a co-financing (sliding) scale in decision 3/CP.11. Almost all LDC Parties that have completed a NAPA are in various stages of NAPA implementation, with a few countries having successfully completed the LDCF project cycle and now in full implementation.

The COP, at its fourteenth session in December 2008, agreed on provisions to operationalize the LDCF to support the implementation of the remaining elements of the LDC work programme.





UNFCCC STEP-BY-STEP GUIDE FOR IMPLEMENTING
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Chapter B

PLANNING IMPLEMENTATION

III. STEP 1

PREPARATION OF IMPLEMENTATION

3.1. SYNTHESIS AND REVIEW OF NAPA TO FACILITATE DESIGN OF IMPLEMENTATION

3.1.1. WHAT ARE THE MAIN CLIMATE CHANGE VULNERABILITIES?

A concise synthesis of the key findings in the NAPAs is a useful basis for quickly addressing needs in the design of an implementation strategy and preparation of project proposals. To demonstrate that activities being proposed address adaptation to climate change, it is necessary to summarise the main climate change vulnerabilities of the country and target region or system.

The NAPA guidelines made special reference to the low levels of knowledge, data and capacity in LDCs to have detailed information on climate change impacts. As such, the justification of climate change impacts, trends and vulnerabilities should be constructed taking these low capacity issues into account. In the absence of local data, regional and global trends from the IPCC should be used, combined with conventional wisdom about widely accepted common impacts on key sectors. For example, it should not be necessary to have to demonstrate exact mechanisms by which droughts impact upon water and agricultural production, and so, food security.

A synthesis of submitted NAPAs has shown that most climate change effects relate to floods, droughts, tropical storms, shifting growing seasons and related impacts. TABLE III-1 shows a summary.

In designing the implementation strategy, the NAPA team should have a clear sense of the main climate change vulnerabilities for the country, including information that can assist in identifying and ranking the most vulnerable communities and systems. In cases where NAPA priority activities may have been implemented already, or where changes in climate has intensified or weakened since development of the NAPA, the list of key vulnerabilities should be updated. Consideration should also be given to the limited funding that is currently available for implementing NAPAs under the LDCF: some NAPA priorities are not able to be implemented in full as originally estimated. Therefore, the overall urgent and immediate needs intended to be addressed may not have been fully addressed and may still be still need consideration.

3.1.2. REVISIONS AND UPDATES TO THE NAPA PROJECTS AND PROJECT PROFILES

One of the eligibility criteria under the LDCF is that a project activity be identified as a ranked priority need in the NAPA. As mentioned in the SECTION above, **changes in climate and hence new risks and vulnerabilities since submission of the NAPA, coupled with increasing levels of new information and knowledge, and lessons learned from projects being implemented in other countries may warrant revision of the NAPA projects and project profiles.** Such an update would include revisions to the list of priority projects, including major revisions to the project profile such as costs. If a country elects to revise its NAPA, it is important that the revisions and updates are formally submitted to the UNFCCC secretariat so that they become part of the submitted NAPA.

In a recent technical paper, the LEG has elaborated steps that can be used by LDC Parties to submit revisions of their NAPAs to the UNFCCC Secretariat. Upon receipt, the revisions are processed and become an official part of the NAPA which can then be used to assess eligibility for funding under the LDCF. The steps in revising NAPAs are given in Box III-2.

Box III-2. LEG steps for submission of revisions to the NAPAs

1. The main steps in developing national adaptation programmes of action (NAPAs) are given in the *Annotated guidelines for the preparation of national adaptation programmes of action*, prepared by the LEG and include a step to periodically review risks and prioritisation of activities. Given the passage of time since the first NAPAs were completed, the LEG has identified the following reasons for updating or revising a NAPA, including, inter alia,
 - (a) Stated priority NAPA activities may have been implemented under bilateral or other sources of funding and technical cooperation and require a revision of the remaining priorities for which funding would be sought under the LDCF;
 - (b) In cases where only brief information was provided on costs and details for implementation, an LDC Party may decide to provide revised cost information and/or additional project profile information;
 - (c) In some cases, new risks and vulnerabilities may have become evident and may necessitate a revision to the ranking of the urgent and immediate priorities in the NAPA, especially in those cases where the NAPA has been completed a year or more ago;
 - (d) The need to incorporate lessons learned in the implementation of NAPAs by other LDCs;
 - (e) The need to address additional information requirements to satisfy new project development guidelines, such as information required under the current guidelines for project development (using the project identification form versus the previous project development fund window that was being applied when some of the earlier NAPAs were prepared);
 - (f) The need to provide simple revisions to the NAPA, such as details on revised costing of project activities, taking into account new information. Information that would facilitate preparation of PIFs for implementation could also be added. Some may also choose to elaborate on how a major project activity would be integrated into sector-wide plans.

2. The LEG proposes the following process and simple steps to be used by LDC Parties in submitting revisions to their NAPAs:
 - (a) **Review the NAPA and identify the need and starting point for the NAPA update:** LDC Parties could review their NAPA and assess whether an update is warranted based on the reasons above. Those interested in updating or revising their NAPA should identify an entry point for the process of updating their NAPA;
 - (b) **Re-convene a multi-stakeholder steering group to develop the updates:** It is likely that most countries would re-convene the NAPA steering committee to assemble updated information on the risks and status of the implementation of existing NAPA priorities. Regardless of the membership of the committee, it would go through a process of re-ranking the priorities and coming up with a new list of priority activities and updated project profiles as appropriate. The NAPA team would prepare an implementation strategy.
 - (c) **Endorsement of the NAPA and submission of the update to the secretariat:** Once the necessary updates have been prepared, it will be necessary for a formal submission to be endorsed by the relevant authorities at the national level, such as the national climate change coordination committee. Once endorsed, the update would be submitted to the secretariat by the UNFCCC focal point, clearly indicating the nature of the update in the submittal letter. The submittal letter plus the document with the update would thus become an addendum to the NAPA;
 - (d) **Post-processing of the update:** Upon receipt, the secretariat will update the records on its website and inform the GEF and its agencies that an update has been submitted. The secretariat would then update the online database of NAPA projects, reflecting those activities and projects that have been retired or revised.
 - (e) **Analysis of NAPAs by the LEG:** The LEG will analyse the information submitted by Parties in the NAPAs, databases of projects implemented, and subsequent updates, and provide reports to the SBI to guide further discussions by all Parties on the progress made with the NAPA programme.

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Table III-1.

Table III-1. Key vulnerabilities in LDCs and commonly proposed adaptation strategies

Vulnerability	Impacts	Anthropogenic amplifiers	Adaptation strategies	Comments on Project Lenses	Project examples
Drought and unpredictable rainfall	Reduced crop yields	<ul style="list-style-type: none"> unsustainable use of groundwater resources 	<ul style="list-style-type: none"> → Introduction of drought-resistant varieties → Community irrigation → Water-saving irrigation → Putting more land into production 	Effects most relevant at the local level, requires a combined response that is both preventative and coping, significant research and management components involved	<ul style="list-style-type: none"> Livelihood Adaptation to Climate Change Project, Bangladesh, FAO (report available <www.fao.org/forestry/media/15488/0/0/) LDCF projects in Sudan/Burkina Faso/ Niger/Cape Verde, CambodiaSCCF project in Kenya
	Loss of income for farmers		<ul style="list-style-type: none"> → Weather forecasting → Improvement of small scale industries 	Forecasting has both infrastructure and management components, regional level most relevant	
	Famine and malnutrition		<ul style="list-style-type: none"> → Introducing better adapted livestock → Diversification of food production → Food processing and preservation → Food banks 	Strong development component, connection to climate change is indirect	
Floods	Sediment pollution	<ul style="list-style-type: none"> deforestation unsustainable land-use practices ill-placed infrastructure 	<ul style="list-style-type: none"> → Reconstitution of basin slopes → Restoration of silted ponds 	Requires alterations of the physical environment, infrastructure	<ul style="list-style-type: none"> Soil Erosion Project, Bangladesh, Caritas International Integrated soil fertility, Practical Action, South Africa LDCF project in Bangladesh LDCF project in Bhutan Preparation of risk maps, Practical Action, Latin America WRI: Zimbabwe: Wind Power Development in Temaruru and Dumbamwe N/A
	Loss of soil fertility		<ul style="list-style-type: none"> → Afforestation & reforestation 	Forestry projects are long-term, direct link to vulnerability	
	Outburst floods (GLOFs)		<ul style="list-style-type: none"> → Lowering of lakes → Early-warning system and raising awareness 	Immediate risk, both preventative and coping measures needed	
	Landslides and erosion		<ul style="list-style-type: none"> → Construction of shelters for displaced pops. → Planning settlements in low-risk areas → Dykes 	Infrastructure planning needed, integrated land use plans	
	Energy insecurity (disruption of hydropower systems)		<ul style="list-style-type: none"> → Hydro-power micro-stations → Diversification of energy (wind, solar, biogas) 	Projects have indirect focus, strong development dividends	
	Destruction of infrastructure		<ul style="list-style-type: none"> → Resettlement of communities at risk → Water gates and culverts 	Immediate risks, preventative measures	

Table III-1. Key vulnerabilities in LDCs and commonly proposed adaptation strategies (continued)

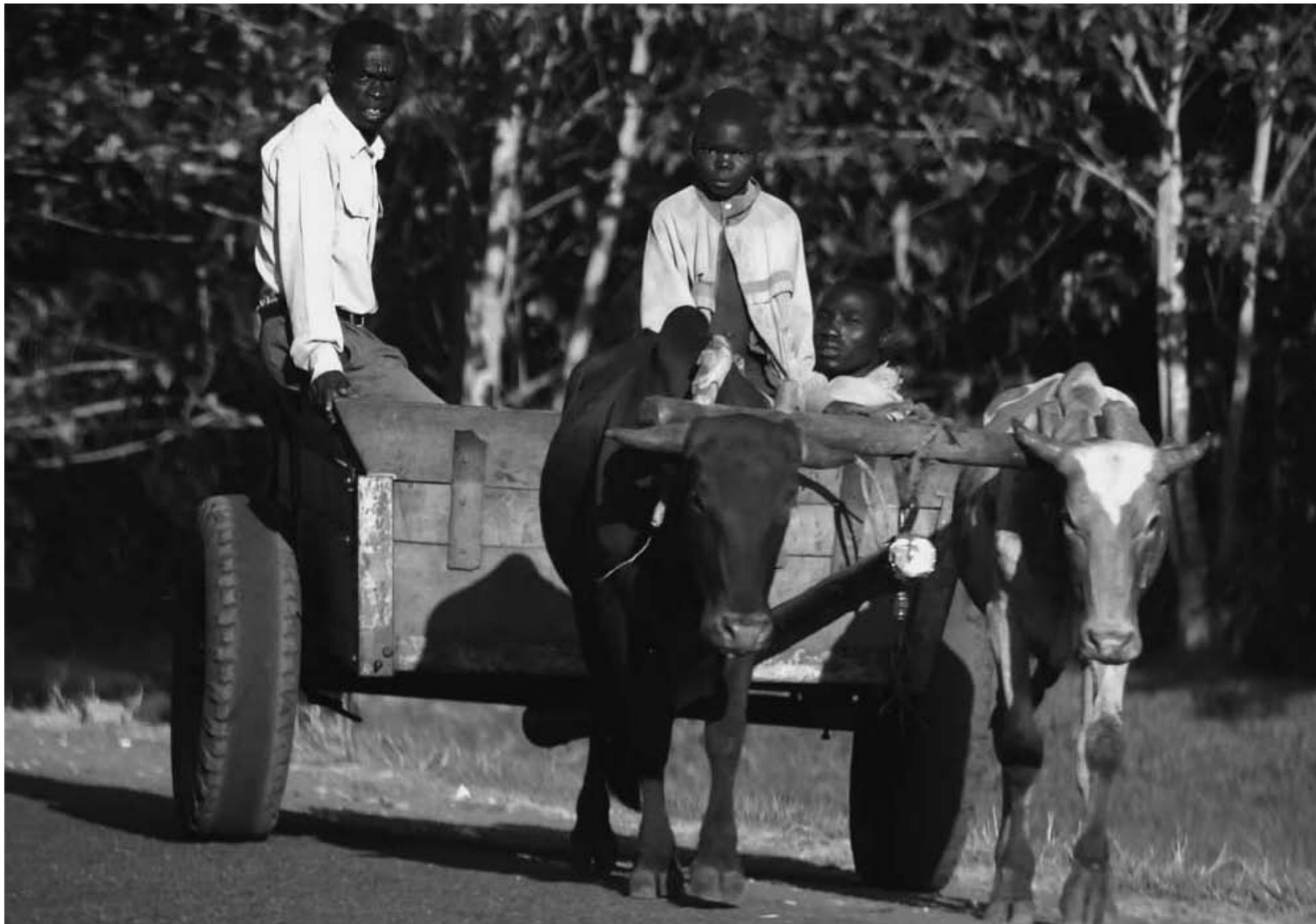
Vulnerability	Impacts	Anthropogenic amplifiers	Adaptation strategies	Comments on Project Lenses	Project examples
Spread of water-borne and vector-borne diseases	Disease proliferation and compromised public health	<ul style="list-style-type: none"> lack of sanitation services 	<ul style="list-style-type: none"> → Production of biopesticides → Malaria education campaigns → Create database of diseases and vectors → Emergency plans → Health care professional training 	Strong synergies with the health sector possible, requires significant planning	<ul style="list-style-type: none"> TRACnet, Rwanda: Fighting Pandemics through Information Technology Tsetse fly management, Practical Action, Africa LDCF project in Samoa
Loss of forest and wetland ecosystems	Energy insecurity (biomass)	<ul style="list-style-type: none"> deforestation 	<ul style="list-style-type: none"> → Forest fire management and prevention → Promote energy efficiency 	Direct and indirect measures possible, management projects	<ul style="list-style-type: none"> Cows to Kilowatts, Nigeria: Turning Waste into Energy and Fertiliser
	Loss of biodiversity and ecosystem services (erosion, watershed regulation)		<ul style="list-style-type: none"> → Forest conservation → Promotion of other construction materials 	Direct and indirect measures possible, management projects	<ul style="list-style-type: none"> Bushbuck Ridge Project, South Africa: Working for Wetlands
Land degradation and desertification	Reduced crop yields	<ul style="list-style-type: none"> deforestation unsustainable land-use practices intensified grazing and agricultural practices 	<ul style="list-style-type: none"> → Rehabilitation of degraded lands → Afforestation 	Project directly addresses vulnerability	<ul style="list-style-type: none"> Coping with drought and climate change, Ethiopia, Kenya, Mozambique, & Zimbabwe, UNDP/GEF Project ID: 3549
	Community migration		<ul style="list-style-type: none"> → Fodder production for goat breeding 	Project addresses impacts	<ul style="list-style-type: none"> LDCF project in Eritrea
	Loss of livestock productivity		<ul style="list-style-type: none"> → Zero-grazing technique → Changing grazing routes 	Management project	<ul style="list-style-type: none"> Development of Small-Scale Livestock Activities in Sikkim, India, FAO (<http://www.fao.org/GENDER/en/Lesson-e/Sikkim.htm>) LDCF project in Eritrea
Scarcity of potable water	Water stress, lack of hygiene	<ul style="list-style-type: none"> groundwater overdraft inefficient irrigation systems 	<ul style="list-style-type: none"> → Rain water harvesting → Construction or rehabilitation of reservoirs/dams → Integrated water resources management → Groundwater recharging → Wastewater treatment systems 	Local level, preventative and coping, directly addresses vulnerability, management and infrastructure	<ul style="list-style-type: none"> Lufumbu Village Water Project, Tanzania: Offsetting Shortage in Water Infrastructure Rain-water harvesting Run-off rain-water harvesting, Practical Action, Sri Lanka Sand Dams, Practical Action, Africa LDCF project in Cape Verde
Decentralised adaptation efforts	Disjointed and inefficient integration of adaptation into development planning		<ul style="list-style-type: none"> → Mainstreaming adaptation 	On the national level, management, gradual change required	<ul style="list-style-type: none"> Sectoral adaptation planning Climate change education Promotion of Indigenous Knowledge (IK) Insurance Using legal framework to include adaptation into law Document IK

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to continue
Table III-1.

Table III-1. Key vulnerabilities in LDCs and commonly proposed adaptation strategies (continued)

Vulnerability	Impacts	Anthropogenic amplifiers	Adaptation strategies	Comments on Project Lenses	Project examples
Coastal erosion	Changes in coastal morphology	<ul style="list-style-type: none"> coastal deforestation and development 	<ul style="list-style-type: none"> → Coastal afforestation → Fixation of shifting dune bars → Current breakers 	Directly addresses vulnerability, coping	<ul style="list-style-type: none"> Floating gardens, Practical Action, Bangladesh LDCF project in Bangladesh
	Coastal infrastructure destruction		<ul style="list-style-type: none"> → Re-designing and rehabilitating infrastructure 	Infrastructure project that requires management to maintain	<ul style="list-style-type: none"> N/A
Saltwater intrusion	Contamination of groundwater for coastal communities		<ul style="list-style-type: none"> → Introduction of coastal crop agriculture (salt tolerant crops) → Mangrove restoration → Well construction and improvement 	Integrated project on local level, depending on community needs	<ul style="list-style-type: none"> Natural resource management in mitigating climate impacts: the example of mangrove restoration in Vietnam, in Global Environmental Change Journal 8(1), 49 – 61
Natural Disasters (storms, cyclones, hurricanes)	Infrastructure destruction & loss of life		<ul style="list-style-type: none"> → Disaster management, preparedness and awareness → Construction of resilient urban infrastructure → Upgrade meteorological services and data → Sustainable building designs 	Preventative, regional level, projects directly addressing vulnerability not possible	<ul style="list-style-type: none"> Defining the community's role in Disaster Mitigation, Practical Action
Loss of marine fish stocks	Food insecurity & loss of income for fishers	<ul style="list-style-type: none"> over-fishing 	<ul style="list-style-type: none"> → Fish culture practices → Introduction of salt-tolerant fish in fish farms → Small aquaculture ponds → Introduction of fish concentration mechanisms → Breeding programs for shellfish 	Management projects most viable, impacts are gradual	<ul style="list-style-type: none"> Fish-net fences Village of Andavadoaka, Madagascar: Marine Reserves for Octopus
Loss of marine ecosystems	Stress on tourism industry	<ul style="list-style-type: none"> marine pollution over-fishing 	<ul style="list-style-type: none"> → Marine resources management and enforcement of laws → Coral restoration → Prevention of over-fishing → Tourism development plans 	Management projects most viable, must be preventative	<ul style="list-style-type: none"> Tiwai Island, Sierra Leone: Building Tourism on Traditional Knowledge

NGOs and sources of case studies and projects:
 - Oxfam America <http://www.oxfamamerica.org/newsandpublications/publications/briefing_papers/adaptation-101/Adaptation-101.pdf>
 - Practical Action
 - Environmental Development Action in the Third World (ENDA), Senegal, presented on a successful agroforestry project in the Sebijotane area of West Senegal
 - Accca Project – Advancing Capacity to Support Climate Change Adaptation – <<http://www.acccaproject.org/accca/?q=node/5>>
 - <http://www.livelihoods.org/lessons/project_summaries/IISD_projsun.html>
 - <http://www.un.org/esa/sustdev/publications/africa_casestudies/index.htm>
 - WWF <<http://www.worldwildlife.org/climate/WWFBinaryitem3831.pdf>>
 - CARE <<http://www.careclimatechange.org/careclimatechange.org/adaptation>>
 - UNDP Database
 - <<http://sdnhq.undp.org/gef-adaptation/projects/index.php>>
 - <<http://projects.wri.org/adaptation-database>>
 - GEF adaptation Database <<http://gefonline.org/home.cfm>>



3.1.3. WHAT IS THE CURRENT LIST OF NAPA PRIORITY ACTIVITIES THAT NEED IMPLEMENTATION?

The list of priority projects submitted by LDC Parties in the NAPAs are maintained in a *NAPA Projects Database* in the LDC Portal on the UNFCCC website <<http://www.unfccc.int/ldc>>. In addition to the updates on NAPA projects and profiles that may be submitted by countries, the list of projects that remain to be implemented is updated as projects are implemented through the LDCF and other reported channels, and can thus be used to indicate remaining eligible projects for funding under the LDCF.

In some cases, several priority activities are aggregated under one project for implementation, and this information is also indicated in the *NAPA Projects Database*. The process of aggregating NAPA priorities will be discussed at a later stage.

