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Role of Participatory Approaches and Communication in National Adaptation Programmes of Action: Lessons Learnt for National Adaptation Plans

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ABSTRACT

This research explores how participatory approaches and communication methodologies were used in the design and implementation of Nation Adaptation Programmes of Action (NAPAs) to detect lessons learnt and to understand how to deploy these approaches in Nation Adaptation Plans (NAPs). The study was developed through a literature review, survey and interviews.

Firstly, it provides an overview of the most important participatory and communication approaches available, emphasizing the crucial role they play in climate change.

Secondly, it assesses how these approaches are utilized in NAPAs, introducing the historical background behind the development of NAPAs and presenting the specific case of the Least Developed Countries (LDCs) with respect to climate change adaptation. The use of communication and participatory approaches within the process and the specific methods or tools are analysed. An evaluation of the effectiveness of communication and participatory approaches in the process is carried out and it draws on previous evaluations of the NAPA process in order to identify possible gaps where further evaluation would be beneficial, which will inform the rest of this study.

Thirdly, it illustrates how the fundamental principles of communication and participation were embedded in the NAP process. It investigates the similarities and differences between the NAPA and NAP processes and it evaluates whether these principles have been embedded in the NAP process by analysing the normative process provided by the Least Developed Countries Expert Group (LEG).

In support of these analyses, a survey and interviews were developed in order to answer the following questions:

1.   How were participatory approaches and communication established in the implementation of NAPAs?

2.   What approaches were used and what were the results?

3.   Which stakeholders were involved?

4.   What were the lessons learned and how can participatory approaches and

communication be used for the NAPs?

Finally, a participatory and communication strategy for NAP draws on the literature review and results presented by the survey responses and interviews in order to complement the LEG National Adaptation Plans technical guidelines and provide new ideas for communication and participation within the proposed framework.

In support of the thesis that participation and communication play a key role in the implementation of NAPA and NAP, a case study for Ethiopia has been analysed. The case study evaluates the approaches in designing and implementing NAPA and the subsequent programmes and projects in the country. The outcomes arising in Ethiopia from using these approaches were compared with those in other countries and specifically in Burkina Faso, Cameroon and Central African Republic (CAR).

As a conclusion of the case study, recommendations for the use of participatory approaches and communication methods in the design and implementation of NAPs in Ethiopia were provided.

KEYWORDS

Participatory approaches, communication, climate change adaptation, national adaptation strategies, National Adaptation Programmes of Action, National Adaptation Plans.

SUGGESTED CITATION

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TABLE OF CONTENTS

LIST OF TABLES, FIGURES, BOXES AND ANNEXES FOR CHAPTERS

LIST OF ACRONYMS

AAP	Africa Adaptation Programme
AAU	Addis Ababa University
AI	Appreciative Inquiry
ARDPS	Agricultural and Rural Development Policy Strategies
BCC	Behavior Change Communication
CAR	Central African Republic
CBA	Community Based Adaptation
CBA	Cost-benefit Analysis
CC DARE	Climate Change and Development-Adapting by Reducing Vulnerability
CCAFS	Climate Change, Agriculture and Food Security Programme
CEA	Cost Effectiveness Analysis
CONEDD	Conseil National pour l'Environnement et le Développement Durable
COP	Conference of the Parties
CRDA	Christian Relief and Development Association
CRGE	Climate-Resilient Green Economy
CRGE	Climate-Resilient Green Economy Strategy
CSE	Chemical Society of Ethiopia
DDS	Decisions Support Systems
DPSIR	Driving forces, Pressures, States, Impacts, Responses
DSDSR	Document de Strategie de Developpement du Secteur Rural
EARO	Ethiopian Agriculture Research Organization
EASW	European Awareness Scenario Workshop
EBA	Ecosystem-Based Adaptation
ECBI	European Capacity Building Initiative
ECCAS	Economic Community of Central African States
EPA	Environmental Protection Authority
EPACC	Ethiopian Programme of Adaptation to Climate Change
EPE	Ethiopian Petroleum Enterprise
EREDPC	Ethiopian Rural Energy Development and Promotion Center
ESTC	Ethiopian Science and Technology Commission
EWCO	Ethiopian Wildlife Conservation Organization
FAO	Food and Agriculture Organization
FDRE	Federal Democratic Republic of Ethiopia
FESP	Forest-Environment Sector Programme
FGD	national-level Focus Group Discussion
FRC	Forestry Research Center
GDP	Gross Domestic Production
GEF	Global Environment Facility
GHG	Greenhouse Gas
GNP	Gross National Product
GSP	Global Support Programme
GTP	Growth and Transformation Plan
GWP	Global Water Partnership
IAS	Invasive Alien Species

ICZM	Integrated Coastal Zone Management
INDC	Intended National Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
JICA	International Co-operation Agency
LAP	Local Adaptation Plan
LDC	Least Developed Country
LDCF	Least Developed Country Fund
LEG	Least Developed Countries Expert Group
MCA	Multi-Criteria Analysis
MDG	Millennium Development Goal
MEDaC	Ministry of Economic Development and Cooperation
MINEP	Ministère de l'Environnement, de la Protection de la Nature
MINEPDED	Ministère de l'Environnement, de la Protection de la Nature et Développement Durable
MOA	Ministry of Agriculture
MoME	Ministry of Mines and Energy
MoWR	Ministry of Water Resources
NAMA	Nationally Appropriate Mitigation Action
NAP	Nation Adaptation Plan
NAPA	Nation Adaptation Programme of Action
NAPCC	National Adaptation Programme to Climate Change
NAP-GSP	National Adaptation Plan - Global Adaptation Programme National
NCSU	Communication Support Unit
NMA	National Meteorological Agency
NPCU	National Project Coordination Unit
NRM	National Resource Management
NTC	National Transitional Council
NWP	Nairobi Work Programme
OECD	Organization for Economic Co-operation and Development
ONACC	Observatoire National sur les Changements Climatiques
PAG-PNA	Programme d'Appui Global pour l'Avancement des Plans Nationaux d'Adaptation
PGIS	Participatory Geographic Information Systems
PNDP	Preliminary National Development Plan
PNIASA	Programme National d'Investissement Agricole et de Securite Alimentaire
PPA	Participatory Poverty Assessment
PRA	Participatory Rural Appraisal
PROVIA	Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation
PRSP	Poverty Reduction Strategy Papers
PSC	Project Steering Committee
PSNP	Productive Safety Net Programme
RCT	Random Control Trial
REDD	Reducing Emissions from Deforestation and forest Degradation
REPAR	Réseau des parlementaires pour la gestion durable des écosystèmes forestiers du Cameroon
RPP	Readiness Plan
RRA	Rapid Rural Appraisal

RTA	Road Transport Authority
SC	Steering Committee
SCADD	Strategy for Accelerated Growth and Sustainable Development
SCCF	Special Climate Change Fund
SCP	Strategic Community Plan
SDRASA	Stratégie de Développement Rural, de l'Agriculture et de la Sécurité Alimentaire
SEI	Stockholm Environment Institute
SIDS	Small Island Developing States
SMCE	Social Multi-Criteria Evaluation
SNA	Social Networks Theory or Social Network Analysis
SNNPRS	Southern Nations, Nationalities' and Peoples' Regional State
SWOT	Strengths, Weaknesses, Opportunities and Threats
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNESCO	United Nations Organization for Education, Science and Culture
UNFCCC	United Nations Framework Convention on Climate Change
UNITAR	United Nations Institute for Training and Research
UNRISD	United Nations Research Institute for Social Development

INTRODUCTION

Rationale

By the late 20th century, the issue of climate change had moved into the foreground, impacting heterogeneously on societies, governments, environment and science. When assessing climate change both in a societal and environmental context, it is relevant to remain aware of two competing processes: internal and external vulnerability, and resilience.

The United Nations Development Programme (UNDP) identifies climate change as an impediment to development:

"Climate change is now an inescapable reality. Human activity is leading to ever increasing levels of greenhouse gas (GHG) emissions and steadily compromising the natural resources needed to maintain the health of the planet. Without a secure natural environment, sustainable human development is impossible. The climate change crisis has the potential to reverse development gains already made and block achievement of the Millennium Development Goals (MDGs) if it is not adequately addressed." (UNDP, 2011, p. 12)

Due to the need for both adaptation and mitigation, climate change influences many factors that development depends on but it also affects how resources can be used for development. In particular, while assessing adaptation plans, attention should be paid not only to internal and external peculiarities of a given territory but also to inner and outsider limits and potentials. Thus, development interventions focus on both Natural Resource Management (NRM) and also Sustainable Livelihoods for climate change mitigation. Because it acts on so many levels, climate change interventions require a very holistic approach.

The effects of climate change are not uniform across the globe and every country will have different difficulties and inner vulnerabilities to deal with. The Nairobi Work Programme was set up within the United Nations Framework Convention on Climate Change (UNFCCC) in order to tackle the lack of knowledge at country level and to help countries to: "improve their understanding of climate change impacts and vulnerability; and increase their ability to make informed decisions on how to adapt

successfully" (FAO, 2008, p. 15). At an even lower level, different communities will also be dealing with various issues. Therefore, communication and participation are especially important when evaluating these diverse needs and problems because development projects require the knowledge and expertise of local people, who understand their problems and have ideas about how they can be overcome. Diez, Etxano and Garmendia (2015) note that "in environmental decision making the focus has shifted from the search for optimal solutions to the quality of the decision-making process, and from top-down technocratic approaches to inclusive processes that account for diverse societal perspectives" (p. 1). Thus, practice has demonstrated that participation should always be taken into account at the very first steps of a development project, while understanding and deeply analysing the overall characteristics and the framework, and establishing proper participation strategies in order to get the active and effective involvement of substantial stakeholders. Furthermore, communication for development is integral within the climate change domain, where there are competing demands for scarce resources and decision processes require negotiation of conflicting positions.

Climate change is a domain where "facts are uncertain, values in dispute, stakes high and decisions urgent" (Funtowicz and Ravetz, 1991, p. 137). This makes discussions about the best methods for decision-making particularly important. Beierle (1999) identifies three main reasons why public participation is integral to environmental decision making. The first is that decisions related to environmental issues are complex and "are not conducive to centralized hierarchical decision-making" in that "they often require the knowledge, commitment, and action of multiple levels of government, special interests, and the general public over long periods of time" (p. 77). Adapting and mitigating to climate change requires changing individuals' beliefs and actions and this is most effectively achieved at the 'grassroots' level by facilitating empowerment and deliberation through participation (Probst & Hagmann, 2003, p. 2). Second, when evaluating complex environmental risks it is important to involve the diverse views of both experts and 'lay people' that have different perspectives. This is especially important in the climate change domain where "national policy-making... requires

country-specific information, such as demographics as who and which regions are most at risk to climate variability and extremes" and this information may not be as readily available to international experts (FAO, 2009, p. 17). The International Association for Impact Assessment (IAIA) also notes that "Indigenous Peoples make important contributions ... through their particular knowledge of the environment, the use and management of the environment, and their values about the environment" (Croal et al., 2012, p. 2). Third, public participation can help to solve issues of mistrust that may hinder projects derived from the decision process.

Hence in order to enhance knowledge to support decision-making, appropriate and comprehensive analysis of the environment should always contemplate a wide understanding of stakeholders involved in the adaptation plans. Also, communication should be applicable and communication methodologies should be chosen and used in order to start, facilitate and enhance the knowledge process.

In particular, communication and information are fundamental assets to avoid barriers to knowledge flows and to consequent foreseeable conflicts arising from a lack of communication methodologies.

According to Agenda 21 Principle no. 10, "Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided" (UNCED, 1993).

Although equal access to information should be guarantee at all levels, the evidence demonstrates that the most harmful barrier to the spread of knowledge, especially while dealing with sustainable decisions, is the acute divide between government systems and the scattered realities of rural surrounding environments. In fact, the exchange of information and knowledge is achieved within countries via regional

organizations, rather than between national government themselves and their own rural settings.

Thus, efficient communications methodologies should aim at levelling those barriers, while tackling isolation and avoiding the separation of national and regional needs to local and often hushed necessities.

Information should be improved through knowledge exchange via communication practices, especially while dealing with interchange between governments, and regional and local entities.

Acknowledging the local dimension is crucial in investigating new approaches to be implemented for adaptation strategies. In fact, according to Agenda 21 Principle no. 22, "Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development".

In order to enhance the connections between national, regional and local levels, participatory methodologies are fundamental for gathering research information, establishing a community-based plan of resources management and promoting sustainable policies. In particular, while dealing with decision-making processes and policies, it is crucial to integrate these practices into the different dimensions (i.e. national, regional and local).

Nevertheless, choosing the appropriate participatory and communication methodologies should take into consideration an overall analysis of potential successes and failures.

Within the climate change domain there is a strong commitment to 'communication for development', which "involves the systematic design and use of participatory communication processes, strategies and media to share knowledge and information among all stakeholders in a particular agro-ecological context. It aims to enhance people's resilience and capacity to cope through diverse livelihood options" (FAO, 2010, p. 1). It is acknowledged that for communities to be able to adapt their

livelihoods in the face of rapid climatic changes, participatory knowledge sharing is required that is "multidisciplinary", "multistakeholder" and includes "social learning" (FAO, 2010, p. 7).

The ideas of communication for development and participation with ad hoc communication methodologies, have strongly influenced the design and implementation of development projects with the aim of adapting to climate change at all levels and contributing to the creation of new approaches. Hence, the process used for the development of the NAPAs is no exception and the concept of participation is rooted in the foundations of this initiative.

Before embracing a specific participatory approach and communication methodologies, which will be extensively analysed in this research, it is relevant to answer to some major questions, such as: "what is already done in a good way by the government?"; "what could be improved by a participatory process?"; "what must be avoided in order to facilitate participation?"; "what has been already done wrong and can be ameliorated by training in participatory methodologies?"; "what external opportunities and hazards could be influenced by participation processes?"; " what external threats could be mitigated with efficient cooperation at national, regional and local levels?".

A further analysis of past and present methodologies of participation and communication will be useful in envisioning the current challenges and opportunities in the domain of climate change.

Scope, Objectives and Outline

This doctoral dissertation focuses on the importance of participatory approaches and communication in climate change adaptation strategies, and on the ways in which these approaches are developed and implemented by governments at different scales. In particular, the research is focused on how participatory approaches and communication methodologies have been used in the design and implementation of NAPAs to detect lessons learnt and to understand how the use of these approaches can be improved and encompassed in the development of NAPs.

In particular, the present dissertation seeks to achieve the following specific research objectives:

1)   Analyse how the use of participatory approaches and communication methodologies can allow a wider access to institutions and populations on critical issues related to climate change while ensuring consultation and participation among relevant stakeholders;

2)   Measure how knowledge and information are essential to improve governance on climate change, reflecting the needs of all stakeholders;

3)   Identify the major lessons learnt on using these approaches to design and implement NAPAs; and

4)   Analyse how participatory approaches and communication could be increased or developed to support climate change adaptation strategies.

Ethiopia is taken as the case study to assess how the challenge of participation of different stakeholders and communication are tackled in the context of the ongoing development of the national adaptation strategy. A comparison with other countries has been developed. In particular, the use of these approaches in adaptation strategies were analysed for Burkina Faso, Cameroon and Central African Republic.

The major objective of this research is to propose a strategy for the use of participation and communication in the implementation of NAP. The proposal will be available for countries that are moving towards NAP.

Achievement of these objectives is sought through a literature review, a survey and interviews to experts on climate change adaptation and on participation and communication.

In particular, the major question raised was: since participatory approaches and communication were identified as a fundamental element for NAPA, how were they used and what are the lessons learnt for NAP, and what are the next steps that countries have to take to identify an adaptation strategy?

The methodology of the research was developed following these steps:

1.   Literature review of documents related to NAPAs, NAPs, participatory approaches and communication.

2.   Exploration of how participatory approaches and communication were used in the design and implementation of NAPAs;

3.   Realization and analysis of survey aimed at:

•   climate change experts involved directly or indirectly in the formulation or implementation of NAPAs and NAPs; and

•   experts on participatory approaches and communications with expertise in climate change.

4.   Interviews to: strategic experts on NAPAs, NAPs, participatory approaches and communication

5.   Develop strategy for communication and participation for the NAP process.

6.   Case study in Ethiopia.

The work of the doctoral dissertation is organized as follows.

In chapter 1, an overview of the most important and available participatory and communication approaches emphasizing the crucial role they play on climate change are described.

In chapter 2, how participatory approaches and communication are utilized in NAPAs introducing the historical background behind the development of the NAPAs and presenting the specific case of the LDCs with respect to climate change adaptation are explained. The use of communication and participatory approaches within the process and the specific methods or tools are analysed. An evaluation of the effectiveness of communication and participatory approaches in the process is completed and it draws on previous evaluations of the NAPA process in order to identify possible gaps where further evaluation would be beneficial, which will inform the rest of this study.

In chapter 3, how the fundamental principles of communication and participation were embedded in the NAP process is illustrates. It investigates the similarities and differences between the processes settled in NAPA and NAP and it evaluates whether these principles have been embedded in the NAP process by analysing the normative process provided by the LEG.

In chapter 4 and 5, results of a survey and interviews are illustrated, respectively. Four questions are asked:

1.   How were participatory approaches and communication established in the implementation of NAPAs?

2.   What approaches were used and what were the results?

3.   Which stakeholders were involved?

4.   What were the lessons learned and how can participatory approaches and communication be used for the naps?

A comparison between the answers of survey and interviews is developed to detect suggestions for NAP strategy implementation.

And finally, in chapter 6, a participatory and communication strategy for NAP draws on the literature review and results presented by the survey responses and interviews in order to complement the Least Developed Countries Expert Group (LEG) National Adaptation Plans technical guidelines and provide new ideas for communication and participation within the proposed framework.

In support of the thesis that participation and communication play a key role in the implementation of NAPA and NAP, a case study for Ethiopia is analysed in chapter 7. The case study evaluates the approaches in designing and implementing NAPA and in the subsequent programmes and projects in the country. The outcomes in Ethiopia using these approaches were compared with those arising in other countries. In particular, the participatory approaches and communication methodologies used during the NAPA and NAP process Burkina Faso, the NAP process in Cameroon and the NAPA process in Central African Republic were analysed. Results of the analysis in the three countries were compared with Ethiopian adaptation strategies. The case study provides recommendations for the use of participatory approaches and communication methods in the implementation of NAP in Ethiopia.

In Chapter 8, a summary of the research conclusions across the chapters is provided.

The dissertation also includes tables, boxes, figures and annexes containing complementary information, and a complete bibliography.

CHAPTER 1 - ANALYSIS OF PARTICIPATORY APPROACHES AND COMMUNICATION METHODOLOGIES

"Ask not what your country can do for you, ask what you can do for your country" (J.F.Kennedy)

INTRODUCTION

Communication and participation have become buzzwords within the development community. They are advocated as integral techniques to be utilised in all development projects at all levels. However, the ideas of communication and participation have not been fixed concepts since the first emphasis on communication arose in the 1950s. As the paradigm about how countries should develop has changed, the types of communication that occur in development have shifted and ideas about its use have evolved concurrently. The shift in the dominant paradigm within development also led to the emphasis on participation and how communication can be used to facilitate participation. In order to analyse the role of communication and participation in development, it is important to examine the changes in the dominant paradigm within development as a whole and take into account the historical context of these shifts.

To this end, the course of communication and participation within the history of development over the last 60 years will be analysed in detail. In addition, the current theories of communication and participatory processes will be assessed and an introduction to critiques of their utilisation will also be presented in order to further emphasize reference to communication and participation within the climate change domain.

A BRIEF HISTORY OF DEVELOPMENT

The practice and theory of development necessarily follows from the definition of 'development'. However, the definition of development is highly contested (Sumner & Tribe, 2008) and the differences in the conceptualisation depend greatly on the historical and social context. There are a myriad of ideas about how development

should occur, what the 'end point' of development is, and who the actors of development are. However, the history of development can be broadly categorised into two dominant paradigms – the 'old' paradigm and the 'new' paradigm. With the shift from one dominant paradigm to the next, ideas about communication and participation necessarily shifted. This section will explore the history of the theories of development within its wider context in order to inform a discussion on the concurrent shifts in popular theories of communication and participation.

The 'Old' Paradigm

The term 'old paradigm' within development is used to describe the prevailing ideas about development before the 1960s. In general, the old paradigm of development was seen as a 'paternalistic' endeavour by those in the developed countries helping those in the less-developed countries (Botes & van Rensburg, 2000). There was an assumption that the development 'experts' knew more than the beneficiaries of the interventions. This was partly due to the historical context of colonialism, which in itself constituted a dominance of more developed nations over less-developed nations. The relicts of colonialism also led to a neglect of individual rights in favour of development at the national level. The heterogeneity within nations and the differential impacts that development interventions could have for various beneficiaries were largely ignored. There was the belief that development would move from the elite to the poor by diffusion; this was coined as the 'trickle-down' effect (Huizer, 1983). The trickle-down effect led to projects and interventions that largely acted to increase the gap between the rich and poor in developing countries.

The old paradigm also grew out of the relatively recent successes that the industrial revolution had had for more developed nations. Therefore, there was a general assumption within the development community that projects should focus on industrialisation and technology and the agricultural sector was largely shunned (Rogers, 1976). By introducing capital-intensive technology to developing nations it was assumed that this would automatically bring them 'in line' with already industrialised nations. Furthermore, it was believed that the developing nations would follow the same development trajectory as already developed countries. There was an

idea that every country could be treated as a 'blank slate' and that interventions would work equally for all countries (Easterly, 2013).

The old paradigm of development was characterised by an 'economism' of development (Stiglitz, 2002; Henderson, 1990). Following from the economic ideas of Adam Smith, individuals were seen as one-dimensional actors that would respond rationally when faced with economic incentives. Their varying interests and desires were ignored by the development community in favour of economic measurements of development and prosperity. The economism of development led to an emphasis on economic factors, such as wealth, as the main variable to be improved by development interventions. There was also a desire for the improvements in economic variables to be quantifiable to allow measurement of the impacts of projects (Henderson, 1990). When taken with the emphasis on national level data, it follows that macroeconomic variables, such as Gross National Product (GNP), were the preferred way to measure development; this is described as the 'index approach' (Golding, 1974, p.40).

Communication and participation within the old paradigm

Communication was first cited as an important tool for development in the 1950s with the advocating of mass media (Lerner, 1958; Klapper, 1960; Schramm, 1964). Communication was seen, in general, as a persuasive 'tool' that could be utilised in order to affect change in the ideas and beliefs of the populous (Beltran, 1974). Because the 'modern' knowledge of development experts was assumed to be superior to the 'traditional' knowledge of beneficiaries, communication was uni-directional (Golding, 1974, p.45). The first example of participation and development communication appeared during 1950s in Brazil, when Paulo Freire used communication strategies to work for adult literacy campaigns in underprivileged settings.

The largely uni-directional nature of communication meant that feedback from recipients of the mass media was not taken into account, or even requested, and participation of stakeholders in projects was a neglected concept at this time. Because modern knowledge of technical experts was supposed to be superior, the need for including the knowledge and expertise of the individuals at who development interventions were directed was not recognised.

There was also an under-emphasis of the content and context of communication that stemmed from the ideas in development of the 'blank-slate' (Rogers, 1976; Moemeka, 1994); it was assumed that the same communication tools would be effective universally. Instead, emphasis was placed on quantifiable variables to determine the 'success' of communication for development. For example, UNESCO suggested norms for all developing countries to strive towards that included ten daily newspapers, twenty radio sets and two cinema seats per 100 people (UNESCO, 1961). These variables ignored the effects of mass communication on the population and their responses.

Historical context of the shift to the new paradigm

During the late 1960s and 1970s there was a general discontent with the outcomes of previous development interventions; there appeared to be little progress and interventions did not appear to be providing the promised poverty alleviation or environmental quality improvements (Ashby, 2003). The view that technology was the 'silver bullet' that would immediately bring large-scale development appeared to have fallen short. An example can be seen by the 'Green Revolution' in India with the introduction of agricultural technology (Owens and Shaw, 1972). It was recognised that the idea of a 'blank slate' was a fallacy and that local knowledge and an acknowledgement of the "local political context" was required for interventions to be fully successful (Eurodad, 2001, p.3).

Furthermore, there was a dissatisfaction with the environmental impacts that industrialisation had brought and the ensuing reduction in health and wellbeing (Ashby, 2003). This led to a growing proportion of the development community that began to question the idea of development as being solely economic (Chambers, 1995; Moemeka, 1994; Rogers, 1976). It became accepted that individuals were multidimensional and welfare depended on many factors other than wealth. Other dimensions, such as social development, health, equality and freedom began to enter discourses (Henderson, 1990). Chambers' recognised that the "realities of poor people are local, complex, diverse and dynamic" (1995, p.173) and that their various desires need to be incorporated into the conceptualisation of development. His ideas of

'putting the last first' (Chambers, 1986) were integral to the recognition of the need for consultation and participation. He stressed that without gathering the ideas and needs of the beneficiaries, development interventions would never succeed at improving the lives of the people at which they were directed.

The levels at which development acts also shifted and multiplied from a focus on the national level within the old paradigm to an inclusion of the individual, community and international levels at which development can act (Knutsson, 2009). There was a growing recognition of the importance of individual rights as a result of the end of colonialism and increasing globalisation, which led to a greater recognition of the individual as a level at which development should be targeted. Furthermore, with globalisation, there was also a shift in the ideas of the underdevelopment. Previously, the 'internal' variables of a nation were what was emphasised as the root cause of underdevelopment. However, with increasing globalisation and interaction between nations, it became evident (at conferences such as the Bucharest World Population Conference, 1972 and the Rome Conference on Food, 1974) that 'external' factors, such as terms of international trade, were also important determinants of development.

The 'new' paradigm

The new dominant paradigm that emerged can be characterised by four main concepts:

1.   Equality

The new development paradigm exhorts the principle of equality in all areas. It rejects the idea that development should be directed at the more 'well-to-do' members of the society and instead emphasises equality in the benefits for the whole of the society (Rogers, 1976).

2.   Attention to variability

Variation between individuals, communities and nations is recognised and the adaptation of programmes to suit the targeted beneficiaries is imperative.

3.   'Self-development'.

'Self-development' is the idea that people should be responsible for their own development (Rogers, 1976). It stresses that development should be a 'bottom-up', grass-roots process rather than being directed from the top. It recognises that beneficiaries (or stakeholders) of development intervention should participate in decisions and that the 'traditional' knowledge needs to be integrated with the 'modern' knowledge to ensure the success of projects.

4.   Multi-dimensional development

The new paradigm rejects the uni-dimensional model of development, as measured solely using economic indicators. It recognises that there is a need for a focus on other factors (Stiglitz, 2002; Chambers, 1995). It also recognises that individuals will not all act according to economic incentives and successful development projects must take these individual differences into account.

The shift to this paradigm led to concurrent shifts in theories about how participation and communication should be utilised to facilitate development. Participation became one of the most important components for facilitating self-development and equality, and communication was integral to the success of participatory approaches. The next sections of the chapter will look at the current role of communication and participation within development.

COMMUNICATION FOR DEVELOPMENT

The principal publication that initiated new ideas in communication was 'Communication and Development: Critical Perspectives' (Rogers, 1976), which was published after the expert conference in Honolulu, Hawaii. It was then that it was first recognised that communication should be adapted to fit with the new priorities of the development community. Development Communication was firstly used as a participatory method and tool of top-down development programmes to enhance local awareness and helping in the formulation of personal and collective demands for the well-being and the enfranchisement from oppression.

Ramirez and Quarry (2004) identify four main elements that necessitate an increased emphasis on the importance of communication for development. These are: the recognition of failure in field implementation of development projects; increased

accountability and transparency; increased interaction between institutions; and environmental changes at a global level (p.8).

Communication within development is now seen as knowledge sharing, with both vertical and horizontal information transfer. It is the means to facilitating the four most important components of development, by providing "the information and intellectual environment that will help the people to know what to do, know how to do it, be willing to do it, and have the resources to do it" (Moemeka, 1994, p.15). It is also the key to bringing together all actors necessary to facilitate development, including government, and private and public business (Moemeka, 1994). Communication for development is defined by Ramirez and Quarry (2004) as "the planned use of different strategies (media and others) to help people become aware of and articulate their position, exchange knowledge and skill to take control over their lives, reach consensus and manage conflicts, and improve the effectiveness of organizations" (p.4). In this way, communication for development can be seen as a means of facilitating self-development.

Communication can be seen as having two main roles within development: a transformation role and a socialisation role (Moemeka, 1994). These two roles work concurrently: the transformation role of communication is to affect social change to improve quality of life; and the socialisation role is to maintain the values within society that are congruent with development.

The UNESCO International Conference on Communication Policies for Rapidly Developing Societies in 1975 concluded that for communication to aid in successful development projects it should be utilised for:

- Citizen access to communication systems for effective feedback;
- Determination of the needs of people;
- Horizontal and vertical communication linkage;
- Provision of local community support for cultural preservation;
- Provision of relevant information;
- Support for specific development projects; and
- Raising awareness.

Furthermore, Ramirez and Quarry (2004) identify three main functions of communication with development programmes: increasing knowledge about policies and interactive policy-making; sharing knowledge; and participatory communication.

COMMUNICATION FOR PARTICIPATION

Communication is central to participatory approaches. It follows that for stakeholders to be consulted and included in development project decisions that development practitioners must communicate with the affected parties. However, it is impossible to provide a blueprint for how communication should be used because it varies considerably for every development intervention and the function that the communication wishes to serve. However, in order facilitate participation communication should be multi-directional, inclusive, and context- and content-oriented.

Although communication is essential for participatory approaches, there are a number of other integral components that are required to facilitate participation. These include: balancing of power relationships; ensuring fair processes; creating institutional capacity; and facilitating effective negotiation with a trusted, impartial convener (Ramirez and Quarry, 2004). These factors will be discussed in detail in the following sections.

DEFINITION OF PARTICIPATION

In the past, participation was actually seen as hindering effective development. It was assumed that centralised decision-making with minimal outside input was adapted to complex problems where rapid action was required. Examples such as the centralised governance of many rapidly developing countries can be cited as an example. However, in recent decades, there is a growing evidence base that suggests that participatory processes are effective and efficient means for affecting development.

