

LEAST DEVELOPED COUNTRIES EXPERT GROUP

Regional synergy in addressing adaptation through the national adaptation programmes of action and the process to formulate and implement national adaptation plans in the least developed countries



United Nations
Framework Convention on
Climate Change



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LDC EXPERT GROUP 2015

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FOREWORD

The least developed countries (LDCs) continue to undertake various measures to adapt to the adverse impacts of climate change. Almost all of them have prepared and submitted their national adaptation programmes of action (NAPAs) and embarked on the implementation of identified projects. NAPAs have raised awareness on climate change and imparted hands-on experience in implementing concrete adaptation projects on the ground in the LDCs. They have increased collective knowledge on adaptation to climate change at the national, regional and international levels. The LDCs have also started to embark on the process to formulate and implement national adaptation plans (NAPs), building on their experiences from the NAPAs.

Regional synergy is one of the important means through which LDCs have been able to advance their work on adaptation. LDCs have benefited from regional cooperation in both the preparation and the implementation of their NAPAs. Many have acquired data and maps on climate change scenarios from relevant regional centres to inform their vulnerability and risk assessments. Some were able to jointly design and implement projects from the NAPAs, as well as through a variety of other adaptation activities. This paper looks at experiences, opportunities and barriers for regional synergy. It also provides a good number of examples on how different countries have come together to address the impacts of climate change through regional synergy.

On behalf of the Least Developed Countries Expert Group, I would like to warmly thank all the countries and organizations that have provided invaluable contributions to this publication. I also believe that this publication will be of value not only to the LDCs but to the broader adaptation community.



Batu Uprety
Chair of the LEG
December 2015



1. INTRODUCTION

Climate change and the systems upon which it impacts – water, ecosystems, humans, etc. – are not confined within set political boundaries. Countries or systems often face similar climate change impacts and challenges, particularly in shared ecosystems or natural resource areas. Dealing with such impacts and challenges requires cooperation between countries and across geopolitical boundaries in order to explore synergies, as some measures may be more effective if carried out jointly.

Synergy refers to an interaction between two or more entities that produces, through a purposeful cooperative effort, a combined effect greater than the sum of the separate efforts, had they been undertaken separately. In the context of this paper, regional synergy refers to the interaction or cooperation between various institutional arrangements, programmes or initiatives in the planning and implementation of adaptation, with a view to maximizing benefits or intended results, at the regional level.

Areas for which regional synergy can enhance adaptation efforts include shared water resources (such as river basins), shared terrestrial ecosystems and conservation areas (such as protected areas, national parks), marine ecosystems (such as fish stocks, shared coastal areas, estuaries, coral reefs), pests and diseases, and the movement of people (such as movement of pastoralists across borders in search of pastures).

The present paper is a revision of the Least Developed Countries Expert Group (LEG) technical paper on *Regional synergy in the context of national adaptation plans*¹ developed in 2005. It presents the rationale for regional synergy in addressing adaptation, and the institutional arrangements established under the Convention to support or promote regional synergy in the least developed countries (LDCs). It showcases experiences from the least developed countries (LDCs) on regional synergy in the preparation and implementation of national adaptation programmes of action (NAPAs),² and proposes possible considerations for exploring regional synergy in the formulation and implementation of national adaptation plans (NAPs).³ It further provides examples of relevant actors and initiatives in different regions that could provide opportunities for exploring or enhancing regional synergy in adaptation. Finally, the paper also presents barriers to regional synergy.

The paper will be complimented by relevant information and resource on regional centres and networks supporting LDCs in adaptation across the different regions, as well as experiences, best practices and lessons learned by the countries in the region on NAP Central.⁴

1 FCCC/TP/2005/4, available at <<http://unfccc.int/resource/docs/2005/tp/eng/04.pdf>>.

2 Submitted NAPAs, a database on NAPA priorities and a list of projects for the implementation of NAPAs under the Least Developed Countries Fund are available on the LDC Portal <<http://unfccc.int/4585>>.

3 COP 16 established a process to enable LDC Parties to formulate and implement NAPs, building upon their experience in preparing and implementing NAPAs, as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs. More information on NAPs is available at <<http://unfccc.int/6057>>.

4 <<http://unfccc.int/nap>>.



2. RATIONALE FOR REGIONAL SYNERGY

THE LEG IDENTIFIES THE FOLLOWING PRACTICAL BENEFITS OF REGIONAL SYNERGY IN ADDRESSING ADAPTATION:

- a) Promoting joint efforts in building capacity, avoiding duplication, achieving economies of scale and cost sharing, and possibly leading to the joint implementation of adaptation activities;
- b) Broadening the knowledge base on impacts, vulnerability and adaptation by engaging regional pool of experts and tapping into experiences, best practices and lessons learned from other countries in the same or other regions;
- c) Encouraging cooperation between regional bodies and partner institutions;
- d) Providing the opportunity to share costs and pool resources in processes that can be carried out jointly (e.g. generating climate change scenarios, database development, data and information sharing, acquisition of available data from partner institutions related to adaptation, and joint research);
- e) Avoiding negative transboundary impacts, especially on shared river basins or other ecosystems, and to subsequently promote joint efforts;
- f) Sharing experiences, approaches, solutions or strategies for addressing adaptation, including best practices and lessons learned at different levels and scales;
- g) Promoting the identification of adaptation options at regional and sub-regional levels.

IN ITS NATIONAL ADAPTATION PROGRAMME OF ACTION, SOMALIA STATES THAT:

Development support to Somalia has to ensure that all projects and programmes address climate change issues. The NAPA, as the first of the national level planning documents on climate change adaptation, is an excellent starting point for such integration. Additionally Somalia is a member of IGAD*, which should form a strong basis for improved regional cooperation to address issues relating to shared ecosystems and natural resources. This will ultimately provide a functioning means of strengthening regional cooperation. IGAD's Climate Prediction Centre (ICPAC) has already been active in supporting the NAPA preparation process through assessing climate data modeled projections.

Somalia, 2013. National adaptation programme of action on climate change. pp.44. Available at <<http://unfccc.int/resource/docs/napa/som01.pdf>>.