3.1.4. WHAT ARE THE MAIN NATIONAL DEVELOPMENT PLANS, PROGRAMMES AND ACTIVITIES?

Once the list of priorities has been established, consideration should be given to where the priorities align with the main national development plans, programmes and activities. A synthesis of the plans, programmes and activities, and the time frame for which they are applicable, will provide a fundamental source of information when developing project documents during implementation. **Activities under implementation as defined in such national plans, programmes and activities constitute a primary source of information for the elaboration of the adaptation baseline investment, to which additional adaptation funding can be added.**

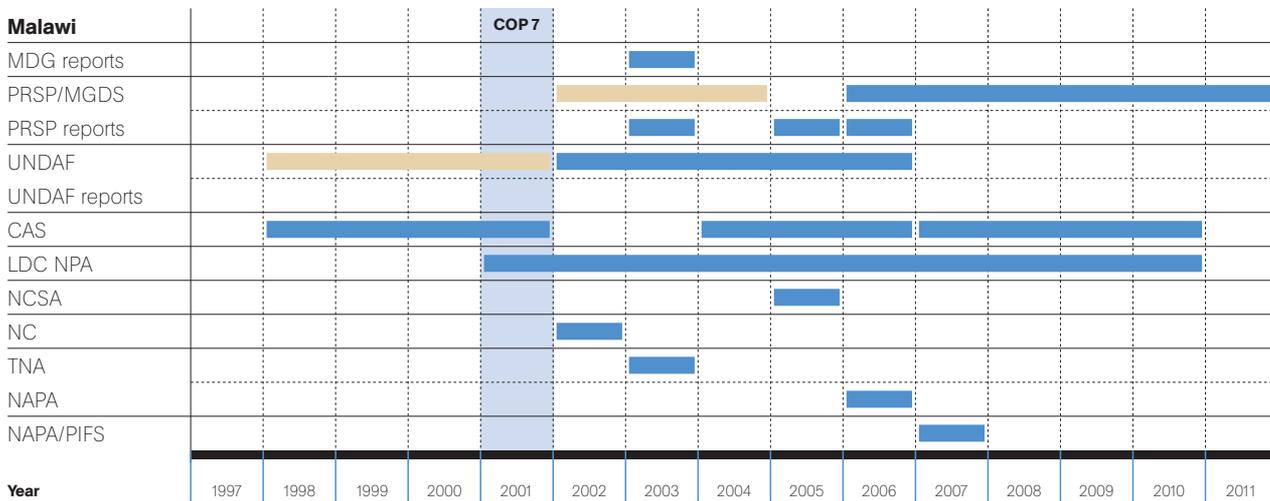
The current practice under the LDCF and a useful approach to any other source of funding is that each project must indicate the baseline activities upon which it is anchored and the justification for co-financing. Therefore, it is essential to focus on those plans, programmes and activities that have specific relevance and focus on key vulnerable sectors as identified by the NAPA. Potential areas to look at are:

- National policies on key vulnerable sectors (such as agriculture, water, coastal zones, or health);
- The national poverty reduction strategies papers (PRSPs);
- National economic growth strategies;
- Medium- and long-term national development goals (such as millennium development goals);
- National policies on governance and community councils;
- Other policies relevant to data and information collection and management, disaster preparedness and risk reduction;
- Multilateral agencies' strategies and action plans (World Bank Country Assistance Strategy – CAS, UNDP Development Assistance Framework – DAF, etc);
- Bilateral and cooperation activities and strategies.

Activities as part of these plans and programmes can form a good basis for identifying areas on which to anchor NAPA projects. This process would help identify potential areas for integration of climate change adaptation in national planning and development. At any given period there will be numerous plans, each with its own time frame, as shown in FIGURE III-3 for Malawi. Ideally, plans developed after the NAPA should link to the NAPA, and offer opportunities for integrating NAPA priorities in subsequent national programmes.

During the preparation of implementation, each country should produce a matrix of key vulnerabilities, proposed NAPA interventions, and show relevant plans, programmes and activities that are related to the vulnerabilities and NAPAs.

Figure III-3. Example of national plans and strategies between 1997 and 2011 for Malawi



IV. STEP 2 DESIGNING AN IMPLEMENTATION STRATEGY FOR THE NAPA

4.1.1. DEFINING AN OVERALL STRATEGY: ONE PROJECT OR THE WHOLE NAPA?

An important decision to be made early on is how to approach the implementation of the NAPA. **The two main options are to either pursue funding from the GEF for a single project, going through the whole sequence of steps in submitting a proposal, or, to design a strategy for implementing the whole NAPA. This would be done by designing an integrated or a programmatic approach that would address all of the priority needs, going through the planning and justifications for implementation, then accessing the LDCF for an initial phase of the implementation under the current ceiling of funding available to each LDC.** The single project referred to here can include multiple NAPA priority activities, however, it is packaged as one project in terms of GEF processing.

However, a country may initially choose to pursue only one project through the LDCF in order to get started quickly with implementation, or when there are no resources to design the more integrated approach. Most LDCs have followed this route so far and have accessed the LDCF for one project.

More recent discussions on adaptation, however, have explored the value of programmatic approaches to increase the effectiveness of interventions and to ensure sustainability of the activities when they are fully integrated into sectoral and other national activities and programmes. In such cases, a country may explore the goals in the priority activities of the NAPA, define solutions, work out costings, and design an implementation plan that packages activities naturally into clusters (projects) or embeds the activities into sector-wide programmes and other broader (national) programmes. Since current funding under the LDCF is only disbursed through individual projects,

the clustered activities can be packaged into phases, with the initial phase accessing the initial allotment for each Party under the LDCF. In the event that more funds become available under the LDCF, additional phases of the project/programme could be funded, without the need to go through the full LDCF project cycle again. **In this case, the design of the holistic implementation strategy for the whole NAPA could be funded through the project preparation grant (PPG) that is currently awarded for each project.**

4.1.2. ALIGNING THE CRITERIA USED IN RANKING PRIORITY ADAPTATION NEEDS IN THE NAPA WITH GOALS FOR IMPLEMENTATION

The ranking of priority adaptation needs during the NAPA preparation is based on nationally-selected criteria, some of which should then form a useful basis for guiding the implementation of projects and assessing the results achieved by these projects. Criteria that could be used to guide the assessment of adaptation projects based on submitted NAPAs, include:

- Contribution towards ensuring food security, increase in water availability and accessibility, and other key development goals;
- Contribution to the resolution of immediate and urgent problems related to climate change;
- Measurable direct impact on vulnerable groups/ Avoided losses for the poor;
- Enhancement of the economic growth rate of the poor, impact on economic growth of the poor (degree of poverty reduction);
- Contribution to fighting poverty/sustainable development;
- Responsiveness to the immediate needs of affected communities;
- The number of beneficiaries/Proportion of project budget spent on direct interventions;
- Enhancement of adaptive capacity and resilience at community and national levels;
- Degree of reduction of vulnerability;
- Protection and enhancement of livelihoods especially in vulnerable groups and among the poor;
- Reduction in (direct) threats due to climate change (hazard/disaster reduction);
- Avoidance of negative impacts of climate change at different scales

- Reduction of death and casualties/Enhancement of human health and well-being;
- Protection of cultural and historical heritage;
- Multiple benefits of project in terms of synergy with other environmental and development goals and agreements;
- Cost effectiveness: cost of benefit.

These criteria were used to rank priority adaptation needs, and it follows logically that they be the basis for developing indicators of progress.

4.1.3. AN OUTLINE OF THE IMPLEMENTATION STRATEGY

The implementation strategy should guide the country on how to go about implementing the NAPA, defining a programme or list of projects to be proposed to the GEF and other funding sources, giving a time frame, and providing as much information as possible on arrangements for the implementation. The strategy should be a report that can act as a guidance document for the country, and one that can be shared with potential donors and agencies. **As a bare minimum, this can be a list of the NAPA priorities and project profiles, showing the cost, expected outcomes and organisations that will be responsible for implementing the projects on the ground.**

In the case where a strategy will be developed for the whole NAPA, it will be necessary to show an analysis of all the NAPA priorities in terms of baseline activities and additional adaptation needs, and a plan for presenting activities from the programme into projects for the purposes of submitting proposals to the LDCF and other sources. The two options are described in more detail in the following sections.

V. STEP 3-A

OPTION TO IMPLEMENT ONE PROJECT – PROJECT-BASED APPROACH

5.1. CHOOSE ONE OR MORE NAPA PRIORITIES TO BE IMPLEMENTED UNDER THE LDCF

The first step in implementing the NAPA one project at a time is to choose which priorities in the NAPA to focus on. Countries can aggregate multiple priorities into one project, as long as the activities are closely

related and consistent with NAPA priorities. The LDCF applies the principle of “balanced access” to avoid the risks of a “first come, first served” policy that would deplete all resources among a limited number of LDCs. Project proposals under this fund must currently not exceed about USD 5 million (recently upgraded from USD 3.6 million), to allow all parties a balanced access. This amount grows proportionally to the size of the fund.

An analysis of selected approved PIFs (see TABLE V-2) shows how NAPA priorities have been aggregated and mapped to core activities in the NAPA projects. The choice of which priorities to pursue belongs to the country, and is based in part on the urgency of the activity, bearing in mind on-going activities and ease of identifying co-financing, as well as the comparative advantages and strengths of the GEF agency that would be chosen.

Table V-2. Aggregations of NAPA priorities into projects for implementation for selected LDCs

Countries	NAPA priority project on which LDCF project is based	LDCF project
Bangladesh	1. Reduction of Climate Change Hazards through Coastal afforestation with community participation. [The total number of priority projects is 15.]	Strengthening adaptive capacities to address climate change threats on sustainable development strategies for coastal communities in Bangladesh
Benin	1. Implementation of a forecasting system for early warning and climatic risks for food security in four vulnerable agro-ecological regions. [The total number of priority projects is 5.]	Integrated Adaptation Programme to Combat the Effects of Climate Change on Agricultural Production and Food Security in Benin
Bhutan	1. Disaster Management Strategy – planning for food security and emergency medicine to vulnerable communities	Reducing climate change induced risks and vulnerabilities from glacial lake outburst floods in the Punakha-Wangdi and Chamkhar Valleys
	2. Artificial Lowering of Thorthomi Lake 8. Installation of Early Warning System on Pho Chu Basin [The total number of priority projects is 9.]	
Cape Verde	1. Mobilization and integrated water resource management project [The total number of priority projects is 3.]	Building adaptive capacity and resilience to climate change in the water sector in Cape Verde
Democratic Republic of the Congo	2. The strengthening of agricultural production capacities: Multiplication of improved seeds of Corn, Rice and Cassava [The total number of priority projects is 3.]	Building the Capacity of the Agriculture Sector in DR Congo to Plan for and Respond to the Additional Threats Posed by Climate Change on Food Production and Security
Djibouti	1. Implementing NAPA priority interventions to build resilience in the most vulnerable coastal zones in Djibouti [The total number of priority projects is 8.]	Mitigation of climate change-related risks for the production system of coastal areas through an integrated, adapted and participatory management involving grassroots organisations
Guinea	13. Protection of cultivated areas neighbouring the coast. [The total number of priority projects is 25.]	Increased Resilience and Adaptation to Adverse Impacts of Climate Change in Guinea’s Vulnerable Coastal Zones

Table V-2. Aggregations of NAPA priorities into projects for implementation for selected LDCs (continued)

Countries	NAPA priority project on which LDCF project is based	LDCF project
Malawi	1. Improving community resilience to climate change through the development of sustainable rural livelihoods	Climate Adaptation for Rural Livelihoods and Agriculture (CARLA)
	1. Improving agricultural production under erratic rains and changing climatic conditions. [The total number of priority projects is 5.]	
Samoa	3. Climate Health Cooperation Program Project	Integrated Climate Change Adaptation in Samoa (ICCAS)
	4. Climate Early Warning System Project	
	5. Agriculture & Food Security Sustainability Project	
	8. Establishing Conservation Programs in Highly Vulnerable Marine & Terrestrial Areas of Communities Project [The total number of priority projects is 9.]	
Sudan	1. Enhancing resilience to increasing rainfall variability through rangeland rehabilitation and water harvesting in the Butana area of Gedarf State	Implementing NAPA priority interventions to build resilience in the agriculture and water sectors to the adverse impacts of climate change in Sudan
	2. Reducing the vulnerability of communities in drought-prone areas of southern Darfur State through improved water harvesting practices	
	3. Improving sustainable agricultural practices under increasing heat stress in the River Nile State	
	4. Environmental conservation and biodiversity restoration in northern Kordofan State as a coping mechanism for rangeland protection under conditions of increasing climate variability	
	5. Adapting to Strategies to adapt to drought-induced water shortages in highly vulnerable areas in Central Equatorial State [The total number of priority projects is 5.]	
Tuvalu	1. Increasing resilience of Coastal Areas and Settlement to climate change [The total number of priority projects is 7.]	Increasing Resilience of Coastal Areas and Community Settlements to Climate Change
Zambia	1. Strengthening of early warning systems to improve services to preparedness and adaptation to climate change	Adaptation to the effects of drought and climate change in Agro-ecological Zone 1 and 2 in Zambia
	2. Promotion of alternatives sources of livelihoods to reduce vulnerability to climate change/ variability to communities living around GMAs	
	6. Adaptation of land use practices (crops, fish, and livestock) in light of climate change [The total number of priority projects is 10.]	

5.2. CHOOSE GEF AGENCY AND IDENTIFY EXECUTING AGENCIES

After the country has chosen which NAPA priority activities to implement, they need to identify a GEF agency to work with. There are 10 possible agencies, the comparative advantages of which are given in the GEF Council paper on Comparative Advantages of the GEF agencies (GEF/C.31/5 rev.1). Additional considerations include current projects being implemented by the agency chosen, past experiences, and working relations with the agency. Please refer to SECTION VII.3.

In parallel, the country needs to select an executing agency(ies) for implementation of the NAPA project. This selection could be based on nationally set criteria for implementing community projects. In some instances, countries may realize that implementation of projects is a national effort that involves government agencies and close collaboration with civil society and the private sector. Civil society organizations, non-governmental organizations, religious organizations, the private sector and development partners should all be considered while selecting executing agency(ies).

5.3. ALIGN NAPA PRIORITIES TO ADAPTATION GOALS AND SELECT ADAPTATION STRATEGIES AND ACTIVITIES

The LEG has identified a list of 10 adaptation goals that best summarize the priority needs identified in NAPAs. Additional support materials will be developed according to these adaptation goals for use in the regional training workshops, and at this stage, the country is requested to align the chosen NAPA priorities with the corresponding adaptation goals to facilitate the identification of adaptation strategies and activities to include in the project. Please refer to TABLE V-3 that shows the 10 adaptation goals and possible adaptation strategies.

5.4. DESCRIBE ADAPTATION BASELINE ACTIVITIES

Once the main adaptation strategies and activities to be implemented have been selected, a list of baseline activities can then be compiled to define the development baseline, by going through steps that are given in FIGURE V-4. This is an important step, as it helps identify existing funded activities which can be used to show co-financing. This step would also show where important investments in key development initiatives are being made, and where these activities and investments would need to be climate-proofed.

5.5. DEFINE ADAPTATION NEEDS AND ESTIMATE ITS COSTS

A key aspect of the LDCF (and other adaptation funds), is that it will fund only the additional costs of activities required to adapt to the adverse effects of climate change.⁴ **Determining the additional adaptation cost is perhaps the most important step in the development of the project proposals, and requires a good basis for determining what the baseline activities and baseline costs are, in order to estimate the additional investment needed to address the adaptation need.** A tool has been developed to facilitate this process, see FIGURE V-5.

The LDCF allows for an alternative approach for cases where the additional costs are difficult to articulate, through a co-financing sliding scale. The sliding scale was developed by the GEF to facilitate estimation of the LDCF contribution to projects based on the total project costs. The sliding scale is described later in SECTION 7.2.1, and a summary is given in the additional costing tool as outlined in FIGURE V-5.

5.6. PREPARE PROJECT CONCEPT NOTE BASED ON GEF PROPOSAL TEMPLATES

Once the information on the project activities to be implemented has been assembled, and the corresponding baseline activities and estimates of additional adaptation costs has been included, the project identification form (PIF) can be assembled and readied for submission to the GEF.

For each project component or activity, the GEF requires that the PIF include an explanation of the expected outcome and outputs. These expected outcomes are expanded in subsequent stages under the project preparation grant (PPG) and the development of the full scale project document to produce a detailed log-frame or results and resources framework. **The country can facilitate planning the project by thinking through the results and resources framework in advance, as this is the core summary of what the project will do and attempt to achieve.**

⁴ Decision 3/CP.11, paragraph 2.

Table V-3. Key vulnerabilities and adaptation strategies for each of ten adaptation goals

Adaptation Goal/Sector	Key Vulnerabilities	NAPA interventions (adaptation strategies)
<p>Agriculture and food security: achieve and safeguard food security</p>	<ul style="list-style-type: none"> • Shorter growing seasons • Declining fish populations • Loss of agricultural land (erosion during floods, desertification for droughts) • Floods cause soil fertility loss • Soil salination due to saltwater intrusion • Uncertainty about what and when to plant • Droughts and unpredictable rainfall + heat spells → increased evapo-transpiration • Reduced crop yields 	<ul style="list-style-type: none"> • Change of planting dates • Diversification of crop production by breeding resilient crops (drought resilient for drought prone areas, and salt resistant for coastal zones, etc.) • Fodder production • Reseeding of rangelands • Water harvesting • Construction and rehabilitation of reservoirs/dams • Water saving irrigation techniques • Land use planning • Soil conservation • Food preservation and processing through improvement of small scale industries • Food/cereal banks
<p>Water resources: achieve and safeguard water security and sanitation</p>	<ul style="list-style-type: none"> • Drying up of rivers and springs • Increased water stress • Rising sea levels compromise fresh water sources • Scarcity of potable water • Unsustainable use of groundwater resources 	<ul style="list-style-type: none"> • Rain water harvesting • Rehabilitation of wetlands • Integrated watershed management with land use and coastal areas protection benefits • Rehabilitation of boreholes/wells • Resilient designs of reservoirs, irrigation canals, ponds and dykes • Water use efficiency • Eco-sanitation
<p>Physical safety: protection of life and property against climate extremes and disasters including along low lying and coastal areas</p>	<ul style="list-style-type: none"> • Increased extreme and new events (glacial lake outburst floods (GLOFs), droughts, floods) • Traditional early warning systems unable to simulate the new and frequent events • Landslides due to flooding • Inundation along coasts • Coastal erosion • Degradation of marine ecosystems 	<ul style="list-style-type: none"> • Artificial lowering of lakes • Construction of dykes, current breakers, and shifting dune bars • Radar reflectors and live vests for fishermen • Hazard/risk maps and related response maps, escape routes • Planning settlements in low risk areas • Resettlement of communities at risk • Disaster management, preparedness and awareness • Rehabilitate existing and/or install new observing stations/equipment • Establishment of communication systems for early warning
<p>Protecting livelihoods and enhancing adaptive capacity</p>	<ul style="list-style-type: none"> • Degradation of natural resources and ecosystems 	<ul style="list-style-type: none"> • Safety nets (e.g. social action funds) • Promotion of non-conventional food resources • Homestead food production • Gender mainstreaming • Vocational training facilities and centres for communities

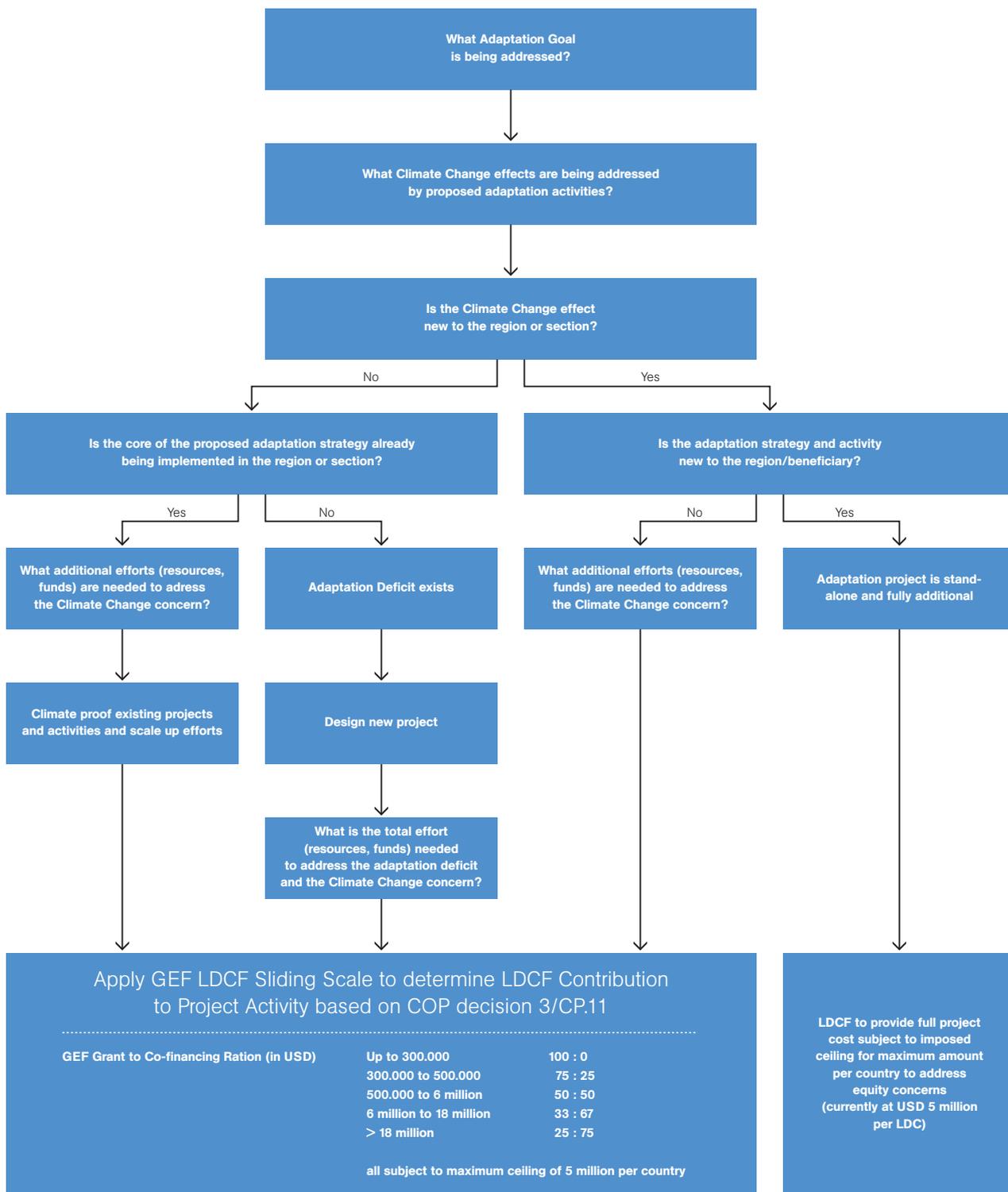
Table V-3. Key vulnerabilities and adaptation strategies for each of ten adaptation goals (continued)