Participation is a difficult concept to define and implement because it is viewed differently by various people (World Bank, 2002; Salole, 1991), occurs differently in every setting, has many sources, and occurs at different levels and stages within projects. In its broadest sense, participation can be defined as "transparency,

openness and voice in both public and corporate settings" (Stiglitz, 2002, p.165). Its main aim is to give stakeholders a voice in decisions that affect them and allow them to "influence and share control over priority setting, policy-making, resource allocations and access to public goods and services" (Tikare et al., 2001). The definition of participation used by the United Nations Research Institute for Social Development (UNRISD) is "the organized efforts to increase control over resources and regulative institutions in given social situations, on the part of groups and movements hitherto excluded from such control." (Wolfe, 1984, p.162) Participatory processes are those procedures that facilitate participation. In a more specific sense, a participatory process is "an active process whereby beneficiaries influence the direction and execution of development projects rather than merely receive a share of project benefits" (Paul, 1987, p.v).

WHY PARTICIPATION?

There are two main reasons why participation is advocated for development activities in the context of climate change. The first reason is that it increases the efficiency and efficacy of development intervention. Stirling (2006) identifies this as a 'substantive' reason because participation "enhance[s] the 'quality' of decisions" (p. 96). The second reason for facilitating participation in development interventions can be seen as a 'moral imperative' such that, regardless of its benefits for development projects, participation is good *per se* because it reinforces equity and empowerment and "enhances the capacity of individuals to improve their own lives and facilitates social change to the advantage of disadvantaged or marginalized groups" (Cleaver, 1999, p. 598). This can be considered a 'normative' consideration as it "appeal[s] to the intrinsic social desire of equity of access, empowerment of process and equality of outcome" (Stirling, 2006, p. 96). These two reasons for introducing participation into decisions give participation a 'dual character'; it can be seen as both a means (for increasing efficiency) and an end in itself (Goulet, 1989).

GOALS OF PARTICIPATION

Participation can be used within decision-making for a number of ends. Beierle (1999) identifies six main goals for participation: "educating and informing the public, incorporating public values into decision-making, improving the substantive quality of decisions, increasing trust in institutions… reducing conflict… [and] cost effectiveness" (p.81). These goals relate to both the substantive and normative reasons for participation, as identified by Stirling (2006), and to considerations of social development.

Participation in any given project or decision-making process may have a single goal or incorporate multiple goals. The goal emphasised by a participatory approach will affect the form the participation takes. As discussed later in the chapter, it is also necessary to identify the desired goal of a participatory approach in order to be able to evaluate its success and failures.

Increasing the efficiency and efficacy of development projects is a clear goal for development professionals. Johnson et al. (2004) define the type of participation with this goal as 'functional participation'. Ribot (1999) states that participation (and decentralisation) can increase managerial efficiency for development projects through: internalising the costs and benefits of decisions by making those who take decisions those who bear the consequences, rather than a disinterested outsider; reducing administrative costs by use of local people, skills and knowledge; and "matching actions to needs" by using local knowledge and aspirations in project design. Furthermore, Stiglitz (2002) notes that participation of stakeholders in decisions allows for legitimacy of those decisions because they have been decided internally and this may improve efficiency because the decisions can be used for further action or policy without debating the outcomes of the prior process. Therefore, participation allows for the "provision of more effective decision justification" and increases efficiency by reducing the quantity of redundant decisions (Stirling, 2006, p.96).

The goals of increased efficiency and efficacy of development projects can be seen as substantive goals. However, there are many goals based on normative considerations. For instance, participation may have the goal of reducing conflict and increasing trust

between various stakeholders with conflicting views. It may also have the goal of empowering stakeholders to own and maintain projects in the future by "building individual and collective capacity to innovate" (Johnson et al., 2004, p.190). Abelson (2006) identifies another core goal for participation is that by facilitating social development it will "contribute to a more educated and engaged citenzry" (p.1). Due to the communication and knowledge sharing that is inherent in participatory processes, they bring about increases in education of the populous, whilst also increasing empowerment and ownership of development activities. As sustainability of development projects is imperative over longer time periods than interventions, the goal of educating and empowering the populous is very important.

SOURCES OF PARTICIPATION

There are three main avenues from which participation can occur and the kind of participations will be presented in the next chapter. It can occur: 'from above', for instance, initiated by government; 'from below', started by the populous themselves; or from a third party, such as technicians, missionaries or militants (Goulet, 1989). The source of participation can have a large effect on what is sought by participation because the dominant group seeks to gain something for themselves from the participation. For example, participation initiated from above usually seeks to gain something from the participants, usually to produce more or more efficiently (Wolfe, 1984).

The source of participation can also impact its sustainability. Participation only lasts if there is 'mobilisation' and 'organisation' (Goulet, 1989). This means that the populous must feel that they are integrated within the development goals and are organised to carry on the project in the future. Organisation can represent empowerment of the people to engage with project goals but also institutional capacity for future development decisions. Building institutional capacity is important for the sustainability of development projects (Paul, 1987; Ribot, 1999; World Bank, 2002).

Regardless of the source of participation, there may be 'good practice' guidelines that apply to all forms of participation in order to ensure that it is legitimate in process and fair in its outcomes.

GUIDELINES FOR EFFECTIVE PARTICIPATION

It has been noted that participation cannot be prescribed completely due to its context-dependent nature (Abelson, 2006); in every situation, a different form of participation may be required. Therefore, it has been noted that a 'tool-kit' for how to illicit participation within development decisions is not applicable (Reed, 2008). Also, as noted above, participation is most likely to be sustainable when it emerges 'from below' rather than being prescribed by an outsider. However, a number of studies and direct research have produced guidelines with core themes, which have led to effective participation in the past.

As discussed earlier in the chapter, participation can occur at many different points within the decision process (Goulet, 1989). Although situations may differ, it is recommended that participation occurs as early as possible in the participatory process. Through a Grounded Theory Analysis of the participation literature, Reed (2008) finds that "engagement with stakeholders as early as possible in decision-making has been frequently cited as essential if participatory processes are to lead to high quality and durable decisions" (p.2422). This includes interacting with stakeholders at the planning stage of any participatory process where needs and goals are determined (Botes & van Rensburg, 2000). However, it may be important to have sustained participatory involvement in the project process and may even be appropriate to include stakeholders in the evaluation stage as well (Reed, 2008).

When participation is utilised, a framework for who should be included in the participation is required. Identifying stakeholders for a project, and then ensuring that the views of those stakeholders are heard, is integral to participation. The level at which participation is appropriate should be considered carefully because it will determine who the relevant stakeholders are and, in turn, will affect the views represented and the outcome of decision process (Munda, 2004). Stakeholder analysis may be a useful tool for pin-pointing "key participants" and gaining a greater "understanding of a system" (Grimble & Chan, 1995, p.114).

When the scope of the participatory process has been identified, it is then important that all relevant stakeholders are included in the process. Stakeholder analysis, which will be deeply analysed in the next chapter, can also be useful for characterising the heterogeneity within the system and identifying various groups and interests that need to be engaged with. It is highly important that vulnerable or marginalised groups are represented in the participatory process. Gender issues should be especially addressed by understanding the given gender roles and ensuring that these roles are considered throughout the process and that any constraints on women's participation are lessened (FAO, 2007; Amelga, 2003). It has been acknowledged that understanding the needs of the most vulnerable groups is not easy because "such information seeking is a rather difficult task, since the target population is poor, and 'poor' is related also to information isolation in both directions: information receiving (exposure to information) and giving (limited circulation of ideas, limited means of verbal expression, etc.)" (Huizer, 1983, p.14). This is why there should be an emphasis on communication and that language considerations, that could impede communication between participants, are taken into account and addressed (Bernard and Armstrong, 1997).

For a participatory process to be successful, the power relationships between groups and individuals need to be identified and power disparities should be addressed (Botes & van Rensburg, 2000). Sensitivity must be used when selecting who to engage with in the participatory process because sometimes it is the most outspoken individuals (who are the ones that are the most easy to communicate with) that are the least representative of the community overall (Salole, 1991).

Ribot (1999) notes that "only in very small communities is it possible for all voices to be heard" (p.2) and that it is therefore necessary to have a representative body within the community that can make decisions for the group as a whole. However, for local representation to be representative it must also be accountable (Ribot, 1999). Institutionalisation of the participatory process can allow for this accountability. However, it should be ensured that spokespeople for the community are truly

representational and potentially powerful groups or individuals should be prevented from dominating participation.

There should be country or community ownership of participation so outsiders should attempt to shift their own role from "implementing agents to facilitators" (Botes & van Rensburg, 2000, p.54). This ensures that the project will be sustainable in the long run because it allows for empowerment of the people to facilitate their own development in the future. As noted by Hyden (1998), "Development is potentially effective only when it is done by people themselves" (p.1). The facilitator should be trusted by all participants.

As presented further on, communication should be facilitated in order to enable the utilisation of local or indigenous knowledge. Facilitation of communication between stakeholders and to "improve linkages" between groups is integral to successful participation (Ramirez and Fernandez, 2006). There should also be a consideration of the 'negotiation-dimension' of participation and communication should be used to facilitate negotiation where there are necessarily conflicting interests that cannot be used for common interest (van den Hove, 2006).

Evaluation of the participatory approach is an important step in the process. When evaluation does not occur the successes and failures of the process cannot be determined, no lessons can be learned for the future, and accountability is limited. Because the evaluation of participation is such an important and detailed topic it will be discussed in more detail in the following section.

EVALUATING PARTICIPATION

When considering the evaluation of participation there are a number of factors that one might wish to take into consideration. First, the reason for evaluation needs to be assessed and what part of the participation will be evaluated needs to be determined. The criteria for the evaluation must also be considered in order to understand what will constitute 'success' and 'failure'. Furthermore, it is necessary to identify how and when the evaluation will take place.

Abelson (2006) identifies four main reasons why one might wish to carry out an evaluation of public participation: summative evaluation; formative evaluation;

ethical/moral reasons; and theoretical/scholarly interests. Summative evaluation refers to evaluation that aims to ensure that processes are accountable and time and resources are used efficiently. For processes that include engaging with stakeholders, it is important to evaluate whether resources, such as the time asked of participants, is used efficiency. This type of evaluation is also particularly important where financial resources for projects are limited and efficiency is paramount. Formative evaluation refers to evaluation whose aim is to improve processes for future projects. Evaluation for this purpose is extremely important and Botes & van Rensburg (2000) and Chess (2000) both identify the lack of evaluation of participatory approaches for continuous improvement as a major problem that hinders learning within the development sphere. Ethical or moral considerations drive evaluation whose aim is to determine whether processes are fair and conducted in a 'good' manner. Finally, evaluation may also be carried out purely "for the purposes of describing, explaining and predicting human behaviour and social processes" in the interest of theoretical research (Abelson, 2006, p.3).

How participation is evaluated necessarily depends on the reasons for carrying out the evaluation and the goals of the participation itself. Beierle (1999) suggests that there are two main ways in which evaluation can occur – process-oriented and interest-oriented approaches. Process-oriented approaches focus on evaluating how the participatory process was conducted. These types of evaluation typically focus on Habermas' ideas of "free and equal communication that meets the democratic requirement of equal participation" (Kulynych, 1997, p.332). Process-oriented approaches are especially useful if the aim of the evaluation is for ethical considerations or to provide improvements for future projects. However, problems with the process-oriented approach have been raised because the process may be fair and conducted efficiently but the outcome may not reflect this (Abelson, 2006). Therefore, evaluating solely the participatory process may miss important factors and it may also be important to evaluate outcomes. Outcome-oriented approaches "measure the extent to which different parties (such as a public agency or a community group) achieved their own specific goals" (Beierle, 1999, p.80). Therefore,

outcome-oriented approaches to evaluation focus on the 'end result' of the process rather than the means to get there (Carol, 1998).

As highlighted above, evaluation of participatory processes is important for many reasons. However, there are also a number of issues with carrying out evaluations. Rosener (1981) succinctly outlines the problems of evaluating participation and identifies that: it is a "complex and value laden" concept; "there are no widely held criteria for judging success and failure"; "there are no agreed-upon evaluation methods"; and "there are few reliable measurement tools" (p.583). These issues will be elaborated below.

When carrying out evaluation it is difficult to know what constitutes 'success' and 'failure' for either a process or outcome because the criteria and the values placed on certain criteria vary depending on the evaluator. Sponsors, organisers and participants of a process may all have different ideas about what constitutes success but even within these broad groups there will be a plurality of ideas. For example, Webler, Tuler and Krueger (2001) identify five different discourses by which the participants themselves may evaluate a participatory process. These perspectives include "fairness", "popular legitimacy", "ideological discussion", "leadership and compromise", and a "power struggle" between participants (p.435). The number of different criteria and values makes objective evaluation of success impossible for participation. Social Multi-Criteria evaluation (SMCE) is one method of overcoming this issue. SMCE is "designed to support decision-making processes in uncertain situations characterized by deep complexities and conflicting interests" (Diez et al., 2015). For the evaluation of participatory processes it allows for the consideration of the criteria for evaluation of relevant stakeholders, the weights of the criteria assigned to each criteria and their various scores.

Finding appropriate methods and tools for carrying out evaluations of participation is complicated. For instance, when evaluating participatory processes it is very difficult to do any form of experimental research, such as the use of Random Control Trials (RCTs), because in many cases controls would not be appropriate. Furthermore, it is unclear that this type of experimental evaluation would be useful because the context-

dependent nature of participatory processes means that results and recommendations are unlikely to be transferable to other projects (Abelson, 2006). Another contested area is whether the use of qualitative or quantitative evaluation methods are more appropriate for participation. Quantitative research is likely to be easier to collect but may not identify the most important factors within the participatory process as well as qualitative methods that may be more time consuming and less easy to generalise (Chess, 2000).

When discussing the methods of evaluation, it is also important to highlight that the timeframe for evaluation can greatly affect what tools and methods can be used. Evaluation may occur before the completion of a project, immediately after project completion or a long period after the project has ended. When evaluation occurs necessarily depends on why the evaluation is being carried out, who is evaluating and the methods used.

CRITIQUES OF PARTICIPATION

Critiques of participation may focus on the underlying reasons for undertaking participatory processes and whether participation provides the benefits that are argued, such as increased efficiency and greater equality in decision-making. Criticisms may also be directed at the participatory processes themselves and highlight 'bad' processes or techniques.

Participation is a highly utilised term in development discourse and it has been suggested that the theory and practice of participation can be very different and that gains may not be realised (Johnson et al., 2004; Hildyard et al, 1998). It has been noted that, in some cases, participation is "merely a means for engineering consent to projects and programmes whose framework has already been determined in advance" (Hildyard et al, 1998, p.3).

Critiques of participation are particularly aimed at participation that is initiated by a top-down process, for instance, when participation is advocated by those who would otherwise have decision power over a development project, policy or intervention. This is in part because participation initiated form the top-down is more likely to be undermined by incumbent interests. It has been suggested that for a participatory

process to be fully successful, its inception should also have participatory origins and Stirling (2006) notes that "there are a growing number of successful examples of approaches where the entire architecture and structural design of a public engagement exercise is itself a matter for participatory deliberation" (p.104).

It has also been suggested that top-down participation can be used purely as a justification for previously-decided outcomes (Stirling, 2006). Furthermore, decision making is a political process and participatory processes that are prescribed from the 'top down' can sometimes be used to legitimise political systems. Regardless of the participatory processes utilised, those in the position of power are those who ultimately decide how the outcome of the decisions are translated into policy. Unless there is complete transparency and accountability, outcomes from the best-made decisions may not be realised (Munda, 2004). The World Bank notes, in its assessment of the participatory processes in the Poverty Reduction Strategy Papers, that "there is no direct link between a political regime per se and the quality of a participatory process. But correlates of democracy such as press freedom, history of and openness to civic organization, etc. are conducive" (World Bank, 2002, p.18). Therefore, the local political landscape can determine the effectiveness of a participatory approach and without due consideration of this projects may not be successful.

For participation initiated from the top-down there is also a confusion over why people should participate – whether it is for their 'own good' and they should do it for rational incentives or whether they should do it from some civic imperative. Cleaver (1999) discusses the nuances of why people participate and concludes that in the development community "little recognition is made of the changing social position of individuals over life-courses, of the variable costs and benefits of participation to differently placed people, [and] of contending and complementary concerns with production and reproduction" (p.607).

As discussed earlier in the chapter, participation can occur at many different points within a decision-making process. At what point participation is requested in a project can have a great effect on the level of the participation. Goulet (1989) notes that "if one wishes to judge whether participation is authentic empowerment of the masses or

merely a manipulation of them, it matters greatly when, in the overall sequence of steps, the participation begins" (p.167). For instance, participation that is requested at a later stage is likely to take the form of decision-justification and is less likely to represent the real views of the various stakeholders.

Communities are not homogeneous and are not easily defined. The heterogeneous nature of communities means that there are many groups or individuals within a community that have different interests. This is the primary reason for the need for participation within decision-making but it also causes various issues for the design and implementation of participatory processes. For example, selective participation may exist where the stakeholders consulted in a process are not representative. This may be because of 'self-selection' or use of community leaders as representatives. There is also the issue that views and interests of stakeholders may be in conflict. If interests are not met, or people feel that their needs are not sufficiently taken into account they will not be fully integrated into the project and may even sabotage project goals (Botes & van Rensburg, 2000).

PARTICIPATORY APPROACHES

Participatory approaches are applied and implemented in a multiplicity of contexts and sectors, for a variety of levels and degrees of human development and for different purposes (e.g. urban management and policies, livestock management, water management, risk assessment, etc.). Box 1 outlines participation in major international declarations.

Box 1 – participation in international declarations

"Adopt popular participation as a basic policy measure in national development strategy (…) encourage the widest possible active participation of all individuals and national non-government organizations, such as trade unions, youth and women's organizations, in the development process in setting goals, formulating policies and implementing plans" (United Nations, 1975)

"Participation is by itself a basic need of people and must be included as a critical consideration in any development strategy" (Office, 1977).

"Experience has shown that sustainable development requires a commitment to sound economic policies and management, an effective and predictable public administration, the integration of environmental concerns into decision-making and progress toward democratic government, in the light of country-specific conditions, which allows for full participation of all parties concerned" (Agenda 21, UNCED 1992).

Given the broadness and dynamism on the discussion of participation, there has been the necessity for new compelling approaches related to participation at different levels and with different methodologies. Especially with regard to development issues and Climate Change Adaptation, it is crucial to firstly analyze and understand the local context and its vulnerabilities before applying more global approaches of good governance (Reid and Huq, 2007a).

In fact, local and culturally-specific knowledge should be considered as important resources in participatory and adaptive processes, particularly in the development of efficient strategies and policies. Hence, inclusiveness and participation should be achieved primarily at the local level, considering specific territorial vulnerabilities and impacts while contemplating more global risks, although this might be considered a paradox since global governance structures are often used to undergo local adaptation strategies (Ayers, 2011).

Participation is helpful in supporting project implementation and in raising awareness, while enhancing the well-being of populations and communities. In particular, participation should be used as a structured method in development projects and especially for providing basic services (e.g. health, education, water, agricultural extension, etc.), while ensuing advocacy goals and monitoring progress towards these targets, and facilitating meditation and learning activities among local groups of individuals.

Moreover, participation in decision-making process is a complex system and inclusion should be always taken into account, while analyzing the variety and complexity of populations not only with regard to territorial characteristics but also to availability of resources, increasing in vulnerabilities, GDP and access to knowledge.

Appropriate participation methodologies are important for the success of participatory approaches. During the early years of development, most projects tended to select inappropriate methodologies of participation due to a lack of understanding of the general framework and dynamics. Participation itself does not guarantee the positive success of a project, since the outcome of participatory approaches should be carefully considered and defined in specific methodologies. Moreover, a mere participation as simple attendance does not imply a win-win situation since being present at a debate but not being effectively involved in the whole decision-making process does not imply the attainment of an expected result.

Participation must be analyzed as a very rigid series of applied methodologies in order to avoid misapprehension with other forms of participation as the consultation and the mobilization, which instead differ from it. As a matter of fact, a real and efficient participation contemplates not only the gathering of people and stakeholders together in a same setting, but particularly the contribution of these actors to the decision-making process in a bi-univocal correspondence of participation and responsibility.

In fact, responsibility, although with various degrees of intervention, is crucial to cement a sense of ownership among participants, helping in perceiving participation and communication activities as a proper interest to pursue.

Participatory techniques, such as the Participatory Rural Appraisal, which will be analyzed further on, can be used to enhance development plans and actively involve members of a community in a proactive and conscious way, while quickly gathering the maximum amount of information on the state and management of natural resources and basic social, economic and political data.

Hence, participation could be interpreted in different ways according not only to the results but also to the expectations. In this regard, Oakley (1991) classified three main interpretations of participation: participation as contribution, participation as organization and participation as empowerment (Leyand, 1991). Later on, Mefalopulos (2008) extended Oakleys' interpretations with the identification of passive participation, participation by consultation, participation by collaboration and empowerment participation.

In Oakley (1991), the first example of participation is considered fundamental for the success of a development project and contemplates voluntary forms of participation by local and rural communities once the project is already predetermined. The voluntary basis should be then interpreted and assimilated to stimulation. In fact, willingness to actively participate in the decision-making process must presume a sort degree of awareness so that a prior information should be widespread in an unavoidable top-down system.

The second form of participation is a middle step degree in which communities are encouraged to organize themselves. This type of participation could result sometimes inefficient due to a lack of additional expertise and traditional knowledge, and could not be sufficient.

On the other hand, the third one is a method of participation that considers the enhancement and development of local knowledge in order to better participate in negotiations and plead their needs.

In Mefalopulos, the passive participation is the least participatory since refers to a participation as simple information of the background and stakeholders' feedback is minimal.

The second form of participation is an extractive process where stakeholders provide inputs but the decision-making power remains in the tasks of external professionals.

The third level of participation contemplates a participation arising from the discussion of a predetermined objective and it is more horizontal and collaborative. In the last form of participation stakeholders are at the same level and can initiate the process, while finding solutions and exchanging knowledge.

Despite these types of participations and the possible effectiveness, it is important to set up a SWOT analysis of the overall situation and the population involved in the whole process.

While analyzing participation methodologies, it is of the utmost importance to understand the pre-existent, particularly the culture of a territory and the indigenous knowledge. Moreover, according to Malinowski (1922), it is crucial to use participatory anthropological techniques as the Participant Observation methodology in order to deeply understand and interconnect with a given group of individual through intensive participation and involvement in the activities of a community.

From Malinowski's theories other forms of participation derived and in particular the most relevant for development projects, also with regard to Climate Change issues, are:

Rapid Rural Appraisal

The method identified as "Rapid Rural Appraisal" (RRA), appeared in the 1970s and widely used along 1980s. It is considered by the international community of researchers as a broad system that can be used both at rural or general levels and implying an essential extractive process being more economical in time and resources. Comparing RRA to more classical quantitative surveys, it enables to achieve less precise results but with more evident values of learning from outsiders. In fact, this method, used essentially in agricultural systems, helps in getting information from local knowledge using a system of listening research and other creative methods as iterative and verification systems, with the support of the triangulation of data from other external sources. In order to do so, the method is usually used by multidisciplinary teams, which apply different techniques, as for example collection of

secondary sources for mapping local areas, use matrix to rank complications or other indicators, observing and producing diagrams or using the Venn diagram. Other tools used are interviews with key informants, questionnaires, thematic workshops, case studies on local happening and culture, time lines and other forms of direct observation.

In addition to the above-mentioned techniques, it is crucial to also adopt an extractive process since participation should not be restricted to a mere provision of information by the community to the benefit of researchers. It is important to determine roles, while defining the value added and the owner of the information. In this method of participation, the information is more top-down oriented since the community react to a stimulus from the outside. The general feeling is that the final product of participation belongs to researchers and not to the community. Thus, it is important that projects dealing with participation and research identify and describe to the community adaptive strategies in order to involve in policy recommendation.

According to FAO (1996), Rapid Rural Appraisal results in activities related to direct communication with local people and actors and focusing on the explicit collection of information. These activities are carried out by a group of experts having heterogeneous backgrounds but with the same willingness to learn more on a specific area. This process is carried forward with the use of set of guidelines providing guidance on the right approach to be used for the collection of information, the involvement of local actors and the interpretation of this information. The main tools adopted in the RRA are conceived to stimulating interaction and obtain information to rapidly report and analyze, while formulating appropriate actions to be sought (FAO, 1996).

Participatory Rural Appraisal

In late 1980s based on RRA, another method became to be tested and used in order to promote empowerment while legitimizing local knowledge, the Participatory Rural Appraisal (PRA), which first description appeared in Kenya in 1988.

PRA has been defined as "a family of approaches and methods to enable rural people to share, enhance and analyze their knowledge of life and conditions, to plan and to act" and "an approach and methods for learning about rural life and conditions from, with and by rural people" (Chambers, 1994).

This method consists in five core principles: Empowerment, Respect, Localization, Enjoyment and Inclusiveness. The external knowledge should be assimilated and shared through participation with internal local knowledge. The knowledge gives strength to communities and should be perceived as an owned value to be used for empowerment. Through this method, researchers should learn from the community while deeply understanding its peculiarities, culture and communication. It is then important to avoid the use of external conventional representations and using local systems.

On the contrary of the RRA method, the PRA is more focused on the process rather than on the economy and rapidity of it and the main ideal objectives are related on the empowerment of local people instead on the learning from outsiders. This enhance a sort of sensibility in the process that helps reinforcing inclusiveness practices such as the contemplation of more vulnerable groups.

The core methods used in PRA are related to the handling of matrix scoring and models, the analysis of change in trends, the ranking of indicators such as the well-being and wealth, seasonal calendars and the analysis of analytical diagrams. The Participatory Rural Appraisal is especially applied in natural resources management as well as in food security and social programmes (Chambers, 1994).

PRA is frequently used in formalizing the knowledge of a community within development projects through participation and has become a label in development projects.

Due to its formalism, PRA may have some possible setbacks due to the possibility of manipulation and disappointment of local expectations.

Thus, it is important to avoid situations of abrupt exploitative approaches or empowerment connotation related to PRA social analysis.

Participatory Poverty Assessment

Another instrument of participation is the Participatory Poverty Assessment (PPA) that according to the Word Bank aims at locally, socially and institutionally understanding the context of an area through iterative participatory researches.

The two generations of PPA use tools that focus on the participation of different stakeholders with regard to the inclusion and vulnerability from the point of view of underprivileged people and with the scope of analyzing poverty and finding concrete solutions.

In fact, it is very common the situation where rural or more in general poor people, experiment a feeling of powerless in steering development policies since they believe that development programmes are controlled and decided entirely by outsiders. They feel they cannot influence the decision-making process and also where political intent of inclusion is made, it may happen that methods used are not useful in enhancing their capability to participate, or they refuse to get informed.

Thus, PPA aims at overstepping these social barriers. In fact, not only poor people ae involved in the process but also decision makers, so that they can commit and address especially national policies. The most common tools used in the PPA methodology are indicators and micro-level data as well as the Venn diagram.[1]

Appreciative Inquiry

Another interesting model of participation finalized to the adoption of strategic policies for development and used particularly by companies, is the Appreciative Inquiry (AI).

This method analyses the fact that in a discussion one tends to focus on the question asked and so to direct the attention to a particular direction. Also, the Appreciative Inquire assumes that consultation activities are based on so called deficiency model, since actors aim at questioning problems in order to find solutions (Cooperrider, D. L., Barrett, F., Srivastva, S., 1995).

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[1] Word Bank web site (2015)

The AI contemplates five core principles: the constructionist principle, the principle of simultaneity, the poetic principle, the anticipatory principle and the positive principle. The main characteristics of these principles aim at analyzing participation with specific perspectives such as the fact that one tends to identify truthfulness with what one believe determining our actions and so our future relationships. Also, the questions posed tend to regulate future actions since the redundancy of similar questions imply they are relevant so that can determine future policies. AI tends to stimulate the debate with new ideas helping generating actions so that what one does today is governed by the image one has of the future. Communication and language is also important in AI, since words invoke particular sentiments and are representative and connotative of a community and their needs. In fact, as analyzed by Goffman (1955) communication is the combination and representation of a group of individuals where a director operates to manage interrelations. Hence, it is important not only to find the right linguistic register but also to bond relationships among participants with sentiments of hope and cooperation in order to avoid conflicts and start the onset of changes.

Analytic Deliberative Approach

The Analytic Deliberative Approach is another method used chiefly to foster citizen participation to enable environmental policy making and risk management to be more democratic and compelling (Stern and Fineberg, 1996).

In particular, this model helps accomplishing integrated options for strategic and long-term development policies, especially with regard to environment assessment. It also contemplates the necessity of a combination of assessment and dialogue with stakeholders. In fact, managers and decision-makers should find fair and useful tools to ensure the incorporation of public preferences and inputs into the management process ant technical assessments.

Moreover, a deliberative approach should refer to interactive communication and discussion assuming that the position and roles of participants, as well as political influences must be regarded as non-influential. On the contrary the importance is

stressed more on the weight of the argument proposed and the guarantee of the equal balance among participants and consultations.

Community Based Adaptation

During last ten years, there has been a crescent interest in the Community Based Adaptation (CBA) approach as considered a more progressive and practical approach compared to previous ones, to enhance participation in climate change issues, especially in developing countries.

Hence, specific tools and join initiatives started to be developed at different community levels (i.e. the Global Initiative on Community-Based Adaptation (GICBA) and the Web platform WeADAPT).

In particular, CBA enables communities to gain knowledge on climate change issues through very practical means, enhancing the good governance and the management of local pressures and drivers. The CBA model helps in providing the population with examples on potential impacts and mitigative measures. This participatory approach also provides with information on potential needs and vulnerabilities, with the aim of establishing procedures that can be further replicated and established within community projects.