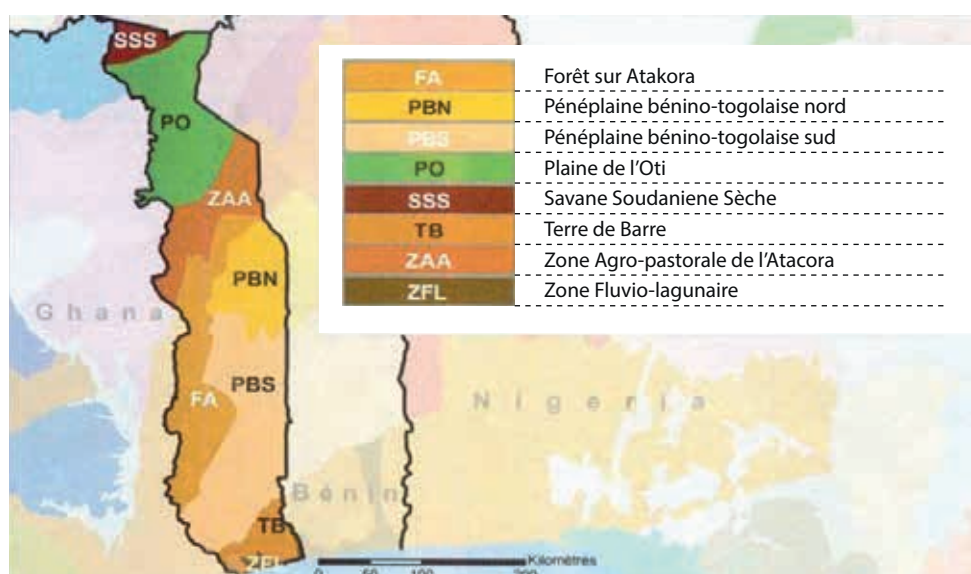
* Intergovernmental Authority on Development (IGAD) in Eastern Africa

3. EXPERIENCES ON REGIONAL SYNERGY IN THE PREPARATION AND IMPLEMENTATION OF NATIONAL ADAPTATION PROGRAMMES OF ACTION

Opportunities for regional synergy could be perceived in various phases of the NAPA: during the preparation stage; as part of the strategies for the implementation of NAPA priority projects; and as eventual measures undertaken during the implementation of the projects.

During the preparation of their NAPAs, many LDCs identified the review of past and current sectoral studies undertaken in other countries within the region, or in other regions, as useful background information (e.g. Afghanistan, Bangladesh, Bhutan, Cambodia, Cape Verde, Comoros, Gambia, Kiribati, Lao People’s Democratic Republic, Maldives, Mali, Senegal, Solomon Islands, Somalia, Timor-Leste and Vanuatu). They took advantage of existing data and information as well as capacity at the regional levels. They recognized that the methodology for adaptation assessment would benefit from a regional approach that draws upon existing techniques to avoid duplication of efforts. In fact, the preparation of NAPAs was to be based on the use of existing information, without the need for additional comprehensive assessments and research before the plans can be completed.⁵ Furthermore, in some cases regional synergy or cooperation was used as part of the criteria for ranking adaptation options. The Gambia, for example, included level of successful cooperation in transboundary management of marine fish resources as part of the criteria for prioritizing adaptation options for fisheries under the food production sector.

FIGURE 1: TOGO ECOLOGICAL REGIONS MAP, ACQUIRED FROM AGRHYMET



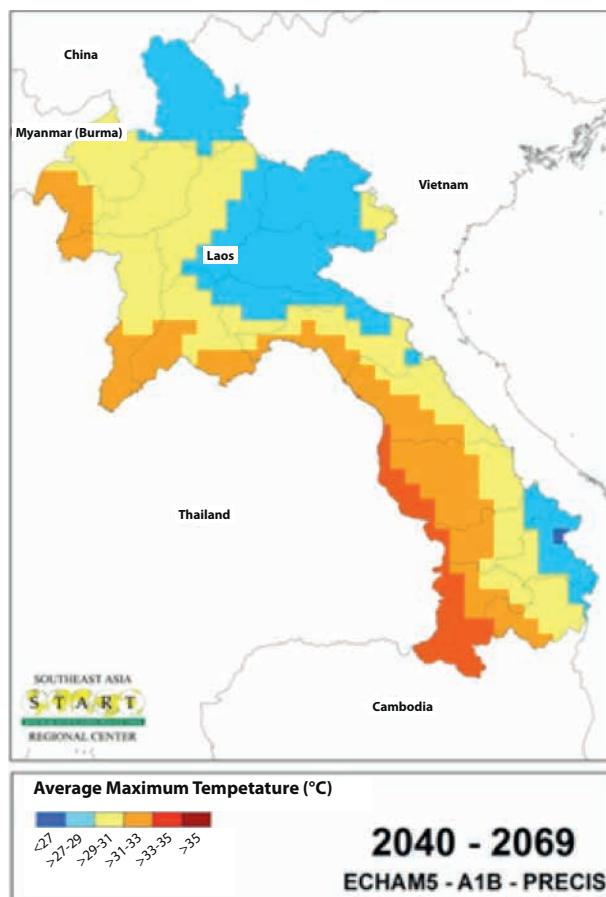
Source: Togo National Adaptation Programme of Action. Available at <<http://unfccc.int/resource/docs/napa/tg001f.pdf>>.

⁵ LEG, 2002. Annotated guidelines for the preparation of national adaptation programmes of action. <http://unfccc.int/files/cooperation_and_support/ldc/application/pdf/annguide.pdf>.

FIGURE 2: APPLICATION OF REGIONAL STUDIES IN THE PREDICTION OF POTENTIAL FUTURE CHANGES IN THE CLIMATE OF LAO PDR AND ITS NEIGHBOURS

During the preparation of its NAPA, Lao People's Democratic Republic noted that national institutions had not yet been able to conduct their own research or studies using climate change models to forecast future climate scenarios due to general lack of capacity and resources. Only short term climatic conditions could be predicted using available resources such as statistical data, actual occurrences, monthly weather monitoring and measurements (temperature, amount of rainfall, regularity and disaster severity) as well as environmental change conditions. The government of Lao PDR therefore extracted data and predictions for the preparation of the NAPA from the technical reports of the South East Asia START Regional Centre. The centre continues to generate maps for countries such as the example shown on the right.