Adaptation Goal/Sector	Key Vulnerabilities	NAPA interventions (adaptation strategies)
Climate proofing major components of national economies and sustainable development (socio-economic growth engine)	<ul style="list-style-type: none"> • Climate change exposes farmers to uncertain risks with heavy losses • Farmers do not have access to credit • Increase in frequency and magnitude of climate extremes 	<ul style="list-style-type: none"> • Community training programmes on climate change • Include climate change into national curriculum • Develop and introduce energy saving techniques • Drought indices • Insurance design • Contingency funding in droughts • Contingency funding for surviving during disasters
Supporting and enhancing human health and safety	<ul style="list-style-type: none"> • Alteration of spatial and temporal transmission of disease vectors, including malaria, dengue fever, meningitis, cholera, and diarrhoea • Increased tropical storms increase risks to life 	<ul style="list-style-type: none"> • Distribution of treated mosquito nets • Production of bio-pesticides • Rehabilitation and establishment of health care centres • Securing potable water • Waste water treatment systems
Protecting and enhancing ecosystem structure and function for the sustainable provision of ecosystem goods and services	<ul style="list-style-type: none"> • Desertification • Deforestation • Degradation of grasslands • Replacement of native species and colonisation by non-indigenous species • Sediment pollution during floods • Loss of biodiversity and ecosystem services due to erosion and watershed regulations 	<ul style="list-style-type: none"> • Coastal afforestation • Rehabilitation of mangroves and plantation management • Participative protection of coastal sediment barriers • Optimization of freshwater and drainage management including construction of diversion furrows and terraces • Soil and vegetation management • Integrated watershed management • Reseeding of rangelands • Plantation of trees and grasses in gullies • Construction of gabions to stop erosion and rehabilitate wetlands • Rehabilitation of silted ponds and reconstitution of basin slopes
Climate proofing renewable energy sources and supplies	<ul style="list-style-type: none"> • Energy insecurity resulting from disruption of hydropower systems • Diminishing of indigenous biomass resources 	<ul style="list-style-type: none"> • Wild fire prevention and management • Energy efficiency • Micro hydropower stations • Diversification of energy sources (solar, wind, biogas)
Protecting and preserving cultural values and cultural systems	<ul style="list-style-type: none"> • Cultural norms and heritage (housing, clothing, medicine and other traditions) are closely linked to the environment • A change of environment puts pressure and forces changes in the culture 	<ul style="list-style-type: none"> • Protection and conservations of indigenous species • Preservation of cultural heritage sites and promotion of botanical gardens
Protecting and improving the design of critical infrastructure	<ul style="list-style-type: none"> • Accelerated beach erosion • Destruction of infrastructure during extreme events (floods, storms) 	<ul style="list-style-type: none"> • Re-designing and rehabilitating infrastructure • Planning settlements in low-risk areas

Figure V-4. Tool to establish a development baseline for an adaptation activity for an individual project under the LDCF



Figure V-5. Tool to establish additional adaptation costs for an individual project activity





VI. STEP 3-B OPTION TO DESIGN IMPLEMENTATION OF THE WHOLE NAPA – A PROGRAMMATIC APPROACH

6.1. ALIGN NAPA PRIORITIES TO ADAPTATION GOALS AND SELECT ADAPTATION STRATEGIES AND ACTIVITIES

In developing an implementation strategy for the whole NAPA, it may be important to align the NAPA priorities to the ten adaptation goals that were described in the previous section. This will facilitate identification of adaptation strategies and activities to be implemented in order to address all the priority needs presented in the NAPA. This is an important exercise and it will reveal activities that can be implemented to address multiple needs. Please refer to TABLE V-3. that shows the adaptation goals and selected adaptation strategies.

6.2. DESCRIBE BASELINE DEVELOPMENT ACTIVITIES AT NATIONAL LEVEL

Once adaptation strategies and activities have been identified for all the priorities in the NAPA, a master list of development baseline activities can then be developed by going through the steps that are given in FIGURE VI-6, a national development baseline tool. This comprehensive analysis of baseline activities at the national level is an important exercise as it facilitates a broad look at all relevant activities in all sectors and all national programmes. **The tool facilitates integration of the new adaptation activities into existing national activities, and can help identify agencies that would be most suitable for the implementation and execution of main NAPA activities.**

6.3. DEFINE ADAPTATION ADDITIONALITY AND ESTIMATE COSTS AT THE NATIONAL LEVEL

Once a list of adaptation activities is developed to address all the priority needs of the NAPA and a list of baseline activities has been compiled, these two can be matched to identify the additional costs of adaptation.

6.4. DESIGN IMPLEMENTATION STRATEGY

In cases where proposals will be submitted to multiple funding sources, the implementation strategy can aggregate the NAPA adaptation activities into bundles or projects for submission. **The advantage of analyzing the whole NAPA is that this process of defining baseline and additional components is done in one step, and subsequent proposal writing for particular funding windows becomes streamlined. In the case that additional funding becomes available in the LDCF for full implementation of NAPAs, then the whole NAPA will be ready to be implemented.**

Another benefit is that activities can be staggered into phases for implementation to adequately build capacity and prepare for activities that would require more time and would have prerequisites before successful implementation. Ideally, the funding for the first project under the LDCF can be used to define a broad implementation strategy through the PPG, and future funding could be supplementary to existing project implementation arrangements, rather than developing totally new projects through a full new GEF/LDCF cycle.

The implementation strategy should clearly identify sources of funding, implementing agencies, executing agencies and other information to facilitate getting all the NAPA activities successfully addressed. In cases where there is a possibility for direct budget support, the NAPA activities should be clearly linked to sectoral plans and programmes. A careful tracking of activities through a national database and information system would be necessary to ensure proper monitoring and assessment of progress.

6.5. PREPARE PROJECT CONCEPT NOTE BASED ON FUNDING SOURCE TEMPLATES

When a funding source has been identified, proposals can be prepared according to templates and formats specific to that source. In the next SECTION, submission of proposals to the GEF/LDCF is described in detail.

Figure VI-6. **Tool to establish the development baseline investments corresponding to adaptation activities in the whole NAPA (Development baseline at the national level)**



ANNEX I. DEFINING ADAPTATION GOALS AND ISSUES OF SCALE

A useful approach for integrating development concerns into adaptation is through the definition of *Adaptation Goals*. This is an attempt to categorize adaptation activities in the context of broader development-related activities. The process also facilitates alignment of adaptation actions to development goals, helps define common development and adaptation strategies and activities, and identifies the analytical frameworks which can be used at appropriate scales and levels for each major system or sector. This approach also facilitates the estimation of baseline investment by linking adaptation activities directly to development and other conventional investments, and enables estimation of the required additional costs to address adaptation needs. Ten adaptation goals are currently defined, and are shown in Box AI-3. A typology for

the first adaptation goals on agriculture and food security is given below, and shows a breakdown of components at appropriate scales, and adaptation strategies and activities for each component.

The example also shows how an ideal outcome for the goal can be aligned with the current situation. If the current situation is below the ideal because current climatic issues are not adequately addressed, then an adaptation deficit would exist, in which case the adaptation activities would have to cover both the adaptation deficit and the additional activities needed to cope with climate change.

A distinction is made between a project to a particular fund or funding entity, and an adaptation activity, which specifically sets out to address a specific adaptation objective. Projects in the end, are a mix of adaptation activities and other activities that are implemented either as part of the type of project (in this case LDCF Projects), are activities designed to address broader ideals for development and climate change, including outreach, capacity-building, mainstreaming etc. **An interesting indicator would thus be the proportion of funding going towards the adaptation activities out of the full project cost.**

Box AI-3. Adaptation goals

<ul style="list-style-type: none"> • Agriculture and Food Security: Achieve and Safeguard Food Security • Water Resources: achieve and safeguard water security and sanitation • Physical Safety: Protecting Life and Property against climatic extremes and disasters including along low-lying and coastal areas • Protecting livelihoods and enhancing adaptive capacity • Climate Proofing major components of national economies and Sustainable Development [Climate proofing the socio-economic growth engine] 	<ul style="list-style-type: none"> • Supporting and Enhancing Human Health and Safety • Protecting and Enhancing Ecosystem structure and function for Sustainable Provision of Ecosystem Goods and Services including Land Use • Climate Proofing Renewable Energy Sources and Supplies • Protecting and Preserving Cultural Values and Cultural Systems • Protecting and Improving the Design of Critical Infrastructure and Land Use Planning
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ISSUE OF SCALE

Before we elaborate on the adaptation goals, we introduce the scales at which activities are normally planned and implemented, as shown in Box AI-4. These are by no means exclusive, and some activities can be implemented at several of these scales. The explicit consideration of scale is important in correctly placing modes of intervention, monitoring and expectation of outcomes, as well as scaling up of efforts. Scaling up adaptation is an emerging concept, and can only be fully realized if properly planned. For example, scaling up adaptation is not simply doing more of the same in many more communities or all communities for the country – an impossible task in itself – rather it would be a careful set of activities and investments at broader scales of aggregation that would enhance and facilitate the actions at the local levels. Scaling up also recognizes the linkages between systems both in space and over time, and if implemented properly, would lead to lasting impacts and sustainable benefits.

KEY COMPONENTS OF EACH ADAPTATION GOAL

As a proof concept, we elaborate the case for Agriculture and Food Security to show components and potential adaptation activities and strategies at different scales. There is a rich literature on issues of agriculture and food security, and many strategies have been proposed to address food security in general, many of which are directly applicable to issues of food security under climate change. Examples include the work of the UN Millennium Project Task Force on Hunger,⁶ and the best-bets to boost crop yields in Sub-Saharan Africa by the Alliance of the CGIAR Centers.⁷ The following diagrams present a simple worked example for components of the agriculture and food security adaptation goals. An agricultural project would then combine activities to implement some of the activities and solutions given below, along with supporting activities such as climate data collection and processing to provide the needed data for planning the agricultural activities, work on climate predictions and seasonal outlooks to provide information for planning the agricultural calendar, as well as capacity-building and outreach efforts to increase awareness of farmers.

Box AI-4. Scales at which adaptation activities are implemented

<ul style="list-style-type: none"> • Small-scale/Local/Community Level • Activities in Coastal Areas • Urban Areas • Sub-national Level Projects & Activities • Integrated River Basin Management 	<ul style="list-style-type: none"> • National Level Projects & Programmes including Sector-wide approaches • Regional – Multinational Project Activities & Programmes • Global Level Activities & Projects
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⁶ SANCHEZ P, SWAMINATHAN MS, DOBIE P AND YUKSEL N. 2005. *Halving Hunger: It can be done*. UN Millennium Project task Force on Hunger 2005. Earthscan, London. pp. 245

⁷ Available at <http://cgiar.org/pdf/alliance_bestbets_july2008.pdf>, accessed 01 September 2009.

Fold out for →
Figure AI-7b.

Figure AI-7b. An example of the Agriculture and Food Security Adaptation Goal and its main components

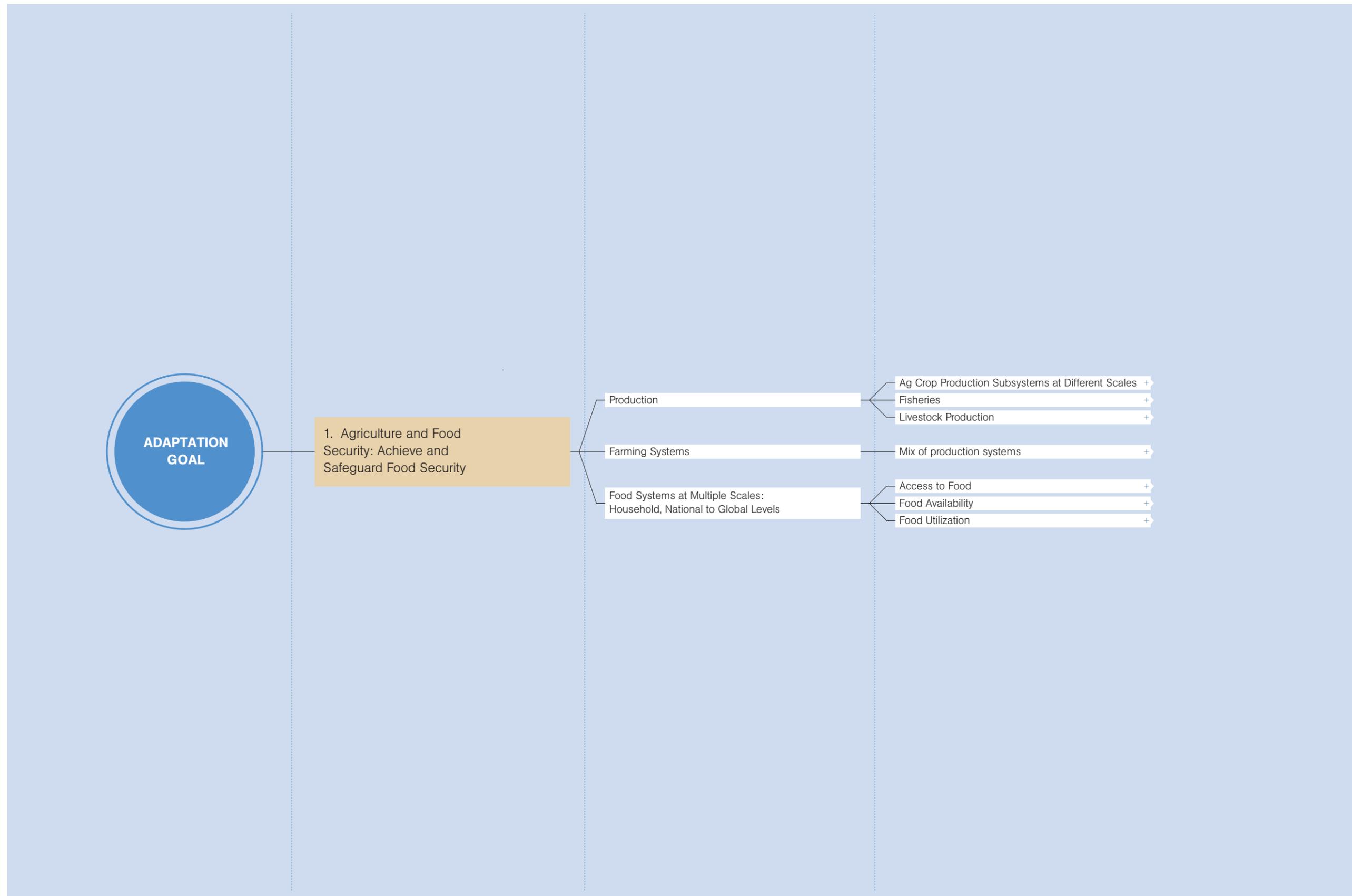
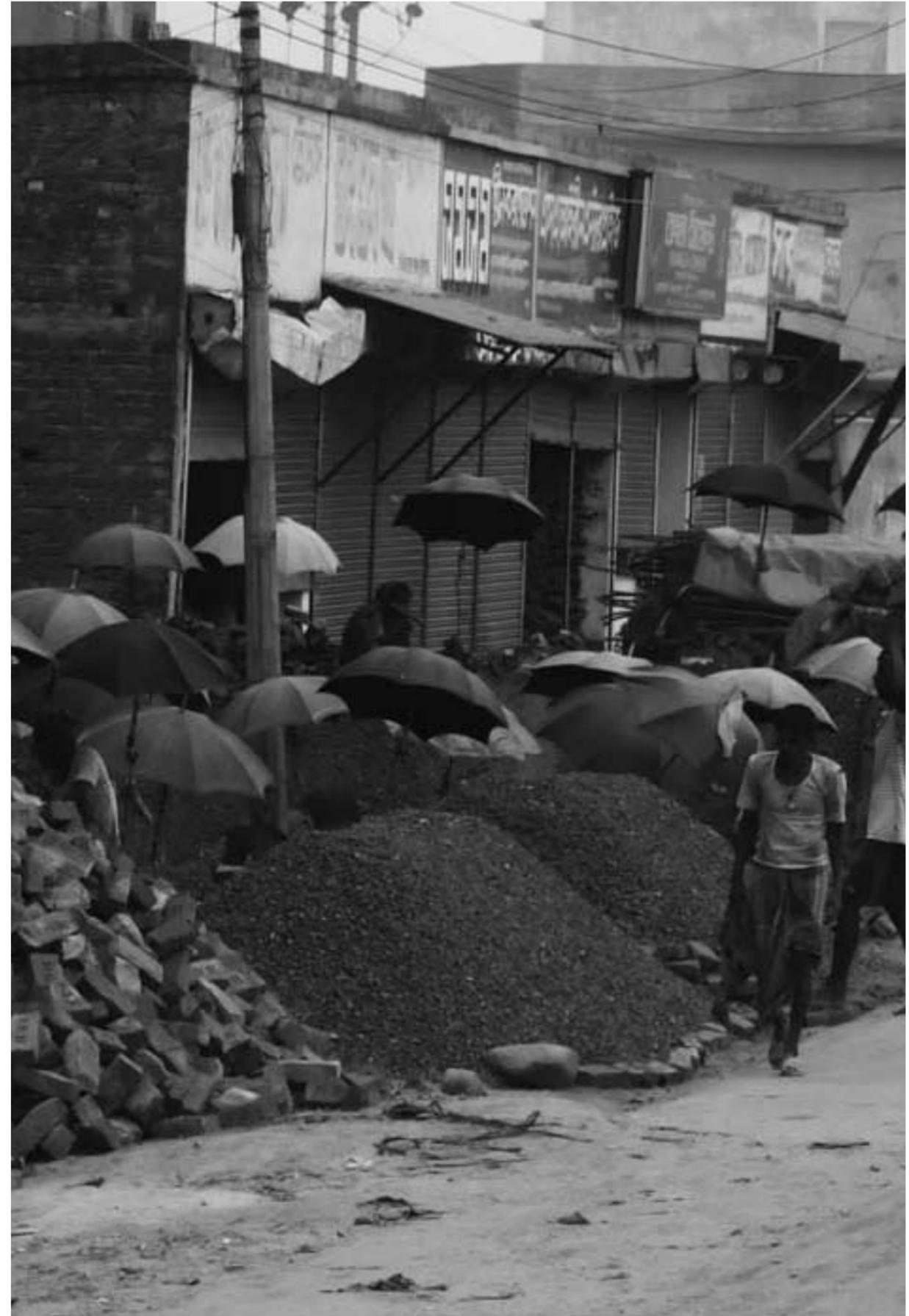
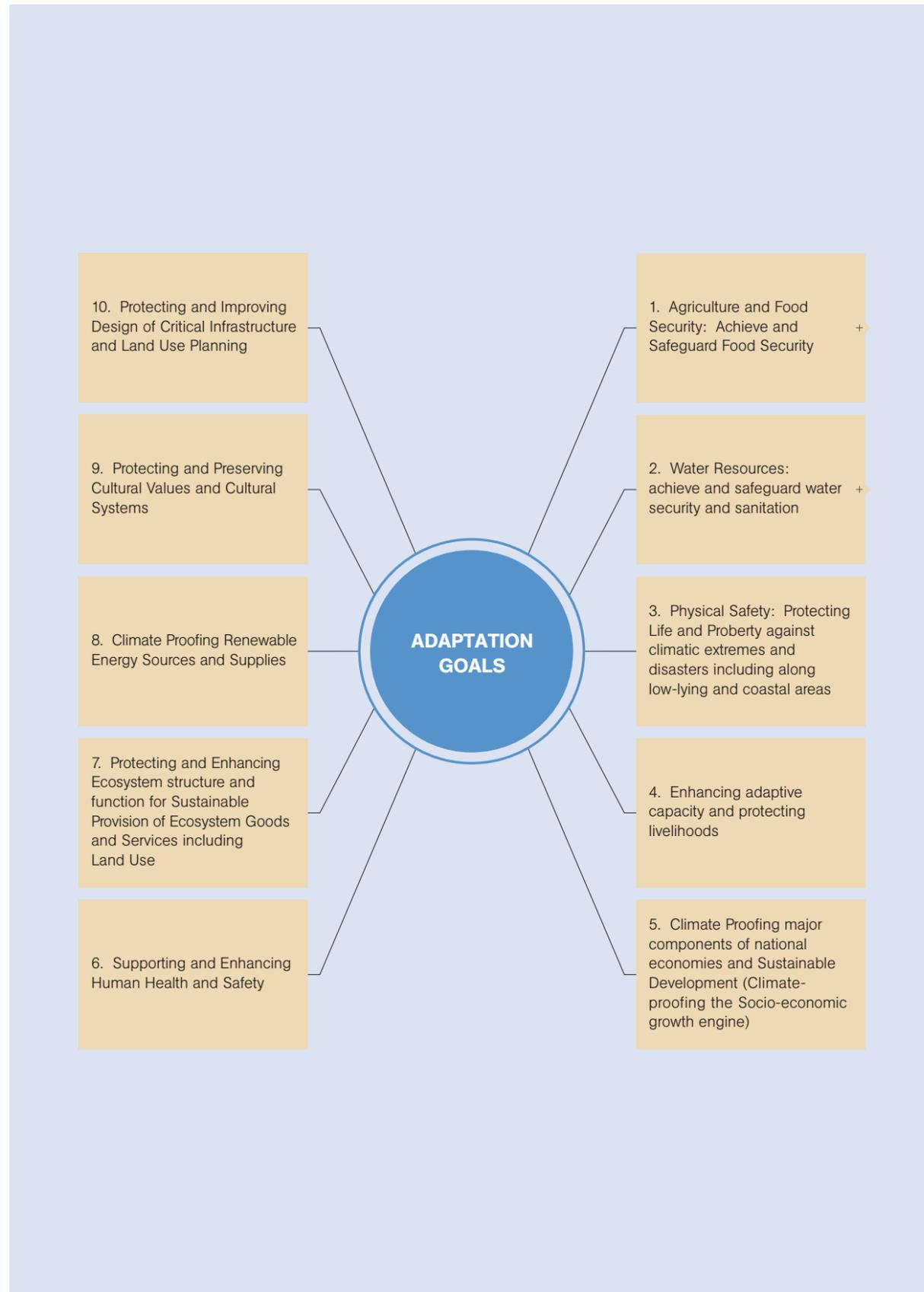


Figure AI-7a. The ten adaptation goals covering priorities identified in NAPAs



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Figure AI-7d.