Procedures within the CBA approach are always systematic and bottom-up oriented, coping with resilience development and aiming at disseminating and cementing knowledge. CBA is a multi-stakeholders approach and can be applied at different levels since it is very interactive. It is especially conceived for small communities and it contemplates the adoption of dynamic games, as well as the use of platforms, content sharing for supporting effective communication among different stakeholders.

The CBA approach, especially with regard to other participatory methods and tools hereabouts has been particularly selected and presented to be considered as a concrete and effective approach for climate change adaptation having demonstrated tangible results especially at the community levels.

The main characteristics of the CBA approach can be summarized as follow: they have a horizontal replicability through small and multiple actions, they have a scaling-up dimension since one singular initiative can be expanded via the appealing format and

attraction, they can be mainstreamed through the absorption of new knowledge into the policies and activities (Schipper et al. 2014).

In particular, the CBA has been selected in this study and considered fundamental because this approach, according also to practitioners, is particularly efficient when dealing with the improvement and uptake sustainability of climate change strategies, since communities and stakeholders develop a strong sense of ownership of the process, which enable the fulfillment of the priorities settled. It also generates a broad sense of awareness helping in creating more adaptable plans and developing more flexible and content appropriate in decision-makings.

OTHER FORMS OF PARTICIPATION AT THE INTERNATIONAL AND REGIONAL LEVEL

The concept of participation has been enclosed and systematized for the international community since the Stockholm Declaration (1972), reaffirmed by the Rio Summit (1992) and legalized within a binding document during Rio+20 (2012). In particular, Principle 10 of the Rio Declaration (1992) postulates that "environmental issues are best handled with the participation of all concerned citizens, at the relevant level". The Declaration calls upon States to ensure that public and private entities can access right to information, public participation in decision-making and justice in environmental matters. Moreover, while at the national level, especially outside the EU, the effective recognition may still represent a matter of concern, internationally the implementation by States of the commitments included in Principle 10. Nowadays participation principles have been legally recognized as fundamental human rights after Rio+20, in particular in para. 43 of the document "The Future We Want" (2012):

"*We underscore that broad public participation and access to information and judicial and administrative proceedings are essential to the promotion of sustainable development. Sustainable development requires the meaningful involvement and active participation of regional, national and subnational legislatures and judiciaries, and all major groups: women, children and youth, indigenous peoples,*

non-governmental organizations, local authorities, workers and trade unions, business and industry, the scientific and technological community, and farmers, as well as other stakeholders, including local communities, volunteer groups and foundations, migrants and families, as well as older persons and persons with disabilities. In this regard, we agree to work more closely with the major groups and other stakeholders, and encourage their active participation, as appropriate, in processes that contribute to decision-making, planning and implementation of policies and programmes for sustainable development at all levels."

Not only participation should be attended in environmental strategies, but also should be enclosed in national and international legislation as fundamental civil rights and citizens' values.

During the last period other forms of participation tools have been shaped accordingly to existent methodologies, especially with regard to the correct development of projects and programmes. In particular, as for some international and national projects dealing with Spatial Planning and Climate Change issues (e.g. Coastal Area Management Project-ICZM Protocol) some instruments have been elaborated and tested to ensure the appropriate involvement of territorial communities, institutions and stakeholders.

The main instruments of participation elaborated to enhance development are based on standardized methodologies, such as the EASW (European Awareness Scenario Workshop). EASW system, which has been elaborate in Denmark aims at promoting debate, communication and democratic participation among different groups and levels of stakeholders. This system has been firstly used in environmental settings and in 1994 has become integral part of European Commission initiatives. Concretely, EASW system articulates on different and fixed stages where participants should be around 24-28 units composed by citizens, public administrators, technology experts and representatives from the private sector.

At European level, information, participation in the decision-making process and access to Justice in environmental issues has been the core value of the UNECE

Convention adopted on 25th June 1998 in Aarhus during the Fourth Ministerial Conference within the "Environment for Europe" process.

The value and scope of the Convention was to focus on the linkage of human rights to environmental rights as an obligation to the wellness of future generations. It empathized that sustainable development could only be achieved through participation and active involvement of all stakeholders. The Convention was also about government transparency, responsiveness and accountability in a democratic context. Moreover, the Aarhus Convention (Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters) aimed at reinforcing public participation in negotiation activities also in the international framework, becoming a legal an effective instrument of participation and equity. The Convention is structured around three main pillars concerning the environment: Public access to information; public participation in relevant decisions; access to courts of law and tribunals. Local authorities but also private entities dealing with public responsibility on environmental issues, should easily access information and open source data without any expenses. Also one can access judicial procedures to protest acts and omissions by private persons and public authorities contravening national law relating to the environment (Art. 9 Par. 3).

Furthermore, the Convention has been transferred and so reinforced into national legislations (CE Directives 2003/4 and 2003/35) for the access to environmental information and participation in the decision-making process related to national plans and programmes for the environment.

The participation process should take into account the main objectives, giving innovative feedbacks evaluating possible impacts, while suggesting mitigation strategies and monitoring the suggestions made.

Adequate timing should be allocated to the consultation procedure in order to give access to a broader number of stakeholders.

Thus, four levels of participation have been established:

- Information level: this type of participation is generated throughout media support and with the gathering of public comments; it is a first step of sharing

of information but it contemplates a lack in direct elaboration in the decision-making process.

- Consultation level: this kind of participation is made by public consultation and meetings. At this level, the public is more integrated but not actively involved in the decision-making process.

- Participatory Planning level: the participation in guaranteed trough consultative bodies and *ad hoc* working groups so that the public can participate in a dynamic and more proactive way.

- Delegated planning level: this last level of participation is made through commissions, delegated and working group which assist and represent the willing of the public having a more decisive role in the decision-making process (e.g. through lobbying activities).

According to UNEP, an effective participation in the decision-making process, requires a set of key elements: the identification of all stakeholders involved, gathering and sharing of up-to-date and accurate information, dialogue among project managers and other actors involved, integration of public opinions and full comprehension of it.

Regarding information, this should be always guaranteed during all stages of the participation process in order to avoid misunderstanding along the process.

Information should be bi-directional: the community is informed about proposals concerning the territory they are living in and the proposers acquire information about local needs and priorities.

Participation should aim at being reiterated so that it is fundamental to take into consideration the opinion of the community regarding the final decisions that have been taken throughout the participation process, otherwise the public would conflict instead of being purposeful.

Participative process could be also planned as a social research activity (Durkheim, 1969) and be analyzed according to three mains different perspectives and through the support of *ad hoc* tools.

The main methodologies to be foreseen are:

- Distributive: this technique contemplates the knowledge of objective attitude, information, data from which it is possible to deduce conclusions about the objective of the study. The reality is distributed and it is possible to quantify trough statistical analysis. The information obtained is descriptive and objective. The main tools used are Questionnaires Q/A, opinion surveys and interviews.

- Structural: this methodology aims at achieving a subjective knowledge of reality and the main tool used is the analysis of the conversation. With this technique, concepts and ideas are more relevant than the representativeness of the sample analyzed.

- Dialectical: this technique supposes the acquisition of information through the interaction between participants so that the tool used is related to the assembly system (e.g. workshops, meetings, etc.). Dialogue and active participation can differ according to the objectives but the result is to aim at achieving consensus while also assuming dissent among actors, in order to get more knowledge on an analyzed subject (Xavier Sabate i Rotes, 2008).

Active participation related to sustainable development issues has been claimed by UNEP, while promoting Agenda 21[2] and the central role of public-private partnership in local decision-making, while encouraging also forms of local partnership in the processes of definition of local policies (UNEP, no date). In fact, local participation is crucial also for achieving global goals in sustainable development plans and activities although must not prescind from the national framework for which represents an asset of success.

The active involvement of stakeholders in the decision-making process is crucial for a dynamic cooperation. The participation of stakeholders should be accompanied by the strengthening of local author cities having the delicate role of taking decisions in complex and conflicting environments (Messina, 2009).

Local authorities become key players in this challenging and objective-related process, while the active participation of stakeholders is a prerequisite for ensuring the sustainability of the policies discussed and adopted.

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[2] Policy and legal instrument emerged during the Rio Summit of 1992

As underlined by the Word Bank, Institutions have a critical role also in local participation process for promoting sustainable development, since their positions can shape and orient sustainable development policies (World Bank, 2003).

Hence, the scientific debate provided guidance on properties that a "Sustainable Institution" must possess to guarantee participation and development:

- Inclusiveness: facilitating participation in the public debate of stakeholders;

- Proactivity: anticipating the effects of their decisions and strategies on private and public actors through specific instruments, such as Environmental Impact Assessments, strategic control, accountability, transparency of information;

- Capacity of integration: maximizing the coordination between different actors and making consistent policies produced by different levels of government and administrative structures;

- Reflectivity: self-assessing ability in a logic of continuous learning (OECD, 2014).

When analyzing participation at the European level, one should be regard it in strict relation with public governance and best practices. Moreover, the variety of principles, which rely to participation and to public governance at local levels, are core instruments for achieving sustainable development also at the community level.

In particular, the main principles are related to the concepts of two main methodologies: the *"Stakeholder Engagement"* and the "Lifecycle of Enterprise".

These methods are especially used in public administration systems and are been reinforced in 2001 in the White Book of the European Union. These systems can be analyzed not only on a national or local levels but can also be included in a wider investigation on efficient participation techniques in use nowadays.

With regard to participation techniques, public governance should be regarded as a community system in which different actors and forces interact for the development of the society.

In fact, it is an instrument and a paradigm for increasing the value of the Social Capital, with its complex relationships of trust and cooperation operating within civil society networks and between groups, organizations and governments.

Moreover, the changing needs of public administrations are mainly linked to the increase of complexity in the functions between public and private services. Thus, the different organization of activities and services are increasingly moving toward a more efficient model of management, which has been borrowed from the private sector: the Lean Organization Structure. This model helps maintaining interrelations on a multilevel structure by promoting the spread over of a flexible instrument of relationships that contributes to overcome the rigid hierarchy's structure used in the past (Penati, 2005).

The complexity of the decision making process and the overall interests, together with demands and expectations of the various actors implied in the model, make the public governance a difficult system to be automatically replicated in every territorial community system.

According to the main definitions of the concept of local governance[3], five core principles have been elaborated to implement and make the model easily replicable and adapted to every peculiar territory: Openness, Participation, Responsibility, Efficiency, and Coherence.

Good local governance is crucial for the achievement of more global participation, so that a multilevel approach should be adopted from multiple subjects such as national and supranational institutions, stakeholders, private and public actors.

Moreover, public governance should aim at increasing the value of social capital by enhancing the complex relationships of trust and cooperation between networks of civil society groups, organizations and the government acting for common goals. In this framework, the local administration plays a crucial and central role of responsibility towards citizens and decision makers especially in socio-economic and environment issues.

Efficient and inclusive governance can be analyzed and resumed in three fundamental components to be achieved:

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[3] Definitions of governance: a) World Bank, 1992: "Governance is the way in which power is exercised in the management of economic and social resources of a country and focuses almost exclusively on the efficiency and effectiveness of public management"; b) ONU Commission on Global Governance, 1995: "The governance should be understood as the set of the many ways individuals and institutions, public and private, face the issues of collective interest. It is a continuing process through which conflicting or diverse interests may be reconciled with each other to create forms of cooperative action"

Internal Governance	Consistent set of models, methodologies and tools (i.e. planning, programming, evaluation and control), which aim at guiding the administrative machinery towards strategic and result-oriented thinking necessary for the overall good functioning of different areas constituting an Entity.
External Governance	Consistent set of models, methodologies and tools, which aim at guiding decisions on outsourcing of public services and at promoting the integration of instrumental bodies and agencies in the in-house system.
Institutional Governance	Consistent set of models, methodologies and tools which aim at guiding and facilitating the cooperation and synergy, not only among the institutional actors not bounded by hierarchical relationships, but also between themselves and the civil society, with the objective of improving coordination and integration of resources and expertise in the designing and implementation of policies and related programs and projects.

Table 1. Levels of good governance.

The internal governance interacts with the other two dimensions and helps promoting an openness towards the external actors of the civil society while developing and enhancing collaboration and monitoring.

The local authority is called upon to define the strategic guidelines for the sustainable development of the territory in a logic of coordination and knowledge sharing with other development actors at the local level. A tool already experienced in European countries is the Strategic Community Plan (SCP), which is conceived for both fora provincial than a supra dimension. The SCP may be designed in a logic of integrated planning, aiming at ensuring a system directed by the Entity or local authorities involved also outside the administrative boundaries.

In addition to the role of the governance, another model should be implemented and used in order to sustainably manage a community, the model of the Stakeholder Engagement (Freeman, Rusconi, Dorigatti, 2007).

It is in fact of the utmost importance to promote inclusion and participation among decision makers in order to achieve the development and well-being of a community. These multiple actors or stakeholders should be identified, analyzed, selected and involved in the process of participation. Moreover, the participatory management of local activities should consider together with the valorization of independent resources within and outside the territory, the need of internal competencies in order to respond to the complexity of new technology needs for internal services and the need to aggregate all the public or private resources available to achieve the desired effects.

In this framework, the different actors should be considered active participants of the general interest to be achieved by the public action through public-private partnership as model of sustainable community integrity.

Freeman (1994) identified seven classes of stakeholders according to the combination of three main characteristics, which are **Power** (the capacity of a stakeholder to influence the management of an organization), **Legitimacy** (the recognition and social acceptance of certain behaviors), and **Urgency** (the ability of a stakeholder to exert pressure on the administration in reference to its contingent interests).

In Freeman's theory, the "stakeholder mapping" is essential in identifying *ad hoc* criteria for the classification and understanding of stakeholders in a defined area. In particular, it is important to defining the stakeholders' constellation since every organization or entity has a certain number of external actors that interact with other stakeholders.

Moreover, stakeholders' classification should be made since it is relevant to classify stakeholders in homogeneous clusters. This last activity is important in the definition of the strategy to be adopted: classification and understanding of peculiarities are crucial for achieving results.

Stakeholders' Engagement follows the mapping activities throughout four different steps: 1) Identification of the main stakeholders, 2) Analysis and Selection of the main stakeholders, 3) Inception of communication activities with key-players, 4) Involvement of stakeholders in strategic decision-making processes.

It is fundamental to guarantee the representativeness of private and public actors on a territory by finding a balance between democratic participation and the representative power of those actors representing the territorial community.

Thus, two separate levels of stakeholders' engagement should be realized. One is the "institutional stakeholder engagement" which is permanent and guaranteed by the participation of all the actors of the collectivity through regular consultative and open processes. Another level is temporary since the involvement may vary depending on the requirements of the policy to be implemented and the specific objectives to be achieved. No matter which level is contemplated, three macro-categories of stakeholders should be identified according to the influences made: stakeholders that directly benefit from local policies, the ones interested that can have an indirect advantage and the influential stakeholders who can determine to a significant extent the effectiveness of actions undertaken and the quality of the effects produced.

The table below has been conceived with the scope of summarizing the main operational techniques to be adopted in order to prime and manage interrelations among stakeholders:

Communication	Consultation	Dialogue	Partnership
Information sharing	Questionnaires	Multi Stakeholder Forums	Joint venture
Training (e.g. with employee)	Focus groups	Advisory panels	Local projects on sustainable development issues
Budget and other reports	Meetings with groups or stakeholders	Virtual participation with media devises	Strategic alliances
Internal and external Newsletters	Consultative forums with principal stakeholders	Public Debates	Cooperation
Web site and other medias	Online feedbacks and discussions		
Technical briefings	Peer reviews		
Presentations and			

conferences			
Open meetings			
Field visits			
Press conferences and media management			

Table 2. Main operational techniques for an efficient stakeholders' management

According to Kroger Model (1974), the life cycle growth model can be also taken into account while developing and building up participation for development in a defined area of intervention.

In particular, five different steps of "growth" should be contemplated: Creativity, Direction, Delegation, Coordination and Collaboration (Greiner in Squazzoni, 2009). These five steps of growth help to start, structure, expand and diversify the whole activities and peculiarity related to the development of a community no matter its extent. In fact, the organizational evolution of a community lies in the ability of programming in terms of partnerships in accordance to the increase and evolution of the reference model.

COMMUNICATION METHODOLOGIES IN PARTICIPATORY DEVELOPMENT COMMUNICATION

The interaction between participants inside and outside their social network is a sort of development process itself, where the community members and stakeholders assume the role of development communicators along that process (Besset, 2004).

In this context, "Participatory Development Communication" should aim at enhancing community participation in development initiatives, especially where a country does not possess the necessary resources to guarantee the needs of the community in a sustainable development perspective. The active participation not only of decision-makers but also of end users should be reinforced through specific communication methodologies. In fact, communication should be chosen, analyzed and shaped accordingly to the characteristics of the subjects involved in the process.

Hence, it is crucial to use specific communication to help building up active participation, especially with regard to content transfer and information in development issues. Especially when communication is applied to more technical contests as natural resources management or Climate Change, it is important to disseminate intelligible information particularly avoiding a top-down system as for experts transferring their knowledge to locals, and favoring instead participation helping in building and enhancing inner capacities and raising awareness and self-assessment.

According to Besset, the main methodologies used in development communication, while using participation and communication tools to achieve development, are: Adult Education, Extension, IEC (information, education and communication), Advocacy, Social Marketing and Enter- Educate (Besset, 2004, p. 50).

As for the positive principle in the Appreciative Inquiry method previously analyzed, also participatory communication has a main positive connotation since it helps a community in finding solutions to a problem. This should be regarded always as the starting point for the inception of communication strategies when talking about development.

Before analyzing more in detail communication methodologies, it is important to examine social relations since they are at the basis not only of interactions but also of communication in participatory processes.

In particular, the Social Networks Theory or Social Network Analysis (SNA) should be contemplated when studying methodologies for development communication.

The Social Network Analysis should be considered when analyzing the participation process as, according to the founder of sociometry Jacob Levi Moreno, represents a solid methodology of the analysis of social interrelations and the tools used to nurture them.

The society is therefore explored as a network of different degrees of interrelations where each individual interacts with other actors shaping or modifying the behavior of other social participants. The different actors have "ties" between each other linking individuals as they were dynamic "nodes" in a forceful environment (Scott, 2012).

Figure 1: Social Networks

Source: Global Reporting Initiative

In order to analyze social networks, the SNA utilizes methods that are far from sociology, as statistics and linear algebra together with more contemporary sociology-related methods.

SNA tends to demonstrate that social networks influence collective behavior. In fact, SNA aims at discover structures of relationships according to scheme-system-based approaches and determine original conditions, while observing consequent actions.

According to Laumann and Pappi (2013), social networks are systematic structures of relationships of different social levels and positions. Thus, social networks are made by dynamic intersections of different social levels and areas of relationships where each subject or actor plays a role in influencing and being influenced, while assuming different positions within the net. According to Simmel (1890) society is created by the sum of the relationships occurring in the social networks. SNA helps in analyzing not only the social behavior in general but also focuses on social strategies and social phenomena becoming an important instrument for social participation and inclusion.

According to "Social Network Analysis Methods" (Wasserman and Faust, 1994), the main theories used also in participation strategies are based on the definition of social networks and relations between actors, as a way of transferring both material and immaterial resources among them. Moreover, these models of social networks can be

regarded as structured environments where opportunities or obstacles can arise conforming to the dynamics of those interrelations.

Social networks are also important also for individuals since they underline the existence of potential resources contained within the networks.

These resources, identified by sociology as the "Social Capital" are accessible and mobilized by the network of individuals trough the activation of their relationships. The Social Capital is represented by the heritage of material and immaterial relational resources hinged within social networks and regulations (Piselli, 2001).

As mentioned before, according to Piselli (2001) social networks can encompass opportunities or limits while Social Capital always determine productivity and occasions, since refers consistently to resources available for individuals (actors) through which one can realize his objectives. Social Capital can be analyzed both as "individual social capital" both as "collective social capital", depending on different approaches. In fact, according to Bourdieu (1980) the first one refers to the individual and the resources and potential one can obtain by using its networks (methodologies: Rational Choice Theory, Exchange Theory), while the second accepts Social Capital as a public good for social cohesion and sharing trough collectivity networks (e.g. Functionalist Theory).

Social Capital with a dimension of sharing and cooperation among the community is fundamental for participation since, as analyzed by Putnam (2002), it exponentially enhances the institutional performance or "civicness" while achieving shared goals, increasing the efficiency and the development of the community, consolidating confidence and facilitate identification.

Thus, Social Capital both as individual (Coleman, 1988), than collective (Putnam, 2002) is a pivot condition for the development of a society or a community. As underlined by Piselli (2001), is important to understand how the intention of an individual and the participation of small groups of individuals can influence the development at the community level.

Different methodologies exist for the measurement of Social Capital and one of the most use is the "Network Measures of Social Capital" (Borgatti, Jones and Everett

1998), in which there is an analysis of the most common social networks of Social Capital based on the relations existing between the "ego" (single person) and the "alter" (collectivity).

The methodology insists in the measurement of Social Capital from the reconstruction of the individual networks, while advancing to more complex networks. This analysis is mainly carried out by the use of in-depth interviews being essentially descriptive and using more qualitative indicators. Recently, the Modern Bayesian Methods and Computing for the Social Sciences started to be tested also for participation and social interactions.

Furthermore, when analyzing modern communication models, it is important to contemplate predecessors like the ones presented by Lasswell in his communication theory of 1948. Compared to more recent communication strategies, these models were more linear since the communication activity was regarded as a simple transfer of information which lead to a step-by-step process of change in behaviors. Lasswell's theory can be resumed as the following main formula: Who? Says what? In what channel? To whom? With what effect? (Tufte and Mefalopulos, 2009)

During the 1970s and 1980s, communication became to be more purpose-oriented while increasing the individual behave in order to promote social regulations trough communication strategies. This particular method borrowing from social marketing, was identified with the name of Behavior Change Communication (BCC) and was more self-oriented.

During the 1990s, communication became to be more collectivity-oriented and Information, Education and Communication activities started to be integrated within development projects. This kind of communication tended to use tools such as audio-visual or printed materials to disseminate information so that communication remains on a top-down level more than on a participatory level.

In particular, in 1927 Brecht (Willett, 1964) formulated his Radio Theory in which new media technologies where firstly used as dialogical instrument for change. From Brecht's theory on, the spread over of different and new typologies of media has been emphasized and used in participatory communication processes.

In particular, when talking about media, it is important to analyze the type and level of media used (e.g. folk, community or mass media tools, oral knowledge, etc.), according also to the degree of visibility in the mediated public sphere.

Medias can serve only as a channel of communication or can become active catalysts of social awareness and change. They can likewise act as a one way tools of communication, like the face-to-face interactions of theatre representations, or dialogically in multi-level systems as the modern social media synergies.

Recent participatory communication refers more to structural and social changes, while using communication to define collective issues and determine decision-making processes. Recently the LEG suggested that the first stage of dissemination could be done especially by using a public website (LEG, 2012, p.81).

In addition, another communication theory was developed during these years focusing more on life skills development performing in formal and informal educational ambience, as the Life Skills Training Model (Hendricks, 1998).

Starting from 1970s participation communication in development projects has become more and more essential and particularly in recent years, has become a stronger concern in governance issues for governments and the international community. In fact, participatory approaches together with participatory communication are contemplated in the project cycle of many organizations to ensure cooperation and transparency along the process.

Along this long process, the term development communication, as presented also in the previous chapter, assumed different forms and applied heterogeneous approaches being identified as communication for development (C4D) or communication for social change, education and communication, information, social mobilization, participatory communication, strategic communication, media advocacy, social marketing and much more.

Thus, the crescent need to eliminate any ambiguity and bring consensus about terminology and methodology lead to the formulation of five fundamental approaches to development communication, which include the understanding of the centrality of the empower of individuals and communities, the harmonic integration of both top-

down and bottom-up methods, the use of *ad-hoc* communication tool-kits (Powell, 2002), the embodiment of environmental factors to investigate social behavior according the changing conditions, and the use of interpersonal and mass media communication especially for raising knowledge and consciousness about a given problem.

In particular, development communication aims at investigating the strict interdependence between the concepts of on one hand the communication and of the development on the other hand. In fact, studies demonstrated that models of communication tend to transform depending on development variations so that it is fundamental to enhance communication and absorb it as participatory communication. Therefore, communication should be regarded not only as an instrument to achieve development goals through the dissemination of information and knowledge helping in the change of behavior but should be considered as the goal of development itself.

As mentioned above, the concept and methodologies of development communication appeared around 1950s, becoming part of the sociology and started to be applied as a branch of sociology with a sense of modernization.

United Nations from 1945 invested in the enhancement of the development of marginalized countries throughout development projects, and especially content transfer needed specific communication models to be applied. At the very beginning, according especially to Lerner (1958) and Rogers (1962) communication was o sort of extension of technology development in which communication was univocal and development oriented.

Lerner in his case study of a city in Turkey demonstrated that communication and especially the use of mass media positively influenced modernization, while establishing participation and being the keystone of development (Lerner, 1958).

Rogers recalled Lerner principles and brought communication to a two-step level introducing the importance of social interrelation for the success of development communication.

In order to obtain development awareness and well-being, communication should go through specific individuals he defined "innovators". These figures are usually exposed and oriented to knowledge and information and tend to be catalyst of development communication. Another important figure of communication for development, is represented by individuals called "opinion leader" who possess the respect of collectivity and are able in finding proper communication to spread over information and stimulate the collectivity (Rogers, 1962).

In particular, the communication model analyzed by Rogers contemplates communication as multi-level process in which the existence of micro-communication networks and types of containers and end-users with different socio-economic status and psychological inclination to innovation. The strategic role of opinion leaders is crucial in strengthening the "individual bridges" between the various target groups that foster communication networks in a sort of "trickle down" o diffusion of information among various social levels.

The model proposed by Rogers have been ri-elaborated during last years and enriched with participation and indigenous knowledge dimensions. In fact, communication for development should envisage not only transmission of information but also social, political, economic and environmental reflections. Moreover, the concept of development itself considers the ecological and human dimensions influencing the communication.

The development is not only linked to the economic dimension but also to the valorization of cultures, ecosystems and other typicalities that determine a community at different stages of development.

Communication for development aims at ensuring the main principles of sustainable development and, especially, enhancing participation in the decision- making process. It is important to support the local dimension in order to facilitate the dialogue between local population and external sources. Moreover, as already mentioned new technologies and media are important in this process and communicators for development should work for the harmonization of best practices both at local than at international levels.

It is fundamental to standardize models of participation, empowerment and self-reliance to undertake positive comparison and evaluation of development initiatives. Development communication to be effective must foresees the decentralization of decisional power and be sustainable in the long term.

Concretely, communication for development and participation is a series of important tools to addressing the urgency of the need for adaptation related to Climate Change due to the relevance of negotiating new institutional strategies and reconfiguring infrastructures and networks of activity to undertake changes.

Hence, communication should support social learning, network building, content transfer and conflict management, while using traditional and brand new communication devices such as interactive design and implementation, network and knowledge brokerage, visioning, learning-oriented monitoring, advocacy communication (Leeuwis and Hall, 2013).

In particular, when dealing with Climate Change adaptation and development communication it is crucial to have a multi-focus on technology and socio-institutional changes and to expand from rural dimension to a national intermediation since it is necessary to constantly reconfiguring roles and networks also between public and private actors, civil society and community Medias.

It is fundamental to strengthen capacities and technologies and broaden from practice to policy development, while disseminating not only information but a broad sense of communication. Communication for development aims at integrate innovations to adaptations plan and capacity building, while enhancing new configuration of network construction, learning, negotiation to support Climate Change Adaptation.

This excursus on history and methodology applied to participatory approaches and communication methodologies is particularly important when dealing with the definition of new and modern approaches for NAPs.

As already analyzed, it appears fundamental to adopt a mixed approach top-down (e.g. via institutional or technical committees) and bottom-up (e.g. participatory approaches) to implement and monitor National Adaptation Plans (NAPs).

Performance indicators, information sharing platforms and other communication tools should be conceived to support governance processes and to influence decision-makers, while building up resilience and experiment new approaches to NAPs.

For example, at the European level, while assessing national adaptation plans and programmes the Climate-Adapt Tool represents a valuable platform of information and knowledge sharing to be declined at different levels in order to inspire local authorities in the leadership role of climate change adaptation, supporting in developing concrete actions and accelerating resilience executions and planning, while minimizing risks. [4]

Other Decisions Support Systems (DDS) are especially used within the European framework or the Integrated Water Resources Management, when dealing with participatory decision making especially in NAPs.

Nevertheless, system approaches and analytical tools are used for maximizing socio-economic wellbeing, while maintaining the whole ecosystem functions and guaranteeing transparency and accountability at all stages of the stakeholder engagement. At this regard, information and communication technologies and other communication tools, such as online platforms, surveys and questionnaires are crucial in shaping decision making processes and facilitating capacity building and information and knowledge interactions. In addition, indicators of context and results are useful in achieving and monitoring projections and vulnerabilities also for communication purposes.

At this regard, different and useful techniques are nowadays available for participatory formalization, such as brainstorming systems and creative structures namely "participatory modelling" (Giupponi, 2008). This system allows the identification of structures and their components by formalizing and linking state variables, flows and casual links.

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[4] The aim of the Adaptation Support Tool is to assist users in developing climate change adaptation strategies and plans by providing guidance, links to relevant sources and dedicated tools (urban practitioners find here also a specific Urban Adaptation Support Tool. The European Commission has issued EU guidelines on developing adaptation strategies as a component of the EU strategy on adaptation to climate change, with the aim to support EU Member States in the process of developing, implementing and reviewing their adaptation strategies. They provide a common understanding of key features relevant to adaptation processes, building on the experience available in the EU. The steps and recommendations of the Adaptation Support Tool are aligned with the contents of these guidelines. http://climate-adapt.eea.europa.eu/adaptation-support-tool/

In particular, this technique is fundamental in outlining the basis of the shared knowledge from which discussions and debates arose, and accompany and define problems while finding solutions and undertake actions.

Depending on needs and peculiarity of a given territory and its community, modelling approaches should be reshaped accordingly. In fact, especially while dealing with natural resource management and climate change traditional modelling systems (i.e. computer tools or complex systems) are difficult to be adopted and gain limited impacts on the decision making process (Rittel and Webber, 2001). In order to guarantee the democratic principle of public participation, it is important to use efficient consultative models, which help the decision making process and the consequent acceptation of the policies. The improvement of climate change and natural resources management will benefit of improvement in accordance with deliberative democracy, public participation and law legitimation when consultation occur at different but comprehensiveness levels of the community.