Source:
Lao PDR, 2009. National adaptation programme of action.
<<http://unfccc.int/resource/docs/napa/laos01.pdf>>.
Map provided by Southeast Asia START Regional Center,
<www.start.or.th>.



NAPA priorities presents multiple entry points by which regional synergy could be harnessed to contribute towards the implementation of NAPAs. Some LDCs make reference to regional programmes and initiatives to which the work on NAPAs will be closely linked (e.g. the Plant Genetic Resource Centre⁶ for the case of Angola, South Asia Cooperative Environment Programme⁷ for the case of Bhutan, and the Bay of Bengal Large Marine Ecosystem Programme⁸ for the case of Myanmar). Somalia made reference to its membership in Intergovernmental Authority on Development in Eastern Africa as a strong basis for improved regional cooperation to address issues relating to shared ecosystems and natural resources. Under a project on rehabilitation, renewal and extension of needed infrastructure for a quantitative and qualitative improvement of water and sanitation resources, Guinea-Bissau identified the need to expand the integrated water master plan to encompass regional linkages. Under one of its NAPA priorities, Lao PDR identified an action to integrate early warning systems with related regional and global systems and networks. Mozambique identified the need for strengthening regional and international coordination, particularly in the management of river basins.

6 <<http://www.sadc.int/sadc-secretariat/services-centres/spgrc>>.

7 <<http://www.sacep.org>>.

8 <<http://www.boblme.org>>.

ON IMPLEMENTATION STRATEGIES FOR THE NAPAS, LDCs IDENTIFIED THE FOLLOWING BENEFITS FROM REGIONAL SYNERGY:

- a) Cooperation and coordination in the implementation phase, thus leading to economies of scale and cost sharing, and the joint implementation of project activities;
- b) Review of a broad set of studies performed in a region, such as vulnerability and adaptation assessments, and adaptation assessment methodology;
- c) Sharing of experience with other LDCs in the region on adaptation measures and implementation strategies;
- d) Raising awareness, knowledge, skills and enhanced understanding of climate change, thus promoting sharing of experiences and expertise across a region.

Regarding the implementation of NAPA projects under the Least Developed Countries Fund (LDCF), some LDCs are taking advantage of existing programmes in their regions. For example, under its project on “Strengthening the resilience of rural livelihood options for Afghan communities in Panjshir, Balkh, Uruzgan and Herat Provinces to manage climate change-induced disaster risks”, Afghanistan will seek to partner with the International Centre for Integrated Mountain Development (ICIMOD)⁹ particularly on improving watershed management. Afghanistan plans to establish linkages with Regional Rangeland Programme, The Himalayan Climate Change Adaptation Programme,¹⁰ and AdaptHimal,¹¹ all of which are executed by ICIMOD.

Some LDCs are pursuing joint projects with their neighbouring countries, taking advantage of existing cooperation platforms and programmes. Angola is addressing one of its NAPA priorities on fisheries through a joint regional project with Namibia and South Africa.¹² Financial resources for the project were drawn from the LDCF for Angola, from the Special Climate Change Fund (SCCF) for Namibia and South Africa, and from domestic resources of the three countries as co-financing. The objective of the project is to build resilience and reduce vulnerability of the Benguela Current marine fisheries system to climate change through strengthened adaptive capacity and implementation of participatory and integrated adaptive strategies in order to ensure food and livelihood security.

9 <<http://www.icimod.org>>.

10 <<http://www.icimod.org/hicap/?q=4779>>.

11 Livelihoods and ecosystem services in the Himalayas: Enhancing adaptive capacity and resilience of the poor to climate and socioeconomic changes.

<<http://www.icimod.org/?q=9188>>.

12 GEF project “Enhancing Climate Change Resilience in the Benguela Current Fisheries System”. Project ID 5113.

<http://www.thegef.org/gef/project_detail?projID=5113>.

Djibouti is jointly implementing a project on Rural Livelihoods' Adaptation to Climate Change Program with Kenya.¹³ The project builds on existing joint programmes between the two countries including Comprehensive Africa Agriculture Development Programme,¹⁴ IGAD's Minimum Integration Plan and Livestock Policy Initiative, and the African Adaptation Programme. Its goal is to improve the resilience to climate change of pastoral and agro-pastoral communities in targeted areas in Djibouti and Kenya, and increase the adaptive capacity of their livelihoods. Funding for the project comes from the LDCF for Djibouti, SCCF for Kenya and from national budget of the two countries as co-financing.



¹³ GEF project "Rural Livelihoods' Adaptation to Climate Change in the Horn of Africa". Project ID 5228, <http://www.thegef.org/gef/project_detail?projID=5228>.

¹⁴ <<http://www.nepad-caadp.net>>.

4. EXPLORING REGIONAL SYNERGY IN THE FORMULATION AND IMPLEMENTATION OF NATIONAL ADAPTATION PLANS

The process to formulate and implement NAPs was established as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs.¹⁵ It is a continuous, progressive and iterative process which follows a country-driven, gender-sensitive, participatory and fully transparent approach.

Building on the recommendations from NAPA and recognizing that regional synergy is a vital component of successful implementation of adaptation actions, the technical guidelines for the NAP process¹⁶ underscored the importance of promoting coordination and synergy at the regional level and with other multilateral environmental agreement in undertaking the process to formulate and implement NAPs. As an important step, countries are encouraged to harness regional synergy as an important pillar of their process to formulate and implement NAPs through the following activities:

- › Promote coordination of adaptation planning across sectors;
- › Identify and promote synergy in assessment, planning and implementation of adaptation at the regional level, as appropriate;
- › Identify and promote opportunities for synergy with other multilateral environmental agreements, both at the onset of the formulation of national adaptation plans and in implementing policies, projects and programmes.