Figure AI-7d. Examples of adaptation strategies at the regional and multinational level

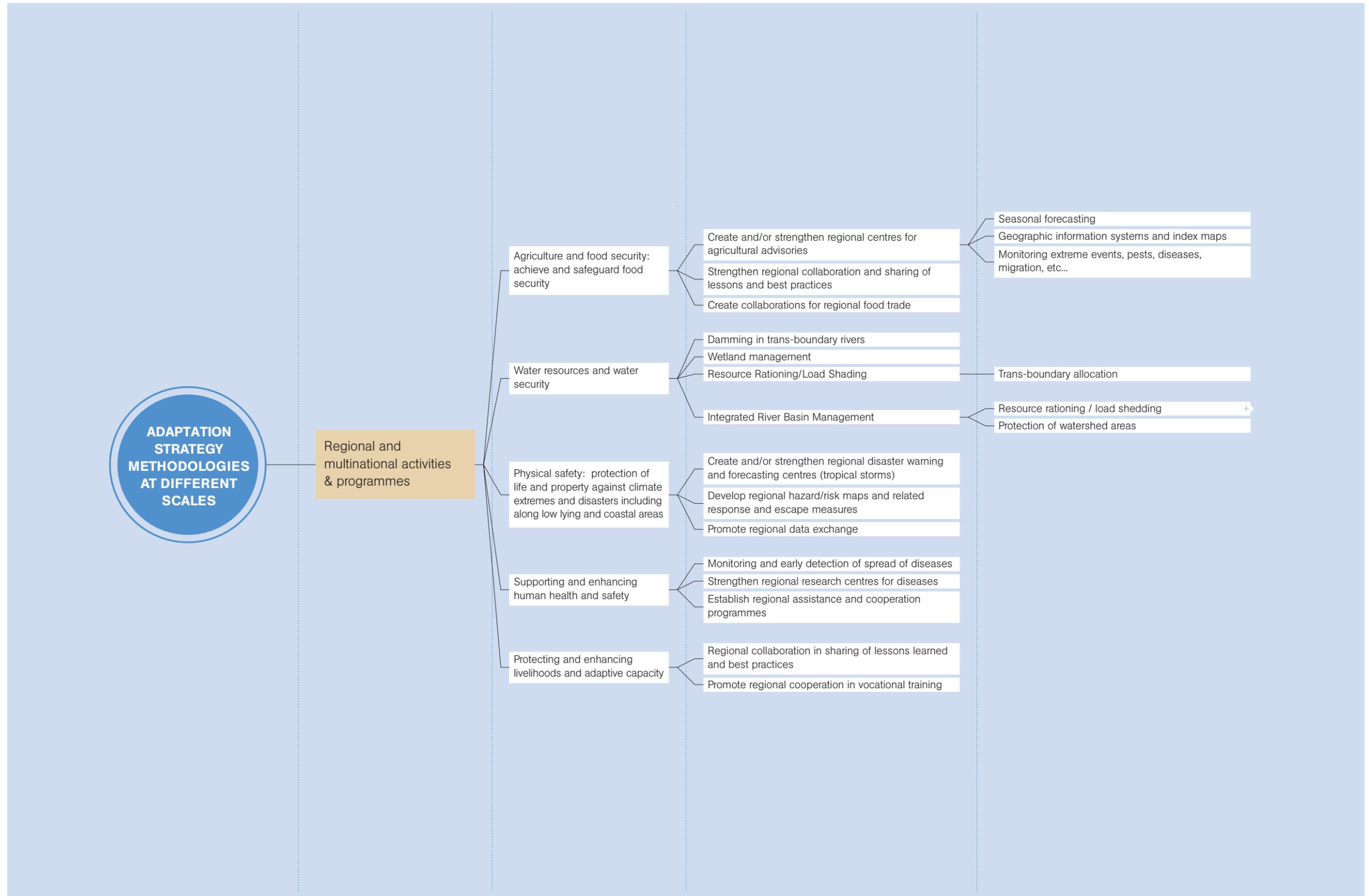
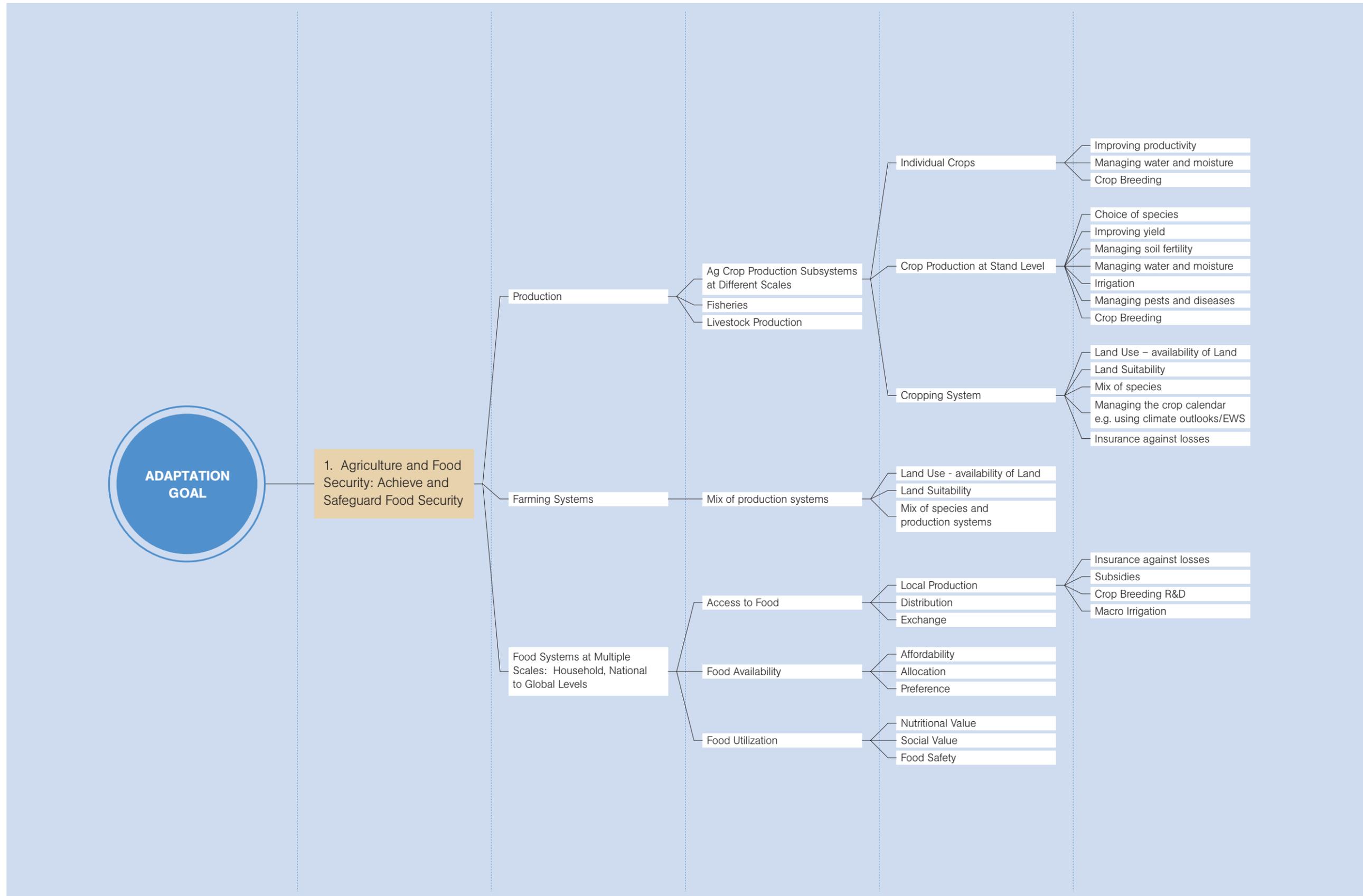


Figure AI-7c. An example of the Agriculture and Food Security Adaptation Goal and its main components



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Figure AI-9a. Typology of scales at which adaptation strategies and activities are implemented

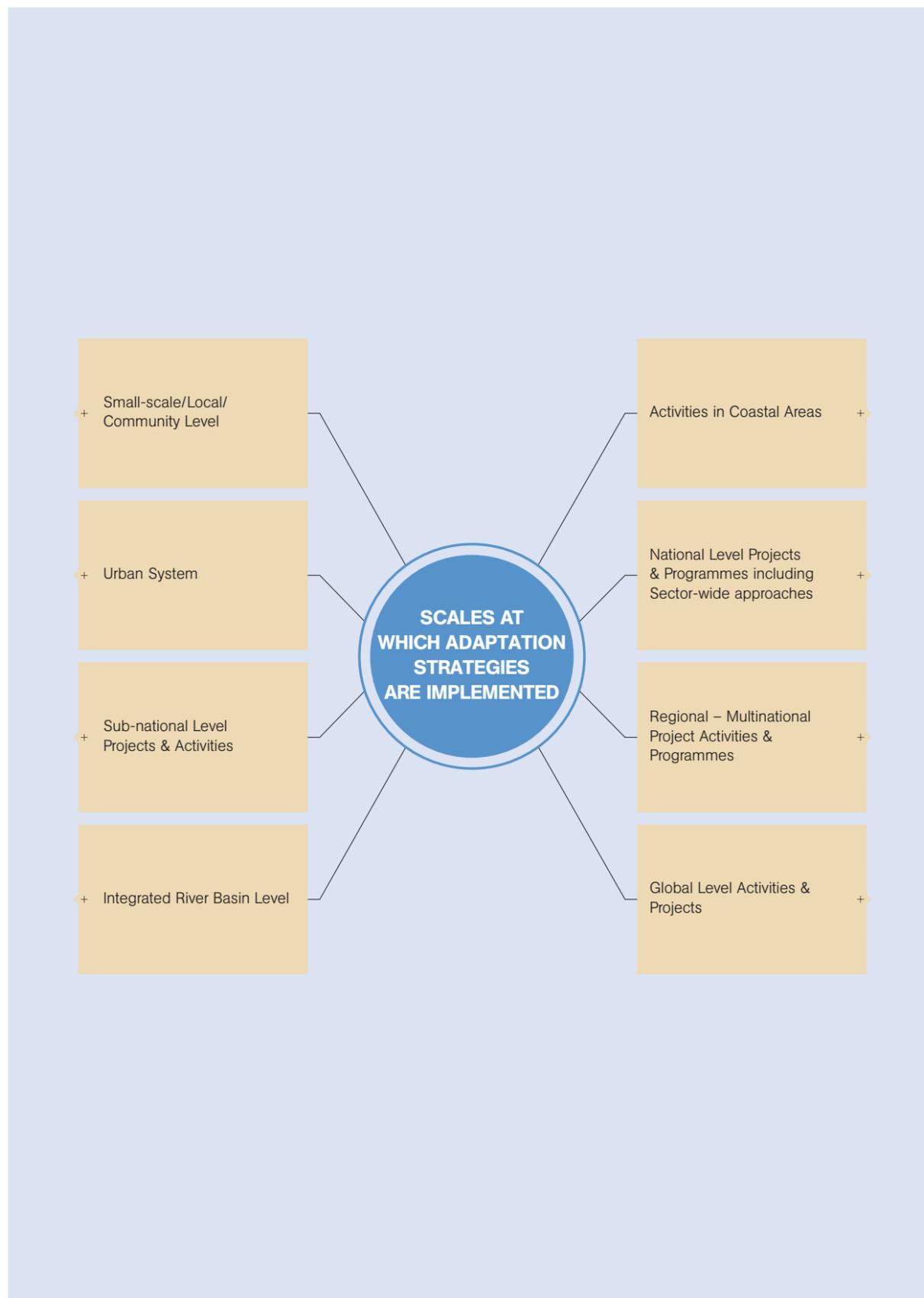
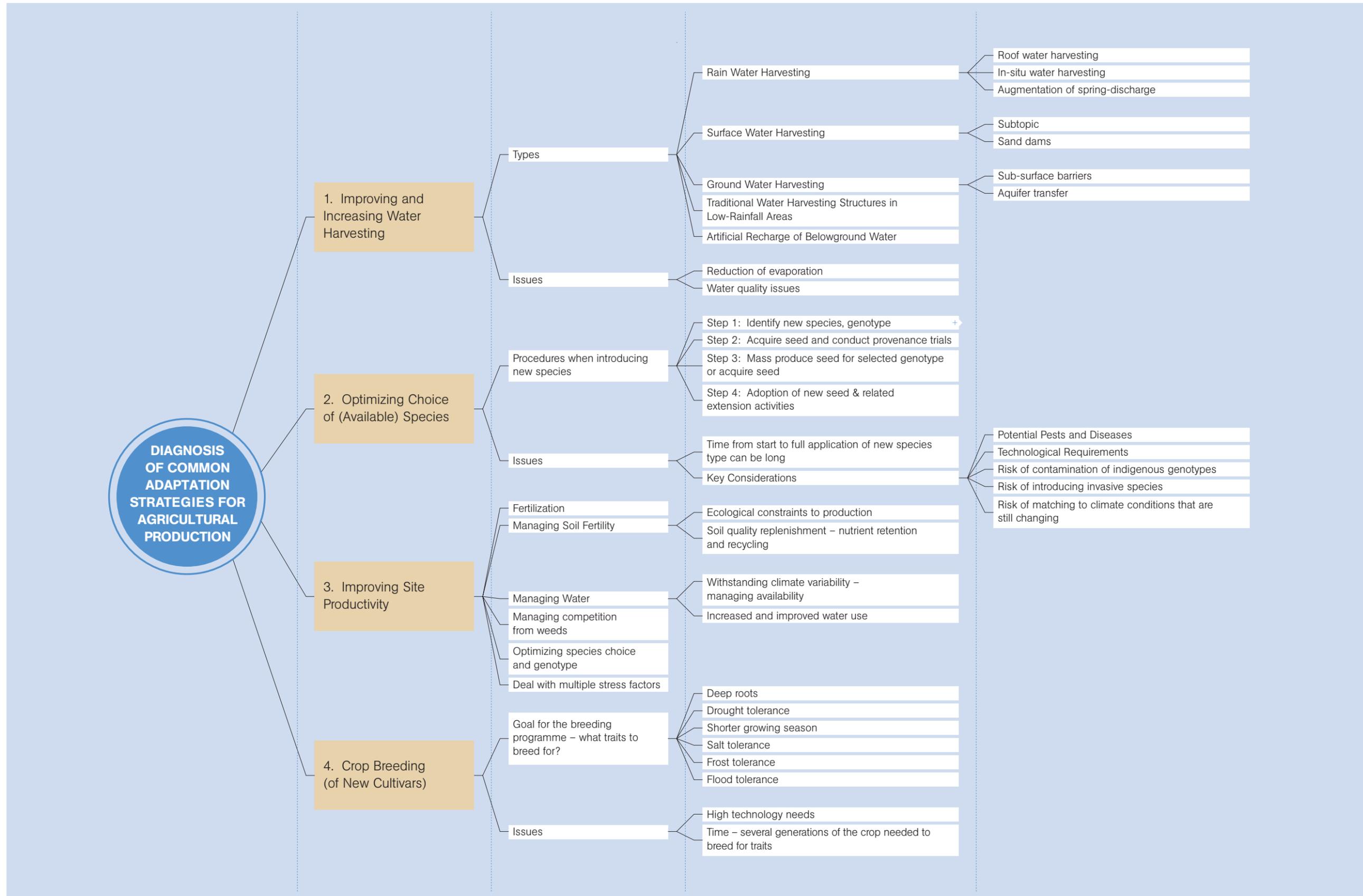


Figure AI-8. An example of common adaptation strategies for agricultural production and issues to consider



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Figure AI-9c.

Figure AI-9c. Examples of adaptation strategies at the national level including programmatic and sectoral approaches