Communication and information tools should consider and link together physical and technical models to social and natural ones, and so combining "hard" and "soft" sciences (Mendoza and Prabhu, 2005). Participation in decision-making processes should be improved also by providing end-users methodological support through cognitive mapping techniques and network analysis to be combined with DPSIR and NetSyMoD frameworks.[5]

Driving or demand driven approaches as well as internal or external involvement and early stage or late participation are other aspects to be considered in shaping new approaches of participation with a sense of trans-disciplinary research.

Moreover, training activities and information sharing should be contemplated for the effective use of model techniques and the use of technical tools. In particular, professional should be trained in order to act as facilitators during the participation process. Importance should be given to in-house experts to increase inner capacities and resilience; they should be then accompanied by the external support of other professionals for a dynamic exchange of knowledge.

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[5] DPSIR: Driving forces, Pressures, States, Impacts, Responses; NetSyMoD: Network analysis, creative System Modeling and Decision support.

CHAPTER 2 - HOW PARTICIPATORY APPROACHES AND COMMUNICATION ARE UTILIZED IN THE NATIONAL ADAPTATION PROGRAMMES OF ACTION (NAPAS).

INTRODUCTION

Having introduced the main discourses within the domain of communication and participatory approaches in the development community and the climate change arena this chapter will analyse how these approaches are utilised in the National Adaptation Programmes of Action (NAPAs). The NAPAs are an international initiative that aim to identify priorities for adaptation for Least Developed Countries (LDCs) for adaptation to the immediate effects of climate change.

The first section of this chapter will introduce the historical background behind the development of the NAPAs and present the specific case of the LDCs with respect to climate change adaptation. The main rationale behind NAPAs will be presented and the institutional context will be outlined. The second section will give a detailed view of the guidelines for NAPA preparation and the normative steps suggested for their implementation. The use of communication and participatory approaches within the process will be addressed and the specific methods or tools utilised will be analysed. The final section will look at the evaluation of the effectiveness of communication and participatory approaches in the process. It will draw on previous evaluations of the NAPA process in order to identify possible gaps where further evaluation would be beneficial, which will inform the rest of this study.

However, before to start an analysis of how participatory and communication approaches are utilised in the NAPAs, it is appropriate to have a short summary of how these approaches are used in UNFCCC processes.

Under the UNFCCC Framework, climate and environment-related responsibilities are defined as common but differentiated among nations. In particular, here the human dimension of climate change assumes a pivotal stage also in terms of effective participation as strengthened also within the Global Alliance for Climate Justice of the Global Humanitarian Forum (2008). With the adoption of the United Nations

Framework Convention on Climate Change (1992), the Kyoto Protocol (1997) and recent Paris Agreement (2015), countries involved have committed to a legally binding regime of targets on the emission of greenhouse gases, while developing *ad hoc* policies and participatory and communication strategies within and outside the framework. Moreover, since national climate policies are promoted and enhanced by international institutions, merging of strategic policies and tools are expected to be continuously implemented. During the years was increasingly clear that effective participation and communication for adaptation was vital in supporting all adaptation activities at each step in the process. Indeed, under the Cancun Adaptation Framework (CAF), relevant multilateral, international, regional and national organizations, public and private sectors, civil society and other relevant stakeholders were invited to engage stakeholders when support actions on adaptation at all levels. In particular, the Nairobi Work Programme (NWP) provides a platform for Parties and stakeholders to facilitate and catalyse the development and dissemination of information and knowledge that would inform and support adaptation policies and practices. Through NWP a range of organizations have the possibility to collaborate on adaptation activities in various sectors, levels and regions, and to build and manage knowledge. The LDC Expert Group (LEG), Adaptation Committee (AC) and NWP have developed many resources, including the LDC portal, online databases and a range of printed publications. The AC, in particular, organises Adaptation Forums, with the purpose of promoting regional cooperation on adaptation and to build partnerships.

Also within the Paris Agreement (UNFCCC, 2015b), participation and communication remain crucial in the development process, with regard also to gender and equity. In particular, the Paris Agreement further specifies: "affirming the importance of education, training, public awareness, public participation, public access to information and cooperation at all levels on the matters addressed in this Agreement" (UNFCCC, 2015b, p.1). This represents a commitment to communication at all levels in order to facilitate dialogue in all directions. Moreover, the Paris Agreement further articulates a commitment to participation of all stakeholders within the process, through: "Recognizing the importance of the engagements of all levels of government and

various actors, in accordance with respective national legislations of Parties, in addressing climate change" (UNFCCC, 2015b, p.1). Specifically in terms of adaptation, the Paris Agreement, under Article 7.5, states that "adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach" (UNFCCC, 2015b, p.9). Therefore, participation is further embedded with future UNFCCC processes.

Incisive methodologies and tools are especially important under the UNFCCC Framework, allowing the development of policy enablers at national and international levels. Thus, information generated from Vulnerability and Adaptation tools are particularly efficient in providing countries with know-how on regulatory frameworks, enabling the development of mechanisms for the stakeholders' engagement, while also providing financial support.

The enhancement of participation and communication are core principles beneath the UNFCCC framework and guidelines, and ensured by the National Climate Change Country Team (NCCCT). Moreover NCCCT, among other duties, is particularly responsible for ensuring appropriate stakeholders' participation and coordination among main actors in consultation with countries and regional offices. Communication and information are important also in capacity-building, while contemplating not only governments but also private and public sectors. Hence, strategic tools especially appreciated for decision-making and participation are fully developed in the UNFCCC Compendium, which present tools for assessments, stakeholder analysis, scenario building models on sector specific areas and with multidisciplinary approaches.

THE HISTORICAL BACKGROUND TO NAPAS

The need for NAPAs

Climate change is recognised by international Parties under the United Nations Framework Convention on Climate Change (UNFCCC), adopted in 1992 and now constituting of 197 Parties (196 States and 1 regional economic integration organization). The Intergovernmental Panel on Climate Change (IPCC) states in its fifth assessment that warming of the climate is now "unequivocal" (IPCC, 2014a, p.1). It also

recognises that anthropogenic emissions of greenhouse gases (GHGs) are "*extremely likely*" to have been the primary cause of the currently observed global warming (IPCC, 2014a, p.1, emphasis in original). Even if GHG emissions are stabilised at their current levels, the effects of anthropogenic emissions will continue to be felt due to the timescales of the climate system.

Impacts of the changing climate have already been felt. Since the 1950s "the atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen" (IPCC, 2014b, p.2). Projections of future changes are necessarily very challenging, given our limited understanding of the intricate details of the climate system, such as climate feedback loops, and uncertainties surrounding emission scenarios. However, under all emission scenarios it is projected that over the twenty first century the mean surface temperature will increase (IPCC, 2014b, p.10). It is predicted that: sea levels will rise and the acidity and temperature of the ocean will increase; there will be an increase in the occurrence and intensity of extreme events, such as droughts, flooding and tropical cyclones; and artic sea ice and permafrost will decrease and the volume of glaciers will diminish. Although overall warming is projected to occur, the effects of this warming will be variable at national and local scales; for instance, changes in precipitation will not be uniform, being predicted to increase at high latitudes and decrease in mid-latitude and subtropical dry regions (IPCC, 2014b, p. 11).

The observed and predicted future changes in climate have led to international action in two areas. The first area of action concerns 'mitigation', which is the reduction of GHG emissions in order to reduce anthropogenic forcing of the climate system. This action is ratified by the Kyoto Protocol under the UNFCCC, currently signed by 192 Parties under the convention. The second main area of action is in adaptation to the current and future changes of climatic conditions. Adaptation is defined as "Adjustment in natural or **human systems** in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities." (IPCC, Glossary, 2007).

Mitigation initially gained the main emphasis within international discussion. Füssel (2007) identifies four reasons why this might be the case. Mitigation is effective on the whole "climatic sensitive system" and addresses the "root cause of the climate change problem" whereas adaptation may not be able to be actioned in all areas of the climate system and, given the uncertainties in projections of changes in climate, there are also uncertainties about the success of adaptation efforts. It is also much easier to quantify reductions in emissions whereas the success of adaptation is much less easily identifiable. Furthermore, mitigation implies the "polluter-pays" principle, whereas those who will likely require the most adaptation to climate change impacts will be those in developing countries who have contributed least to anthropogenic GHG emissions (Füssel, 2007, p.265). However, given that the effects of human-induced climate change will be felt regardless of the mitigation strategy, adaptation to these effects has increasingly become a priority.

Climate change and development are intrinsically linked. Fundamentally, climate change is due to the unsustainable socio-economic development of the world's population, leading to high levels of emissions of GHGs (Cohen, 1998). Furthermore, the perceived and predicted changes in climate, and their consequent impacts, have important consequences for current development efforts. As the Least Developed Country Expert Group (LEG) notes, "human activities have always been influenced by the climate conditions people find themselves in, and it has become difficult to delineate where socio-economic development ends and adaptation to climate change begins" (LEG, 2009a, p.6). Although humans have always adapted to the environment in which they find themselves, the concepts related to anthropogenic climate change make planned adaptation especially important. This is due to: the unprecedented climate conditions and the rate of the change; the increased knowledge and methods now available to allow for proactive adaptation; and increase in the actors due to the need for people who previously considered their local climate to be stable at reasonable timescales now having to adapt to changes (Füssel, 2007, p.267). The Nairobi Work Programme (NWP), under the UNFCCC, was set up in recognition of the need for adaptation to the rapidly changing climate. Its objective is to "assist all

Parties, in particular developing countries, including LDCs and [Small Island States] (SIDS): to improve their understanding and assessment of impacts, vulnerability and adaptation; [and] to make informed decisions on practical adaptation actions" (Desanker, 2007).

Climatic changes impact ecosystems around the world. Where livelihoods depend on ecosystem services, economic and social prosperity will be impacted, both positively and negatively, by changes to the systems that support these services. Adaptation will need to occur to either mitigate negative impacts or profit fully from positive impacts. However, the 'vulnerability' of systems to climatic shocks is not homogeneous. "Vulnerability is the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including variability and extremes" (IPCC, 2007a). How vulnerable a system is depends on a number of factors, such as "the character, magnitude and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity" (Burton et al., 2002, p.150). The concept of adaptive capacity refers to the "potential 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" (LEG, 2009c, p.3).

Many of the less-developed nations will be those that have the greatest vulnerability to climate change due to their relatively high dependence on ecosystem services for livelihoods, their geographical location that makes them more susceptible to extreme climate events and disease outbreaks, their weak institutional capacity, and minimal financial resources. This difference in vulnerability is highlighted by countries who have a similar 'hazard profile' but different social, political and institutional contexts, and therefore different impacts of natural hazards. An example is Haiti and Dominican Republic, where 121,000 people were effected by natural hazards in Haiti in comparison with only 38,000 people in Dominican Republic in the same period between 2000 and 2007 (FAO, 2009). Among those most vulnerable are the Least Developed Countries (LDCs), a group of 49 countries that are "identified by the United Nations (UN) as the poorest and weakest segment of the international community"

(LEG, 2009b, p.8). Due to their vulnerability, it is recognised that they require extra assistance to deal with the impacts of global warming. Furthermore, from the ethical viewpoint of equality and fairness, Paavola and Adger (2006) note that more developed nations, who have been the primary contributors to GHG emissions in recent history, should be responsible for helping more vulnerable nations, who have contributed relatively less to anthropogenically forced climate change, to cope with the impacts of that change. To this end, Article 4.9 of the United Nations Framework Convention on Climate Change (UNFCCC) recognizes the specific needs and special situations of the LDCs: "The Parties shall take full account of the specific needs and special situations of the Least Developed Countries in their actions with regard to funding and transfer of technology". Decision 5/CP.7 of the 7th Conference of the Parties sets out the establishment of the LDC work programme and associated activities that work towards aiding LDC parties with adaptation. These include: establishment of national climate change secretariats, providing training in negotiation skills and language to develop capacity; dissemination of climate change issues via public awareness programmes; transfer of adaptation technology; support preparation of NAPAs; and "strengthening of the capacity of meteorological and hydrological services to collect, analyse, interpret and disseminate weather and climate information to support implementation of NAPAs" (Decision 2/CP.7, paragraph 17).

The rationale behind the NAPAs is to aid LDCs in identifying and implementing adaptation projects and activities that respond to their most urgent requirements against climate change and variability. For each party the NAPA document includes a list of priority activities and projects that will be used to access funding sources for implementation from international funding sources. Although the NAPAs "focus on [only the most] urgent and immediate needs" (LEG, 2009b, p.6), it is expected that the experience of the NAPA process (along with the other supporting activities) improves long-term capacity to adapt to change (LEG, 2009b, p.8). As each party faces different climatic changes and have varying vulnerability and adaptive capacity, the NAPA documents are completely country-specific. The following section will outline in more detail the institutional context behind the NAPA process.

The institutional Context

The UNFCCC is the overarching convention behind the formation of the NAPAs. The specific needs of the LDCs are recognised in Article 4.9 of the UNFCCC. During the 7th Conference of the Parties (COP) held in Marrakech, Morocco in 2001, Decision 5/CP.7 further recognised that, due to their specific situation, LDCs due to not have the adaptive capacity to adapt to climate change and its associated impacts. Therefore, the LDC work programme was established, which included the NAPAs and other activities (outlined in the previous section). Decision 28/CP.7 then set out the guidelines for the development of the NAPA documents (UNFCCC, 2002b).

During COP7 further mechanisms were established to aid in the development of NAPAs. The LEG was mandated under Decision 29/CP.7 of the UNFCCC "with the mission of providing guidance and advice on the preparation and implementation strategies for the NAPAs". Since then it has served four mandates, designed guidance notes for the NAPA development and updated these where appropriate, provided advice on tools for the NAPA process, and helped in the facilitation of exchange of experience through workshops and meetings. There are also a number of other relevant institutions that provide additional help in the development and implementation of the NAPAs. There are ten of these 'implementing agencies' and each LDC party must elicit guidance from one or more of these agencies for the submission of a proposal for funding to the Global Environment Facility (GEF).

It was recognised under Decision 28/CP.7 that "many of the least developed country Parties do not have the capacity to prepare and submit national communications in the foreseeable future, or to convey their urgent and immediate needs in respect of their vulnerability and adaptation to the adverse effects of climate change" (GEF, 2002). Therefore, the GEF, under Decisions 7/CP.7 and 5/CP.7, was set up as the body that provides funding for the preparation of NAPAs. It is also ultimately responsible for funding of completed NAPA projects. The identified activities and projects are submitted to the GEF in order to obtain "financial resources to implement them"(GEF, 2002). LDCs receive their primary financial resources to implement their NAPA activities and projects from the Least Developed Country Fund (LDCF), which is

available to all LDCs that are parties to the UNFCCC. However, financial resources for adaptation projects can also be secured from the Special Climate Change Fund (SCCF), which is a competitive fund accessible by all developing countries. Both the LDCF and the SCCF rely on voluntary contributions. There are two further funding mechanisms from where resources can be acquired: The Adaptation Fund is available to all developing countries that are parties to the Kyoto Protocol for "clean development mechanism project activities" (LEG, 2009a, p.4); and the Green Climate Fund, launched at COP 17, provides, channels and catalyses financial resources to developing countries for both the adaptation and mitigation of climate change. These funds, given that contribution is voluntary, have limited financial resources to aid in the development and implementation of NAPAs. It is therefore of extreme importance that the processes are as efficient as possible and that the activities identified will be effective. As well as the institutions formally involved in the NAPA process under the UNFCCC, the development and implementation of the NAPAs necessarily requires contributions from a myriad of other institutions. These include governmental institutions and departments at both national and local levels, international and national non-governmental organisations, and local-level community institutions and groups.

THE NAPA PROCESS

Overarching concepts of the NAPA process

The NAPA process for the development and implementation of activities and projects is governed by some key principles. The guiding principles of the NAPA process are shown in Box 1. The overall ethos behind the NAPA process is, as far as possible, one of communication and participation. As highlighted by the LEG (2009), "the preparation of NAPAs should be guided by a participatory process involving stakeholders, particularly local communities, and a multidisciplinary and complementary approach akin to the broader context of sustainable development" (p.11). These principles are a move to distance the NAPA process from a 'technocratic' approach that was widespread (and widely criticised) during the twentieth century. The principles of knowledge transfer, inclusive communication and grassroots participation are firmly

grounded in the process and are a running theme throughout all stages of NAPA development and implementation.

Box 1 – Guiding principles behind the NAPA process
"The preparation of NAPAs will be guided by the following:
a) A participatory process involving stakeholders, particularly local communities;
b) A multidisciplinary approach;
c) A complementary approach, building upon existing plans and programs, including national action plans under the United Nations Convention to Combat Desertification, national biodiversity strategies and action plans under the Convention on Biodiversity, and national sectoral policies;
d) Sustainable development;
e) Gender equality;
f) A country-driven approach;
g) Sound environmental management;
h) Cost-effectiveness;
i) Simplicity; and
j) Flexibility of procedures based on individual country circumstances."
(Osman-Elasha and Downing, 2007, p.11)

Box 1 – Guiding principles behind the NAPA process

Building on the aforementioned principles, the whole NAPA process utilises a vulnerably-based approach towards adaptation to climate change. Vulnerability can be defined as "the degree to which an exposure unit is susceptible to harm due to exposure to a perturbation or stress, and the ability (or lack thereof) of the exposure unit to cope, recover, or fundamentally adapt (become a new system or become extinct)" (Kasperson et al. 2000, quoted in LEG, 2009b). It incorporates the recognition that, although impacts of climate change may be negative, certain political, social, institutional and political contexts need to be present to turn these negative impacts into risks (FAO, 2009). For the purposes of the NAPA process approach, vulnerability is taken to be "the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to

which a system is exposed, its sensitivity, and its adaptive capacity" (IPCC, 2007). This definition therefore encompasses not only an identification of the climatic stresses present, but also the social, economic and political context. Therefore, because assessing vulnerability requires an understanding of social factors and current coping strategies to climatic extremes, a vulnerabilities-based approach to adaptation necessarily calls for communication with local people and stakeholder engagement. This is contrast with a hazards-based approach, which has "limited consideration of non-climatic factors" (Füssel, 2007, p.271).

Communication within NAPAs

Climate change is a domain where the underlying science is extremely technical and the projections and associated impacts on human development in the future are uncertain but potentially very large and negative. Given the uncertainties, communication and sharing of knowledge is imperative. In terms of adaptation in particular, there is a need for capacity building by informing the public of technical knowledge that will help with increasing adaptive capacity and planning for the future. However, knowledge from the 'top-down' is not the only thing that is required. Communication in all 'directions' is necessary for adaptation to climate change. This includes: knowledge of local coping strategies already in place for climate extremes; sharing of best practice; and dissemination of successes and failures of projects for future improvement.

The need for more inclusive communication within the climate change domain is recognised by many international mechanisms. The UNFCCC has made moves to improve people's access to information about climate change. In particular, the New Delhi Work Programme (2002) aims to improve public knowledge and participation in climate change issues. In this context, the Network Clearing House (CciNet) has been established at the request of the Parties to the United Nations Framework Convention on Climate Change. Their underlying aim is to support Article 6 of the Convention, which calls on governments to promote education, training and public awareness on climate change. The CciNet is a database-driven website where all Parties can provide data and other inputs in order to facilitate access to information (UNFCCC, 2002a). The

Nairobi Work Programme builds on this; set up at COP11 through decision 2/CP.11, it intends to "facilitate and catalyse the development and dissemination of information and knowledge that would inform and support adaptation policies and practices" (UNFCCC, 2012)).

Given the emphasis on communication within UNFCCC, it is unsurprising that the NAPA process also asserts the importance of communication. The NAPAs themselves have the objective to "serve as simplified and direct *channels of communication* for information relating to the urgent and immediate adaptation needs of the LDCs" (GEF, 2002, emphasis added). Another of the main priorities of the NAPAs is for capacity building and this requires the transfer of technical knowledge and expertise. As well as being a means of communication within themselves, the development of the NAPAs is also guided by principles of inclusive communication. Box 2 gives some excerpts from Decision 28/CP.7 that underline the overarching emphasis on communication (UNFCCC, 2002b).

Box 2 - Excerpts from Decision 28/CP.7 (emphasis added)

"Development of proposals for priority activities to address needs, the national team will… (i) Organize a national and/or *consultative process to solicit inputs* and proposal ideas in order to help develop a short list of potential NAPA activities. The national team would facilitate this consultative process and would help in translating ideas into activities. This process will allow *adequate dialogue* between the national and the public, with time allowed for public comments and revisions."

"Public review and revisions: the NAPA document will undergo public review and be revised accordingly"

"Public dissemination: the endorsed NAPA document will be made *available to the public* and to the UNFCCC Secretariat"

Box 2 - Excerpts from Decision 28/CP.7 (emphasis added)

The use of communication is also stressed throughout all steps in the NAPA guidelines provided by the LEG. It serves a variety of purposes in different contexts within the guidelines. These various purposes are highlighted by Ramirez and Quarry (2004); they state that communication for development can serve the purpose of: sharing knowledge; participatory communication to facilitate negotiation between effected

parties; and communication of policies. For these purposes, different forms of communication are required, the skills needed to facilitate the form of communication will be different, and the tools are multiple. The specific use of communication at difference points during the NAPA process will be elaborated later in this section.

Participation within NAPAs

Participation means the "process through which the views of all interested parties (stakeholders) are integrated into project decision-making" (United Nations, 1997). Roncerel et al. (2003) identify three levels of participation, each one that builds on the former. These are: gathering and dissemination of information; consultation process, and stakeholder participation, where stakeholder participation is the most advanced level. Each level has various methods and tools for its implementation. For the NAPA process, it is suggested that all of these levels be utilised to ensure a legitimate process.

Article 6 of the 1992 UNFCCC states clearly the need for participation within adaptation; it calls for Parties to promote and facilitate "public participation in addressing climate change and its effects and developing adequate responses" (UNFCCC, 1992, p.17). Furthermore, Decision 28/CP.7 states that: "the preparation of NAPAs will be guided by... a participatory process, involving stakeholders, particularly local communities." (UNFCCC, 2002b). As well as being embedded in the guiding principles of the NAPA process, participatory approaches are specifically called for in a number of steps within the process. The ethos behind the inclusion of participatory processes is summarised well by LEG (2009b):

 "...the NAPA process will benefit from early and broad-based involvement of the concerned stakeholders, particularly the local communities who are most directly affected by climate variability, who can identify their immediate and urgent needs for coping with these changes, and with whom they can discuss possible project ideas." (p.14)

The rest of this section will discuss the guidelines for the use of participatory processes within the development of NAPAs and then go on to elucidate the key methods and tools utilised to ensure participation.

Guidelines set for participatory processes within the NAPAs

The guidelines for participatory processes produced by the LEG build on much of the literature on participation that was discussed in detail in Chapter 1. Fundamentally, the NAPA process is attempting to elicit participation by a 'top-down' method that does not originate from 'grassroots'. It is therefore vulnerable to many of the problems that participation from this source fall prey to. Due to this vulnerability, it is essential that the participatory process is guided by clear protocol to be followed. Box 3 outlines the guidelines provided to Parties by the LEG for improving the quality of the participatory proccess.

Box 3 - Principles to improve quality of participatory process
"Ensure legitimacy of the participatory process;

Ensure effective coordination by NAPA team, building on existing mechanisms for consultation;

Provide a clear explanation of the purpose, intent and expectations of stakeholder involvement;

Set a reasonable deadline for completing the NAPA process that incorporates adequate time for thorough stakeholder dialogue and cooperation (participation should not be an afterthought);

NAPA teams to undertake advance preparation and attain general knowledge of stakeholder, including who is affected by particular thematic areas (e.g. vulnerability to climate change), what indigenous adaptation knowledge might be tapped, and the sectors, interests and regions that different stakeholders represent."

(LEG, 2009b, p.13)

Box 3 - Principles to improve quality of participatory process

It is important to note that many of the guiding principles that are intended to improve the quality of the participatory process have their roots in the underlying communication methods used. As such, communication and participation are inherently intertwined and a discussion of one aspect will necessarily involve a discussion of the other. Therefore, in the following section the NAPA process is discussed in detail with regards to both the communication and participatory methods

and tools suggested for each step. The importance of adequate communication and participation will also be highlighted at each step in the process in order to emphasise the integral nature of these concepts for the success of the NAPA process.

Outline of main NAPA steps

Under the LDC Work Programme, the LEG has provided guidelines that should be followed when developing the NAPAs (LEG, 2009c). These guidelines are supposed to ensure that the process that is followed is as efficient as possible and that it is fair. The guidelines contain nine stages or steps to follow; these stages are discussed in detail below, with special emphasis given to the communication methods utilised and the participatory approach that is suggested.

Step 1 – NAPA teams

Step 1 involves the setting up of NAPA teams to coordinate the NAPA process. The NAPA team for each Party has the responsibility for communicating NAPA steps to relevant stakeholders and ensuring that the NAPA process follows the LEG guidelines. To attempt to maintain continuity, it is recommended that these NAPA teams remain in place throughout the process, including the implementation stage and beyond. Having a stable team in place that draws together expertise and acts as an external focal point is important for building institutional capacity to cope with further adaptation needs in the future.

It is recommended that these teams should be multidisciplinary and should encompass individuals from as many sectors as possible. In setting up a multidisciplinary team to coordinate the NAPA process, it is hoped that this will help to include a broad spectrum of views from the outset and that participation of the relevant stakeholders will already be represented within the NAPA team. The incorporation of a multidisciplinary team means that the stakeholder engagement is institutionalised in the process and is more likely to endure in the long term and for future adaptation measures.

The LEG suggests that existing committees or structures that already govern policies for climate change could be a good basis for NAPA teams (LEG, 2009b, p.8). It is

thought that building on existing teams will help to make the NAPA teams more inclusive and aid in engaging with stakeholders.

Further to this commitment to engage with stakeholders, it is recommended that the NAPA teams should contain people with expertise in eliciting participation from the public (LEG, 2009b, p.8). The guiding principles for participation within the NAPA process require many skills within the NAPA teams in order to produce a legitimate participatory process that provides the desired results. By ensuring that members of the team have expertise in eliciting participation, there is the ability within the team to utilise participatory approaches and tools that are important in later stages of the process.

Inclusion of stakeholders in the process requires that these stakeholders are identified and that their needs are diagnosed. Stakeholder analysis is suggested as a method to this end. It is a technique for assessing possible stakeholders and their relevance for the process in order to determine who should be involved in consultation. Tools for this mechanism could be the use of interviews and expert knowledge (LEG, 2009b, p.16). There are a number of questions that it would be useful to ask during this stage, such as:

"Who is/might be interested in or affected by the thematic area? What are their interests and positions? Who has information and expertise that might be helpful? Who has been/is involved in similar initiatives or planning? Who has expressed interest in being involved in similar initiatives/efforts before? Who else might make a useful contribution to the NAPA?" (LEG, 2009b, p.18)

Once the relevant stakeholders have been identified, their needs with regards to the process can then be assessed. The categorisation of groups depending on their demands from the process means that a communication strategy can be delivered for each group that matches their needs. This is integral for ensuring legitimate participation that includes willing stakeholders. The LEG (2009b) categorises stakeholders into four groups for the purposes of communication: "those who will likely want to participate fully or whose active involvement will determine the credibility of the process; those who will likely play a more limited role; those who will

likely want only to be kept well informed; and those who will not want to be involved" (p.18).

Stakeholder analysis is not a one-off procedure; stakeholders likely change during the process of developing the NAPAs and so the analysis technique needs to be returned to multiple times to ensure that the categorisation and relevance of stakeholders is kept up-to-date (LEG, 2009b, p.16).

Step 2 – Synthesis of available information

One of the prerequisites of the NAPA process is that it relies on available information and that it should not require new research in order to inform decisions. The synthesis of this available information makes up Step 2 of the process. It is recommended by the LEG, under the vulnerabilities-based approach to assessment, that information should be collected on both "sound science" and "social dynamics" (LEG, 2009b, p.9). Furthermore, the information should include knowledge collected from indigenous communities about their local hazards and traditional coping strategies.

The collection of information from all sectors and stakeholders is important for bottom-up communication flow. Without information on already existing coping strategies, NAPA activities prioritised by the process risk being detached from what is actually needed at a local level and will have less buy-in by local actors. However, technical knowledge is also required on the projected climatic changes and possible technical solutions to cope with the impacts of climatic changes. By incorporating both of these sources of information, they can be integrated in order to devise activities that draw on all available knowledge.

The information collected in this stage can then be used to categorise the country "by spatial scale (e.g. local, district, regional or national), socioeconomic status, social relations or shared economic activities (e.g. smallholder farmers, women, commercial farmers, urban/rural livelihoods, corporations, etc), as regards to the exposure to a particular threat." (LEG, 2009b, p.11). This categorisation can then be used to identify vulnerable groups. This is extremely important for later stages where representatives from key vulnerable stakeholders will need to be consulted in order to understand their needs and vulnerabilities. Without having a thorough understanding of

stakeholder groups, this would be impossible or would not be representative of the true variation in stakeholder views.

Step 3 – Rapid participatory vulnerability assessment

Step 3 involves a rapid participatory vulnerability assessment. This step draws on the information synthesised in Step 2 about vulnerable groups and the idea is that "it advances further from the key questions of who or what, how or to what and why they are vulnerable, towards measures to mitigate vulnerability... It focuses on identifying climate-related vulnerable livelihoods" (LEG, 2009b, p.11).

The rapid participatory vulnerability assessment aims to determine what are the most vulnerable sectors or communities within the country and to determine how best to mitigate this vulnerability through NAPA activities. It draws on information from all stakeholders to inform the process. Furthermore, this stage involves dissemination of information to stakeholders and the public; this communication strategy informs further steps.