FOR UNDERTAKING THE ABOVEMENTIONED ACTIVITIES, COUNTRIES WILL NEED TO ENSURE THAT THE RIGHT ENABLING MECHANISMS FOR REGIONAL SYNERGY ARE IN PLACE. THESE ARE:

- a) Facilitating structures to encourage collaboration between countries such as institutional coordination mechanisms, bilateral and multilateral agreements on cooperation between institutions within countries and between countries in the region, technical assistance, and funding for regional projects and initiatives;
- b) Operational arrangements to enable commitment of the necessary resources for the implementation of regional synergy projects or initiatives (e.g. community ownership of the regional projects, sharing of costs and benefits);
- c) Monitoring and evaluation frameworks to track and quantify the benefits of regional synergy in addressing adaptation at the regional, sub-regional, national and community levels (e.g. standardized methodology across countries for data collection and analysis).

The analysis of these enabling mechanisms can be undertaken as part of the gap analysis to assess strengths and weaknesses regarding the capacity, data and information, and resources required to effectively engage in the process to formulate and implement NAPs. Emerging gaps and needs with respect to regional synergy would also then be addressed as part of the activities for addressing capacity gaps and weaknesses in undertaking the process.¹⁷ Table 1 below lists some good practices, lessons learned, gaps and needs in the process to formulate and implement NAPs in the context of regional synergies.

¹⁵ Decision 1/CP.16, paragraph 15.

¹⁶ Available at <http://unfccc.int/nap/guidelines_main.html>.

¹⁷ Element A, Step 2 and 3 of the technical guidelines for the process to formulate and implement NAPs.

Following such gap analysis, countries could then develop strategies to address the needs. Such strategies would need to take into account available opportunities at the regional level for exploring regional synergies. Chapter 5 below provides examples of relevant initiatives or programmes across different regions that could provide the opportunities for regional synergy. The experiences from NAPAs will also serve as important inputs for identifying best approaches, or capitalizing on already existing approaches that fit the national and regional contexts.

The work on regional synergy will be carried throughout the process to formulate and implement NAPs: from planning to implementation, including monitoring and review.

Table 1: Good practices, lessons learned, gaps and needs in the process to formulate and implement NAPs in the context of regional synergies¹⁸

Good practices and lessons learned	
>	Regional centres and networks can play important roles in supporting adaptation strategies for transboundary issues;
>	Regional centres can also play an important role in increasing a country's capacity to access finance for the process to formulate and implement NAPs. A number of regional centres are applying or have previously applied for accreditation as implementing entities of the Green Climate Fund. Considering their long-time experience in supporting countries in their regions, they are well positioned to effectively support countries in accessing funding;
>	The dialogue and exchange of experiences and cooperation through country and regional interventions promotes the transfer of knowledge from the field, informing the international climate change debate and decision-making at the highest level;
>	Regional training workshops, such as the ones provided by the LEG or the NAP Global Support Programme, are an effective means of providing training and capacity-building on adaptation to LDCs. The modality provides countries with the opportunity to come together and learn from each other and engage with the LEG as well as international and regional organizations, and to explore how to build on existing regional activities and programmes in designing the process to formulate and implement NAPs;
>	The exchange of experiences and lessons learned is key as the process to formulate and implement NAPs is a learning process for all involved.
Gaps and needs	
>	It is important to consider the potential impact of regional issues, such as cross-border issues and related agreements, and international issues, such as global agreements on climate change, sustainable development goals, etc., on decision-making at the national level;
>	Some of the risk and vulnerability assessments taken thus far need a more detailed assessment by region;
>	There is a need for climate scenarios using the latest IPCC methods downscaled to different regions and locations;
>	There is a need for a learning platform to promote the sharing of experiences and learning, especially at the regional level;
>	There is a need for better understanding of how international and regional programmes support the national efforts under the NAP umbrella;
>	There is a need for the Adaptation Committee, in line with its mandate and workplan, to reach out to strategic partners of the process to formulate regional institutions;
>	There is a need for the LEG to further explore and address regional capacity gaps.

¹⁸ FCCC/SBI/2014/INF.14, FCCC/SBI/2015/INF.6, and FCCC/SBI/2015/7.

BOX 1. NAP EXPO 2015 KEY MESSAGES ON REGIONAL APPROACHES

- Enhanced and more formal collaboration between the LEG and regional centres and networks would ensure better coverage of regional issues and promote South-South collaboration between LDCs and non-LDCs;
 - Regional centres and networks are useful platforms for creating adaptation communities of practice such as for regional programmes, technical assessments and support to regional policies;
 - The regional level is another important scale for exploring adaptation options (policies, programmes and activities), in addition to the national and subnational levels.
-



5. OPPORTUNITIES FOR REGIONAL SYNERGY IN THE PROCESS TO FORMULATE AND IMPLEMENT NATIONAL ADAPTATION PLANS

A. EXISTING ARRANGEMENTS FOR REGIONAL SYNERGY IN ADDRESSING ADAPTATION UNDER THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Various institutional arrangements have been established under the Convention to guide actions for promoting regional synergy in addressing adaptation. These include the LEG, the Adaptation Committee, Nairobi work programme on impacts, vulnerability and adaptation to climate change, and the Technology Executive Committee.

The LEG is mandated to facilitate the exchange of information and to promote regional synergies, and synergies with other multilateral environmental conventions, in the preparation and in the implementation strategy of NAPAs.¹⁹ This is also applicable to NAPs in line with the LEG mandate to provide technical guidance and support to the process to formulate and implement NAPs.²⁰ Furthermore, in defining modalities for the process to formulate and implement NAPs, the COP invited national and regional centres and networks to strengthen their programmes and engage in support of the process in LDC Parties, at the regional, national and subnational levels, as appropriate, in a manner that is country-driven and that encourages cooperation and coordination between regional stakeholders.²¹ Meanwhile, the LEG is conducting a number of activities that promote regional synergy in addressing adaptation in the LDCs, including the following:

- a) Developing information papers on regional synergy on addressing adaptation in the LDCs;
- b) Capturing and sharing experiences, best practices and lessons learned in addressing adaptation in LDCs. The LEG maintains a best practices and lessons learned platform, housing relevant information from the LDCs;
- c) Conducting regional training workshops and outreach events. Since its establishment in 2001, the LEG has conducted three rounds of regional training workshops to build and enhance the capacity of LDCs in addressing adaptation;
- d) Maintaining collaboration with relevant organizations, regional centres and networks in providing support to the LDCs on the NAPs at the regional levels. In addition to engaging the GEF and its agencies in providing support to the LDCs, the LEG engages a wide range of regional centres and organizations during its meetings, workshops and events, for them to contribute their specific experiences and expertise relevant to each respective region;
- e) Developing the NAP Central which will serve as a data source and central hub for information pertaining to the process to formulate and implement NAPs. The NAP Central will include various means by which information can be accessed, which will include by region, thus allowing countries to access information that is relevant to their region.