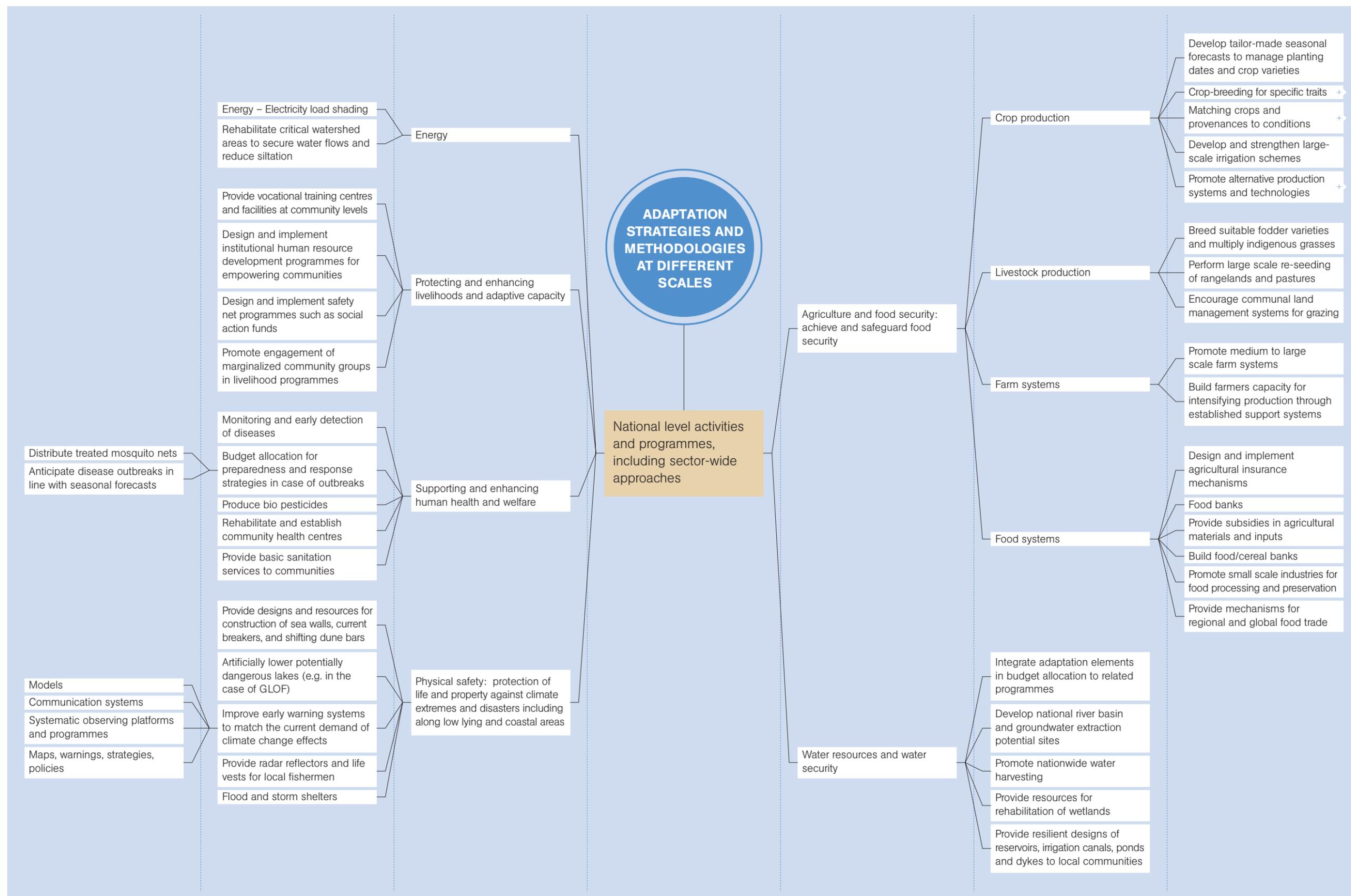
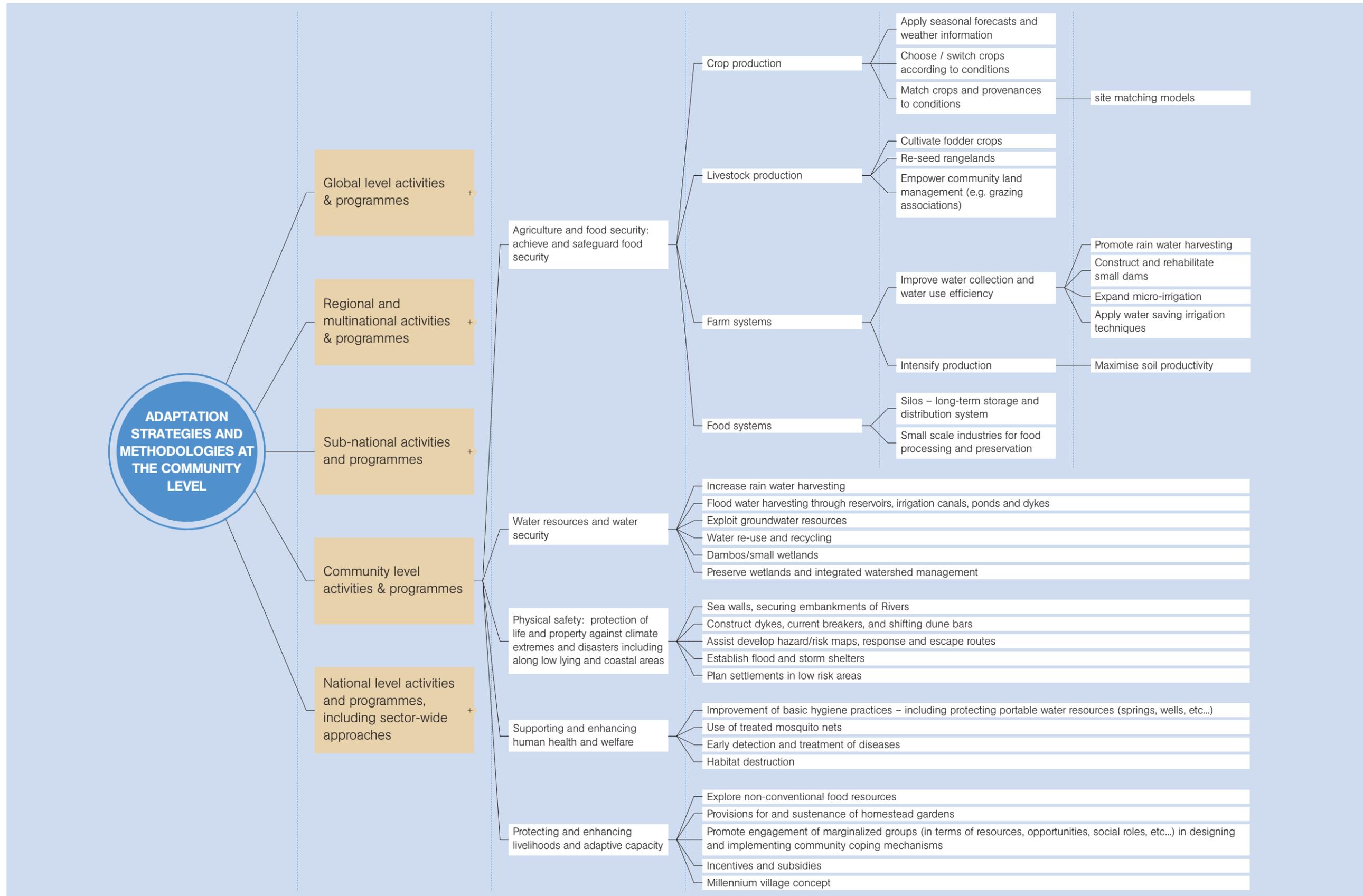
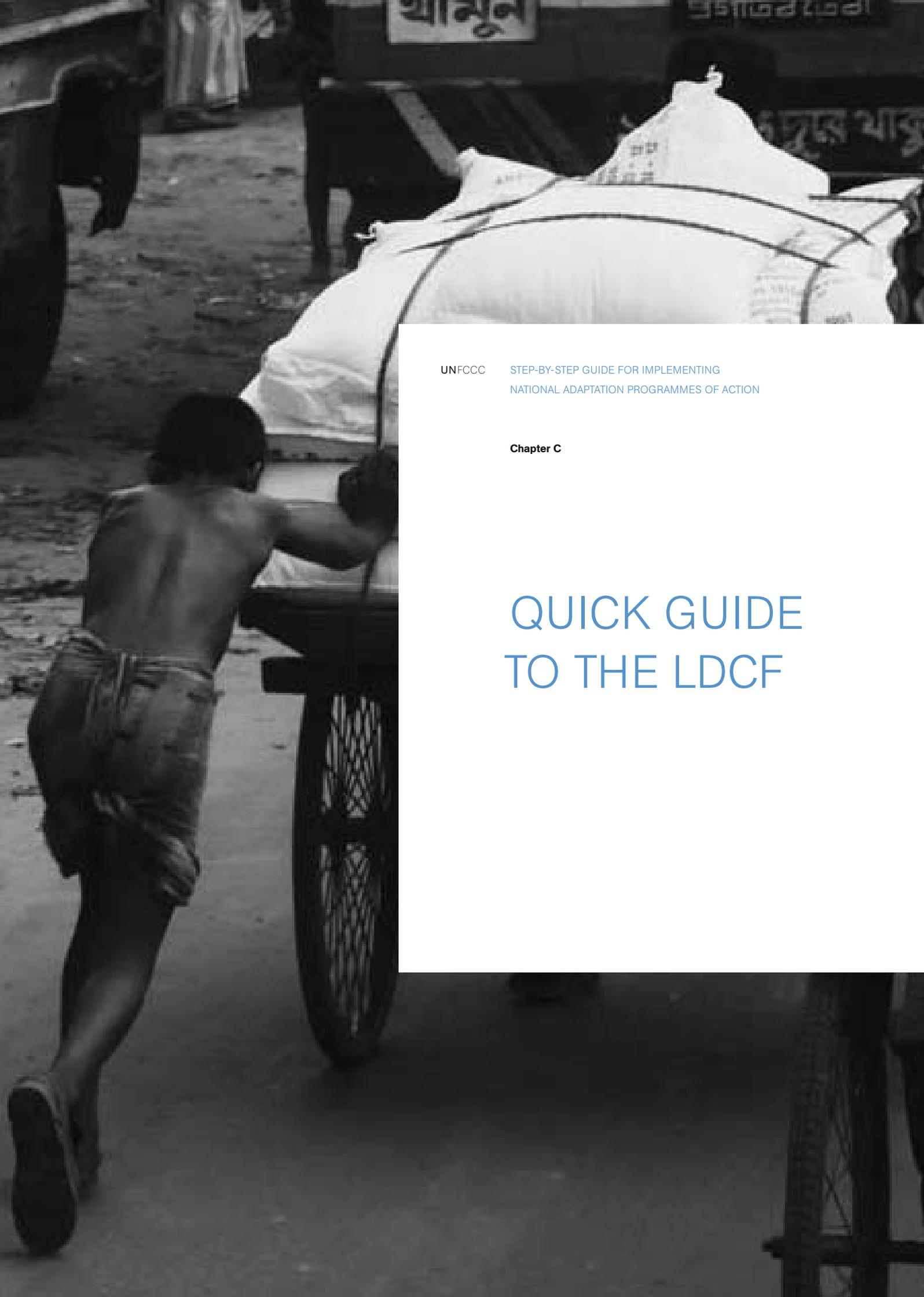


Figure AI-9b. Examples of adaptation strategies at the local and community level





UNFCCC STEP-BY-STEP GUIDE FOR IMPLEMENTING
NATIONAL ADAPTATION PROGRAMMES OF ACTION

Chapter C

QUICK GUIDE TO THE LDCF

VII. OPERATION DETAILS OF THE LDCF FOR NAPA PROJECTS

7.1. THE LDCF

The LDCF was established by the COP in 2001 to support the implementation of the LDC work programme. A full description of the LDC work programme is given in SECTION II of this guide.

COP guidance on the funding for the preparation of NAPAs was given to the GEF (as manager of the LDCF) through decision 27/CP.7, and in decision 3/CP.11 on funding for the implementation of NAPAs. Guidance for funding the rest of the elements of the LDC work programme was given in 2008 through decision 5/CP.14.

For general information on how to access LDCF funding, see documents GEF/C.19/inf.7 (for NAPA preparation), and GEF/C.28/18 (for NAPA implementation).

The LDCF is the primary source of funding for NAPAs. Other funds, such as the Special Climate Change Fund and the Adaptation Fund, are also open to LDC Parties.

7.2. COSTING OF PROJECTS

Based on the guidance of decision 3/CP.11, the LDCF has developed several special concepts, designed to simplify project preparation and provide expedited access to LDCF resources. These concepts include a full cost option, additional cost principle, a flexible concept of co-financing, and a sliding scale to simplify the calculation of project cost.

In accordance with decision 3/CP.11, the LDCF provides full cost funding for adaptation needs in Least Developed Countries. However, in practice, adaptation is expected to take place in conjunction with other activities. It can also be argued that in most cases, adaptation investments will be both more sustainable and more effective when mainstreamed into existing development objectives. In such cases, existing development objectives will, by themselves, entail certain costs (e.g. the costs of investments in the agricultural sector to improve production and increase food security). The costs

of existing development objectives form the ‘baseline costs’ to achieve these objectives in the absence of climate change. These costs cannot be covered by the LDCF, but should be sought elsewhere through international development assistance, national budgets etc. **The LDCF covers only the full ‘additional cost’ of adaptation, meaning the investments necessary to make existing baseline investments (more) resilient to the impacts of climate change.** In other words ‘the additional cost’ is the cost imposed on vulnerable countries to meet their immediate adaptation needs.

7.2.1. CO-FINANCING AND THE SLIDING SCALE

In practice, the exact level of such LDCF-eligible ‘additional cost’ can be determined in two ways:

- (a) By comparing a full cost estimate of a ‘baseline development scenario’ (without LDCF investments), to a full cost estimate of an ‘alternative scenario’ (with additional activities to make the baseline resilient to climate change) – the difference between these two scenarios would constitute the additional cost eligible for LDCF funding.
- (b) Using a simplified ‘sliding scale’ which is an approach developed to calculate the contribution that would come from the LDCF for projects, in the absence of an explicit calculation of the adaptation additional costs. Details of this sliding scale can be found in the LDCF programming paper (GEF/C.28/18).

The co-financing for NAPA projects serves to show that the proposed adaptation activities are securely anchored in existing (previously financed) development activities. In fact there is no fund raising required for co-financing in the traditional sense (i.e. finding new financial resources which would be applied directly to the project). Co-financing under the LDCF relies on existing financing for development projects which provides de facto co-financing on the ground. To materialize the co-financing procedure the LDCF requires a declared commitment from relevant co-financiers of the existing baseline activities on which the proposed adaptation project will build. The co-financier(s) declare that they will allocate a certain part of their existing resources toward the project objective.

7.2.2. BALANCED ACCESS AND RESOURCES AVAILABLE
PER COUNTRY

According to decision 6/CP.9, the LDCF is to apply a principle of: *'Equitable access by least developed country Parties to funding for the implementation of national adaptation programs of action'*. In the GEF LDCF programming paper (GEF/C.28/18), which is again based on further guidance in decision 3/CP.11, this principle of equitable access has been translated into a concept of *balanced access*. **The balanced access concept assures that funding for NAPA implementation will be available to all LDC, and not be awarded on a 'first-come, first-served' basis (e.g. to countries with higher institutional capacity for project development).**

For the first round of NAPA implementation, therefore, funding will be awarded on a per country basis, assuring that each LDC can access a share of the total LDCF resources available.⁸ As of May 2009 donors have pledged USD 176.5 million to the LDCF. With 49 eligible LDCs⁹ this translates into an available per country allocation of approximately *USD 5.0 million*.

7.3. GEF AGENCIES

The first step in accessing NAPA implementation funding through the LDCF is to identify one (or more) implementing agency(ies) from the group of GEF agencies to assist in submitting a project proposal to the LDCF in a process that must not exceed 22 months. See the GEF website at <<http://www.thegef.org>>, for an up-to-date status of projects under the LDCF.

The role of the GEF agency is to assist the country in formulating a coherent project idea, based on one (or more) of the highest ranking NAPA priorities, and convert this idea into a Project Identification Form (PIF) of about 4 – 8 pages in accordance with current LDCF templates. **The country can choose freely between each of the 10 GEF agencies for the implementation of its project(s). It is also possible to implement separate projects with separate agencies, or have two or more agencies working together in one project to utilize their expertise in specific sectors.** The choice of GEF agency(ies) should be based on its comparative advantage in relation to the specific issues addressed by the project implemented (for more details on these please refer to the document GEF/C.31/5 on the GEF webpage – <<http://www.thegef.org>>).

The 10 GEF agencies currently operating are:

- (a) *Asian Development Bank (ADB)*'s comparative advantage for the GEF includes investment projects at the country and multi-country level in Asia as well as the ability to incorporate capacity building and technical assistance into its projects. ADB has strong experience in the fields of energy efficiency, renewable energy, adaptation to climate change and natural resources management, including water and sustainable land management.
- (b) *African Development Bank (AfDB)*'s comparative advantage for the GEF lies in its capacity as a regional development bank. The AfDB is, however, in the initial stages of tackling global environmental issues. Its environmental policy has only recently been approved and is in the process of being integrated into operations. The AfDB will focus on establishing a track record for environmental projects related to the GEF focal areas of Climate Change (adaptation, renewable energy and energy efficiency), Land Degradation (deforestation, desertification) and International Waters (water management and fisheries).
- (c) *European Bank for Reconstruction and Development (EBRD)*'s comparative advantage for the GEF lies in its experience and track record in market creation and transformation, and ensuring sustainability through private sector (including small- and medium-sized enterprises) and municipal environmental infrastructure projects at the country and regional level in the countries of eastern and central Europe and central Asia, especially in the fields of energy efficiency, mainstreaming of biodiversity and water management.

⁸ Subsequent rounds of LDCF funding will likely be more flexible and take into account differing factors, such as vulnerability to climate change; national and local circumstances including population and country size; and national and local capacity to cope with current vulnerability and future change.

⁹ Cape Verde was part of the LDC group at the inception of the NAPA process, and is thus eligible for funding under the LDCF. Somalia is not a signatory to the UNFCCC, and thus not eligible for LDCF funding.

- (d) *Food and Agriculture Organization (FAO)*'s mandate to "raise levels of nutrition, improve agricultural productivity, better the lives of rural populations and contribute to the growth of the world economy" guides its work on climate change. Based on its multidisciplinary activities in agriculture, forestry, fisheries, aquaculture, livestock, economics, rural development and food security FAO applies an integrated approach to climate change adaptation and mitigation. This means identifying current and potential challenges and assisting its Members, particularly the most vulnerable, to improve their capacities to confront the negative impacts of climate change and associated climate variability, and helps identify ways to maximize any opportunities that may emerge. FAO places particular importance on identifying opportunities and practices that have potential to promote synergies among adaptation and mitigation objectives and help achieve development goals.

FAO's work covers a broad spectrum of activities which range from local to global and from immediate actions to long-term strategies for dealing with climate change. FAO is committed to an ecosystem approach that embraces agriculture, forestry and fisheries.

Core principles that guide FAO's work on climate change include:

- integrating climate change concerns into food security and development planning across all sectors and spatio-temporal scales,
- seeking a systems approach that builds on synergies in mitigation, adaptation and sustainable food production,
- working in a demand-driven, location-specific and participatory manner, considering gender-specific needs as well as priorities of indigenous communities,
- addressing adaptation and mitigation as an ongoing social learning process that integrates local and scientific knowledge,
- promoting synergies among the international conventions and agreements on climate change, desertification, biodiversity and forestry.

FAO's six priority action areas for climate change adaptation in agriculture, forestry and fisheries:

- data and knowledge for impact assessment and adaptation
- governance for climate change adaptation
- livelihood resilience to climate change
- conservation and sustainable management of biodiversity
- innovative technologies
- improved disaster risk management

- (e) *Inter-American Development Bank (IADB)*'s comparative advantage for the GEF includes investment projects at the country and regional level in Latin America and the Caribbean. IDB finances operations related to the following GEF focal areas: Biodiversity (protected areas, marine resources, forestry, biotechnology), Climate Change (including biofuels), International Waters (watershed management), Land Degradation (erosion control), and POPs (pest management).

- (f) *International Fund for Agricultural Development (IFAD)*'s comparative advantage for the GEF lies in its work related to land degradation, rural sustainable development, integrated land management, and its role in the implementation of the UN Convention to Combat Desertification. IFAD has been working intensively in marginal lands, degraded ecosystems and in post-conflict situations.

- (g) *United Nations Development Programme (UNDP)*'s comparative advantage for the GEF lies in its global network of country offices, its experience in integrated policy development, human resources development, institutional strengthening, and non-governmental and community participation. UNDP assists countries in promoting, designing and implementing activities consistent with both the GEF mandate and national sustainable development plans. UNDP also has extensive inter-country programming experience. Regarding adaptation activities the UNDP website says: "UNDP assists countries to develop overarching national adaptation programmes where climate change risks are routinely considered as part of national planning and fiscal policies formulation. Such activities ensure that information about climate-related risks, vulnerability, and options for adaptation are incorporated into planning and decision-making in climate-sensitive sectors (e.g. agriculture, water, health, disaster risk management and coastal development), as well as into existing development plans and poverty reduction efforts (e.g. Poverty Reduction Strategies Papers – PRSPs)".
- (h) *United Nations Environment Programme (UNEP)*'s comparative advantage for the GEF is related to its being the only United Nations organisation with a mandate derived from the General Assembly to coordinate the work of the United Nations in the area of environment and whose core business is the environment. UNEP's comparative strength is in providing the GEF with a range of relevant experience, proof of concept, testing of ideas, and the best available science and knowledge upon which it can base its investments. It also serves as the Secretariat to three of the MEAs (multilateral environment agreements), for which GEF is the/a financial mechanism. UNEP's comparative advantage also includes its ability to serve as a broker in multi-stakeholder consultations.
- Regarding adaptation activities, the UNEP website says: "UNEP is helping developing countries to reduce vulnerabilities and build resilience to the impacts of climate change. UNEP will build and strengthen national institutional capacities for vulnerability assessment and adaptation planning, and support national efforts to integrate climate change adaptation measures into development planning and ecosystem management practices. The work will be guided by and contribute to the Nairobi Work Programme on Impacts, Vulnerability and Adaptation. UNEP will also work to promote sustainable land use management and reduced emissions from deforestation and degradation, bridging adaptation and mitigation".
- (i) *United Nations Industrial Development Organization (UNIDO)*'s comparative advantage for the GEF is that it can involve the industrial sector in GEF projects in the following areas: industrial energy efficiency, renewable energy services, water management, chemicals management (including POP and ODS), and biotechnology. UNIDO also has extensive knowledge of small and medium enterprises (SMEs) in developing and transition economy countries.
- (j) *The World Bank*'s comparative advantage for the GEF is as a leading international financial institution at the global scale in a number of sectors, similar to the comparative advantage of the regional development banks. The World Bank has strong experience in investment lending focusing on institution building, infrastructure development and policy reform across all the focal areas of the GEF.

VIII. THE GEF PROJECT CYCLE FOR THE LDCF FOR IMPLEMENTATION OF NAPAS

The LDCF project cycle for NAPA implementation consists of two main steps:

- *The project identification stage (PIF-approval):* **The primary purpose of this step is to assure that the project idea is conceptually aligned with the mandate for LDCF, and thus eligible for funding.** Once the PIF is approved (and therefore enters the LDCF Work Program), funds remain reserved for that particular project under the condition that a fully developed project proposal is submitted to the GEF Secretariat before the milestone date indicated in the PIFs cover page. **There is no minimum standard for preparation time – a fully developed project can be submitted as soon as the PIF is approved.** However, a maximum of 22 months is allowed for project development. Following the PIF approval, the project is also eligible for an optional project preparation grant (PPG) to facilitate work necessary to prepare the fully developed proposal.

- *The detailed project description stage (CEO endorsement):* The purpose of the Chief Executive Officer (CEO) endorsement document is twofold. First, it should further **elaborate and describe the technical rationale of the project** (i.e. how the proposed activities will reduce vulnerability and increase adaptive capacity in the targeted sector(s)). Second, it should **clearly demonstrate that all details of project implementation have been established**, and that the project is ready for implementation. It includes the following items:
 - fully developed project proposal;
 - full description and budgeting of all project activities;
 - details of implementation arrangements;
 - all official approvals;
 - signed co-financing letters;
 - arrangement for monitoring and evaluation (M&E.)