The vulnerability assessment includes three primary activities (LEG, 2009b, p.11). The first activity is to speak with experts and stakeholders about approaches to vulnerability that can be adapted for the purposes of the NAPAs. The next activity is to understand fully all of the actors and processes involved in vulnerability to climate change. As previously mentioned, the NAPA process uses a vulnerabilities-based approach to identifying key adaptation activities. This involves the identification of vulnerable livelihoods that projects need to specifically target; this procedure can be carried out based on a sustainable livelihoods approach. The approach recognises five capitals of livelihoods: human resources, natural resources, finance, physical infrastructure and assets, and social networks and relationships. It then regards these livelihoods as inherently exposed and potentially vulnerable to shocks and threats. By combining information on the livelihoods present in an area and the threats that they are exposed to, vulnerable communities can be identified and activities can be prioritised accordingly. This technique involves establishing the livelihoods and their productive activities, and then classifying the services that these livelihoods depend on, such as sectoral services, public infrastructure and ecosystem services. Once the

linkages between these two pieces of information have been identified, the "units of exposure" within the system can be diagnosed (LEG, 2009b, p.27). This can then be "combined with scientific projections of natural hazards, [so that] a 'sensitivity matrix' can be produced to identify where the most urgent needs are" (LEG, 2009b, p.37).

The third and final activity in this section is to produce a mental map can then be used to produce a poster that will present the NAPA process to stakeholders and the public. Dissemination of information is a key action within the communication strategy because without full endorsement of the public and stakeholders, the NAPA projects will not be successful.

The LEG (2009b) identifies methods that can be used for this step:

"...the best methods for rural areas fall within rapid participatory development, action research, and social transformation including [Participatory Rural Appraisal] PRA, [Rapid Rural Appraisal] RRA and appreciative inquiry. These are quick and systematic methods of gathering information about a specific community, and can be used to facilitate community self-assessment and prioritization of major climate related problems, identify available resources and knowledge to tackle the problems, gaps in information, and a list of interventions to implement at community level." (LEG, 2009b, p.13)

The PRA and RRA methodologies are "a family of approaches and methods to enable rural people to share, enhance, and analyse their knowledge of life and conditions, to plan and to act" (Absalom, 1994, p.1). For the NAPA process, they are instrumental in ensuring empowerment of rural actors and stakeholders by ensuring that there is self-analysis of their problems and needs. PRA in particular includes a strong participatory element and self-identification of problems and possible solutions; Chambers (1993) describes it succinctly as "analysis by them. Shared with us" (p.5). PRA and RRA have been used consistently within a wide range of development activities since the 1990s and, as such, the LEG notes that "virtually all LDCs will have in-country expertise in these methodologies and tools" that can be mobilised for the NAPA process (LEG, 2009b, p.13).

Step 4 – Consult stakeholders and public

The LEG recognises that the success of the NAPA process depends on the buy-in of stakeholders and the public and therefore consultation of all relevant stakeholders to determine views and needs is an extremely important step in the process. The stakeholders in this process are multiple and include "government ministries, academic and research institutions, NGOs, civil society organizations, community-based organizations, political and traditional leaders, private sector, including small to medium sized enterprises" (LEG, 2009b, p.12).

The LEG suggests that the "NAPA teams should endeavour to make this process deliberate, systematic, objective, comprehensive, appropriate, and yet flexible enough to adapt to circumstances, in order to make it effective" (LEG, 2009b, p.12). Included in the guidelines are methods and tools for the consultation process to ensure that it is legitimate. The tools proposed include "interviews, questionnaire based surveys, participatory rural appraisals (PRAs), rapid rural appraisals (RRAs), appreciative inquiries, focus groups, informal meetings, workshops, structured events, such as constituency meetings, policy dialogues and public hearings" (LEG, 2009b, p.12). The tools utilised vary depending on the focus stakeholder group, as the prior knowledge of stakeholders, their accessibility to and desired involvement in the process, and available time resources are diverse. For example, in Africa, national workshops were the most common tool used during this consultation stage to engage high-level stakeholders at the national level. However, sub-national workshops, group interviews and surveys were also used to gain inputs from other stakeholders during the process (LEG, 2009b, p.12). For stakeholders at the community level, PRAs and RRAs are common tools, along with public hearings that can help to engage more distant groups. The tools used at this stage will also be dependent on the size and spread of the country. As the LEG (2009b) notes, in countries with a small population size, such as SIDS, consultation can occur directly with all directly affected stakeholders within the country, whereas in larger countries, some a method of ensuring that all groups are represented must be found without having to directly consult with all stakeholders.

Step 5 – Identify potential NAPA activity

Step 5 draws on the information collected and the results of the participatory process, and integrates expert knowledge, to identify potential adaptation activities. At the end of this stage, there should be a list of "relevant adaptation options including capacity building, policy reform, integration into sectoral policies and project-level activities" (LEG, 2009b, p.13). As the LEG (2009b) states, this step primarily "involves articulation, amendment, consolidation and summarization of potential NAPA activities" (p.13). Given, therefore, that this stage of the process requires the integration of information from a wide range of sources, it is important that the communication of all information is conducted properly to avoid confusion or miscommunication. Furthermore, the evaluation of each activity based on many factors requires inputs from many stakeholders, including technical experts, community focal points, financial experts, national leaders, etc. This is because different groups will have various priorities and inputs, for example, within the national setting, the Ministry of Finance may be more concerned with cost-effectiveness criteria, whereas the Ministry of Environment may be interested primarily in the synergies with other environmental projects (LEG, 2009b, p.48). To integrate these various interests, communication and negotiation are key tools.

Step 6 – Prioritise criteria and screen activities

Step 6 involves the identification of criteria that can be used for the evaluation of activities. These criteria are based on generic criteria proposed by the LEG (2009b, p16 and UNITAR, 2002) and supplemented by national, country-specific criteria. The criteria are given weights based on their relative importance. It is advised that these criteria be a country-oriented as possible and that they incorporate national and subnational risks and priorities. The selection of these criteria could be very subjective and so it is integral that a multistakeholder team makes decisions about the criteria to be used and the weights they are given.

This stage may involve discussion of the potential criteria along with negotiation of conflicting positions. Communication between stakeholders at this stage therefore needs to include incorporation of conflicting views.

Step 7 – Rank activities

In step 7, the weighted criteria identified in step 6 are then used to prioritise and screen activities in order to rank the potential activities and identify those priority activities that will make up the NAPA projects for implementation.

There are three commonly used methods for the ranking of the activities. Cost-benefit Analysis (CBA) and Cost Effectiveness Analysis (CEA) use similar methodology to quantify the cost and benefits of activities based on quantitative criteria. These two methods both require that benefits and costs can be expressed in monetary terms, which can be problematic in the climate change domain where there many uncertainties. The third method, Multi-Criteria Analysis (MCA), overcomes this problem because it "does not require quantitative costing" (LEG, 2009b, p.16).

For MCA, subjective and qualitative criteria can be used within the analysis and can be given weights in order to rank priorities. This approach is suggested as the most relevant method for ranking activities for the NAPA process in terms of 'importance'; this is because social and technical incommensurability that are inherent in decisions within the climate change domain mean that objective criteria are frequently unavailable (Munda, 2004). Paavola (2004) notes that an emphasis on solely technical criteria can cause conflicts. MCA overcomes this issue because it is flexible and "...goes beyond the search for optimal solutions, and allows, with the support of deliberative approaches, the identification of compromise solutions where diverse and sometimes irreconcilable perspectives coexist" (Diez et al, 2015).

Step 8 and 9 – Develop NAPA project profiles and submission of NAPA

In step 8 the NAPA project profile is developed to include all priority projects identified. This is done using a "...system based on a project identification form (PIF), followed by a project preparation grant (PPG), then the full-size project document" (LEG, 2009b, p.18). Given the difficulty that some LDCs encountered when attempting to convert the priority activities into projects, the LEG recommends the use of the strategic results framework method for this step (LEG, 2009b). The strategic results framework method breaks down each activity into its corresponding objectives, indicators and outputs and this dissection of each activity allows for the evaluation of

their contribution to adaptation to the most urgent threats due to the impacts of climate change. By providing an analysis of the contribution of each activity to national goals, this tool allows for a focus on "opportunities for dialogue and negotiation" (LEG, 2009b, p.18) by targeting those indicators that need revising or activities that need to be redefined. This feedback loop means that the specifics of each prioritised activity can be discussed and negotiated based on their outputs and allows for participatory revision of activities prior to the development of project profiles.

In step 9 the NAPA teams submit the final draft of the NAPA to LEG for revision and improvements. Once the draft has been updated, the NAPA is endorsed by national policy makers before being formally submitted to UNFCCC. Once it is received by UNFCCC, it is uploaded to UNFCCC website. Once this process has been completed the party is then eligible to apply for funds through the GEF for implementation of their adaption projects.

The dissemination of information is critical at this stage as it is important that the results of the process are made widely available to relevant stakeholders and the public. To the end, the GEF suggests that the NAPA document "should be easy to understand, action-oriented and country driven" (GEF, 2002) as this will aid with communication of ideas. Language has been found to be a barrier to communication in some cases (World Bank, 2002) and therefore it is also recommended that "the final product should be made available in one of the official languages of the United Nations, and a common local language (if other than a UN language) for purposes of dissemination" (GEF, 2002).

Implementation

It is identified by LEG (2009a) that the "implementation process will be more complex than preparation" (p.15) due to the many approaches that could be used for implementation of the NAPA activities and the need to secure financial and institutional resources for these projects. There are two main approaches that are considered for the implementation of NAPA activities: the single-activity approach and the programmatic approach. The single activity approach seeks to target specific areas or strategies by implementing individual activities identified in the NAPA document on

their own. Conversely, the programmatic approach seeks to implement multiple activities concurrently by taking a broader approach that looks at economic and social development as overall concepts or bundles projects together that relate to an entire sector.

In terms of successful empowerment of participating stakeholders, it is important that the implementation stage follows swiftly from the development stage of the NAPA. If the delay between participation in the development of the projects and the implementation of the projects is too long then this may cause participants to become disheartened and discouraged from participating in future adaptation planning. However, it may be the case that after the project development process, that the projects can then not be funded in the implementation stage. For instance, the LDCF will only fund *additional* costs of the activities that are specifically focused on adaptation to the adverse effects of climate change (LEG, 2009c, p.21). Therefore, a crucial step in the implementation stage is to identify the 'development baseline' of any adaptation activities. If project outputs are not quantifiable, or if the baseline is unclear, then funding cannot be secured. Furthermore, the LEG notes that the costs stated in the NAPA documents are typically underestimates of the costs of the projects and therefore in some cases can only be partially funded due to the funding ceiling of USD 3.5 million (LEG, 2009b).

The implementation of the NAPA projects is guided by the same principles of communication and participation as the development stage. The choice of implementation strategy and the projects to be implemented requires engagement from all stakeholders to ensure that the projects selected for implementation properly reflect the needs of all affected parties. It also requires the synthesis of data, best practices, technical expertise and local knowledge in order to ensure the successful implementation of projects. Without this inclusive flow of information and participation of all relevant parties, the projects would not be successful.

Crosscutting Themes

One of the important components of the NAPAs is that they become integrated into national policies and strategies in order to ensure continuous adaptation to climate

change over the long-term. The NAPA process, in many cases, has raised awareness nationally of the need for consideration of the impacts of climate change and action to prevent adverse effects on the most vulnerable groups. Communication of the NAPA process facilitates this awareness-raising and participation of stakeholders and the public increases national ownership of NAPA projects. The process of streamlining NAPA project implementation into national policy would be aided by dissemination of information summarised in the NAPA document through national communications (LEG, 2009b, p.23).

EVALUATION OF THE USE OF COMMUNICATION AND PARTICIPATORY PROCESSES IN THE DRAFTING OF NAPAS

Evaluating communication and participatory approaches

Chapter 1 introduced the importance of communication and the advantages of participatory approaches, especially with regard to the efficiency of the Communication Based Approach, within development and the climate change domain in particular. This chapter has discussed the guidelines for using communication and participatory approaches within the NAPA process. However, it is integral that evaluations are carried out to identify the strengths and weaknesses of the process, both from a theoretical and practical point of view. There are two main things that need to be evaluated in terms of the NAPA process: whether the guidelines produced by the LEG led to an efficient and effective process; and whether these guidelines were followed and if not, why not and how did the NAPA development and implementation proceed.

Abelson and Gauvin (2006) identify four main reasons that evaluations are of critical importance. In terms of NAPAs all four of these reasons have particular salience. The summative reasons for evaluating participatory processes for the NAPAs lead to evaluations that focus on the efficient use of resources, including participants' time and funding. For the NAPAs, this is relevant because of the limited financial resources available from the LDCF for development and implementation of NAPA projects. Furthermore, the inefficient use of stakeholder time during participatory processes

may have negative impacts on ownership and buy-in of projects. The formative evaluation of participatory approaches assesses the processes for future improvements. For the NAPAs this is crucial because adaptation to climate change is an ongoing process and institutional processes that are set up during the NAPA process to improve adaptive capacity will then be used in future processes, such as the more long-term National Adaptation Plans (NAPs). Abelson and Gauvin (2006) also identify evaluations that are driven by ethical or moral considerations. In terms of the NAPA process, given that it deals with decisions about the natural resource management, where stakes are high and conflicts are likely, it is crucial that the processes are fair and that the points of view of all stakeholder groups are represented. Evaluations of the NAPAs can also proceed for theoretical interests, for example, to examine the effects of political variables on the participatory process or on the use of communication.

In Chapter 1 two types of evaluation were discussed, namely process-oriented and outcome-oriented evaluations (Beierle, 1999). For the evaluation of the NAPA process, both of these types of evaluation may provide fruitful results. The process-oriented approach to evaluation may aid in the identification of processes with particular efficacy in order to inform future adaptation actions. It also helps to determine whether the processes utilised were fair and sufficiently included interests of all relevant stakeholders. The second type of evaluations are outcome-oriented evaluations, which consist of determining whether the projects identified by the NAPA process were implemented and furthermore whether their implementation lead to a reduction in vulnerability to climate change. These evaluations are useful for determining the most effective methods and tools for communication and participation for the end goal of increasing adaptive capacity to climate change.

Existing evaluations

Given that the NAPA process is, in itself, a mechanism for raising awareness and capacity for future adaptations, evaluating the NAPA process is important. A number of evaluations of the NAPA process have already been carried out. These evaluations, in general, do not deal specifically with the communication and participation within

the NAPA process. However, given that these concepts are central to the NAPA process, they are given a strong weight within existing evaluations.

The LEG itself has evaluated the NAPA process based on its own guidelines. It identifies a number of issues with the communication and the problems of vertical transfer of knowledge from grassroots. For instance, in Step 2 of the guidelines, it is recommended that information should be gathered from both scientific and local knowledge sources. However, the LEG notes the difficulties of identifying "mechanisms for capturing traditionally undocumented information at national to regional levels, including indigenous adaptation knowledge" (LEG, 2009b, p.9). The LEG also notes that there are problems with the subsequent dissemination of this knowledge in order to inform the rest of the NAPA process and the decision making stages. The knowledge gathered from local and regional sources is needed in order to determine vulnerable communities or regions but also to identify traditional coping strategies that can be used to inform priority actions. However, the LEG states that the information gathered during step 2 has "not always been organized logically enough to achieve maximum communication effect" (LEG, 2009b, p.9).

The LEG has also identified problems with the system that supports the NAPA process that may impede successful participatory approaches. For instance, there are problems with the timeframe needed for implementation of identified priority projects due to the difficulties found when applying for funding from the GEF. The time between identification of projects and securing of funding has been, on average, three years. This delay may tend to undermine the participatory approaches because stakeholders may feel that their inputs have not be worthwhile.

Evaluations of the NAPA process by other actors and researchers are scarce. Among these studies is an evaluation made by the European Capacity Building Initiative (ecbi). This is a process-oriented evaluation that analyses the NAPA process in East and South Africa. The primary tool for carrying out the analysis was "interviews and questionnaires of NAPA coordinating teams, members of national working groups and technical committees in LDCs, as well as people from other non-LDC countries in

Africa" (Osman-Elasha & Downing, 2007, p.11). Box 4 outlines the main issues covered by the ecbi analysis.

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Box 4 – issues covered by interviews by Osman-Elasha & Downing (2007, p.11)
"Status of the NAPA;

Objectives and guiding principles followed by the NAPA teams in each country;

Approaches and methods adopted for developing the NAPA;

Focus of the assessment (sectors or regions);

Ranking process (criteria development for ranking and prioritisation of projects, and project formulation);

Lessons learned during the process of NAPA development (what worked well, where are the gaps and constraints, etc.);

Strengths, weaknesses and constraints encountered during and after the NAPA preparations;

Current opportunities opened up through the NAPAs and positive outcomes;

The way forward (implementation of the identified adaptation projects); and

Any other issues and comments."

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Box 4 – issues covered by interviews by Osman-Elasha & Downing (2007, p.11)

From interviews, Osman-Elasha and Downing (2007) gain a number of important insights into how the NAPA process proceeded in seven countries in East and South Africa. Table 1 summarises the successes and failures of the NAPA process as identified by the evaluation. In terms of communication, the overall opinion is that the NAPA process was successful in "creating a wide awareness and a sense of ownership among the different stakeholder groups at different levels, starting from policy makers down to the general public at the village level" (p.22). Communication was also used as a tool to raise awareness about the barriers faced by the NAPA process in order to ensure that unrealistic expectations about the projected outcomes of the NAPAs were eliminated. However, as identified by the LEG itself, many interviewees expressed

concerns over the limited funding and the damage to stakeholder engagement and the success of the NAPA projects as a whole.

With specific reference to participation, Osman-Elasha and Downing (2007) identify three levels at which the public consultation was carried out, namely: national level, which consisted of workshops with national-level stakeholders; local level workshops "used as platforms for discussion and exchange of ideas among local stakeholders"; and interviews with "selected key stakeholders" (p.18). The study also finds that interviewees in general felt that the screening and ranking of priority activities for adaptation proceeded in a participatory manner, "which typically involved discussions and negotiations" (p.19). They also find that, although the ranking process has a tendency to be subjective and dependent on the views of the stakeholders involved, NAPA teams generally overcame this subjectivity by supplementing discussions with the use of "a simple multi-criteria approach in the form of computer software (such as NAPASSESS and HiView)" (p.19). However, the study does not address whether the methods used for stakeholder participation, decisions about criteria and ranking of projects was appropriate.

Successes	Constraints
Emphasis on participatory processes	Institutional barriers
Consideration of both vulnerability and adaptation to climate change	Communication problems between the central offices and states
Investigation of climate variability as well as climate change	Lack of sufficient technical capacities needed at local levels to play an active role in the assessment process
The bottom-up approach	
Capacity building and awareness raising	Need for additional technical and financial assistance by most countries to develop the concept notes and project profiles into full projects
Use of a variety of methods (including literature surveys of previous studies and assessment, direct interviews and meetings, and the use of GIS and remote sensing technology and other formal data analyses)	Insufficient financial resources and time, especially for large countries like Sudan and Ethiopia.

Data collection	Inability to secure funds in time to secure momentum for implementation of activities
Stakeholder identification	
Focusing on the most vulnerable groups in different sectors/ regions	
Involvement of planners and policy makers and the provision of platforms for discussion and consultation between them	

Table 1 – Key successes and constraints identified by Osman-Elasha & Downing (2007, p.22)

Kalame, Kudejira and Nkem (2010) present another evaluation of the NAPA process, with specific reference to the development and implementation of the NAPA in Burkina Faso. They used a variety of methods in order to carry out a full assessment. They used Poverty Reduction Strategy Papers (PRSP), NAPA and vulnerability assessment reports to determine vulnerability of sectors to climate change to determine whether projects relate to the most vulnerable sectors. They supplemented this information "open-ended questionnaires to gather information about the NAPA research process and implementation of NAPA priority projects" (Kalame, Kudejira and Nkem, 2010, p.539) with key stakeholders within the NAPA process in Burkina Faso. These stakeholders included: NAPA researchers (experts from government departments, research institutions and NGOs); NAPA implementers; funding bodies; national-level focus group discussion (FGD); FGDs in "communities and villages in which NAPA researchers are assumed to have collected local-level field data in preparing the NAPA documents" (p.539); and FGDs in villages selected for implementation of priority projects. They also used direct observation over a period of five months.

The study collected information at the national and local level and is therefore able to evaluate how communication and participation proceeded at both levels. They find that, at the national level, the projects identified and selected were highly influenced by the area from which the members of the NAPA teams came from. For Burkina Faso, this was primarily National Resource Management (NRM), and the projects reflect this.

Furthermore there were issues at national level with the arrangement of different stakeholder institutions and their inputs to the implementation: "Key informants we interviewed expressed concerns that stakeholders such as NGOs and the ministries in charge of decentralization, economy, and development may not participate in implementing identified NAPA projects because they had not been involved in the initial planning stage or because they are unaware of what they are expected to do" (Kalame, Kudejira and Nkem, 2010, p.546).

At the local level Kalame, Kudejira and Nkem (2010) find that the local level participation was inadequate. They make three main points in reference to the failings of the local level participation:

1. The 15 months given for elaboration of the NAPA document did not provide sufficient time to mobilise community participation for a fully participatory process;

2. Not enough of the relevant stakeholder were consulted - "Residents of only 67 of the country's 8,000 villages were interviewed during the NAPA elaboration process. Although all three of the ecological zones in Burkina Faso (see Fig 1) were represented in the research, the sample size was too small (<1%) in relation to the total number of villages in Burkina Faso" (p.542); and

3. Information was only gathered on sectors, which were selected prior to community participation "without any representation from local communities or any detailed studies" (p.542)

Kalame, Kudejira & Nkem (2010) then identify two main areas in which the NAPA process could be improved:

1. Identification of specific community groups that will be beneficiaries of the projects is essential to enhance efficiency and prevent confusion, such as "women's or smallholders' organizations or certain types of community NGO" (p.546); and

2. A broader range of communication tools need to be used within the NAPA process in order to "improve awareness-raising efforts, especially at the community level" (p.546). This is especially important in communities with high

illiteracy levels. The study recommends the use of tools such as "community meetings and workshops, national radio and television broadcasts, and other audiovisual tools" (p.546).

CONCLUSION: A FRAMEWORK FOR THE EVALUATION OF PARTICIPATORY APPROACHES AND COMMUNICATION

In conclusion, given the limited number of studies that evaluate the NAPA process, there appears to be a gap in current research. Our knowledge of how participatory approaches and communication were utilised in the NAPA process could be improved by more research on how the process occurred in LDCs and whether the guidelines provided by the LEG (2002) were followed.

There are two key questions that it would be fruitful to answer:

1. To what extent were communication and participatory approaches embedded into NAPAs (according to global/local stakeholders)?

2. Is it possible to identify the impact of participatory approaches and communication on the implementation of NAPAs (according to global/local stakeholders)?

By answering these questions, the successes and failures of the NAPA process can be identified to inform future adaptation planning. Especially with regard to the National Adaptation Plans (NAPs) currently being developed by LDCs in order to plan long-term adaptation strategies. Furthermore, it is possible to identify the impact of certain participatory approaches within the process, and this will also be useful for future planning processes.

This evaluation of the NAPA process intends to fill the research gap by investigating participatory approaches and communication within the NAPA process. The methods used will follow from similar studies discussed in this section (Kalame, Kudejira & Nkem, 2010; Osman-Elasha and Downing, 2007). This includes interviews of key experts within the NAPA process in order to analyse their views on how the process proceeded. These experts will include both local and global stakeholders within the process. The study takes a broad global view but will also focus on one country,

namely, The Republic of Ethiopia. Ethiopia was chosen as a focus country due to its national dependence on agriculture as a key industry. Furthermore, Ethiopia has submitted its NAPA document and is working towards developing its NAP. Therefore, an analysis of the processes is integral at this stage to allow improvement for the development and implementation of the NAP. Ethiopia will be compared with other countries that have already sent their NAP such as Burkina Faso and Cameroon and with Central African Republic that has significant gaps on participation and communication use in NAPA process and that hasn't submitted its NAP.

CHAPTER 3 - HOW THE FUNDAMENTAL PRINCIPLES OF COMMUNICATION AND PARTICIPATION HAVE BEEN EMBEDDED IN THE NAP PROCESS

INTRODUCTION

National Adaptation Plans (NAPs) are a process designed to enable LDCs to adapt to the long-term consequences of climate change in an integrated manner that is

streamlined with their in-country development and environment goals. Given that NAPs build on the previous successes of the NAPA process, it is interesting to investigate the similarities and differences between the processes used in each mechanism. Furthermore, this chapter will evaluate whether the fundamental principles of communication and participation have been embedded in the NAP process by analysing the normative process provided by the LEG. In the last section of this chapter, the views of global and local stakeholders will be used to understand which of the approaches used in the NAPA process had the best impact and should therefore be included in the NAPs.

DIFFERENCE AND SIMILARITIES BETWEEN RATIONALE BEHIND NAPA AND NAP.

The NAPAs were formulated in order to help LDCs cope with the most urgent adaptation needs to climate change: the adaptation requirements that if they are not conducted immediately will lead to large costs in the future. Although only focusing on short-term priorities, this process provides a good point from which further adaptation action can proceed. This is due to a number of reasons: the NAPA process led to the institutionalisation of climate change adaptation within national bodies; it built a participatory approach to climate change adaptation processes; it helped identify important stakeholder groups; and it led to the collection of large amounts of data on national vulnerabilities.

Therefore, the NAP process builds on the success of the NAPAs and utilises many of the same mechanisms developed during the NAPA process. However, the NAPs, rather than looking at urgent and immediate needs, take a much longer-term view of climate change adaptation; they aim to provide a "better way of doing business" (LEG, 2012b, p.14).

Decision 5/CP.17, paragraph 1

The agreed objectives of the national adaptation plan process are:

a) To reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience;

b) To facilitate the integration of climate change adaptation, in a coherent manner, into relevant new and existing policies, programmes and activities, in particular development planning processes and strategies, within all relevant sectors and at different levels, as appropriate.

Box 1. Agreed objectives of NAPs process identified in Decision 5/CP.17, (UNFCCC, 2012a)

The idea of the NAPs is to provide LDCs with the adaptive capacity to adapt to climate change in the long term and to establish climate change adaptation as a key national policy that is integrated into development planning. It therefore aims to produce a "comprehensive system" through which adaptation can be mainstreamed rather than any single programme of project. Box 1 shows Decision 5/CP.17, which lays out the objectives of the NAPs (UNFCCC, 2012a). To ensure that the NAPs become integrated into national development strategies requires streamlining of processes to prevent duplication of efforts and further institutionalising of climate change adaptation processes.

The institutional mechanisms behind the NAPs are similar to those of the NAPAs, in that the NAPs were devised by the COP under the UNFCCC and the Nairobi Work Programme. The LEG provides technical guidance for the establishment of the NAPs and funding for the development and implementation of the plans is organised by the GEF by attainment of financial resources from the LDCF, SCCF, the Adaptation Fund and the Green Climate Fund. Furthermore, the process is aided by other multilateral agencies that act as facilitating agencies. In addition, the Technology Mechanism and the Technology Executive Committee ensure the development and transfer of technology to support the process and implementation of adaptation plans. Within each country, the institutional arrangements will likely vary depending on their

circumstances, but the LEG suggests that a single government agency may be best placed to coordinate the NAP process and to organise capacity building and outreach (LEG, 2012b, p.12).

NAP PROCESS

Underlying themes behind NAP process

The NAP process is designed to build on the successes of the NAPA process by integrating many of the same underlying themes and utilising the same approach. The ideas of inclusive and multi-directional communication are identified as key to the success of the NAP process, as with the NAPA process before. This means collection and synthesis of knowledge and views from all relevant stakeholders, utilisation of technical expertise from experts, learning from successes and failures of similar projects, and the dissemination of plans and ongoing progress to all stakeholders and the public in order to improve outreach and ownership of the process.

The NAP approach is described by the LEG as "a country-driven, gender-sensitive, participatory, and fully transparent approach" (2012a, p.8). Therefore, it is desired that Parties take ownership of the NAP process in order to ensure that it is fully integrated with national policies and to streamline approaches to prevent duplication of adaptation efforts. The gender-sensitive and participatory components of the approach mean that stakeholders should be consulted throughout the process and that the potentially divergent needs of the different gender roles are taken into account when adaptation plans are produced and reviewed. This includes ensuring that women are equally included in decision-making processes and that adaptation plans take into account the needs of women as having increased dependency on natural resources. The process should also utilise the "best available science and, as appropriate, traditional and indigenous knowledge" (LEG, 2012b, p11). In terms of the transparency of the approach, the dissemination of the NAP and the ongoing review and reporting of the process is an integral component that ensures that stakeholders and the public are kept informed kept informed. Given that the NAPs represent long-

term adaptation to climate change, the monitoring and review of the adaptation strategies are integral components of the plans as vulnerabilities and priorities will change over time.

Steps in the NAPs

The NAP process is aimed at being completely country-driven and therefore the process will follow the needs of individual countries. However, the LEG set out overall guidelines for the Parties in the annex to decision 5/CP.17. These guidelines contain four main elements: laying the ground work and addressing gaps; preparatory elements; implementation strategies; and reporting, monitoring and review. Outlines of each step can be found below. Each of these four elements then contains a series of activities that Parties can select from to suit their own situation. Therefore, the guidelines are not prescriptive, and Parties are encouraged to be selective in which steps and activities they use in their own case in order to prevent duplication of efforts.

<u>Step 1 – Laying the groundwork and addressing gaps</u>

Step 1 involves laying the groundwork and addressing gaps in current knowledge. This includes initiating and launching the NAP process through meetings with policy makers and defining the framework to be used for the rest of the process. It also requires stocktaking of available climate information to determine gaps in current knowledge needed to successfully adapt to climate change. Furthermore, capacity gaps are addressed at this stage, including technical and institutional capacity but also improving communication capacity by initiating programmes that improve public awareness. At this stage institutional barrier are also identified that may impede the planning process.

This step should create a national mandate for the NAP process that ensures that participation is fully enabled within the process and that communication forms a core component. This means having two-way communication in which stakeholders are

engaged from the outset and all stages of the process are disseminated to stakeholders and the public.