¹⁹ Decision 29/CP.7, annex.

²⁰ Decision 5/CP.17, paragraphs 13–17.

²¹ Decision 5/CP.17, paragraph 18.

Among its functions, the Adaptation Committee is tasked with promoting synergy and strengthening engagement with national, regional and international organizations, centres and networks, in order to enhance the implementation of adaptation actions.²² Subsequently, the Adaptation Committee is maintaining a compilation of a list of regional centres and networks working on adaptation, with a view to strengthening their role in supporting country-driven adaptation actions.²³ It has established a task force on technical support that will, *inter alia*, analyze existing support for adaptation action provided by regional institutions and UN agencies, including gaps, needs and opportunities.

The Nairobi work programme on impacts, vulnerability and adaptation to climate change involves a wide range of stakeholders including regional centres and networks to support countries in improving the understanding and assessment of impacts, vulnerability and adaptation to climate change, and in making informed decisions on practical adaptation actions and measures.²⁴

The Technology Executive Committee has, as one of its modalities, engagement of a broad range of stakeholders at the international, regional and national levels, including public institutions, the business community, academia and non-governmental organizations, in conducting its work.²⁵ Similarly, the Climate Technology Centre and Network will catalyze and develop regional/national training programmes for projects seeking a range of needs including financing as part of its modalities.²⁶

B. RELEVANT ARRANGEMENTS UNDER THE OTHER RIO CONVENTIONS ON REGIONAL SYNERGY

Under the United Nations Convention to Combat Desertification (UNCCD),²⁷ Sub-regional Action Programmes (SRAPs) and a Regional Action Programme (RAP) have been created in Africa, Asia, Central and Eastern Europe, Latin America and the Caribbean, and Northern Mediterranean.²⁸ The SRAPs and RAPs facilitate regional cooperation on sustainable management of transboundary natural resources and promote initiatives to address land degradation where increased efficiency can be obtained through joint action. They provide a framework for coordinated action among countries and other key stakeholders, including by means of thematic programme networks. Table 1 below provides a list of thematic programme networks in Africa, Asia and Latin America and the Caribbean regions. The thematic programme networks seek to link institutions and agencies together via an institutional focal point in order to promote cooperation and information sharing.

22 Decision 1/CP.16, paragraph 20(c).

23 The list is available at <<http://unfccc.int/8199>>.

24 <<http://unfccc.int/3633>>.

25 FCCC/CP/2011/9/Add.1, Annex I.

26 FCCC/CP/2013/10/Add.3, Annex I.

27 UNCCD document ICCD/COP(1)/7, available at <<http://www.unccd.int/Lists/OfficialDocuments/cop1/7eng.pdf>>.

28 SRAPs and RAPs are accessible at <www.unccd.int/en/about-the-convention/Action-programmes/Pages/default.aspx>.

Table 2: Thematic programme networks established under regional action programmes for Africa, Asia and Latin America and the Caribbean regions

Regional action programme	Thematic programme networks
African regional action programme^a	<ul style="list-style-type: none"> > Integrated water management > Agro-forestry and soil conservation > Rangelands, ecological monitoring and early warning systems > New and renewable energy sources and technologies > Sustainable agricultural farming systems
Asian regional action programme^b	<ul style="list-style-type: none"> > Desertification monitoring and assessment > Agroforestry and soil conservation > Rangeland management and fixation of shifting sand dunes > Water resources management for arid-land agriculture > Strengthening capacities for drought impact mitigation and combating desertification > Assistance for the implementation of integrated local area development programmes (LADPs)
Latin America and the Caribbean regional action programme^c	<ul style="list-style-type: none"> > Benchmarks and indicators > Information > Integrated water management > Agroforestry > Traditional knowledge > Renewable sustainable energy

a <<http://www.unccd.int/en/regional-access/Africa/Pages/alltext.aspx#secondtitle>>.

b <<http://www.unccd.int/en/regional-access/Asia/Pages/alltext.aspx#secondtitle>>.

c <<http://www.unccd.int/en/regional-access/LAC/Pages/alltext.aspx#secondtitle>>.

Under the United Nations Convention on Biological Diversity, regional organizations, networks and centres have been urged to develop or update regional biodiversity strategies, as a means of complementing and supporting national actions and of contributing to the implementation of the Strategic Plan for Biodiversity 2011-2020.²⁹ A list of regional organizations and institutes addressing biodiversity, as well as Regional Biodiversity Strategies and Action Plans (RBSAPs) produced to date is available on the following address <<http://www.cbd.int/nbsap/related-info/region-bsap>>.

²⁹ The Strategic Plan for Biodiversity 2011-2020 is available at <<http://www.cbd.int/decision/cop/?id=12268>>.

C. REGIONAL CENTRES AND NETWORKS

Regional centres and networks play an important role in promoting regional synergy in adaptation planning and implementation. They carry out various activities at the regional levels that directly or indirectly promote regional synergy, and that countries can take advantage of, or learn from, including:

- a) Serving as an interface between global financial, technological and capacity-building support and adaptation gaps and needs at the regional and local levels;
- b) Generating and disseminating data, methods and tools, including research, at the regional levels to support the different stages of adaptation planning and implementation (e.g. generating climate change scenarios, undertaking impact assessments, development and transfer of adaptation technologies, publication of regional and national studies on adaptation, etc.);
- c) Coordinating and facilitating coherent adaptation planning and implementation, and providing multi-stakeholder engagement in addressing adaptation;
- d) Enhancing regional and national capacity to address adaptation such as through training, professional development programmes, technical exchange programmes, strengthening information sharing, and strengthening national institutional arrangements;
- e) Implementing specific regional adaptation programmes, projects and policies;
- f) Creating a regional identity and sense of unity amongst often very different countries within a region;
- g) Facilitating the exchange of experiences, best practices and lessons learned at the regional levels.