In addition to these two steps and once the PIF is cleared for Council approval, the project will be eligible for **an optional project preparation grant (PPG), to cover the costs related to the preparation of the detailed project description stage.** Costs associated with the preparation of project documents, consultations between host country and the implementing agency, and other costs included in the agency service fee¹⁰ should not be covered by the PPG. A separate template for PPG requests (including detailed guidelines on its individual components) is available at the GEF website (under projects) and in ANNEX II.

¹⁰ Details can be found in (GEF/C.23/8) available at the GEF webpage.



IX. STEP 4

PIF PROCESSING – PIF APPROVAL PROCESS

The most recent template for submission of a PIF to the LDCF is available through the GEF website under 'projects' (<<http://www.thegef.org>>), and is attached in ANNEX II of this guide. **PIFs can be submitted as soon as they are ready on a rolling basis (no deadlines), and are reviewed and approved by the GEF secretariat and LDCF/SCCF 11 Council on a rolling basis to facilitate the fastest possible turn around.** After a 10 day review period in the LDCF/SCCF GEF secretariat, projects are either recommended for Council review and approval (four weeks for additional review by the LDCF/SCCF Council) or returned to the GEF agency with a clear indication of the issues preventing recommendation for Council approval.

9.1. PIF TEMPLATE

The PIF template includes two main parts: a project framework and budget section, and a project justification section.

9.1.1. PROJECT FRAMEWORK AND BUDGET SECTION

The project framework and budget section provides a basic overview of the project, including its overall objective, the project's main components, and the expected outcomes/outputs of each component. Also this section requires an indicative budget at the level of each component and a specification of expected co-financing and sources. **Budget information is for indicative purposes only, and detailed cost-estimates and finalized co-financing commitments are not expected at this stage.**

9.1.2. PROJECT JUSTIFICATION SECTION

The second section presents a brief description of the baseline situation in the country/region and targeted sector, the specific climate change vulnerability being addressed by the project, the additional activities necessary to reduce climate change vulnerability in the targeted sector (the so-called 'additional cost reasoning'),

the fit of the proposed activities with existing national plans and priorities (most notably the NAPA priorities), and a brief description of related activities (planned and ongoing) in the target sector/region.

A good rule of thumb is that the PIF should, as a minimum, give satisfactory answers to the fundamental review criteria described below. More detailed guidance on the individual sections of the PIF template can be found in the preparation guidelines attached to the PIF template.

9.2. PIF CRITERIA FOR APPROVAL

A list of review questions asked during the internal review process at PIF level in the GEF secretariat is expressed below. It is clustered in four categories of 'critical information' which must be available in a PIF submission:

9.2.1. BASIC PROJECT IDEA (ADDITIONAL COST ARGUMENT)

- What is the likely baseline development for the targeted sector without LDCF investment?
- What are the climate change vulnerabilities?
- What are the specific additional activities to be implemented to make baseline development (more) 'climate resilient'?

9.2.2. FIT WITH NAPA PRIORITIES

- Does the project respond to the highest priority(ies) identified in the NAPA, and if not, why?

9.2.3. IMPLEMENTATION SET UP

- Who will implement the project and why (including comparative advantage of implementing agency(ies) and executing agency(ies))?
- Is the project being coordinated with related projects and programmes to avoid duplication of activities?

¹¹ SCCF-Special Climate Change Fund.

9.2.4. INDICATIVE BUDGET AND CO-FINANCING

- How will the project components be weighted in terms of budget and why?
- What levels and sources of ‘co-financing’ (see definition below) is the project expecting to leverage?

A project is, by definition, recommended at the time when all of the eligibility criteria, consistent with Convention guidance, are met. If one or more of the above points of ‘critical information’ is missing and/or insufficiently described in the PIF – the reviewer will be unable to provide clear answers to the review questions, and would, therefore, have to request that such information is provided by the implementing agency in a revised PIF. Such requests for additional information is the most common reason for projects not being recommended within the initial 10 day review period (please refer to PIF processing below).

It is important to emphasize that the GEF secretariat *does not* impose any strategic direction on the LDCF other than that given by the COP guidance to the LDCF, and that defined in the individual country NAPAs.

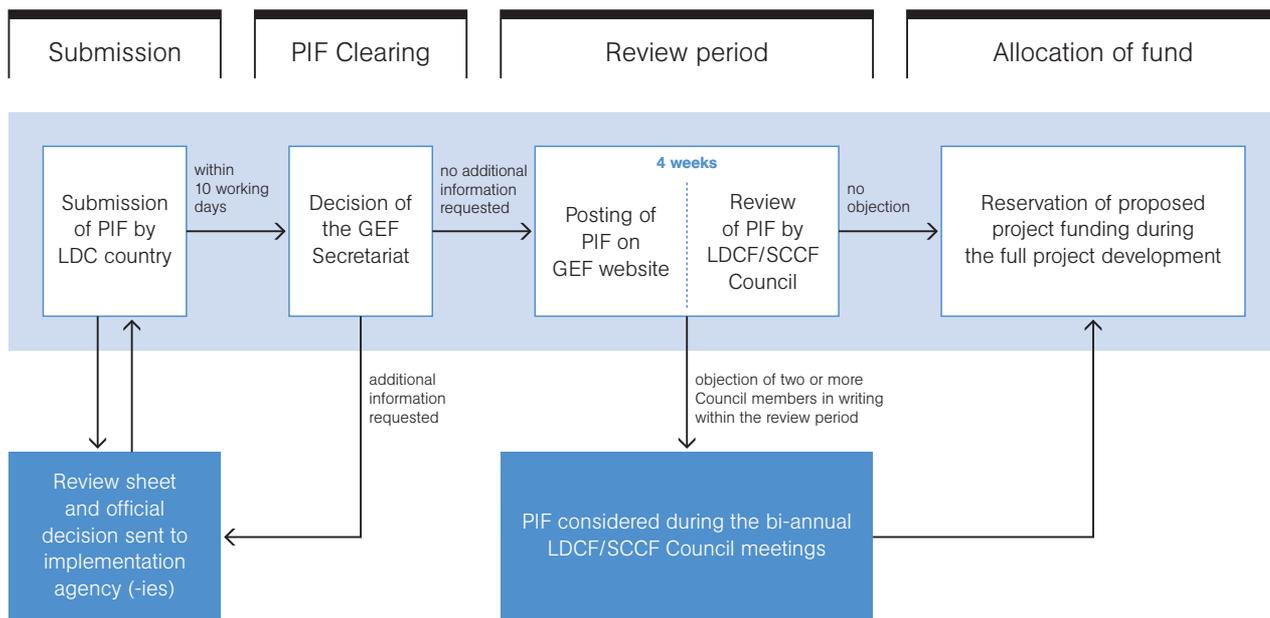
9.3. PIF PROCEDURES AND PROCESSING

Upon receiving a request from a country through an endorsement letter with an attached concept note about the project to be developed, a GEF agency will work with the national UNFCCC Focal Point to prepare a PIF. The PIF is then submitted to the GEF Secretariat for processing. The GEF secretariat reviews and clears the PIF for further processing then posts the PIF on the GEF webpage, etc., as shown in FIGURE IX-10.

PIFs are submitted and processed on a rolling basis, meaning that there is no deadline for submission. As soon as the implementing agency submits the PIF to the GEF secretariat the clock starts ticking. The procedures and processing are presented in the diagram below.

It is worth noting that all agencies and LDCs have the opportunity to meet with, e-mail or call GEF Secretariat Program Managers and ask for clarifications about the project cycle or specific questions on their projects through ‘upstream consultations’ and/or bilateral meetings.

Figure IX-10. Flow of procedures and processing for the project identification form (PIF) for LDCF projects



X. STEP 5

PROJECT PREPARATION GRANT (PPG)

10.1. DEVELOPING A FULL PROJECT PROPOSAL

A Party may request a Project Preparation Grant, should it be needed. The PPG proposal should describe a logical process toward developing the full project proposal (CEO endorsement), including a reasonable budget and a detailed schedule of preparation activities to be implemented. Besides from these guiding principles there are no technical criteria imposed on the PPG.

Additional co-financing should be raised for the purpose of project development as it demonstrates commitment and involvement on the part of the project proponent (in kind is generally acceptable).

10.1.1. SCHEDULE OF PREPARATION ACTIVITIES

A typical schedule of activities for the PPG is shown in TABLE AII-4. There are usually calls from LDC Parties encouraging the use of national and regional consultants during the project development, and as adaptation evolves there will be an increasing demand for services in the development of project proposals. The LEG has started to compile a roster of experts on adaptation by country, and this can be a useful resource for the GEF agencies.



XI. STEP 6

GEF CEO ENDORSEMENT

The purpose of the CEO endorsement document is twofold:

- First, to further elaborate and describe the technical rationale of the project (i.e. how the proposed activities will reduce vulnerability and increase adaptive capacity in the targeted sector(s)/communities).
- Second, to clearly demonstrate that all details of project implementation have been established, and that the project is ready for implementation.

11.1. TEMPLATE

The submission for CEO endorsement usually includes two separate documents: the ‘CEO endorsement template’, which (in a relatively short form) summarizes all the technical/budgetary information required to answer the review questions at CEO endorsement, and the GEF agency project document, which will usually include detailed background information such as an itemised budget, description of individual project activities, etc. The CEO endorsement template itself asks very similar questions to those posed at the PIF level, but with additional requirements in terms of: the general level of detail expected, a more elaborated budget description, an M&E framework, detailed description of project implementation arrangements, and official documentation in the form of signed letters of endorsement for ‘co-financing’. The CEO endorsement request template should include the most fundamental information, but can otherwise cross-reference to relevant sections of the project document for comprehensive (but essential!) argumentation and description.

The most recent template for the submission of this information to the LDCF is available through the GEF website under ‘projects’ (<<http://www.thegef.org>>). CEO endorsement requests can be submitted as soon as they are ready (no deadlines), but at the latest at the date indicated in the PIF and its approval letter. CEO endorsement requests are reviewed and endorsed by the GEF secretariat and LDCF/SCCF Council on a

rolling basis to facilitate the fastest possible turn around. After a 10 day review period in the GEF secretariat, projects are either endorsed by the CEO (subject to four weeks of LDCF/SCCF Council review) or returned to the GEF agency with a clear indication of the issues preventing recommendation for CEO endorsement.

11.2. CRITERIA FOR CEO ENDORSEMENT APPROVAL

A full list of questions asked during the internal review process in the GEF secretariat is attached in ANNEX III.

A project is, by definition, recommended at the time when all of the review questions relevant at the CEO endorsement stage can be answered with a clear yes by the reviewer. As with the PIF, these questions can be expressed in terms of four categories of ‘critical information’.

11.2.1. PROJECT IDEA AND ADDITIONAL COST ARGUMENT

- Similar to the information provided at PIF stage, but with considerably more detail – especially in terms of specific adaptation activities for each of the project components, and how such activities will contribute to the overall objective, outcomes and outputs of the project.

11.2.2. IMPLEMENTATION SET UP

- Similar to the information provided at PIF stage, but with considerably more detail on the implementation and coordination arrangements.

11.2.3. INDICATIVE BUDGET AND CO-FINANCING

- Similar to the information provided at PIF stage, but with a detailed, itemized budget, including consultancy cost and brief TORs (terms of reference) for all consultants to be hired.
- Letters of endorsement for *all* ‘co-financing’ leveraged by the project.

11.2.4. MONITORING AND EVALUATION FRAMEWORK

- A clear description of the process and a timetable for the M&E process.
- A project strategic results framework identifying clear impact indicators (as opposed to only process indicators), as well as baseline and target values, for each of the project’s outcomes and outputs.

If one or more of the above points of ‘critical information’ is missing and/or insufficiently described in the CEO endorsement submission – the reviewer will be unable to provide clear answers to review questions in, and would, therefore, have to request that such information is provided by the implementing agency in a revised CEO endorsement submission. However, as long as the project proposal is conceptually and budgetarily consistent with the proposal presented in the original PIF, the general eligibility of the project is not brought into question at this stage.

11.3. STRATEGIC RESULTS FRAMEWORK/LOGFRAME

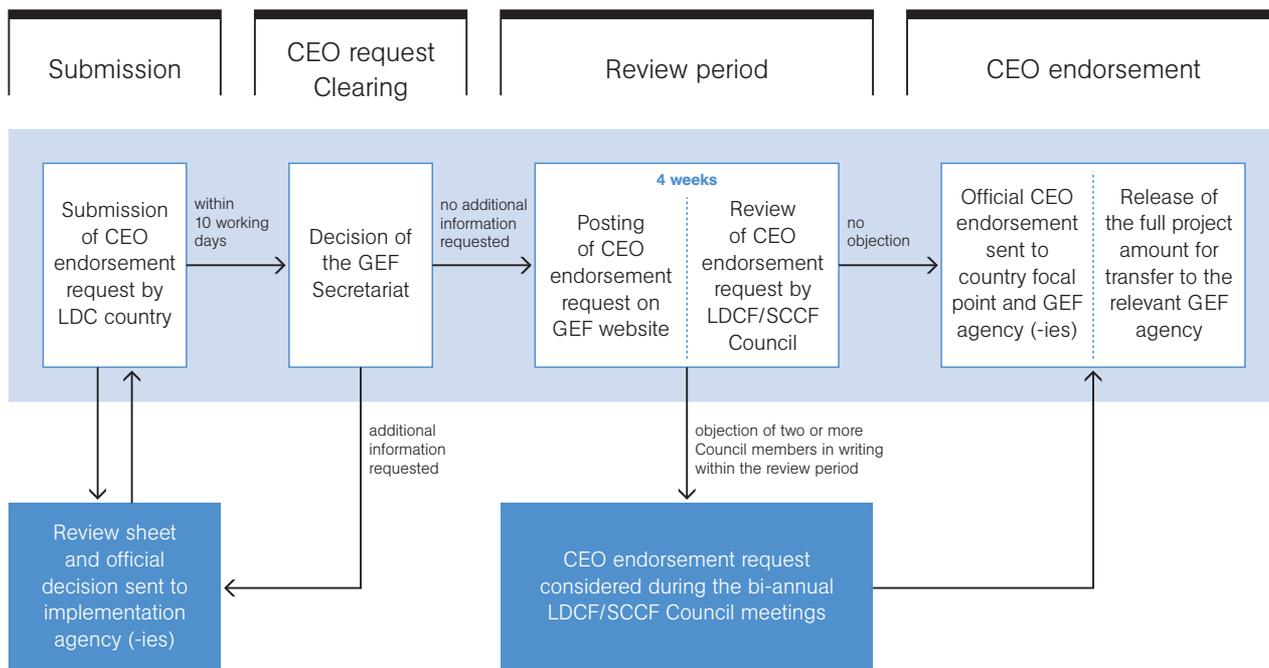
A strategic results framework is a table that shows the objectives, outcomes, outputs and indicators. This is a key component of every project document as it summarises the main elements of the project. Given the many adaptation projects already underway in different sectors in the LDCs, sample frameworks are available through published project documents to guide project development and promote learning between countries.

11.4. CEO ENDORSEMENT PROCEDURES AND PROCESSING

11.4.1. SUBMISSION

CEO endorsement requests can be submitted as soon as they are ready (no deadlines), but at the latest on the date indicated in the PIF and its approval letter. As soon as the implementing agency submits the CEO endorsement to the GEF secretariat the clock starts ticking. The procedures and processing are presented in FIGURE XI-11.

Figure XI-11. Flow of procedures and processing for the CEO endorsement of LDCF projects





UNFCCC STEP-BY-STEP GUIDE FOR IMPLEMENTING
NATIONAL ADAPTATION PROGRAMMES OF ACTION

Chapter D

ANNEX

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Figure AII-14.

Figure AII-14. Categorization of NAPA projects being implemented under the LDCF (as of June 2009)

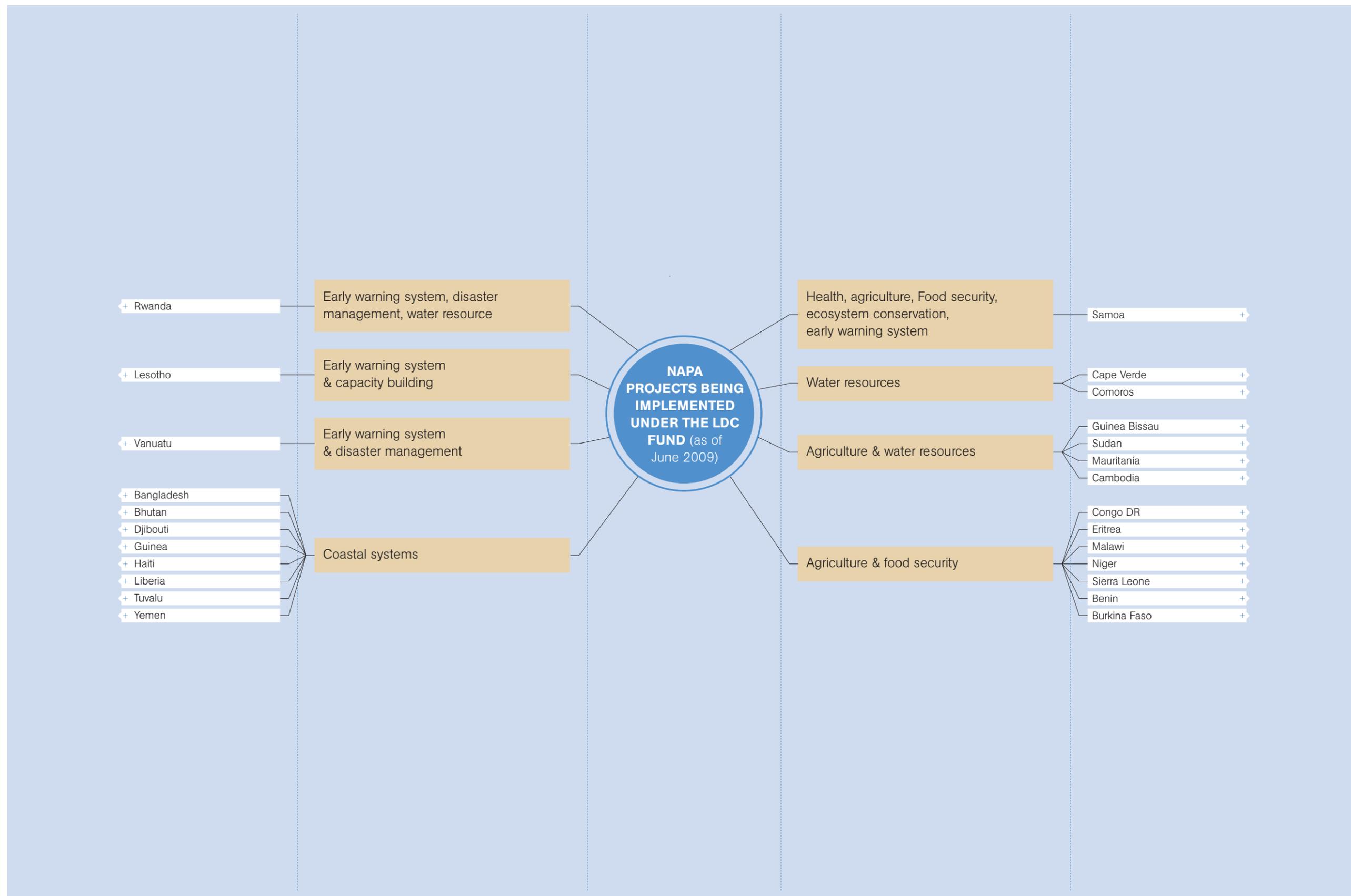


Figure AII-12. Outline of key steps in project development between the country, the GEF secretariat and the GEF agency showing flow of inputs and processing