Step 2 – Preparatory elements

Step 2 involves the preparatory elements required to make the rest of the NAP process a success. This includes analysing the current and future climate risks using existing scenarios and determining the indices that will be most useful for future planning. The communication of this expert knowledge could be conducted using a database that details all climate change impacts. This step also involves assessing the risks at the sectoral scale (and other scales, such as national, sub-national, community, etc.) to identify vulnerabilities and adaptation options. These options can then be assessed later in this step and decision analysis can be used to rank vulnerabilities and adaptation options according to severity and to their possible unintended consequences. The LEG suggests in its guidelines that the ranking of vulnerabilities should occur through a consultative process and methods such as multi-criteria approach could be utilised to ensure that there is as broad consensus as possible on the ranking of the adaptation options, including among the public (LEG, 2012b, p.70). The priority adaptation options can then be utilised to produce plans and strategies for adaptation at the sub-national and sectoral scales.

The NAP is then compiled using stakeholder inputs and the adaptation priorities identified. Any comments from national stakeholders are integrated at this stage and then the NAP is communicated to "all stakeholders in the country" (LEG, 2012b, p.81). The LEG suggests that the NAP document could be made available on a public website at this stage and that time can then be given to receive comments and feedback. Although review is important at this stage, it is also envisioned that the NAP will be a "living document" that can be updated as new information becomes available (LEG, 2012b, p.81).

"Communicating projected climate change information to all stakeholders and the public" (LEG, 2012b, p.62) is an extremely important stage during this step. By communicating climate change information in a non-technical manner it ensures that

stakeholders can all fully engage with the process. The final task for this step is to integrate the NAP into existing national policies by evaluating "opportunities and constraints for integration of climate change in planning" (LEG, 2012b, p.55).

Step 3 – Implementation Strategies

This step involves the prioritisation of climate change adaptation within current policies and the analysis of how climate change adaptation can complement existing policies. It then requires the development of long-term national adaptation implementation strategies using concrete measures. For successful implementation of the adaptation plans, capacity building must occur in order to be able to implement NAP projects. This capacity building includes enhancing the capacity of institutions to integrate climate change adaptation into national development plans, and to implement ongoing training and outreach at various levels. The final task in this step is to promote synergies at all levels with other environmental agreements, plans and implementation.

All of the tasks within this step, such as capacity building, outreach and promotion of synergies with existing policies, require solid communication of the NAP process to relevant stakeholders and transfer of knowledge to the appropriate areas. Specifically, the outreach and capacity building may include activities such as formal and informal training and education at a national level so that stakeholders can effectively participate in the NAP process as it develops.

Step 4 – Reporting, monitoring and review

Step 4 involves the reporting, monitoring and review of the NAP to ensure that it is transparent, accountable and updated as situations and vulnerabilities change. Monitoring includes selecting qualitative and quantitative metrics that can be used to evaluate the ongoing performance of the NAP and then using the information collected, and any emerging science, to support reviews. Reviewing of the NAP should occur on a regular basis using the outcomes of the monitoring process and should also include an assessment of any "inefficiencies and identified gaps" (LEG, 2012b, p.111). The monitoring and reviewing of the NAP should lead to the updating of the plan and

all relevant documentation at intervals that are aligned with other national planning documents to ensure that the NAP is up-to-date and complementary with national planning.

The final, important component of this step is outreach and communication of the NAP. This involves reporting on the "progress and effectiveness" (LEG, 2012b, p.114) of the process to relevant stakeholders, including the UNFCCC secretariat, and through national communications.

CONCLUSIONS: LESSONS LEARNT FROM NAPA PROCESS

The NAP process is different from the NAPA process as it is a much longer-term solution to the adaptation requirements of LDCs and therefore integration of plans with national strategies and monitoring and reviewing over long time periods are extremely important concepts that are unique to the NAP process. However, a number of lessons that were learnt from the NAPA process have been taken into account during the design of the NAP process. For instance, it is designed in such a way as to aspire to mainstream climate change adaptation within other processes; this is different from the NAPA, which was a detached, short-term solution. It is therefore much more country-driven and includes governments as the driving stakeholder in the process. It is also much more important that it include capacity building to strengthen long-term abilities. This has been acknowledged by the LEG and integrated into the guidelines provided for the Parties. Specifically, as discussed above, the guidelines include: steps that address gaps and barriers that need to be overcome for the NAP process to be successful; stakeholder engagement and input in both the development and communication of the NAP document; capacity building and communication initiatives to ensure effective implementation; and monitoring and reporting to relevant stakeholders for review.

One lesson learnt from the NAPA process is that reviewing and monitoring is important for success of the development and implementation of adaptation measures. This forms a key stage within the NAP process (Step 4). It is also important that the results of the reviews are communicated to the relevant stakeholders in order to manage

expectations of participation and maintain ownership of the process. This was a problem highlighted by the LEG during the NAPA process that stakeholder expectations were not aligned with the outcomes of the process due to the long delay between development and implementation of the projects, which left some stakeholders disillusioned (LEG, 2012b, p.15). This long delay (and sometimes a curtailment of the projects that could be implemented) was due to the lack of financial resources. The limitations that the lack of funding posed to the NAPA process has been acknowledged and should be taken into account for the NAP process.

The NAPA process utilised a multidisciplinary NAPA team that drew on the expertise and views of multiple stakeholders. The NAP process hopes to use the same type of multidisciplinary inputs so that there is early and ongoing engagement of multiple stakeholders. The LEG also notes that "the implementation of NAPA projects was smoother and more effective in those LDCs that were able to sustain country teams throughout all stages of the NAPA process" (LEG, 2012b, p.15). This suggests that the NAP process will benefit from the inclusion of stakeholders throughout all stages. Therefore, building on the NAPA experiences highlighted by the LEG, there are a number of recommendations for the NAP process. The following chapters will build on these recommendations in order to inform the NAP strategy concerning participation and communication.

CHAPTER 4 - RESULTS OF SURVEY

INTRODUCTION

In support of literature review a survey was designed to answer four main questions:

1.   How were participatory approaches and communication used in the implementation of NAPAs?

2.   What approaches were used and what were the results?

3.   Which stakeholders were involved?

4.   What were the lessons learned and how can participatory approaches and communication be used for the naps?

In order to facilitate this, the survey was designed using clustered questions that answered, one by one, the four major research questions. In order that a comparison could be drawn between those who were and were not involved the NAPA design and implementation, different, comparable questions were devised to gauge their responses. The importance of participants that didn't participate to the design and involvement of NAPA is on their knowledge on participatory approaches. In fact, almost all of them are participatory or communication experts with knowledge on climate change. The results of survey were not subjected to statistical analysis because the research is primarily qualitative.

A pop-up glossary was also shared to the participants in order to allow non-expert respondents to grasp the basics of adaptation terminology (e.g. adaptive capacity, risk) before making their choice.

METHODOLOGY

The results from all questions were considered in the results, including those of the generic questions. All questions were analysed separately and their results presented graphically to aid understanding.

The answers provided by the participants who were not involved in NAPA design or implementation were presented alongside the corresponding answered provided by those who were. Because these provided responses to similar or comparable questions, this allowed for comparison of the two groups. Where appropriate, the responses of the two groups were compared directly in the same graph.

In some cases, the answers to the questions were analysed based on answers to the generic questions, such as gender, region, area of expertise and type of institution. As none of these analyses presented interesting results for the overall conclusions, no further quantitative analysis was undertaken to determine statistical significance.

For questions where open-ended answers were provided, all answers are presented in the results in boxes separate from the main text and salient responses or general themes are highlighted and commented on. These responses were not checked for spelling or grammar as to be a true a representation of the responses as possible.

Similarly, where multiple choice questions required participants to specify for 'other' responses, all responses are detailed in the results and analysed appropriately. In some cases, a participant may have selected 'other' but specified a response that was contained within the list provided. These were checked and the responses adjusted accordingly.

For questions where answers were ranked, results are typically visualized by presenting the number of participants that gave a particular rank in order to show the range of ranks for each option and the overall variation of responses. However, the comparison of responses is carried out using the average ranking of the options, as this provides a quantitative metric for comparing options.

The choice of developing a qualitative analysis resides in the need to represent a describing process of knowledge, while explaining and evaluating the background and the plurality of perspectives of various stakeholders, with the aim of developing a concrete strategy for NAPs. In particular, a qualitative analysis contemplates different approaches according to the intrinsic purposes of the research and their applicability.

Although survey percentage has been taken into account, qualitative analysis helps in obtaining pertinent information from a large and various group of interviewers, where standardization is important.

Thus, a qualitative survey refers to the articulation of meaning and their conceptualization, while categorizing and coding data, and not just focusing on the accountability of percentage for statistics purposes. The survey can be associated with social research, where qualitative data reflect the interest and the use the research wants to show with it. Although qualitative data are often less standardized and less accurate than quantitative data, they appear to be more flexible in understanding the information the survey aims to gather in order to shape ad hoc strategies.

The methodology of the survey is both "close-ended" and "open-ended", allowing respondents to answer in a more ductile way. The use of open questions in combination with categories and ratings defined by the research, help in gathering information through multiple choice with subject defined data but also in a more narrative way with the use of open questions and the "other" section. Thus, the detail and relevance of such data are not pre-determined by the researcher but instead recorded and elaborated with the combination of rate approach and open answers.

Concerning the processing and managing of qualitative data, it has been previously identified a main focus for research purposes particularly regarding the decision that has been taken in selecting the material, extrapolating meanings and thinking, also of the potential audience of the survey.

The survey is important for both formative and summative purposes and could be useful for future spaced intervals of time with the aim of measuring progress with a research time dimension and comprehension of change in behaviors, according to new policies and strategies adopted and lessons learned.

GENERIC QUESTIONS

There were 68 responses to the survey from 48 countries and 62 institutions, who in total work across 94 countries worldwide. A full list of home countries, countries

where participants work and their institutions can be found in Appendix 1, 2 and 3, respectively. Of the 68 respondents, 23 were female (34 percent) and 45 were male (66 percent). As Figure 1 shows, the majority of participants work in the African region (64 percent), followed by Asia (38 percent).
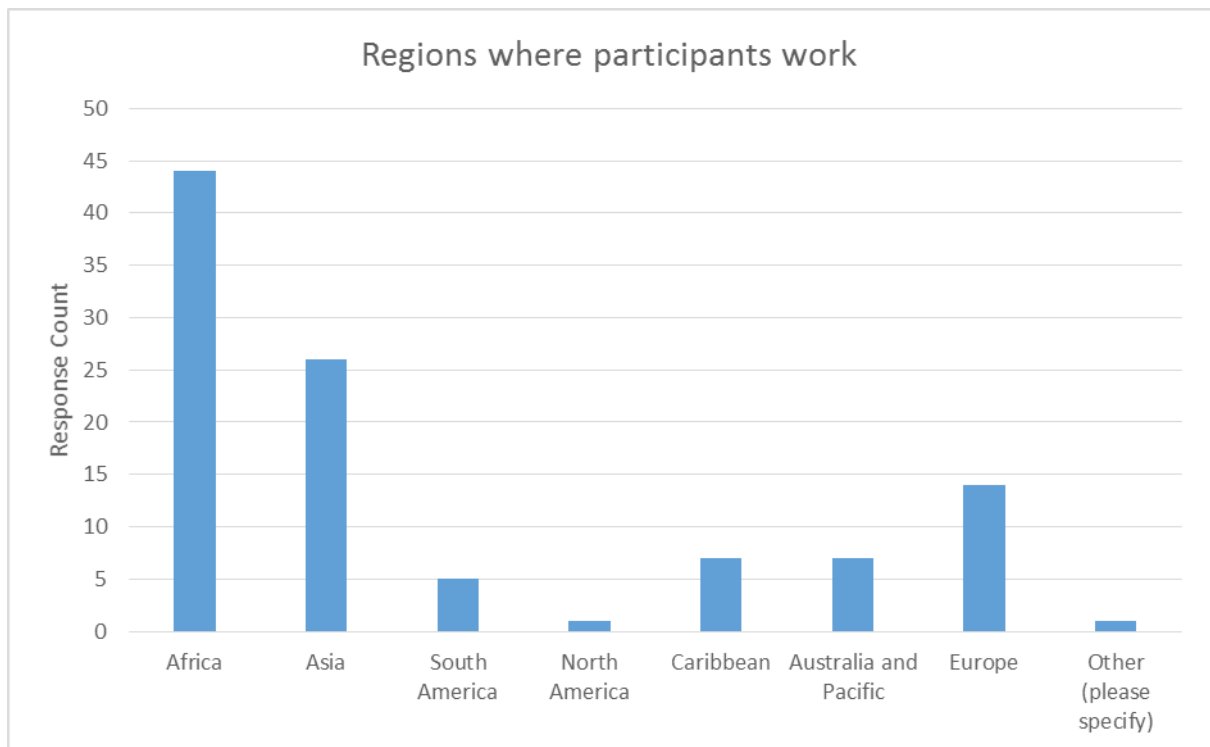
Figure 1 – regions where participants work; participants may work in more than one region. One participant selected 'other' because they do not work in a specific region.

Although all participants are experts in NAPAs or participation and communication within decision making, they were also asked to indicate their areas of expertise. 53 of the participants identified climate change adaptation as an area of expertise, with other most identified areas of expertise being National Adaptation Programmes of Action (31 responses), capacity building (28 responses), National Adaptation Plans (23 responses) and adaptation planning (22 responses). Figure 2 shows the response count for the various areas of expertise.

Figure 3 shows the types of institutions that participants work for. The majority of participants work for government entities. Within this, the majority of participants work in either programme or project management (44 responses), knowledge sharing

(34 responses), or as a scientist or researcher (34 responses). Figure 4 shows the type of work participants are engaged in. As can be seen from the graphic, more participants who were not involved in NAPA work in knowledge sharing than those who were involved in NAPA and, conversely, more participants who were involved in NAPA were policy makers compared with those who were not involved in NAPA. This is important because it may strongly influence the answers provided by the two groups, given that those provided by those involved in NAPA may be more guided towards policy and those provided by those not involved in NAPA may be more specific recommendations based on communication or participation theory or best practice.
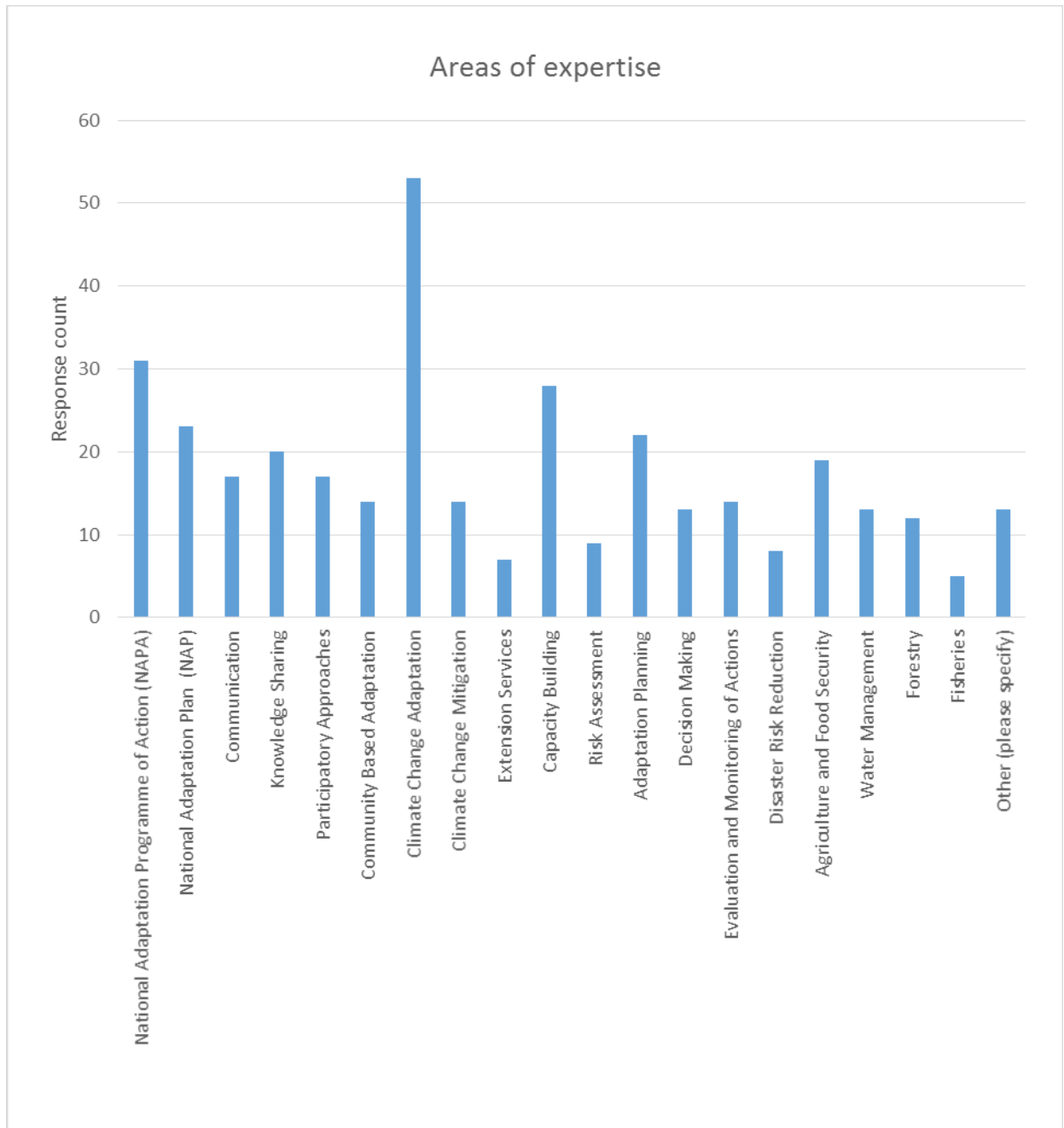
Figure 2 – areas of expertise of participants; participants may work in more than one area. Participants who selected 'other' work in the following areas: Energy; Coastal management; Planning of development programmes; National Compliance and Governance in Climate Change, Conflict Resolution; South-South cooperation on climate change; ecosystem-based adaptation; Environmental Management and Development; Economics; Soil conservation, project implementation, village and district level public auditing of the ongoing project; Public Policy; Nutrition; Integrated

coastal zone management; Project management; Research strategies and coordination.
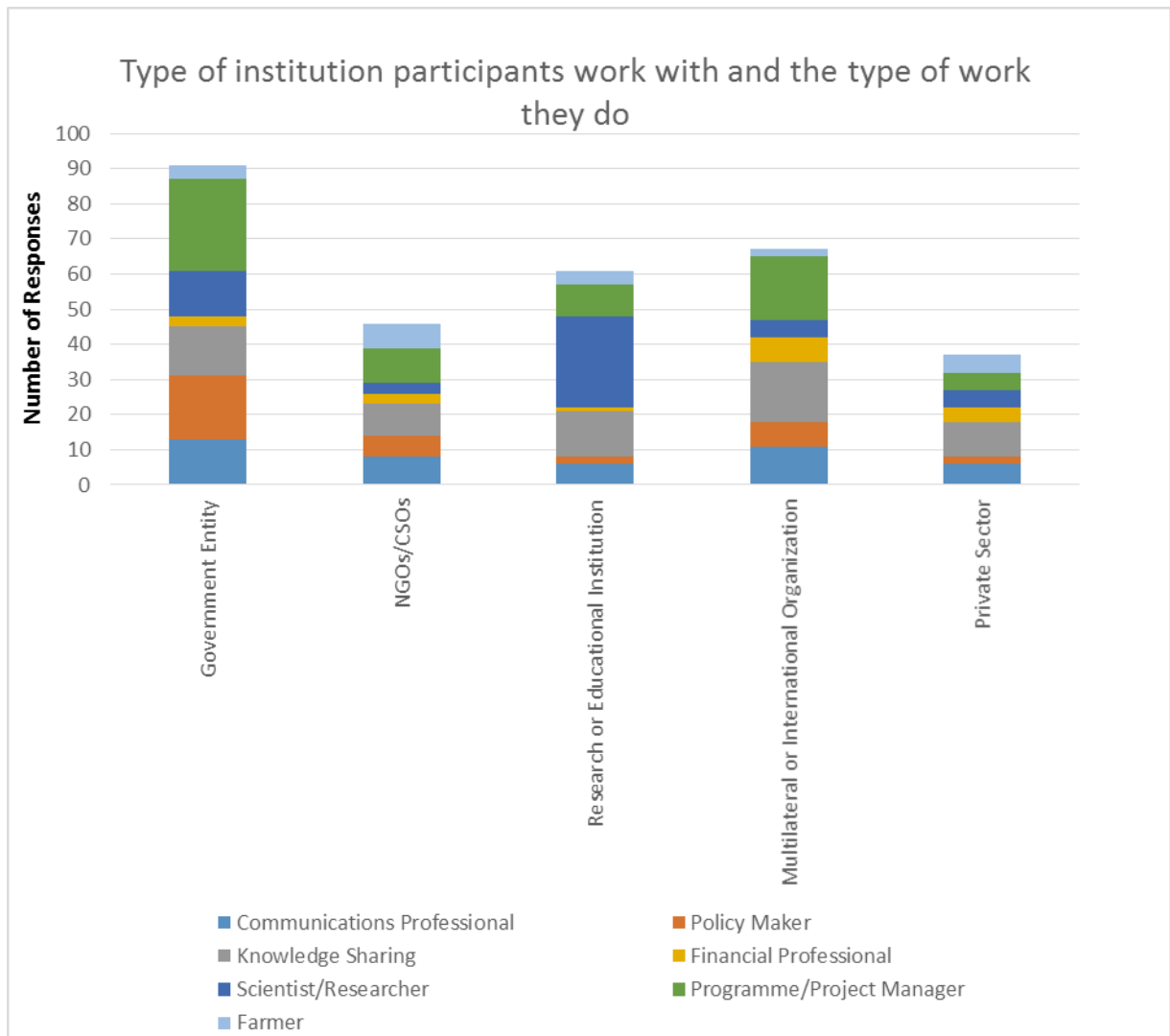
Figure 3 – type of institution in which participants work.
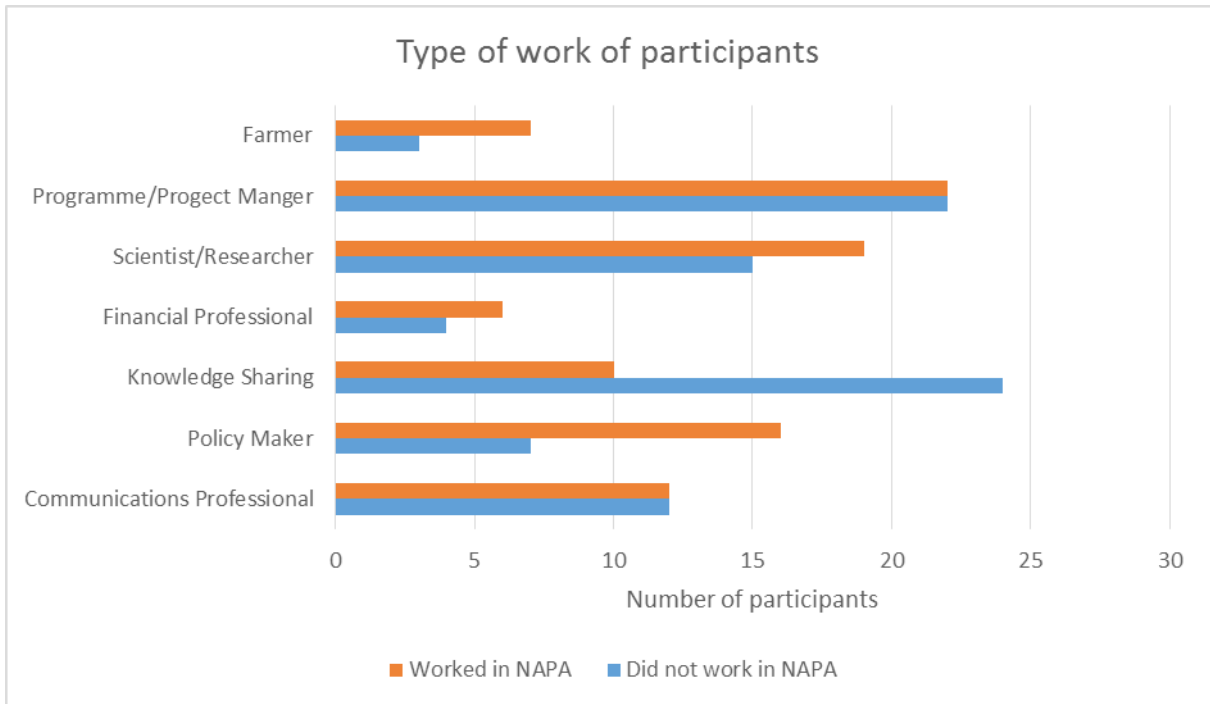
Figure 4 – type of work participants are engaged in.

Fifty percent of the participants of the survey were involved in NAPA design or implementation and the other fifty percent were not. Of those participants who participated in the NAPA design or implementation, they were involved in 32 countries. A full list of countries in which they were involved in can be found in Appendix 4.

NAPA STEPS

The participants who took part in the design or implementation of the NAPA were asked to indicate the steps that were taken in developing the NAPA. Figure 5 shows the responses to this question. As can be seen, the majority of participants (76 percent) indicated that all of the steps prompted had been undertaken, namely:

- Synthesis of available vulnerability assessments;
- Review of existing or past vulnerability studies such as national communications or past consultations under other national planning processes;
- Review of current coping strategies;

- Review and assessment of existing development frameworks such as national strategies for sustainable development, PRSPs, Programme of Action for the LDCs etc.

However, the participants also recognised other steps that were involved in the development of the NAPA with which they were involved. These 'other' steps were as follows:

- Community awareness and application of MDGs

- Community based vulnerability assessments

- Negotiation and implementation NAPA's prioritized projects.

- Documenting the indigenous knowledge as regards the adaptation of the communities to the climate change

- Role of communication in enhancing planning and participation

- Review and assessment of communication policies, resources and efforts

The participants who took part in the design or implementation of the NAPA were also asked to indicate whether they thought that the steps that had been taken were sufficient for developing the NAPA or whether more efforts could have been taken. Eleven participants responded to this question with open ended answers; of these 11 responses, one was disregarded as it represented a general comment on the steps. Three of the ten remaining participants believed that the steps used to develop the NAPA were enough. However, they comment that "specific problems of country are different" and that, although the steps were sufficient, "government organizations involvement were weak" due to weak communication and coordination and that this lead to problems with implementation. The other seven respondents did not believe that the steps were sufficient for developing the NAPA. Their responses can be seen in Box 1.
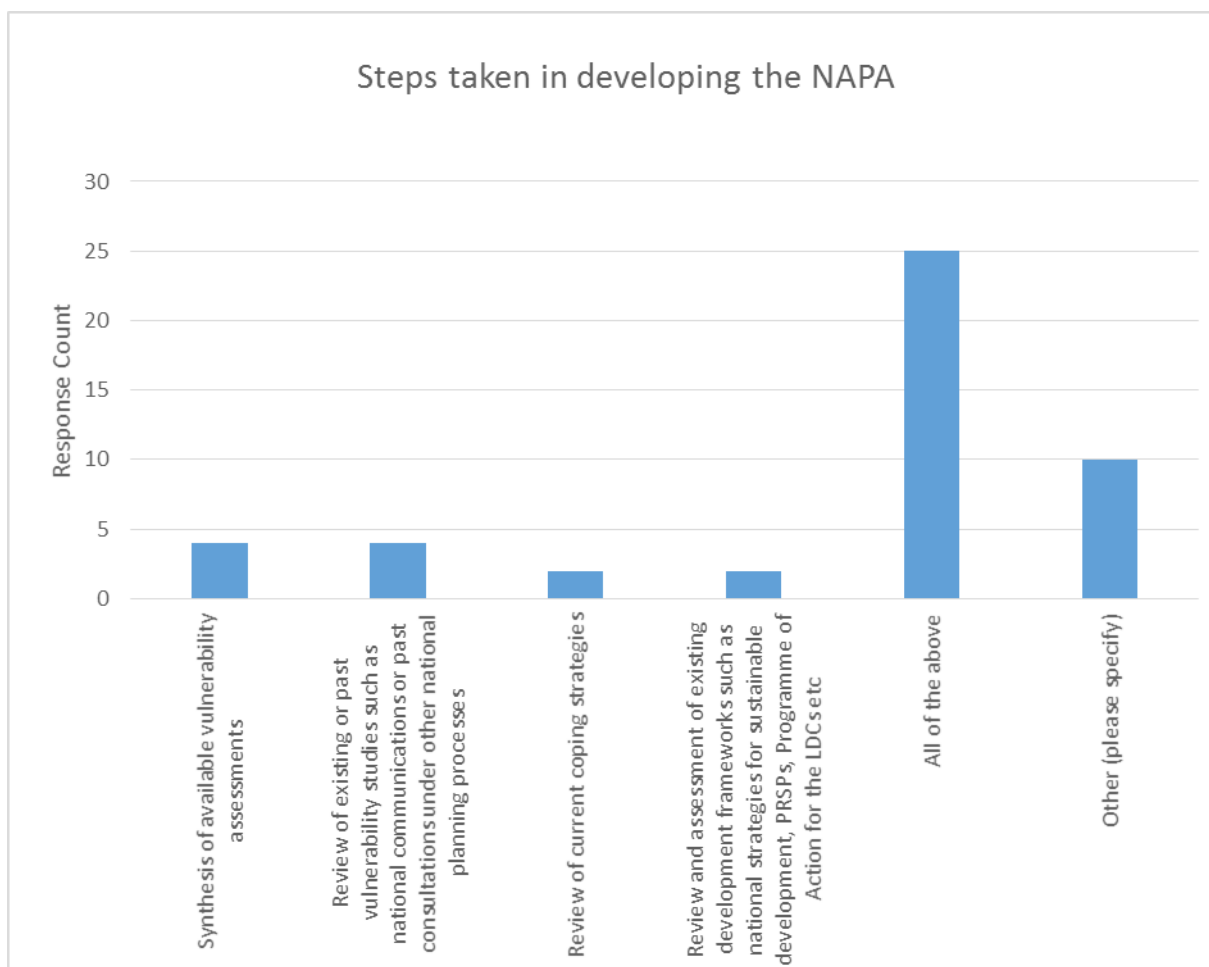
Figure 5 – steps taken in developing the NAPA in the country/ies in which participants were involved.