BOX 2. WORLD METEOROLOGICAL ORGANIZATION (WMO) REGIONAL CLIMATE CENTRES

WMO – Regional Climate Centres (RCCs) are being established to generate and deliver more regionally-focused high-resolution data and products as well as training and capacity-building. The RCCs perform regional-scale functions that include operational long-range forecasting and climate monitoring, coordination between regional, global and national centres in the region, data services, climate applications, training and capacity-building, and research and development. Their functions are complementary and supportive to national meteorological and hydrological services (NMHSs). They strengthen the capacity of NMHSs in a given region to deliver better climate services to national users.

Sources: <<http://www.wmo.int/pages/prog/wcp/wcasp/RCCs.html>>, accessed 16 September 2015

D. REGIONAL ACTIVITIES AND PROGRAMMES

There are several opportunities that arise from addressing climate change adaptation at the regional level. Such opportunities may include cost, knowledge and information sharing, harmonization of approaches, effective management and conservation of transboundary ecosystems. Various initiatives, programmes and institutional arrangements established under regional systems such as Regional Economic Commissions, Regional Integration Systems, River Commissions, United Nations organizations regional programmes, regional and international non-governmental organizations, etc., can provide the platform for regional synergy in adaptation planning and implementation. Below are potential areas of regional synergy, together with examples of relevant initiatives or programmes across different regions that could provide the opportunities for regional synergy.

Strengthening the capacity for climate data and information management and facilitating the development of climate change scenarios at the regional level

The Africa Adaptation Programme (AAP) implemented between 2009 and 2013 provided support to 20 countries in Africa in strengthening capacities in data and information management, institutions and leadership, analysis and implementation, knowledge management, and innovative finance.³⁰ Through its knowledge management pillar, the AAP assisted the countries to develop the means to ensure that the relevant information and knowledge they generate is documented, codified and disseminated in ways practitioners and decision-makers can use. The work contributed to the creation of region-wide knowledge and learning mechanisms that raise awareness, engage stakeholders, inform decision-makers and promote exchange and cooperation among countries.³¹

The Caribbean Community Climate Change Centre (CCCCC),³² provides regional and country-oriented results from climate change modelling and projection experiments online for the Caribbean Member countries.

The Pacific Meteorological Desk Partnership was launched in 2011 as the regional weather and climate services coordination mechanism managed by the SPREP Secretariat to deliver a regionally coordinated effort to service SPREP Members needs in the area of weather and climate services.³³ The partnership has two components: a secretariat component led by SPREP and the World Meteorological Organization; and a partner's component that includes United States National Oceanic and Atmospheric Administration, Australian Bureau of Meteorology, Finnish Meteorological Institute, New Zealand MetService, New Zealand National Institute of Water and Atmospheric Research and Japan International Cooperation Agency, among other partners.

Joint impact, vulnerability and adaptation assessments at the regional level

ICIMOD's Koshi basin programme³⁴ shared by China, India and Nepal aims to, among other outcomes, include improved estimates of future water availability and its impact, and adaptive water management strategies at the Koshi basin and community levels. This information is made available through the Koshi Basin Information System and is meant to be used by countries in their national adaptation planning and implementation activities.

³⁰ More information on the Africa Adaptation Programme is available at <www.undp-aap.org>.

³¹ Africa Adaptation Programme (2013). Consolidating Gains and Building Momentum: Knowledge, transformation and the human legacy of the Africa Adaptation Programme. Available at <http://www.undp-aap.org/sites/undp-aap.org/files/Consolidating%20Gains%20and%20Building%20Momentum_o.pdf>.

³² <www.caribbeanclimate.bz>.

³³ <http://www.sprep.org/2011sm22/pdfs/eng/Officials/WP_8_2_5_Att_3_Pacific%20Meteorological%20Desk%20Partnership.pdf>.

³⁴ Available at <<http://www.icimod.org/kbp>>.

Harmonization of adaptation planning and implementation at the regional level

The Lower Mekong Basin Climate Change Adaptation Initiative (CCAI)³⁵ was initiated in 2007 to guide climate change adaptation planning and implementation through improved strategies and plans at various levels and in priority locations throughout the Lower Mekong Basin (LMB). The programme is intended to facilitate a regional response to climate change and will realize its outcomes through regional cooperation, exchange and learning based on partnerships. In facilitating regional cooperation, the CCAI has the following planned outputs: partnership agreements with the CCAI core implementing partner organizations; appropriate institutional arrangements, staffing and capacities within the Mekong River Commission Secretariat (MRCS) and National Mekong Committees; harmonized system for regular CCAI reporting on progress and plans; secured financing for the CCAI cycles; and regular review and revision of CCAI.³⁶

The Pacific Adaptation to Climate Change (PACC) Programme was initiated in 2009 to support 14 Pacific island countries to enhance adaptive capacity on the ground, to drive the mainstreaming of climate risks into national development planning and activities, and to share knowledge in order to build adaptive capacity. Activities implemented at the regional level under the PACC include: training and support in areas such as cost-benefit analysis, the integration of gender considerations, knowledge management and mainstreaming; and the development of practical guides³⁷ for use by countries.

Water resources and watershed management along shared river basins

River basin commissions provide an important platform for management of shared waters between two or more countries.³⁸

The Zambezi Watercourse Commission (ZAMCOM) serves as a water management organization for the Zambezi River Basin.³⁹ Its objective is to promote the equitable and reasonable utilization of the water resources of the Zambezi Watercourse as well as the efficient management and sustainable development thereof. A complete list of current river basin commissions across the different regions can be found at <<http://www.inbo-news.org>>.

Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, and Togo formed the Volta Basin Authority (VBA) in 2005 to promote joint approaches to water governance in the basin. By 2010, five countries of the Volta Basin had ratified the agreement, including Mali, Ghana, Togo, Benin and Burkina Faso bringing the Convention into effect. The VBA has been active in facilitating workshops and forums at the regional level, as it hosted the first regional forum on water for agriculture and first regional forum on the Volta basin sustainable underground water resources management in 2009. With a clear strategic plan in place by 2009, pre-investment and strategic plans for the Volta Basin were then developed. The VBA Convention in August 2009 presented an opportunity to foster stronger collaboration and scaling up experiences of countries of the Volta Basin by reinforcing capacities of experts and supporting the development of VBA's plans. VBA is continuing establishing decentralized institutional framework needed for consensus building and implementation at different level for the population at local level.

Senegal River Basin Authority was created by three countries namely Mali, Mauritania and Senegal, to pool their efforts to master the availability of water and seek means of a rational and coordinated use of the basin's resources. Its missions were (i) to achieve self-sufficiency for the people of the basin and the sub-region, (ii) secure and improve people's incomes, (iii) preserve

35 More information on the Mekong River Commission Climate Change Adaptation Initiative (CCAI) is available at <<http://www.mrcmekong.org/about-the-mrc-programmes/climate-change-and-adaptation-initiative/>>.

36 MRC (2011). Climate Change Adaptation Initiative: 2011-2015 Programme Document. Available at <<http://www.mrcmekong.org/assets/CCAI-2011-2015-documentFinal.pdf>>.

37 For example, "SPREP and UNDP (2013): Mainstreaming climate change adaptation in the Pacific – A practical guide. Available at <http://www.sprep.org/attachments/Publications/Mainstreaming_CC_Adaptation_Guide_.pdf>."

38 GWP, INBO, 2012. Handbook for Integrated Water Resources Management in the Basins of Transboundary Rivers, Lakes and Aquifers. Available at <<http://www.inbo-news.org/inbo/information-and-publications/article/handbook-for-integrated-water>>.

39 Member states are Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe. Further information is available at <www.zambezicommission.org>.

the ecosystem balance in the basin, (iv) reduce the vulnerability of the economies of the member states of the Organization to climate hazards and external factors and (v) accelerate the economic development of member states. The authority implemented an integrated and concerted management programme for water resources and ecosystems for sustainable development of the basin. The ambition has evolved to more socio-economic development concerns like hydropower generation, navigation, development of drinking water infrastructures and sanitation, and transport for the benefit of the populations. Thus, one of the concrete achievements is the construction of The Manantali Dam 1982, which is a multi-purpose dam for hydropower generation and irrigation. The authority is presently implementing projects on land degradation and desertification; improved quality of water resources; support for wetland management initiatives; and strengthening of local operational capabilities.

The Authority of the Niger Basin (ANB) is one of the oldest African Intergovernmental Organizations with its creation traced back to 1964 in Niamey. The ANB 's mission is to promote cooperation among member countries and ensure an integrated development of the basin in all areas by setting value of its resources particularly in terms of energy, hydraulics, agriculture, livestock, fisheries, fish farming, forestry, transport and communications and industry. The Executive Secretariat is the statutory body of the NBA which translates into operational objectives, policy and general objectives adopted by the Council of Ministers of the Authority. It provides the strategy to follow and seek ways to make available structures it aims to coordinate. The Shared Vision is a comprehensive overview of the development of the basin, negotiated and accepted by all member countries and stakeholders, users of the basin's resources. This ideal development potential of the entire basin desired by the member countries is to promote understanding, strengthen cooperation between countries and generate the greatest number of advantages for the all countries.⁴⁰ ANB had implemented a number of projects aimed to river basin natural resources management to integrated water management and capacity-building among states members and infrastructures project. Recent projects focus on resilience by data-building system and satellite information on hydrology, meteorology and agriculture and the monitoring of the impact of climate change, floods and drought in the Niger basin among countries members.

Enhancing adaptive capacity and resilience in mountainous environments

ICIMOD's regional programme on adaptation to climate change is designed to enhance resilience and to support adaptation by vulnerable mountain communities and ecosystems in the Hindu Kush Himalayas region.⁴¹ The programme currently has three initiatives; enhancing adaptive capacity and resilience of the poor to climate and socioeconomic changes (AdaptHimal); the Himalayan climate change adaptation programme (HICAP); and Rural Livelihoods and Climate Change Adaptation in the Himalayas (Himalica). The initiatives are conducted under the overall goal of improved resilience and livelihoods of mountain women, men, and children of the region through adaptation to socioeconomic and environmental change including climate change.

Conservation of transboundary ecosystems

The Kavango Zambezi Transfrontier Conservation Area (KAZA) was initiated in 2006 to sustainably manage the Kavango Zambezi ecosystem, its heritage and cultural resources based on best conservation and tourism models for the socio-economic well-being of the communities and other stakeholders in and around the eco-region through the harmonization of policies, strategies and practices. The KAZA strategic action plan for 2011–2016 contains the development and facilitation of research studies on emerging and crosscutting issues such as climate change.⁴²

⁴⁰ <<http://www.abn.ne>>.

⁴¹ <<http://www.icimod.org/?q=9120>>. Regions covered in this programme span through Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan.

⁴² More information available at <<http://www.kavangozambezi.org/>>.

Enhancing climate change resilience

The Benguela Current Commission (BCC) is an executing agency of a regional project on Enhancing Climate Change Resilience in the Benguela Current Fisheries System,⁴³ covering Angola, Namibia and South Africa. The project is funded through Multi Trust Funds, including LDCF allocation for Angola. BCC has a mandate from Angola, Namibia and South Africa to promote the integrated management, sustainable development and protection of the Benguela Current Large Marine Ecosystem (BCLME).⁴⁴

Sharing experiences, best practices and lessons learned in designing and implementing adaptation actions

The Pacific Environment Information Network Virtual Library of Lessons Learned and Best Practices in Environment Management provides a browsable directory of lessons learned and best practices in environment management from around the Pacific region and abroad.⁴⁵

Joint capacity-building efforts, thus offering countries the opportunity to pool from the same expertise and maximize benefits across the region

The LEG conducts regional training workshops for the LDCs, to build and enhance their capacity in addressing adaptation at the national levels, using materials and experiences that are context-specific to each region. Decision-makers and practitioners from within the same regions are able to share with, and learn from, each other.⁴⁶

Combatting desertification across different countries

The Great Green Wall for the Sahara and the Sahel Initiative (GGWSSI)⁴⁷ was launched in 2007 to combat the effects of climate change and desertification with a view to improving living conditions of the most affected populations. Through the programme, participating countries are collectively undertaking efforts, including through different channels of support. Additional funding from the Global Environment Facility and the World Bank has supported the inclusion of sustainable land and water management and climate change adaptation in targeted areas in participating countries. Participating LDCs designed projects based on their NAPAs, and with funding from the LDCF.