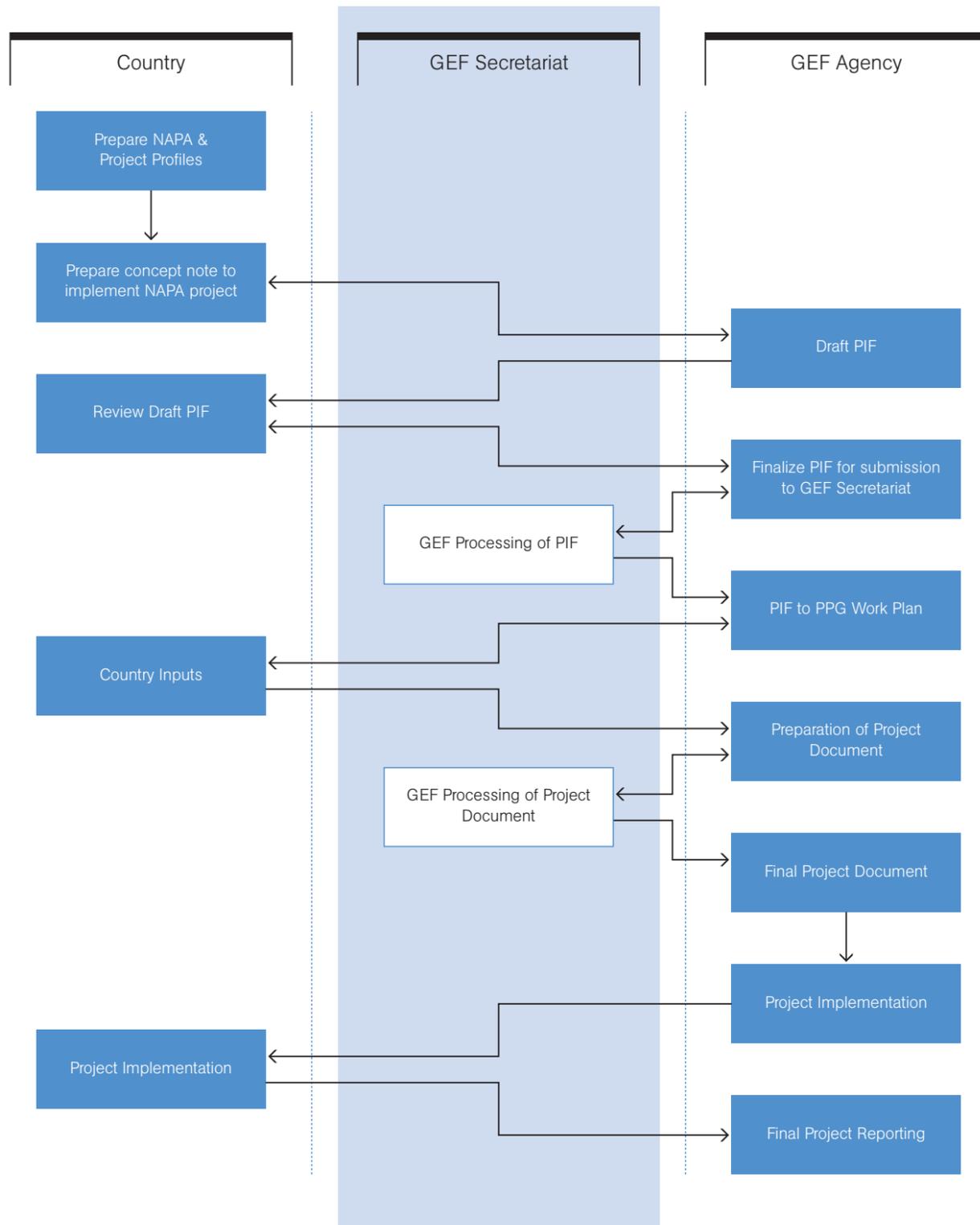
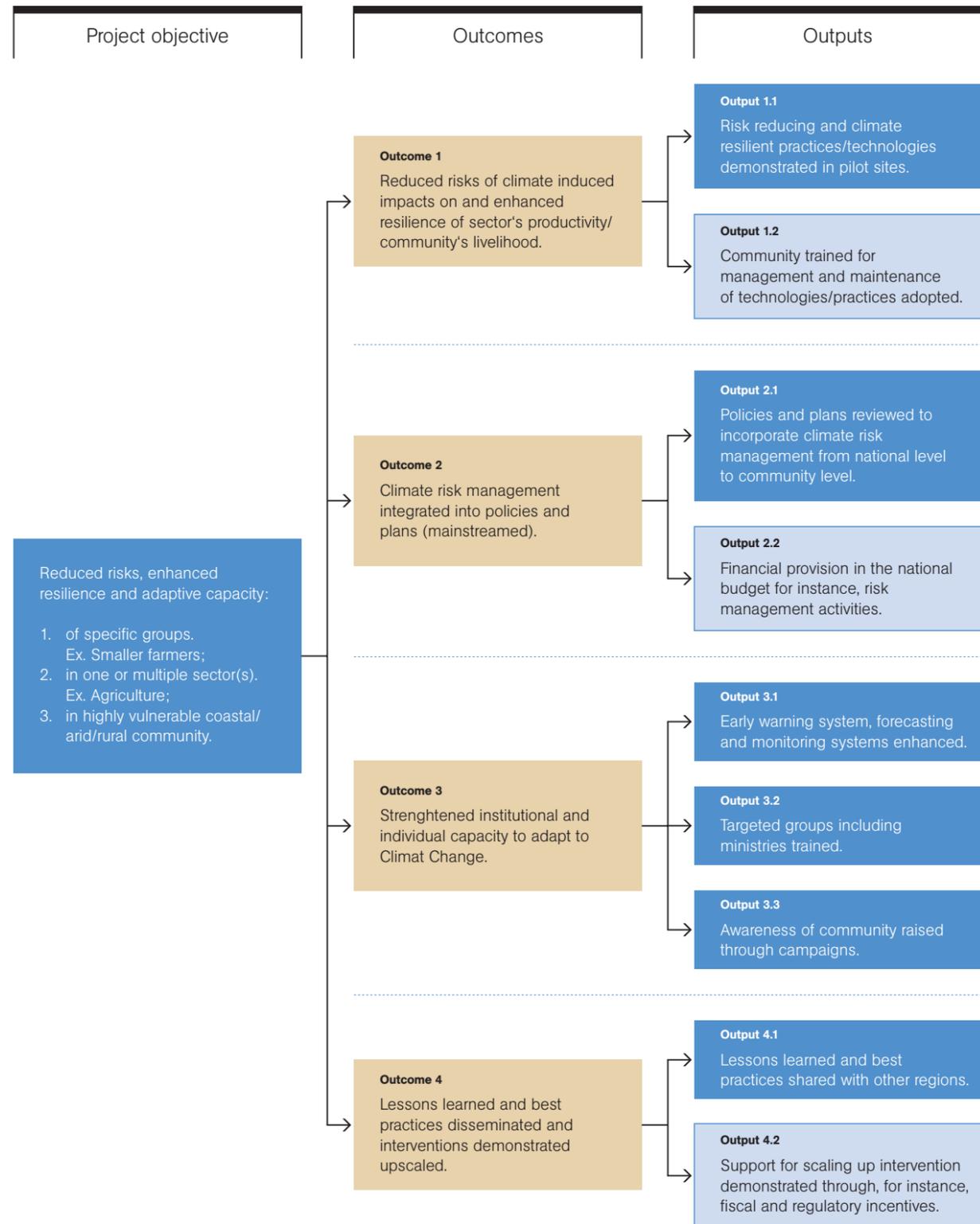


Figure AII-13. Basic design for LDCF projects under UNDP based on projects under implementation as of March 2009



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Table AII-4.

Table AII-4. Data and knowledge: Data characterisation and assessments needed to effectively plan, design and implement adaptation

Data type/Topic	Source	Typical situation	Ideal situation	Proposed solutions in the context of NAPAs
Climate data, normals, extremes, history, trends	<ul style="list-style-type: none"> National meteorological and/or hydrological services (NMHSs) 	<ul style="list-style-type: none"> A few basic under-equipped observing stations. These stations often do not capture all essential climate variables. Lack of data at the local and national levels lead to inaccurate assessment of potential effects of climate change and design of adaptation strategies.^a 	<ul style="list-style-type: none"> High density regional and national observing stations to provide data for impact assessment and adaptation activities. The observing network should provide daily and/or hourly observations to establish extreme events.^b 	Allocation of a percentage (5%) of funds from adaptation projects to support climate observations.
Monitoring and early warning systems for climate and impacts	<ul style="list-style-type: none"> National meteorological and/or hydrological services (NMHSs) Disaster Management Offices 	<ul style="list-style-type: none"> At the national level, most NMHSs are hampered by weak infrastructure, inability to provide basic services and an overall lack of resources to meet development objectives.^c The sole reliance is on regional and global monitoring centres for provision of information. 	<ul style="list-style-type: none"> Monitoring systems for climate indices, extremes, trends, droughts, floods, sea level rise, phenology, poverty, and other variables, as well as capacity and resources to maintain and use these systems are available at the local and national levels. Information generated thereon reaches and benefits communities. 	Allocation of a percentage of adaptation projects to support observations and early warning systems.
Models and tools	<ul style="list-style-type: none"> National meteorological and/or hydrological services (NMHSs) National climate change office 	<ul style="list-style-type: none"> Available simplified models have very low temporal and spatial resolution and are not suitable for designing community adaptation projects. There is a lack of expertise to interpret results from global and regional climate models. 	<ul style="list-style-type: none"> Capacity and means to downscale data and information from global models. Capacity and resources to run limited area models GIS, remote sensing, simulation, weather generators available with adequate resources to run them. 	As part of the activities, adaptation projects should: <ul style="list-style-type: none"> provide fellowships for education and training in climate modelling and impact studies, promote integration of climate studies in schools, support the participation of LDCs' experts in regional and international research activities.
Process models of different systems	<ul style="list-style-type: none"> National climate change office Government ministries 	Process models are not available in the LDCs. Most LDCs use products generated by regional and global centres.	<ul style="list-style-type: none"> Models for linking climate with various processes, food chains, water balance, biodiversity, wildlife, life histories, phenology, etc. available at the local and national levels in LDCs. Local capacity available to interpret and apply information generated by the models. 	As part of the activities, adaptation projects should support and promote centralised database management systems.
Baseline information on key vulnerable sectors	<ul style="list-style-type: none"> Relevant ministries, national agencies and sectors 	<ul style="list-style-type: none"> Basic information available in national communications and NAPAs. More work needed to update the information and to be put into adaptation information systems. 	<ul style="list-style-type: none"> Baseline information on key vulnerable sectors such as agriculture, water, land use, coastal resources, health, is available and easily accessible for adaptation planning and implementation. 	Development and update of baseline information on key sectors is integrated within project preparation funds for building adaptation projects, and these may not be limited to the sectors covered by the adaptation project.
Baseline adaptation activities, maladaptation and gaps	<ul style="list-style-type: none"> Local governments National climate change office 	<ul style="list-style-type: none"> Climate change adaptation is often addressed indirectly by ongoing national programmes and policies, including bilateral and multilateral programmes. In some cases where climate change has not been appropriately factored in, cases of maladaptation occur. 	<ul style="list-style-type: none"> Baseline activities aligned to follow climate change adaptation pathways. Development programmes from bilateral and multilateral partners overseen to encourage adaptive capacity, build climate resilience and manage adverse effects. 	During project preparation, funds should be accordingly adjusted to allow countries to assess and update a database of baseline adaptation activities, even those that are not necessarily relevant to the project, but important to the country for planning purposes
Population distribution and demography	<ul style="list-style-type: none"> National statistics offices 	<ul style="list-style-type: none"> Demographic surveys, are currently limited to the traditional study of the size, structure and distribution of populations with respect to birth, age, death, education, nationality, religion, ethnicity, etc. No special systems are in place for capturing essential demographic data for climate change impact analysis and adaptation planning and implementation. 	<ul style="list-style-type: none"> A system for the measurement of climate change impacts and vulnerability that is responsive to national and international data needs for adaptation planning and implementation. This system should be integrated within the national demographic surveys. 	Adaptation projects should include support for local and national statisticians to build a system for the measurement of climate change impacts and vulnerability that is responsive to national and international data needs for adaptation planning and implementation.

Table AII-4. Data and knowledge: Data characterisation and assessments needed to effectively plan, design and implement adaptation (continued)

Data type/Topic	Source	Typical situation	Ideal situation	Proposed solutions in the context of NAPAs
Inventory and monitoring of livelihoods	<ul style="list-style-type: none"> National statistics offices 	<ul style="list-style-type: none"> Most countries now have systems of data collection for household surveys but with varying levels of experience and infrastructure.^d However, no specific focus has been given to climate change impacts, vulnerability and adaptation. 	<ul style="list-style-type: none"> Household surveys that include data on climate change impacts, vulnerability and adaptation being periodically carried out for key vulnerable sectors such as agriculture, water, land use, coastal resources. 	Demographic surveys for climate related information should be considered as part of adaptation projects. Each adaptation project should have demographic surveys as one of the activities in, and not limited to, its focus area.
Land use patterns, plans and policies	<ul style="list-style-type: none"> Lands ministry or authority in the country 	<ul style="list-style-type: none"> For many LDCs, accurate land use data does not exist, and what is available is outdated, and non-periodic for monitoring land use change patterns. Plans and policies do not recognise linkages between land use and climate change vulnerability and adaptation. 	<ul style="list-style-type: none"> LDCs are able to map and update land use patterns by categories such as forestland, cropland, grassland, wetlands, settlements, and other. Land use policies, plans and practices are cognisant of climate change, and maximise on preserving ecosystem integrity and biodiversity, maximising benefits from agricultural practices and encouraging green environments 	Every adaptation project should have in its budget an allocation for developing and updating land use information.
Policies, development plans, programmes, budgeting	<ul style="list-style-type: none"> Local governments Central Planning Ministry Finance Ministry 	<ul style="list-style-type: none"> A number of interventions on integrating climate change adaptation into development policies exist. Most of the policies are to be translated into action by local governments. This brings massive responsibilities to the local governments without increases in human or financial resources.^e 	<ul style="list-style-type: none"> Climate change risks are routinely considered as part of national planning and fiscal policies formulation.^f Policies, plans and programmes take NAPAs into consideration. Actions by local and national governments are supported by international actions for appropriate capacities and resources.^g 	International support for developing and implementing policy frameworks should also build local level capacity to support the additional policies by providing financial and technical resources.
Impact of past programmes and activities	<ul style="list-style-type: none"> Central planning and finance ministries National climate change office 	<ul style="list-style-type: none"> There is limited in country capacity to evaluate impact of previous interventions on various sectors. Data sharing among institutions and efficient archiving of the impacts. 	<ul style="list-style-type: none"> A system for evaluating the impacts of past programmes in relation to climate change adaptation. Models for lessons and best practices and a system for building on these. 	Adaptation project funds support household surveys to investigate the impacts of programmes.
System of systems	<ul style="list-style-type: none"> National statistics office 	<ul style="list-style-type: none"> Data and information are available in independent and isolated pieces that are difficult and cumbersome to assimilate for climate change impact, vulnerability and adaptation analyses. 	<ul style="list-style-type: none"> Harmonised database systems for essential data and information requisite for framing and implementing adaptation existing in all LDCs. Such systems should also be available to local communities in appropriately easy to understand codes and language. 	Adaptation projects dedicate a fraction of their budget to build a harmonised database system at the national level. This database should have an easy to use interface for local and national policymakers.

^a <http://www.wmo.int/pages/themes/lcds/documents/WMO_LDC06_web.pdf>
^b GCOS-82 (WMO/TD No. 1143) – The second report on the adequacy of the global observing systems for climate in support of the UNFCCC. <http://www.wmo.int/pages/prog/gcos/Publications/gcos-82_2AR.pdf>
^c <http://www.wmo.int/pages/themes/lcds/documents/WMO_LDC06_web.pdf>
^d United Nations (2005). Household Sample Surveys in Developing and Transition Countries. Statistical Papers, Series F, No. 96. ST/ESA/STAT/SER.F/96. New York
^e Commission on climate change and development (2009). Closing the gaps. <<http://www.ccdcommission.org>>
^f UNDP (2009). Integrating Adaptation into Development. <<http://www.undp.org/climatechange/adapt/mainstream.html>>
^g Commission on climate change and development, 2009. Closing the gaps. <<http://www.ccdcommission.org>>

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Table AII-5. Strategic Results Framework (SRF, formerly GEF Logical Framework): Bangladesh

Project Title	Community-based Adaptation to Climate Change through Coastal Afforestation in Bangladesh				
Implementing agency	UNDP				
Executing agencies	Department of Forest, Ministry of Environment and Forest (MOEF), Bangladesh Forest Research Institute; Ministry of Land; Department of Agricultural Extension, Ministry of Fisheries & Livestock, United Nations Development Program				
Project duration	March 2009 to April 2013				
Total budget					USD 5,400,000
GEF/LDCF					USD 3,300,000
UNDP (Parallel, TRAC)					USD 1,100,000
Government (in kind)					USD 1,000,000
Project Strategy	Objectively verifiable indicators				
Goals	Promote climate-resilient development in the coastal areas of Bangladesh				
Outcome/Output	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Objective – Reduce the vulnerability of coastal communities to the impacts of climate change-induced risks in 4 upazilas in the coastal districts of Barguna and Patuakhali (Western Region), Bhola (Central Region), Noakhali (Central Region), and Chittagong (Eastern Region)	<ul style="list-style-type: none"> Number of households that have increased their adaptive capacity to climate change-induced risks in targeted coastal districts 	<ul style="list-style-type: none"> Coastal communities face climate change risks largely due to lack of adaptive capacity Recent scientific findings project 15% increases in salinity, cyclonic events, and inundation of coastal areas, with up to 35 million people becoming climate refugees from the coastal areas by 2050 	<ul style="list-style-type: none"> By the end of the project, over 80% of households in project communities are able to anticipate climate risks and select the most effective risk reduction options By the end of the project, at least 75% of MoL and MoEF government officials and coastal management planners in target districts are able to identify climate-induced risks in coastal areas and are capable of prioritising, planning, and implementing effective adaptation measures with the involvement of communities. 	<ul style="list-style-type: none"> Qualitative-based surveys (QBS)/ Interviews/Vulnerability reduction assessment (VRA) DMB Legislation End of project evaluation report 	<ul style="list-style-type: none"> Stakeholders are able to perceive reductions in vulnerability over the time-scale determined by project duration Effective coordination between MoL and MoEF exists and institutional linkages with other relevant ministries and institutions is functional and supportive
Outcome 1 – Enhanced Resilience of Vulnerable Coastal Communities and Protective Systems to Climate Risks	<ul style="list-style-type: none"> Percentage of locally designed, sustainable adaptation measures demonstrating effectiveness in reducing climate vulnerability 	<ul style="list-style-type: none"> Disaster management efforts have increased preparedness for cyclones in some areas; however, there is a lack of planned measures and structured analysis of options to adapt to a broader range of both extreme and gradual climate change – induced hazards in coastal areas 	<ul style="list-style-type: none"> By end of the project, over 80% of the adaptation measures employed by the project demonstrate their effectiveness and sustainability in reducing climate vulnerability in coastal communities 	<ul style="list-style-type: none"> Project progress reports and end of project evaluation report 	<ul style="list-style-type: none"> Communities continue to be supportive of CBA Extreme climate events have not irreparably destroyed coastal lands in project sites Corruption does not significantly impede implementation of adaptation measures Mangrove and non-mangrove species chosen for afforestation can thrive in project sites
Output 1.1 – Community-Based Adaptation Initiatives Defined for 4 Upazilas	<ul style="list-style-type: none"> Number of CBA plans developed with active participation of local communities for afforestation, livelihood diversification, and local warning systems 	<ul style="list-style-type: none"> Local-level adaptation plans to deal with climate change risks do not exist in target upazilas 	<ul style="list-style-type: none"> By the end of Year 1, 1 CBA plan on coastal afforestation developed for each target upazila (4 in total) By the end of Year 1, 1 CBA plan on livelihood diversification developed for each target upazila (4 in total) By the end of Year 1, 1 CBA plan on extreme climate warning communications developed for each target upazila (4 in total) 	<ul style="list-style-type: none"> CBA plans Reports describing community involvement in the process, including: vulnerability and needs assessment reports, feasibility reports, assessment methodologies, and maps 	<ul style="list-style-type: none"> Communities are willing to participate and contribute in the assessment and design process of developing CBA plans FD field staff, Forest Research Institute, and district/ local administrations extend required assistance to project team and communities

Table AII-5. Strategic Results Framework (SRF, formerly GEF Logical Framework): Bangladesh (continued)

Outcome/Output	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Output 1.2 – Climate-Resilient and Community-Based Coastal Afforestation Measures Implemented	<ul style="list-style-type: none"> Number of hectares of mangrove and non-mangrove species planted and continuously maintained by communities Number of people trained and participating in mangrove nursery and maintenance 	<ul style="list-style-type: none"> Coastal afforestation programs have been ongoing since 1960 in some coastal areas (e.g. Coastal Greenbelt Project); however, measures to ensure the sustainability of forested lands are not implemented, and the potential for protection against climate change-induced hazards is not fully realised 	<ul style="list-style-type: none"> By the end of the project, 6000 ha of mangrove species, 600 ha of non-mangrove species, 1000 km of coastal strip, and 100 ha of model demonstration species are planted in each of the target upazilas (6,700 ha and 1,000 km in total) By the end of the project, 15,000 people have been trained on mangrove nursery establishment and community-based forest management By the end of the project, at least 4,000 local people have participated in the management and protection of new plantations financed by the project 	<ul style="list-style-type: none"> Project progress reports Independent evaluation reports Inventory stock list of seedlings Training protocols 	<ul style="list-style-type: none"> Communities will be willing to participate in coastal afforestation activities. A sufficient number of seedlings survive the nursery stage and can be planted Land for the pilot areas is not lost to an extreme event during the project
Output 1.3 – Climate-Resilient Livelihood Options Enabled and Promoted	<ul style="list-style-type: none"> Number of households in target upazilas with access to climate-resilient livelihood options 	<ul style="list-style-type: none"> Livelihood programs are ongoing in some coastal areas (e.g. Chittagong); however, they do not take climate change impacts into account and are not integrated with afforestation measures 	<ul style="list-style-type: none"> By Year 2, at least 60% of villages in the target upazilas promote alternative livelihood options and create conducive structures that enable at least 1,600 households to actively adopt them. By the end of the project, 400 households in each of the target upazilas have actively expanded their livelihood options through the project (1,600 total) 	<ul style="list-style-type: none"> Project progress reports QBS/VRA 	<ul style="list-style-type: none"> Natural resources required for livelihood options are not damaged in extreme events Government and NGOs continue to be willing to provide required support for livelihood options Climate-resilient livelihood options provide at least as much income as non-climate-resilient options
Output 1.4 – Warning Communications for Extreme Climate Events Improved	<ul style="list-style-type: none"> Number of communities with effective local warning systems for increasingly frequent climate hazards Percentage of fishermen able to receive and respond to warning signals from the system in time to avoid human and material losses 	<ul style="list-style-type: none"> Basic warning systems for cyclones exist in limited areas (e.g. different coloured flags displayed on towers according to sea conditions); however, most communities in the target upazilas have inadequate access to warning information for communicating information to vulnerable fishermen. 	<ul style="list-style-type: none"> By Year 3, assessments of local early warning needs, as required for sustainability of climate-resilient alternative livelihood options, conducted in communities in target upazilas (4 assessments in total) 	<ul style="list-style-type: none"> Project progress reports, including reports on public awareness campaigns Mock drill reports QBS 	<ul style="list-style-type: none"> In the event of warnings, safe response actions exist for vulnerable fishermen Government and NGOs continue to be willing to provide required support for local warning systems Infrastructure exists for receiving cyclone warnings from national climate information services at the target district and local levels in a timely manner
Outcome 2 – Climate Risk Reduction Measures Incorporated into Coastal Area Management Frameworks	<ul style="list-style-type: none"> Percentage of national planners, district authorities, and communities able to identify climate risks and prioritise, plan, and implement effective adaptation measures 	<ul style="list-style-type: none"> Coastal development planners currently take certain extreme events into account at the national, district, and local levels, but the capacity to plan for and react to dynamic climate change risks is very low. There is a lack of an integrated framework and human and institutional capacity for assessing, planning for, and addressing climate change-induced risks at coastal areas. 	<ul style="list-style-type: none"> By the end of the project, at least 75% of MoL and MoEF civil servants at the national level and in targeted districts are able to identify climate risks and prioritise, plan, and implement measures for adaptation in coastal areas 	<ul style="list-style-type: none"> QBS/interviews Training reports 	<ul style="list-style-type: none"> MoL and MoEF officials remain supportive to the project's capacity building initiative Appropriate staff members undergo training and staff turnover does not negate training benefits MoL and MoEF continue to support adaptation within coastal development programs, and to apply and maintain adaptive capacity built during the project

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Table AII-5.