Box 1 – Comments on whether the steps for developing the NAPA were enough or whether more efforts were needed.

"Yes more efforts could have been taken to expand to real vulnerability assessment and ranking proper adaptation options and develop ME framework in addition."

"More efforts could be taken, but there is problem because of conditionalty to mobilise finance."

"I did not take part in the development of the NAPA but from my experience implementing and reviewing countries' NAPAs, the scope of the NAPA was too small in most countries."

"As per the given guideline and time the NAPA development steps were enough. In adequate time, finance and methodology in the NAPA preparation guidelines were not enough."

"Review of current of coping strategies should be expanded to cover past coping strategies. This will enhance understanding of how people and communities survive or adapt with vulnerability."

Box 1 – Comments on whether the steps for developing the NAPA were enough or whether more efforts were needed.

Participatory Approaches

When participatory approaches were used in the design of the NAPA

Participants were asked to indicate when participatory approaches were used within NAPA design. Figure 6 shows the responses to this question. As it can be seen, most participants responded that participatory approaches had been used in all of the procedures prompted, namely: to assess current vulnerability to climate variability and extreme weather events; to assess the potential increase hazards and associated risks due to climate change; and to identify key climate change adaptation measures. Five respondents identified other areas in which participatory approaches had been used. These were:

- To validate the final document;
- During regional consultation workshops;
- Project design;
- To identify priorities and key roles and responsibilities; and

- To assess information access, needs, and communication capability including their social networks.
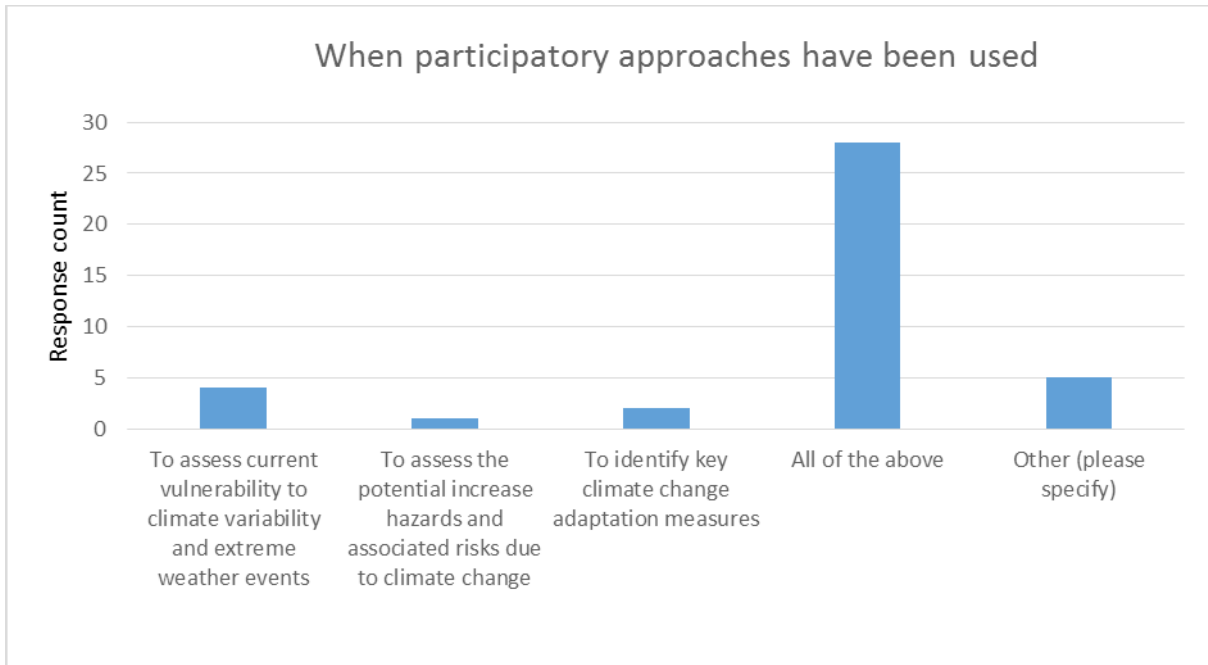
Figure 6 – when participatory approaches were used within NAPA design, according to participants who were involved in NAPA design and implementation.

Those participants who had not been involved in the NAPA design were asked to indicate when participatory approaches *should* have been used in implementing NAPAs. Figure 7 shows a comparison between the responses of those who were involved and those who were not involved in NAPAs. Fewer participants answered that they thought that participatory approaches should have been used for all of the procedures, compared with when they were identified to have been used. Fewer participants also identified other areas where participatory approaches should have been used; these two other responses were:

- "For point two, [to asses the potential increase hazards and associated risks due to climate change,] perhaps not the hazards, but surely the risks these pose towards people";
- "To prioritise adaptation options and to assess the feasibility and viability of these options."
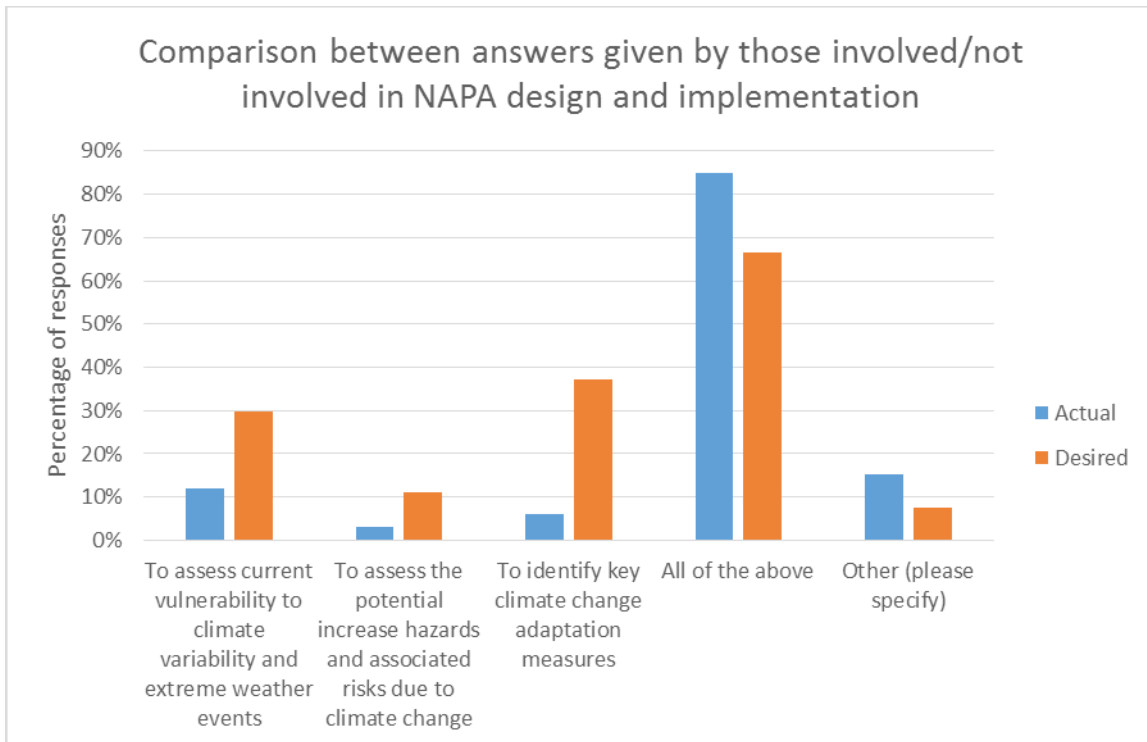
*Figure 7 – comparison between the responses of participants who were/were not involved in NAPA design and implementation of the procedures where participatory approaches were used (*actual*) and the procedures where participatory approaches should have been used, as provided by those not involved in the NAPA (*desired*).*

Objectives of participatory approaches

Following from the previous question where participants were asked to identify whether participatory approaches were used for specific objectives, both the participants who were involved in the NAPA and those who were not were then asked whether they think that participatory approaches could have been used for different objectives. They were asked to specify which objectives and express their comments in an open ended answer.

Of the 34 participants who were involved in the NAPA, seven (21 percent) stated that that participatory approaches could have been used for different objectives. Of the 34 participants who were not involved in the NAPA, nine respondents (27 percent) identified that participatory approaches should have been used for other objectives. A full list of their comments can be found in Box 2.

Box 2 – Other objectives for which participatory approaches should have been used

Objectives identified by participants involved in the NAPA:

- "Yes, participatory approaches is necessary to assure the durability of the project."
- "there should more PA at field levels. Vulnerable people should directly engage in identifying their CC related problems, vulnerabilities and prepare action plan to reduce their vulnerabilities."
- "Participatory approaches could be used to enhance people's interest in identifying vulnerability and developing measures to adapt."
- "Yes. Participator approaches can be used for policy formulation, project implementation, biodiversity conservation, livelihoods development, vulnerability assessment, adaptation and mitigation measures formulation, etc."
- "assess the potential increase hazards and associated risks due to climate change and identifying key climate change adaption measures and projects,"
- "Greater attention to community participation needs to be undertaken using various communication methods (video, social media, PRA, and so on) to encourage buy-in and support at all levels"
- "Participatory approaches should be embedded in all assessments to be undertaken and in defining potential strategies to address the climate resilience of affected communities and other stakeholders in the policy and service provision sectors."

Objectives identified by participants not involved in the NAPA:

- "Oui les approches participatives pouvaient être utilisées pour des objectifs différents comme outil d'aide au scientifiques en charge d'identifier les principales mesures d'adaptation au changement climatique car ces approches prennent en compte le consensus, la sensibilité des participants et de leur vécus, mais non basées sur des considérations scientifiques". (Yes, participatory approaches could be used for different purposes such as a tool helping in supporting scientists in identifying key measures to climate change adaptation, since these approaches take into account the consensus, the sensitivity of participants and their personal histories, but are not based on scientific considerations.)
- "For vulnerability assessment and designing the feasible long term adaptation measures at local level."
- "We have to involve local/regional people in all steps of the activities so that people can understand and keep aware in Climate change issues and countermeasures"
- "Yes, to help leaders guide choices including decisions in improving the daily lives of their populations to the effects of the observed changes."
- "Objective number 1: to obtain sustainable results; Objective number 2: to target the right population; Objective number 3: to take appropriate actions"
- "Potentially you could make them all participatory, but the NAPA budget was tiny (200,000) so if you were to prioritise key steps the selection of the NAPA drafting team and reference group; the assessment of vulnerability; and the ranking and prioritisation of options (including selection of criteria) would be the most essential."
- "To gauging the level of awareness response of local communities"
- "Reduce vulnerability"
- "I think there where the NAPA touches upon people's lives - which it does through vulnerability assessment, risk assessment, potential measures, etc. - there is a need for part. approaches. Though 'participatory approaches' is open to interpretation. This can range from an information session where people can ask questions up to real collaborative development. I think it is important to define participation up front. And

Participatory approaches used

The participants who were involved in the NAPA and those who were not were asked which participatory approaches were used and which should have been used in the NAPA, respectively. Figure 8 shows the answers of the participants who were involved in the NAPA. As can be seen, the most used participatory approach, as identified by the survey participants, was participatory poverty assessment (Identified by 75 percent of participants). Participatory poverty assessment can be defined as "an instrument for including poor people's views in the analysis of poverty and the formulation of strategies to reduce it through public policy" (Norton et al., 2001). Participatory rural appraisal was the next most used approach (identified by 72 percent). This is an approach that seeks to incorporate the knowledge, views and ideas of rural people into development programmes and decision making. Community based adaptation (identified by 59 percent) was the third most used approach is an initiative that seeks to utilise knowledge gathered from many sources in order to facilitate adaptation to climate change at the community level.
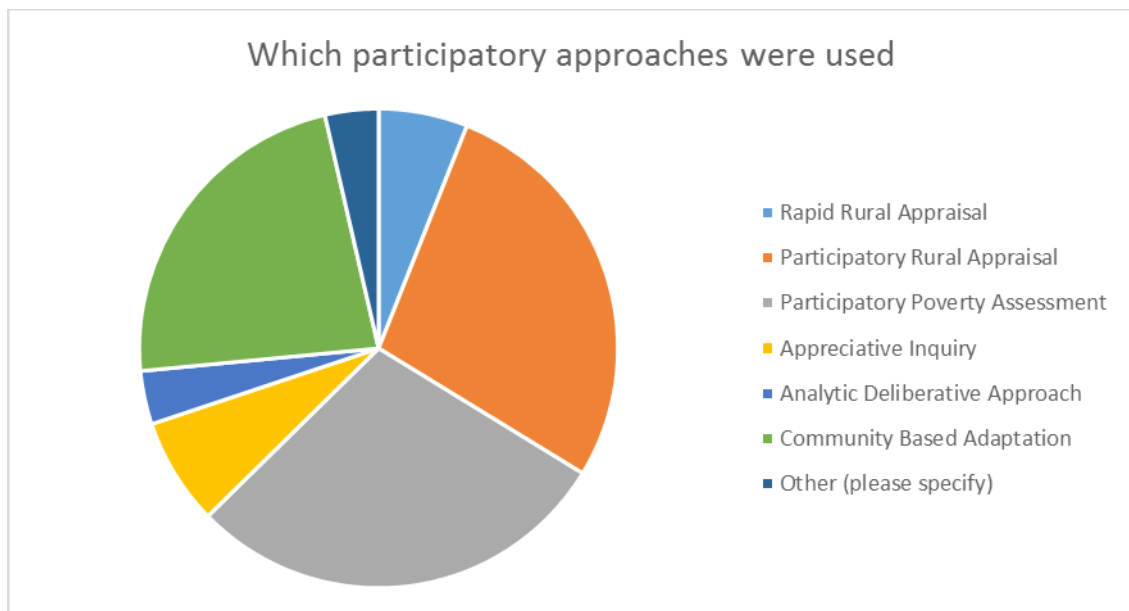
Figure 8 – which participatory approaches were used in the development of the NAPA, as identified by participants who were involved in the design and implementation of the NAPA. The three people (9%) who responded 'other', specified: workshop;

Institutional approach; and discussions with national and local governments and local beneficiaries during project design.

Participants who were not involved in the NAPA were asked to indicate which participatory approaches *should* have been used in implementing NAPAs. Their responses can be seen in Figure 9. Community Based Adaptation and Participatory Rural Appraisal were the approaches that were chosen by the largest number of participants as the approaches that should have been used in the implementation of NAPAs (with 16 - 70% - and 11 - 35% - responses respectively).

Of the 27 respondents who were not involved in NAPA that answered the question, two stated that they were not able to answer due to lack of knowledge. Another two respondents were unsure as to the validity of trying to prescribe specific participatory approaches, one stating that it should be "on a country-by-country case basis". Those who responded 'other', specified three different participatory approaches that they believe should have been used in implementing NAPAs. These were Ecosystem-Based Adaptation Decision Support Framework, Participatory Geographic Information Systems (PGIS/P3DM) and Multi-criteria analysis. Ecosystem-Based Adaptation Decision Support Framework is being developed by UNEP and its partners in order to "assist national planners and decision-makers select, design, implement and track Ecosystem-Based Adaptation (EBA) approaches as part of a wider adaptation strategy" (UNEP, n.d.). The framework has four main steps: "Setting Adaptive Context – Selecting Appropriate Adaptation Options – Design for Change – Adaptive Implementation" (UNEP, n.d.). It is currently being adapted for use within the implementation of NAPs. Participatory Geographic Information Systems (PGIS) describes the "community application" of GIS in order "to represent peoples' local spatial knowledge in the forms of virtual or physical, 2 or 3 dimensional maps" (International Institute for Environment and Development, 2015). Multi-criteria analysis (MCA) "describes any structured approach used to determine overall preferences among alternative options, where the options accomplish several objectives" (UNFCCC, n.d.). It is categorized by the UNFCCC (n.d.) as one of the

methods that should be used to "evaluate impacts of, and vulnerability and adaptation to, climate change".
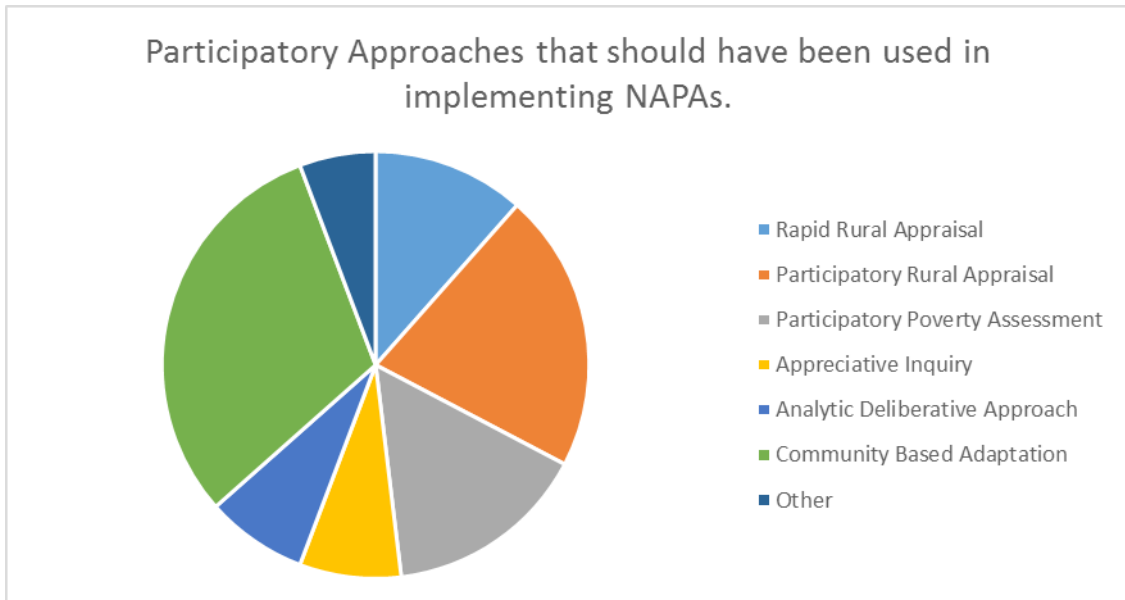
Figure 9 - participatory approaches should have been used in implementing NAPAs, as indicated by survey participants who were not involved in NAPAs.

When the responses of the participants who were involved in NAPAs and those who were not are compared, as in Figure 10, we can see that participatory rural appraisal and participatory poverty assessment were identified to have been used more in the NAPA development than participants who were not involved in the NAPAs thought that they should have been. However, the responses for the other participatory approaches by the two types of participants correspond relatively closely.
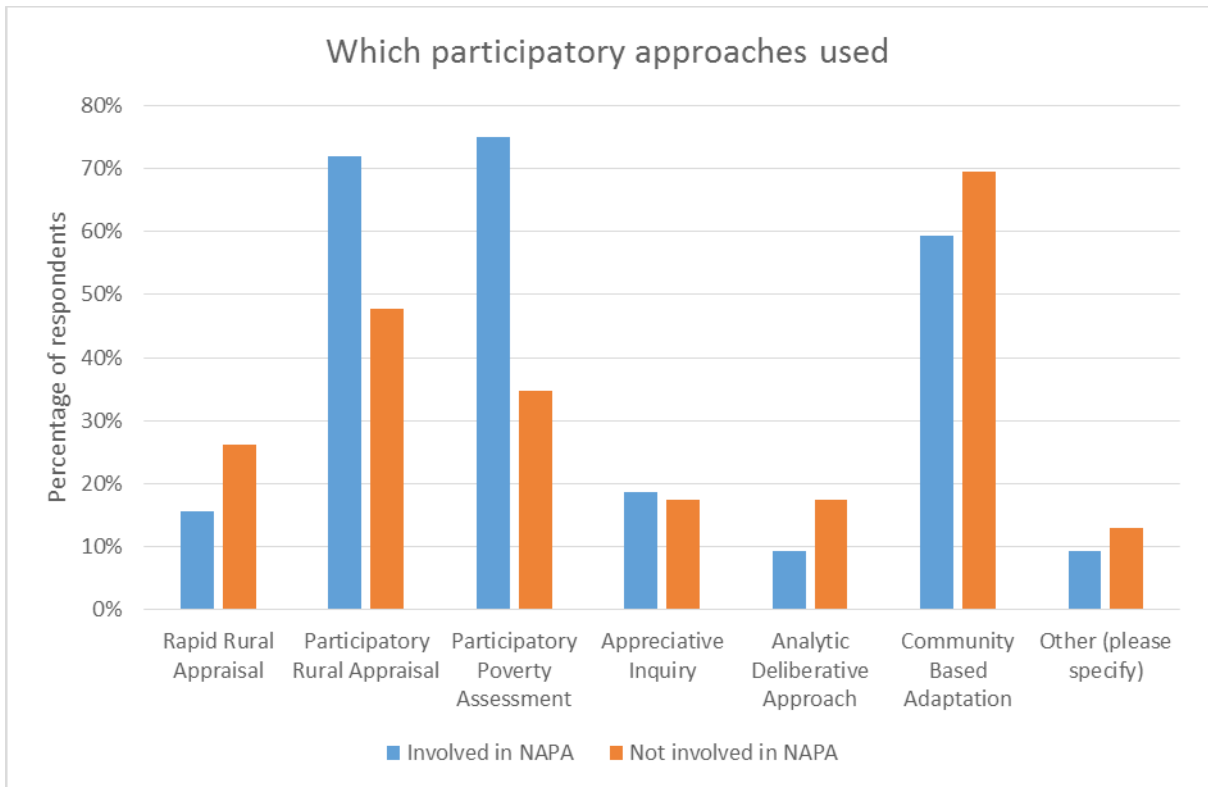
Figure 10 – comparison of responses of participants who were/were not involved in NAPAs on which participatory approaches were used and which should have been used, respectively.

Usefulness of participatory approaches

Participants were asked to rank each the participatory approaches in order of usefulness for NAPA, from 1 being the most useful to 6 being the least useful. The responses from those participants who were involved in the NAPA are shown in Figure 11. For this question, many participants responded 'N/A'; this is because the approach was not used in the NAPA(s) they were involved in. Out of the respondents who ranked the approaches, participatory rural appraisal, community based adaptation and participatory poverty assessment were ranked as the most useful. The other three approaches (rapid rural appraisal, analytical deliberative approach and appreciative inquiry) all had N/A responses of at least 20 out of 34.
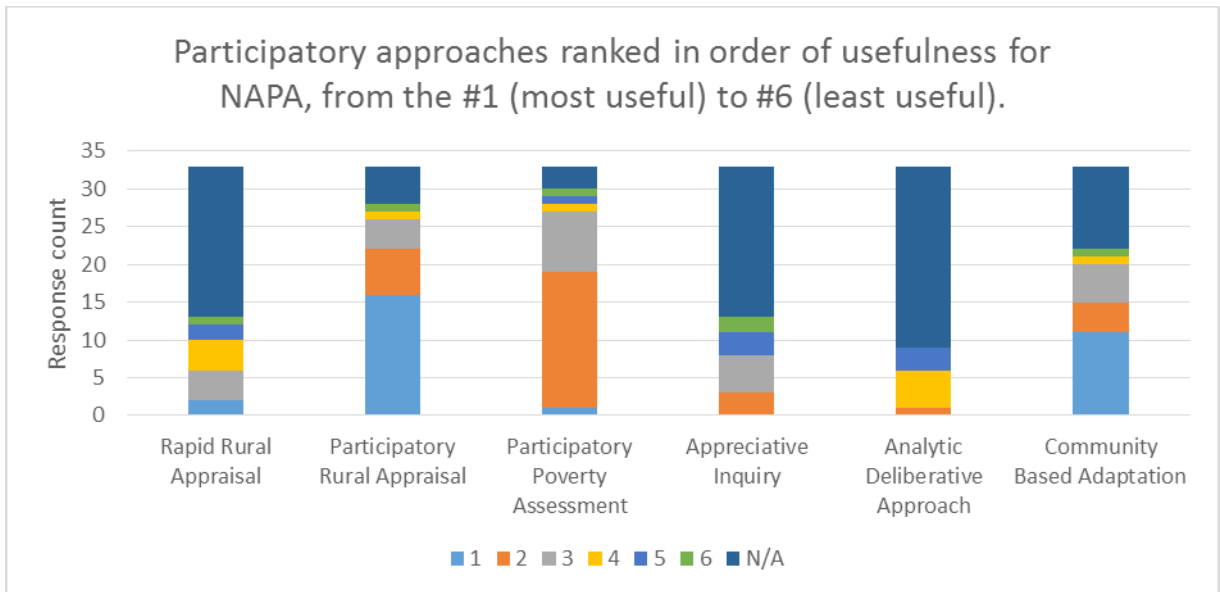
Figure 11 – participatory approaches ranked in order of usefulness for NAPA, from 1 being most useful to 6 being least useful, as responded by participants who participated in NAPA.
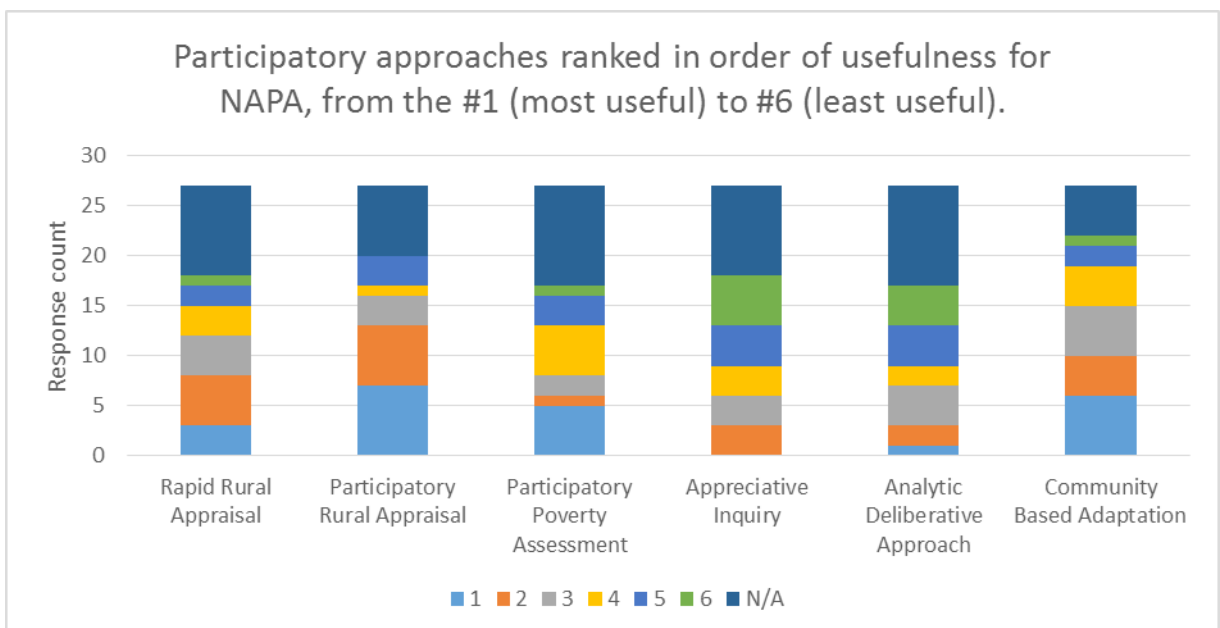
Figure 12 – participatory approaches ranked in order of usefulness for NAPA, from 1 being most useful to 6 being least useful, as responded by participants who did not participate in NAPA.

Participants who have not participated in NAPA were also asked to rank the participatory approaches in order of usefulness for NAPA in the same format. There responses are shown graphically in Figure 12. As can be seen, participatory rural appraisal, community based adaptation and participatory poverty assessment were ranked as the most useful. This is similar to the responses of the participants who were involved in NAPA. Similarly, analytic deliberative approach was ranked as least useful.

The results of the usefulness of the participatory approaches have also been analysed with regards to which regions participants work in order to determine whether the effectiveness of a certain approach differs with region. The results of this analysis can be seen in Figure 13. The major differences in the responses from participants working in North America are due to the small sample size (1 participant) and the lack of response for all but one of the approaches. As can be seen, the average ranking of the participatory approaches was very similar for the participants from the various regions.
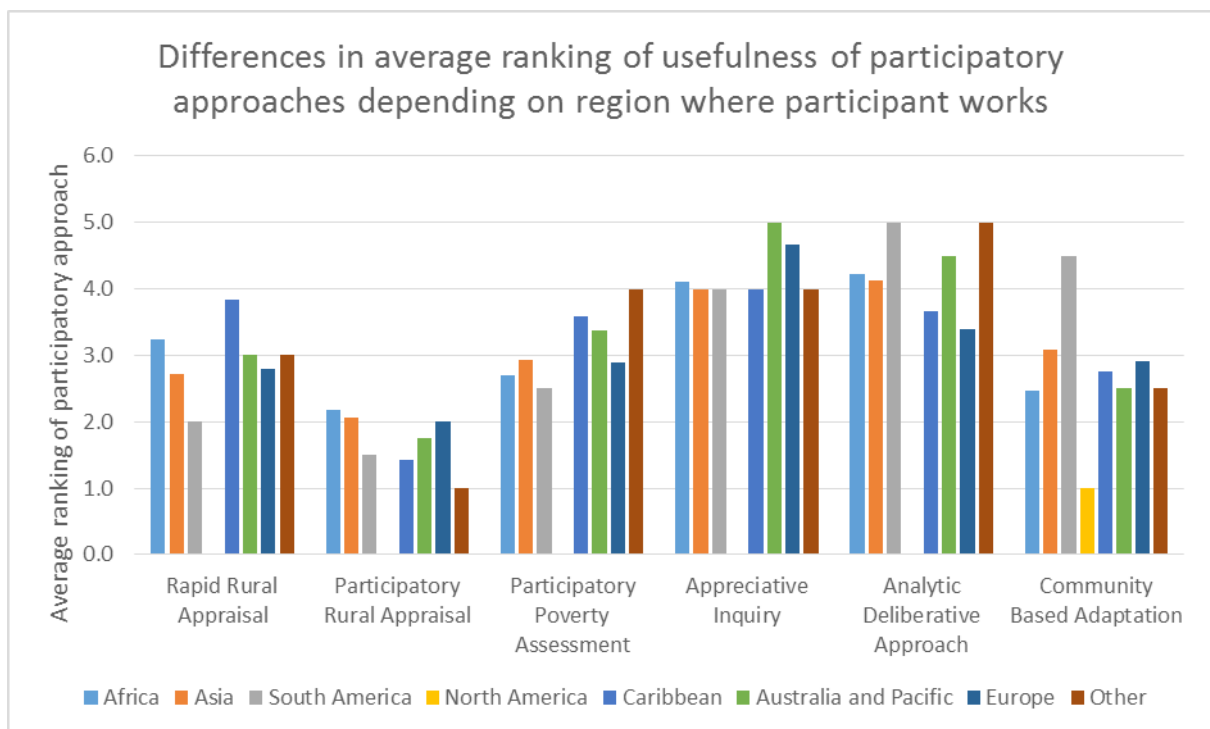
Figure 13 – average ranking of the usefulness of participatory approaches depending on the region where participants work.