Different regions have created Sub-regional Action Programmes (SRAPs) and a Regional Action Programmes (RAPs) under the United Nations Convention to Combat Desertification. The purpose of the SRAPs and RAPs are to provide a framework for coordinated action among countries and other key stakeholders, which complement and support national level implementation.⁴⁸

Building climate resilient and sustainable human systems, ecosystems and economies through mobilization of knowledge

The Asia Pacific Adaptation Network (APAN)⁴⁹ is a regional network of practitioners responding to the growing and urgent need for climate change adaptation. APAN is part of the United Nations Environment Programme's Global Adaptation Network. Its mission is to help build climate change resilient and sustainable human systems, ecosystems and economies in countries across the Asia-Pacific region. APAN has established a web portal that serves as a knowledge platform for climate change adaptation for the region. Furthermore, APAN organizes fora, thematic conferences and trainings to provide learning opportunities for practitioners and networking opportunities for the diversity of adaptation stakeholders.

43 <http://www.thegef.org/gef/project_detail?projID=5113>.

44 <<http://www.benguelacc.org>>.

45 <<https://www.sprep.org/Pacific-Environment-Information-Network/lessons-learned-and-best-practices-in-environment-management>>.

46 More information available at <<http://unfccc.int/6101>>.

47 More information available at <www.greatgreenwallinitiative.org>.

48 <<http://www.unccd.int>>.

49 More information available at <asiapacificadapt.net>.



6. BARRIERS TO REGIONAL SYNERGY

There are challenges and barriers that can hinder efforts for regional synergy in adaptation planning and implementation. These include, among others:

- a) Adaptation needs differ widely based on geography and the prevailing conditions in the area, so the same phenomenon can have widely disparate impacts on populations in different parts of the world. At the same time, acceptance or perception of certain impacts may also differ across regions;
- b) Different countries may have different advancements in addressing climate change adaptation, including legislative frameworks for implementing measures to reduce vulnerability to climate change and to integrate adaptation into development planning;
- c) In the context of risk management and insurance, historical, cultural and religious differences, different legal frameworks, knowledge gaps on regional insurance mechanism and its implementation in defining an appropriate region for purposes of structuring a pool, and difficulties in obtaining the sustained commitment of decision-makers could limit the realization of regional insurance schemes;
- d) A regional strategy could compete with national efforts for resources;
- e) When transferring adaptation strategies within a large region, it is possible that different cultures will not accommodate the new approach;
- f) Regional institutional arrangements may need to be established or strengthened to facilitate synergy in addressing adaptation.

7. CONCLUSION

Although certain barriers may exist, pursuing regional synergy is an effective way to get results on adaptation on the ground given the nature of climate change impacts. By cooperating regionally, countries can tackle similar problems in a more effective manner. The preparation and implementation of NAPAs contain concrete examples on how countries explored regional synergy, which can subsequently feed into the process to formulate and implement NAPs. Regional synergy works best when a clear strategy for synergy at the regional level is defined, efforts are made to ensure full ownership of all projects/programmes by all countries and regional entities concerned, and efforts for broad inclusiveness and involvement of all relevant stakeholders are promoted.



ABOUT THE LEAST DEVELOPED COUNTRIES EXPERT GROUP

MANDATE OF THE LEG

The LEG is mandated as follows (decisions 29/CP.7, 4/CP.11, 8/CP.13, 6/CP.16, 5/CP.17, 12/CP.18, and 3/CP.20):

- (a) To provide technical guidance and advice on the preparation and on the 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 implementation of NAPAs;
- (c) To serve in an advisory capacity to the LDCs, for the preparation and strategy for implementation 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 Global Environment Facility and other relevant capacity-building initiatives;
- (e) To facilitate the exchange of information and to promote regional synergies, and synergies with other multilateral environment conventions, in the preparation and in the 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;
- (h) To provide technical guidance and advice on the revision and update of NAPAs to further improve their quality, to facilitate integration of adaptation actions of LDCs into development planning and to reflect increased adaptation knowledge and changed priorities in the countries, upon request by LDCs;
- (i) To provide technical guidance and advice on the identification of medium- and long-term adaptation needs, their integration into development planning and the implementation of identified adaptation activities;
- (j) To provide technical guidance and advice on strengthening gender-related considerations and considerations regarding vulnerable communities within LDC Parties;
- (k) To provide technical guidance and advice on the implementation of the elements of the LDC work programme other than the preparation and implementation of NAPA that are relevant to the expertise of the LEG;
- (l) To provide technical guidance and support to the national adaptation plan process, as appropriate;
- (m) To prioritize support for the formulation and implementation of national adaptation plans in carrying out its mandate to support the identification and implementation of medium- and long-term adaptation in least developed countries;

- (n) To prepare technical guidelines for the national adaptation plan process, based on the initial guidelines;
- (o) To arrange a review of the above-mentioned technical guidelines and to identify support needs for the process of formulation and implementation of the national adaptation plans;
- (p) To invite the Adaptation Committee and other relevant bodies under the Convention to contribute to its work in support of the national adaptation plan process; and to report, as appropriate;
- (q) To include information in their reports on how they have responded to the requests made in this decision and on their activities relevant to the national adaptation plan process, as per their respective mandates, and to make recommendations accordingly;
- (r) To consider, with the Adaptation Committee and in collaboration with the Green Climate Fund, how to best support developing country Parties in accessing funding from the Green Climate Fund for the process to formulate and implement national adaptation plans, and to report thereon to the Subsidiary Body for Implementation as its forty-second session.



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