Table AII-5. Strategic Results Framework (SRF, formerly GEF Logical Framework): Bangladesh (continued)

Outcome/Output	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Output 2.1 – National Planners and Policymakers Trained in Climate-Resilient Coastal Development	<ul style="list-style-type: none"> Number of capacity building materials and tools developed Number of national training seminars Percentage of national sectoral planners with improved understanding of climate change risks and adaptation measures 	<ul style="list-style-type: none"> Current capacity at the national level relevant to the integrated planning and management of climate change and adaptation issues is limited to a core group of experts within the Climate Change Cell, research institutions, and the NAPA team 	<ul style="list-style-type: none"> By the end of Year 1, 5 briefing notes, 5 fact sheets, and 1 cross-sectoral guideline for climate-resilient coastal planning developed and disseminated By the end of Year 2, 2 national training seminars for relevant national ministries and organisations on climate-resilient coastal planning conducted (2 total) By the end of the project, at least 80% of relevant national sectoral planners are able to anticipate climate change-induced risks in their professional sector and advocate/plan for suitable corresponding adaptation measures 	<ul style="list-style-type: none"> Briefing notes, factsheets, and cross-sectoral guidelines Capacity assessment report, training reports, and QBS/interviews 	<ul style="list-style-type: none"> Concerned ministries and other stakeholders organisations are willing to participate in capacity development initiatives Staff who are unfamiliar with climate change, rather than previously identified climate change experts or focal points within ministries, will attend trainings Stakeholders relevant for decision and policy making in coastal zone management are correctly identified v
Output 2.2 – District Officials Trained in Facilitating Community-Based Adaptation	<ul style="list-style-type: none"> Number of regular district-level climate change seminars Number of district officials with a deeper understanding of climate risks and CBA options in their districts Percentage of district officials able to anticipate climate change risks and facilitate CBA measures in coastal areas 	<ul style="list-style-type: none"> Although there is a certain competence in disaster management, especially in response planning, the current capacity of district officials is extremely low with regard to climate change issues 	<ul style="list-style-type: none"> By the end of Year 3, 3 climate change seminars conducted in each target district (12 total) By the end of Year 3, at least 20 district officials undertake exposure visits to project villages to enhance knowledge on CBA and sustainable management of protective systems (80 in total) By the end of the project, at least 90% of target district officials are able to anticipate climate change risks and facilitate CBA measures in coastal areas 	<ul style="list-style-type: none"> Training reports and capacity assessment report Exposure visit reports QBS/Interviews 	<ul style="list-style-type: none"> Appropriate government officials would be participating in capacity building events and the same officials will be able to attend all three seminars to fully benefit from the training series CBA measures will have produced replicable successes in time for exposure visits by district officials
Output 2.3 – Upazila Officials Trained in Promoting and Facilitating Local Climate Risk Resilience	<ul style="list-style-type: none"> Number of local officials and representatives working on coastal management able to support CBA Number of sectoral development plans integrating climate-resilient measures Number of functional "Local Climate Resource and Support Centres" Number of civil society networks for climate change resilience 	<ul style="list-style-type: none"> Current knowledge and capacity is extremely low with regard to address climate change issues, and climate change risks are not integrated into any sectoral development plans at the upazila level 	<ul style="list-style-type: none"> By the end of Year 2, 10 representatives from UzDMCs and UzDCCs in each target upazila trained and able to assess, plan, and implement CBA measures (40 in total) By the end of Year 3, climate resilience integrated into at least 2 sectoral upazila development plans (8 in total) By the end of Year 3, a local institution, such as the UzDMC, acts as the "Local Climate Resource and Support Centre" for CBA in each of the target upazilas. The centres will serve the upazila (4 centres in total) By the end of Year 3, a civil society network is established in each target upazila (4 in total) 	<ul style="list-style-type: none"> QBS/Interviews Training reports Sectoral development plans Independent evaluation reports 	<ul style="list-style-type: none"> Government officials and other stakeholders continue to be willing to participate in the training and other capacity building events At least 8 sectoral upazila development plans will be drafted or revised during the first three years of the project At least one local institution in target upazilas is willing to act as the Local Climate Resource and Support Center Staff turnover does not negate training benefits Champions exist at each upazila who are willing to establish and maintain the civil society networks The political climate supports a civil society network

Table AII-5. Strategic Results Framework (SRF, formerly GEF Logical Framework): Bangladesh (continued)

Outcome/Output	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Output 2.4 – Union Officials and Community-based Organisations Trained in Climate Risk Reduction	<ul style="list-style-type: none"> Number of vulnerable people trained on climate change risks Number of union-level networks for climate resilience 	<ul style="list-style-type: none"> Current knowledge and capacity is extremely low with regard to address climate change issues 	<ul style="list-style-type: none"> By the end of Year 3, 200 vulnerable people (including at least 100 women members of Union Parishads and other groups) in each target upazila trained and able to assess, plan, and implement CBA measures (800 in total) By the end of Year 3, 1 union-level climate change network established to raise community awareness of climate risk reduction, local participation, decision-making, and livelihood security in each upazila (4 in total) 	<ul style="list-style-type: none"> Training reports QBS/Interviews Independent evaluation reports 	<ul style="list-style-type: none"> At least 800 women and other vulnerable people have the time and willingness to regularly attend capacity building events Champions exist at each union who are willing to establish and maintain climate change networks The political climate supports a civil society network
Output 2.5 – Community Awareness Campaign Conducted on Climatic Risks and Community-based Adaptation Defined and Implemented	<ul style="list-style-type: none"> Number of Participatory Rural Appraisals (PRA) Number of households aware of climate change risks and adaptation measures 	<ul style="list-style-type: none"> Disaster preparedness programs (e.g. those implemented by the Red Crescent Society and CARE Bangladesh) for cyclones have raised awareness of current risks from extreme climate events. However, there are no climate change-related training and awareness activities currently being implemented in target communities 	<ul style="list-style-type: none"> By the end of Year 2, 1 PRA conducted in each target upazila to improve understanding of capacity needs in target communities on longer-term climatic and environmental changes (4 in total) By the end of Year 3, culturally appropriate tools are developed to raise awareness on climate change impacts on relevant sectors By the end of Year 3, 25 people, including Red Crescent volunteers and other ward/village members, trained and able to apply PRA methods specifically in climate risk assessment and CBA planning and implementation (100 in total) By the end of the project, at least 80% of households in 4 upazilas are aware of climate change issues and CBA options 	<ul style="list-style-type: none"> PRA reports Public awareness materials Training materials and Project progress report QBA/Interviews Independent evaluations 	<ul style="list-style-type: none"> Community members continue to be willing to learn, disseminate, and use information in training and awareness materials
Outcome 3 – National Policies Revised to Increase Climate Risk Resilience of Coastal Communities	<ul style="list-style-type: none"> Number of policies and government action plans that support climate-resilient development Percentage of civil servants reporting that policies have been revised to improve climate resilience in coastal communities 	<ul style="list-style-type: none"> Currently there is a national coastal management policy and land use policy, in addition to several others that affect coastal development; however, they do not address climate change and adaptation issues in an integrated manner 	<ul style="list-style-type: none"> By the end of the project, at least 2 national policies or action plans on coastal management and 2 on land use are revised to promote sustainable, climate-resilient development By end of project, at least 75% of national-level civil servants in the MoL and MoEF report that the policies of those ministries have been adjusted to improve climate resilience in coastal communities 	<ul style="list-style-type: none"> Policies, action plans, policy briefings, and communication reports QBS/Interviews 	<ul style="list-style-type: none"> Policy stakeholders are willing to make changes in policy and action plans, based on emerging issues and communities' needs The government remains stable and climate change remains a policy priority throughout the project

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Table AII-5.

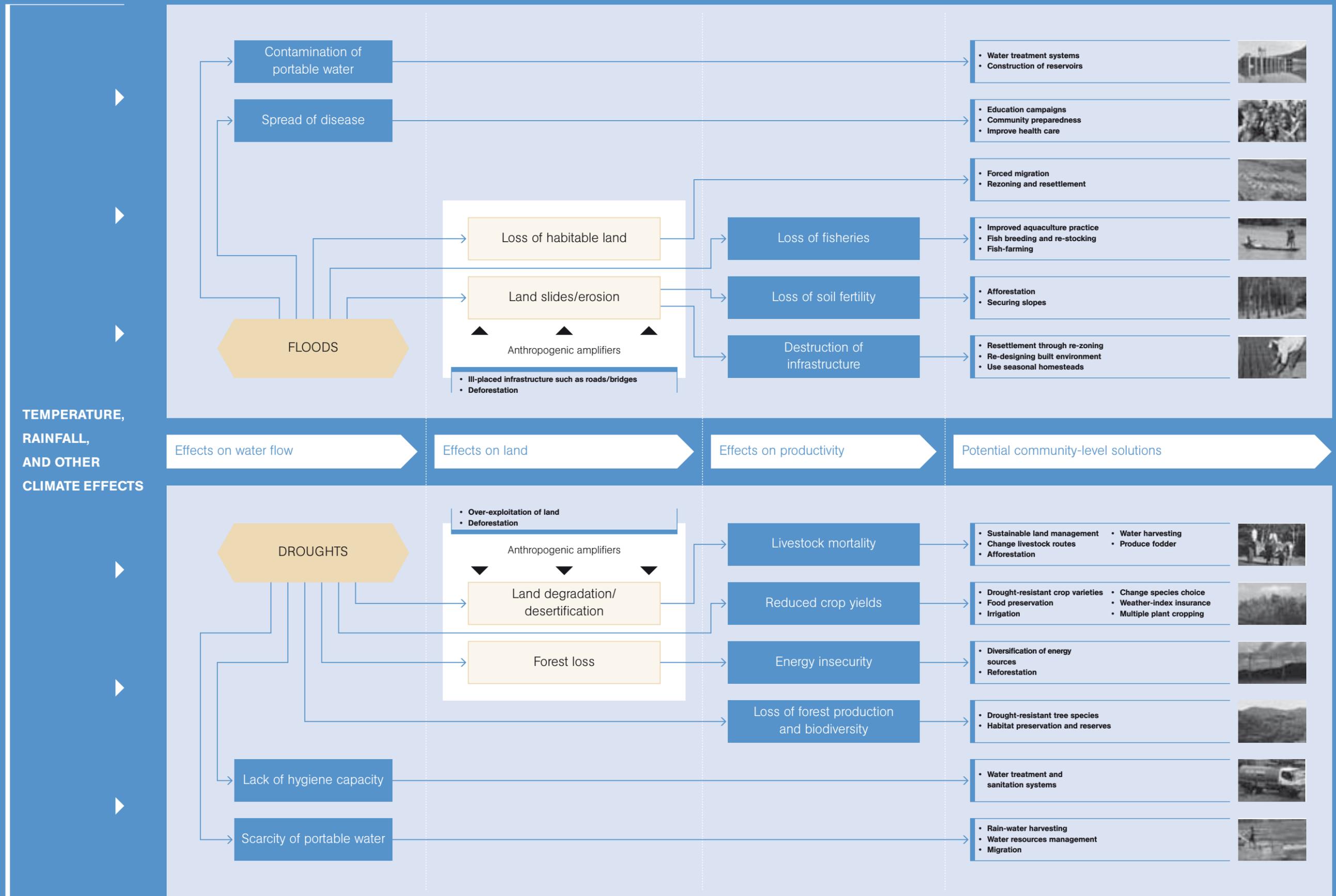
Table AII-5. Strategic Results Framework (SRF, formerly GEF Logical Framework): Bangladesh (continued)

Outcome/Output	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Output 3.1 – Policy Effects on Livelihood Resilience Analysed and Policy Recommendations Developed	<ul style="list-style-type: none"> Number of policy reviews Number of policymakers receiving background notes and policy recommendations on climate-resilient livelihoods 	<ul style="list-style-type: none"> There has been no systematic examination of relevant coastal management policies' impacts regarding climate change resilience at the community level 	<ul style="list-style-type: none"> By the middle of Year 2, 1 comprehensive review of policies that support or impede climate-resilient livelihoods in coastal communities conducted By the middle of Year 3, at least 75% of policymakers in the MoA, MoEF, MoFL, MoFDM, MoL, MoLGRDC, and MoWR receive policy recommendations on impacts of various sectoral policies on the resilience of livelihoods in coastal areas 	<ul style="list-style-type: none"> Policy review report Background notes and policy recommendations QBS/Interview Climate resilient development guidelines 	<ul style="list-style-type: none"> Policy stakeholders remain supportive of revising policies to support climate resilience at the community level and are willing to receive input from local levels Capacity to undertake policy review exists Community members provide accurate information on policy impacts on livelihoods
Output 3.2 – Land Use Policies Promote Sustainability of Protective Systems in Coastal Areas	<ul style="list-style-type: none"> Number of land use policy reviews Number of land use policies promoting sustainability of coastal protective ecosystems Number of coastal zoning regulations that incorporate climate change issues 	<ul style="list-style-type: none"> Several policies regarding coastal land use exist; however, they do not take climate change risks into account and do not promote sustainability of protective ecosystems 	<ul style="list-style-type: none"> By the middle of Year 2, 1 review of impacts of existing land use policies on the sustainability of protective greenbelt structures produced By the end of the project, at least 1 land use policy or action plan is revised to reflect policy recommendations and promotes sustainability of coastal protective ecosystems in each target district (4 in total) By the end of the project, at least 2 coastal zoning regulations promote resilient livelihoods and sustainability of protective systems 	<ul style="list-style-type: none"> Policy review report Land use policies Coastal Land Use Zoning Project zoning regulations 	<ul style="list-style-type: none"> Government remains stable and ensuring that climate-resilient land use policies remain a priority Good cooperation between MoL and MoEF continues Corruption does not impede revision and passage of policies, action plans, or zoning regulations that promote resilient livelihoods and sustainability of protective ecosystems
Output 3.3 – Coordination Mechanism for Climate-Resilient Policy Development and Coastal Planning Established	<ul style="list-style-type: none"> Number of institutional assessments conducted Number of documented agreements between MoL and FD Number of coordination meetings supporting climate-resilient policy development at district levels 	<ul style="list-style-type: none"> MoL coastal land use zoning projects are ongoing. Cooperation between the MoL and FD, MoEF, presents opportunities to include climate change and adaptation issues in the zoning plan The current agreement between the MoL and FD for mangrove afforestation in newly accreted coastal lands does not adequately ensure the forests' sustainability, since the land is distributed for settlement and farming purposes after the mangroves mature. 	<ul style="list-style-type: none"> By the end of Year 1, 1 assessment conducted of institutional roles and coordination regarding coastal zone management in target districts By the end of Year 2, 1 agreement achieved and documented between the MoL and FD that ensures sustainability of protective ecosystems in newly accreted coastal lands target districts During Years 2, 3, and 4 of the project, 1 coordination meeting for the District Steering Committee and organisations listed in Table III-1 held each quarter in target districts By the end of the project, at least 80% of government officials and representatives of coastal management organisations attending quarterly coordination meetings report comprehensive information support on climate resilience and coordination with other organisations in coastal development planning 	<ul style="list-style-type: none"> Institutional assessment report Agreement, such as an MOU, between MoL and FD QBS/Interviews Coastal development policies and planning documents Quarterly coordination meeting minutes 	<ul style="list-style-type: none"> Coastal Land Use Zoning project and the MoL continue to be supportive of including climate change issues in zoning regulations Competing priorities do not impede development of an agreement between the MoL and FD for sustainable protective ecosystems Sectoral planners attend coordination meetings consistently to ensure continuous and effective information sharing

Table AII-5. Strategic Results Framework (SRF, formerly GEF Logical Framework): Bangladesh (continued)

Outcome/Output	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Outcome 4 – Learning, Evaluation, and Adaptive Management Enhanced	<ul style="list-style-type: none"> Number of proposals, papers, and other documents that incorporate learning from the project 	<ul style="list-style-type: none"> Development projects currently do not systematically benefit from learning practices and project lessons on community-based adaptation. 	<ul style="list-style-type: none"> By the end of the project, at least 4 proposed or ongoing coastal afforestation, livelihoods, or CBA programs draw on lessons and knowledge generated through the project 	<ul style="list-style-type: none"> ALM platform Proposals, papers, and other documents 	<ul style="list-style-type: none"> The ALM is operational and circumstances in coastal areas of Bangladesh apply to other coastal afforestation, livelihoods, and CBA initiatives
Output 4.1 – Project Lessons Captured in, and Disseminated through, the Adaptation Learning Mechanism	<ul style="list-style-type: none"> Number of contributions by the project to the ALM 	<ul style="list-style-type: none"> No contribution by Bangladesh to the ALM on coastal afforestation and other CBA initiatives 	<ul style="list-style-type: none"> By the end of the project, all project monitoring and evaluation reports are screened for inclusion in the ALM By the end of the project, key project lessons are captured and disseminated through the ALM 	<ul style="list-style-type: none"> ALM platform 	<ul style="list-style-type: none"> The ALM is operational to facilitate learning
Output 4.2 – Project Knowledge Shared with Other Regions and Countries Facing Climate-Induced Coastal Hazards	<ul style="list-style-type: none"> Number of organisations and individuals actively involved in knowledge transfer activities within and outside of Bangladesh 	<ul style="list-style-type: none"> No systematic knowledge transfer on coastal afforestation and climate-resilient livelihoods initiatives within Bangladesh and from Bangladesh to other countries 	<ul style="list-style-type: none"> By the end of the project, 1 national and 1 international workshop on coastal afforestation and other climate-resilient livelihoods conducted (2 in total) with at least 100 participants each 	<ul style="list-style-type: none"> Workshop proceedings 	<ul style="list-style-type: none"> Other regions and countries believe experiences from the project will be valuable for future coastal afforestation and climate-resilient livelihoods
Output 4.3 – Project Knowledge Incorporated into Other Coastal Afforestation and Livelihoods Programs in Bangladesh	<ul style="list-style-type: none"> Number of follow-up/replication projects within Bangladesh designed on the basis of project lessons Number of follow-up/replication projects outside of Bangladesh designed on the basis of project lessons Number of research initiatives based on project insights and lessons 	<ul style="list-style-type: none"> No coastal afforestation and coastal afforestation, livelihoods, and CBA initiatives within or outside Bangladesh have drawn on lessons from the project 	<ul style="list-style-type: none"> By the end of the project, at least 2 follow-up/replication project within Bangladesh are designed on the basis of project lessons By the end of the project, at least 2 follow-up/replication projects outside of Bangladesh are informed by project lessons By the end of the project, at least 3 new research initiatives for coastal adaptation draw on knowledge gaps identified during the project 	<ul style="list-style-type: none"> Project documents 	<ul style="list-style-type: none"> Project lessons apply to proposed or ongoing coastal afforestation, livelihoods, and CBA initiatives in other regions within and outside Bangladesh

VULNERABILITIES TO CLIMATE CHANGE IN LDC'S





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