As it has been established, participatory approaches may have a differential effectiveness when gender is taken into consideration. For this reason, the responses of the females and males in the survey were compared to analyse whether their responses indicated a difference in the ranking of the usefulness of participatory approaches within the NAPA process. This comparison is shown graphically in Figure 14. As can be seen, there is very slight difference in the responses of the males and females in the survey, suggesting that their views on the usefulness of the different participatory approaches is not influenced by gender.

A further analysis was carried out to determine whether the type of institution a participant works for influences their ranking of the usefulness of participatory approaches. As can be seen in Figure 15, this is not the case and the average ranking was very similar across institutions.
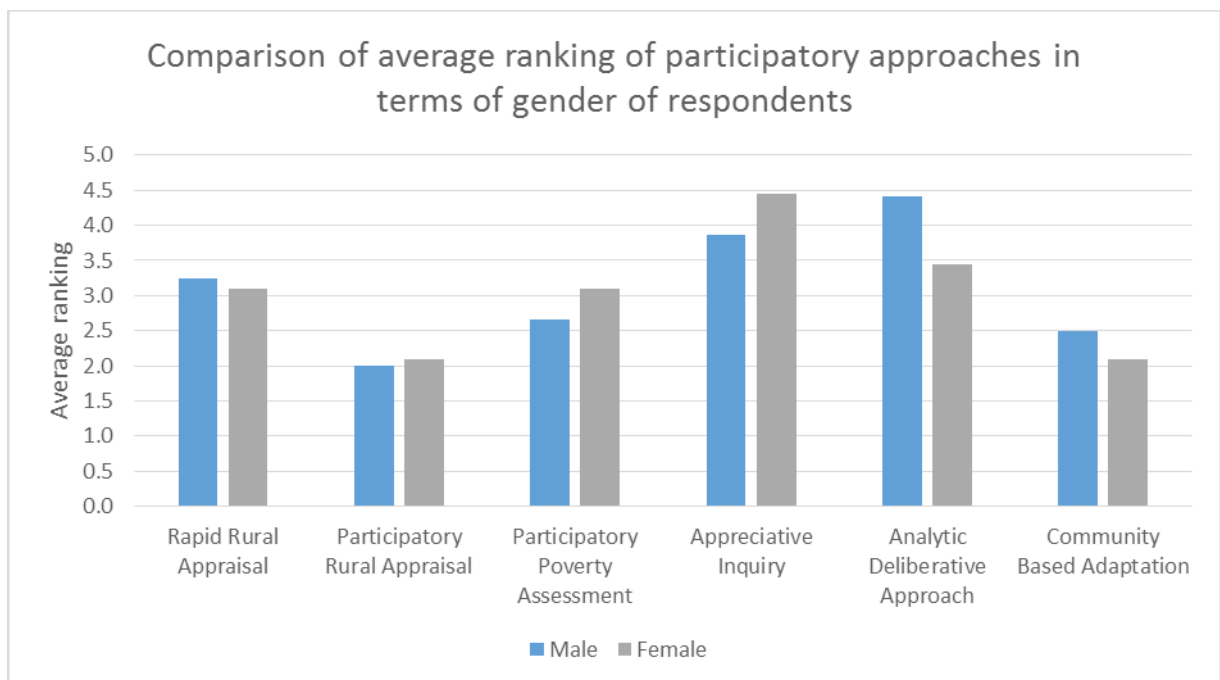
Figure 14 – comparison of the average ranking of participatory approaches depending on the gender of the respondents, from #1 being the most useful and #6 being the least useful.
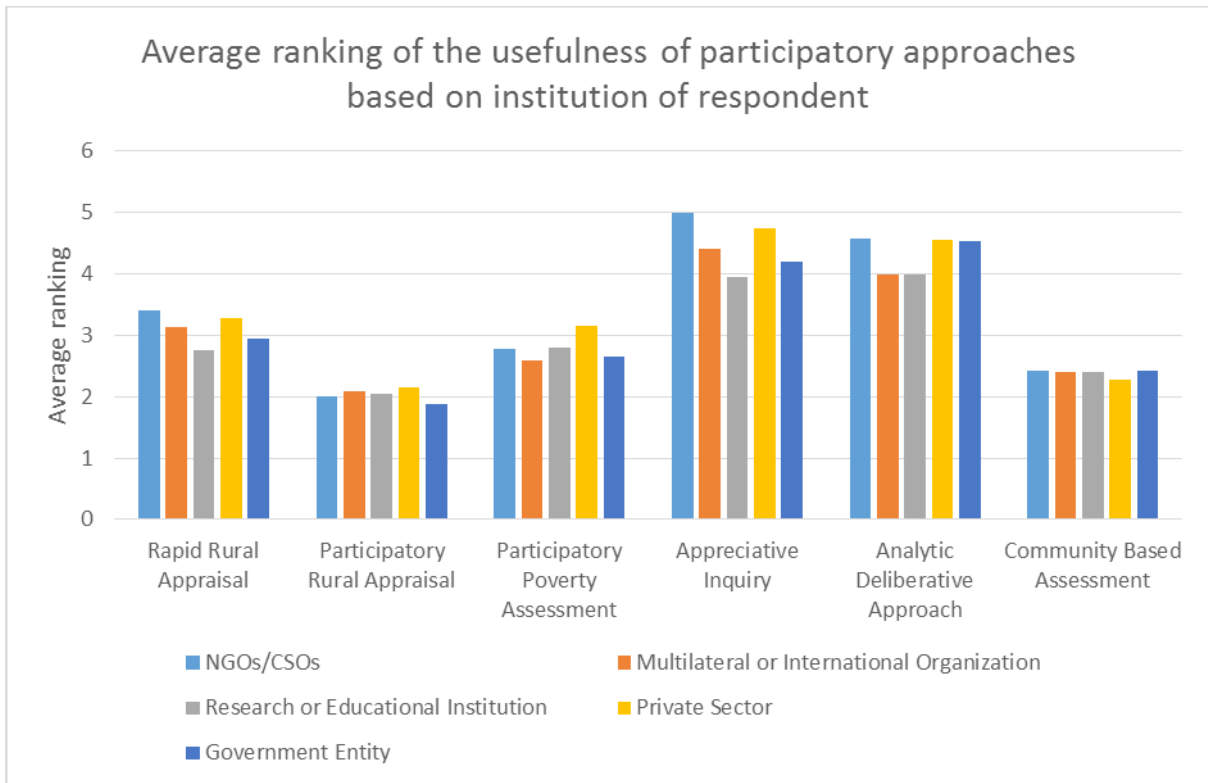
Figure 15 – comparison of the average ranking of participatory approaches depending on the type of institution of the respondents, from #1 being the most useful and #6 being the least useful.

Benefits resulting from participatory approaches

Participants who were involved in the NAPA process were asked what were the benefits resulting from the use of participatory approaches during the NAPA's implementation and to indicate if, in their NAPA experience, if these benefits were achieved and how much. The results can be seen in Figure 24. As can be seen, most participants thought that many of the participatory approaches used provided strong benefits for NAPA implementation. However, they indicated that participatory approaches were not good at providing the following benefits: to build collective ownership of problems and solutions; and to create a knowledge base for informed and responsible decision-making.
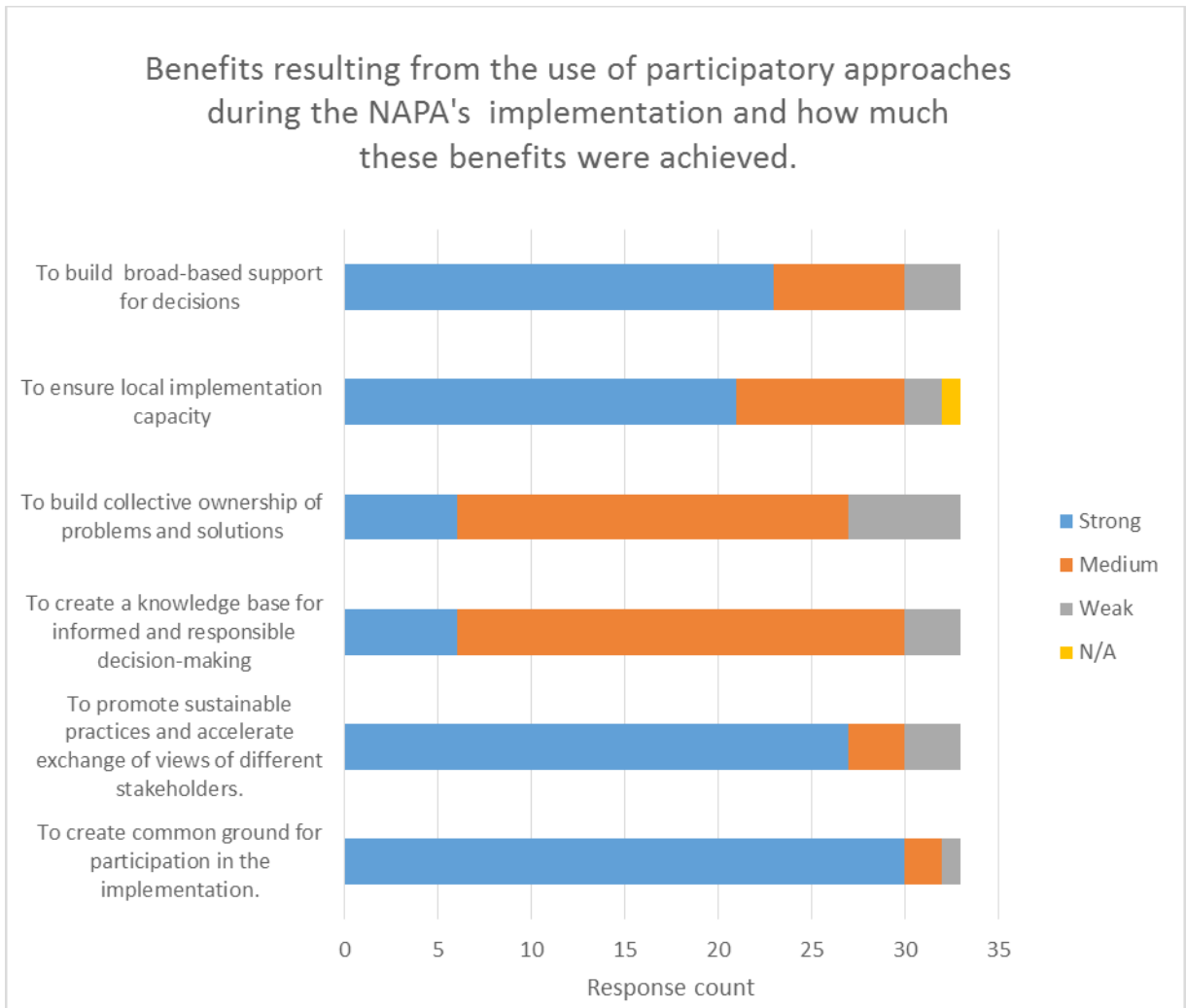
Figure 24 - benefits resulting from the use of participatory approaches during the NAPA's implementation and how much these benefits were achieved.

Participants who were not involved in the NAPA process were also asked to indicate which benefits could have been achieved by participatory approaches during NAPA and how much. The responses are shown in Figure 25. As can be seen, the responses show that participants think that all of the benefits suggested could have been provided by participatory approaches. About half of the respondents indicated that all of the benefits could have been 'strongly' achieved by the participatory approaches.
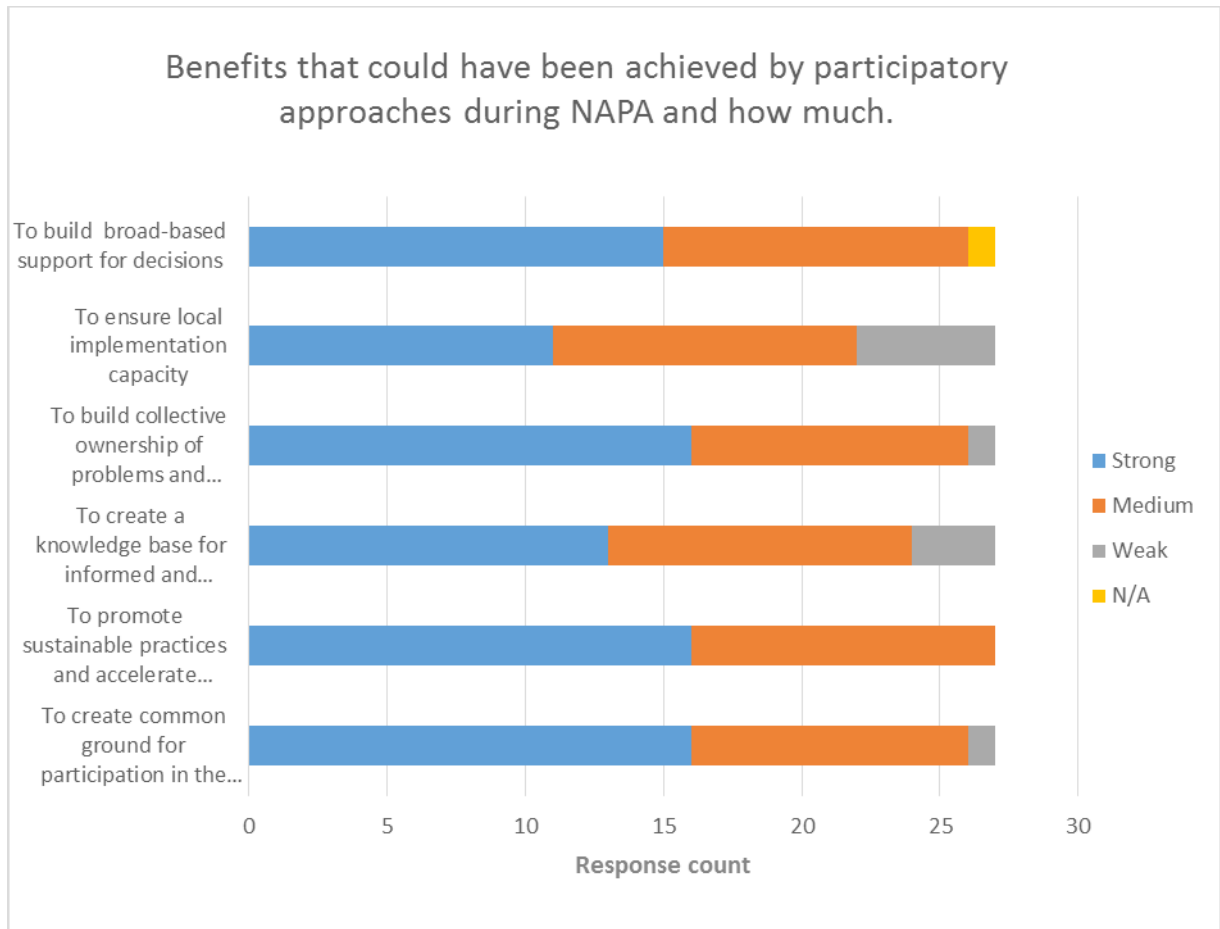
Figure 25 – benefits that could have resulted from the use of participatory approaches during the NAPA's implementation and how much these benefits were achieved, as indicated by participants not involved in NAPA process.

UNFCCC guidelines for participatory approach

The participants who were involved in NAPA were asked to identify which of the 7 steps within the UNFCCC NAPA guidelines were used in the development of the NAPA(s) they were involved in. As can be seen from the bar chart in Figure 26, the most utilised step in the participatory process was 'establishing a NAPA team with a public participatory dimension', as almost all participants (97%) indicated that this step had been used in the NAPA(s) that they were involved in. However, 'describing the participatory process in the NAPA document' was a step that was indicated by only 45 percent of the participants as a step that was used in the NAPA(s) that they were involved in.
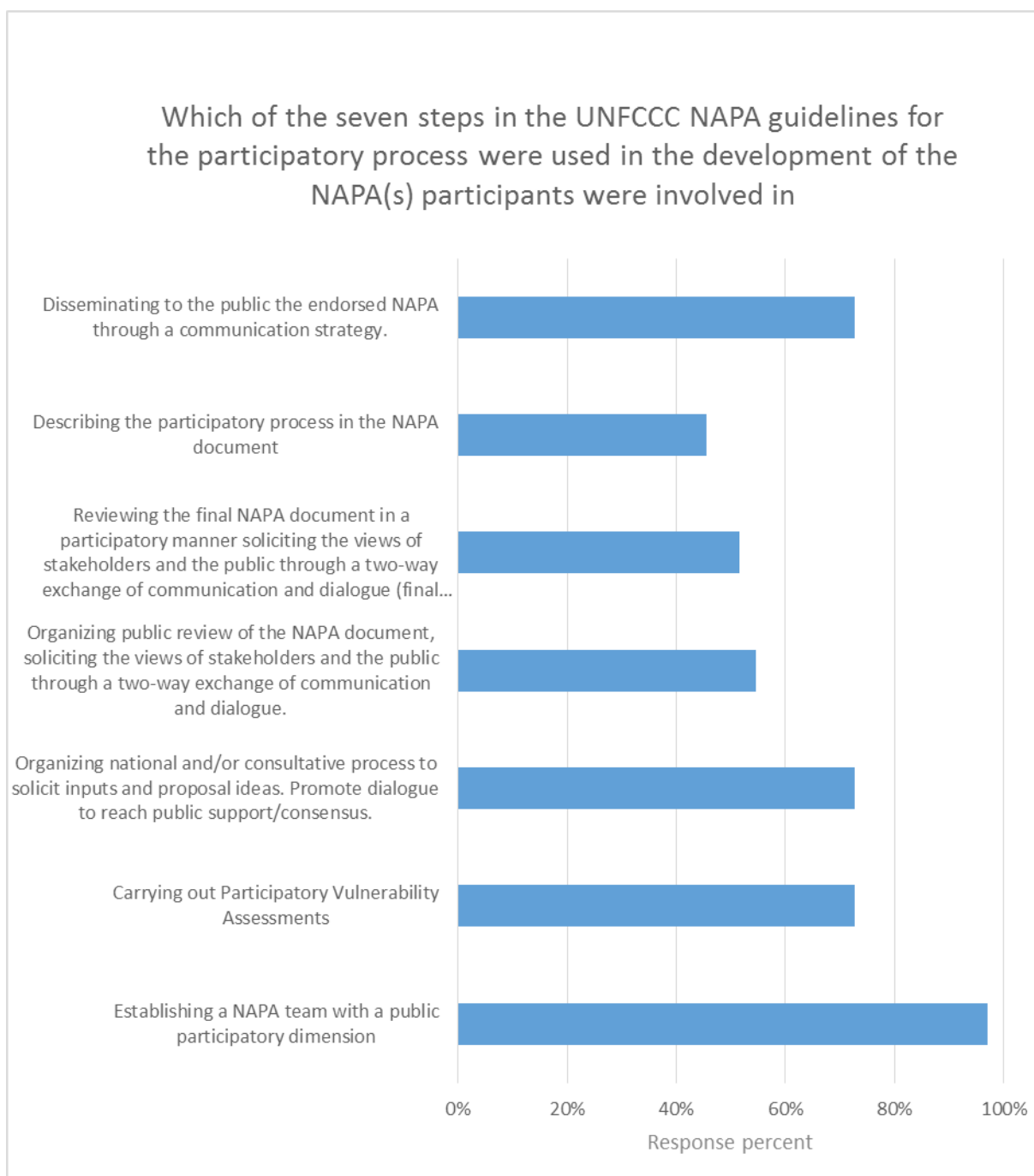
Figure 26 - Which of the seven steps in the UNFCCC NAPA guidelines for the participatory process were used in the development of the NAPA(s) participants were involved in.

Following from the identification of the steps used in the participatory process, the participants were then asked to rank the steps for effectiveness in terms of good progress in the NAPA, from 1 being the most effective, to 7 being the least effective.

The results are indicated in Figure 27. When the N/A responses are removed, it can be seen that 'establishing a NAPA team with a public participatory dimension' was ranked as the most effective in terms of results. 'Carrying out Participatory Vulnerability Assessments' was deemed to be the next most effective step in terms of progress for the NAPA. However, 'describing the participatory process in the NAPA document' was ranked as the least effective.
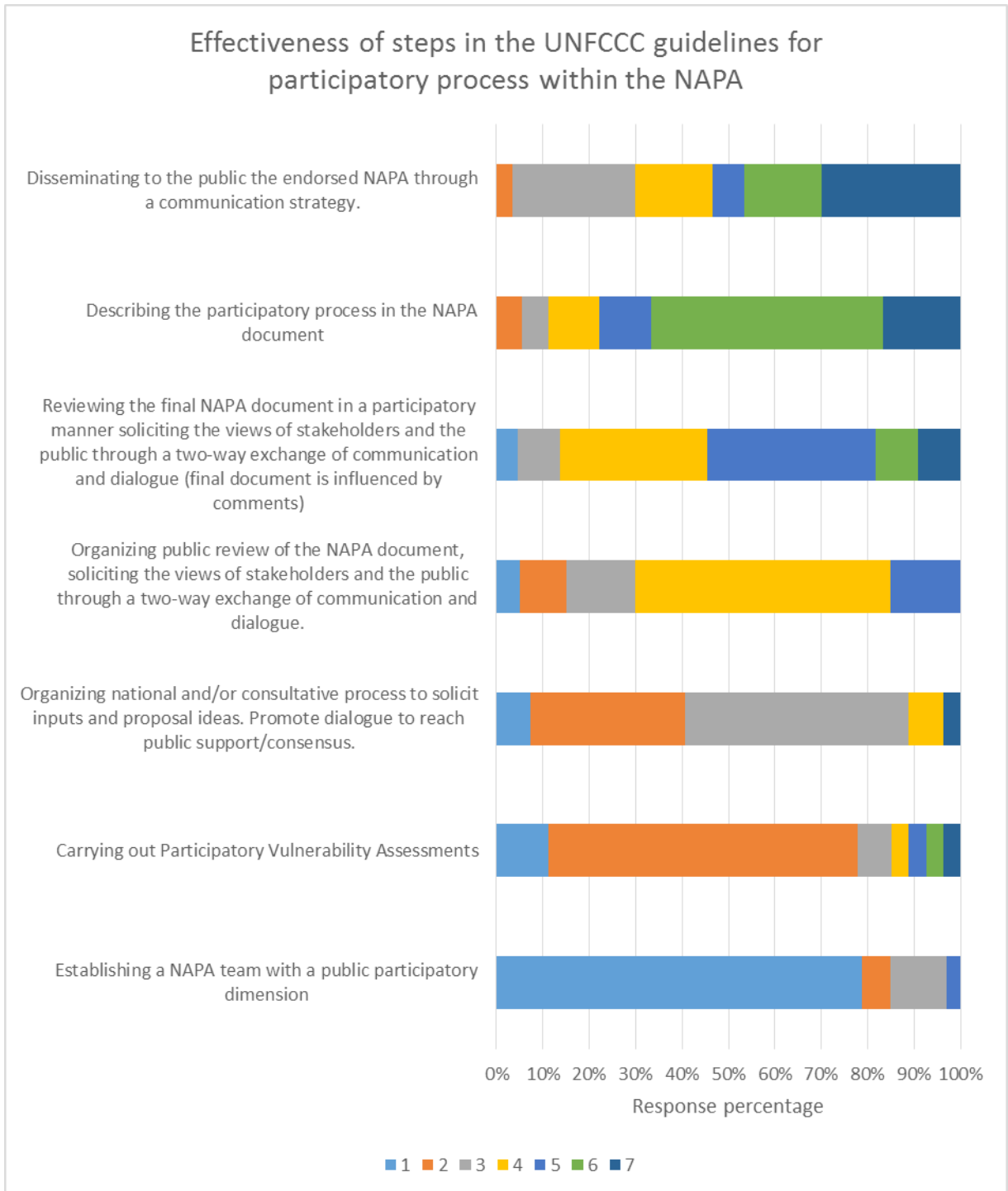
Figure 27 – ranking of the steps in the UNFCCC guidelines for the participatory process in the NAPA, from 1 being the most effective in terms of progress and 7 being the least effective, as indicated by participants who were involved in NAPA.

The participants who were not involved in NAPA design or implementation were also asked to rank the steps in the participatory process for effectiveness in terms of good

progress in the NAPA. Their responses are shown in Figure 28. Their responses are very similar to those of the participants who were involved in NAPA in that they indicate that 'establishing a NAPA team with a public participatory dimension' is the step that is most effective in terms of progress of NAPA. Furthermore, they see 'describing the participatory process in the NAPA document' as the least effective step.
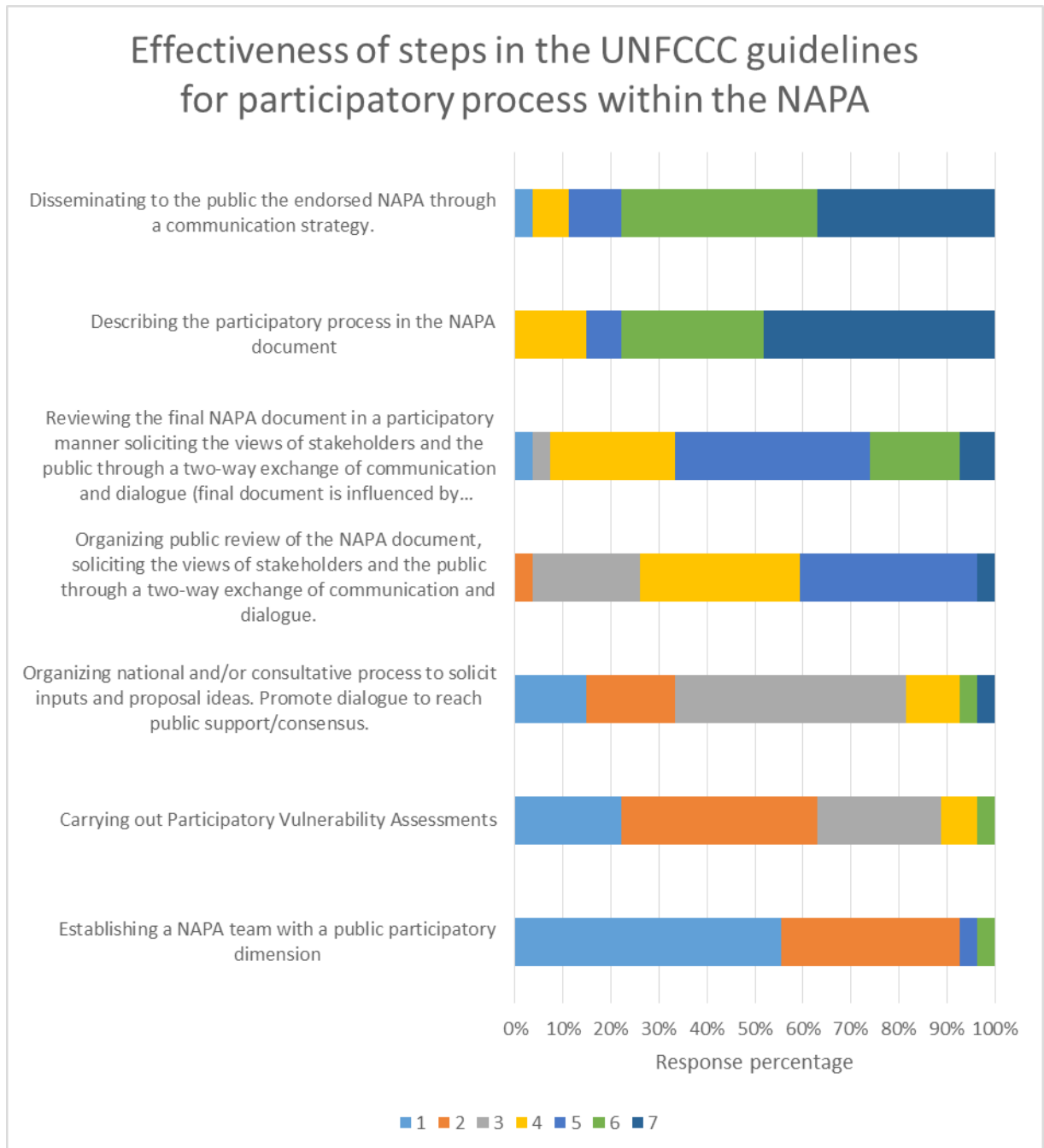
Figure 28 – ranking of the steps in the UNFCCC guidelines for the participatory process in the NAPA, from 1 being the most effective in terms of progress and 7 being the least effective, as indicated by participants who were not involved in NAPA.

Stakeholders

Participants who were involved in NAPA were asked to state which stakeholders were involved in the process. As can be seen in Figure 16, all respondents stated that governments were involved in the NAPA process. Research institutions, UN Agencies and local communities were also highly represented in the process. As can be seen, private sector was only involved in 21 percent of the NAPAs that the participants were involved in and international agencies and CSOs were also under-represented stakeholders, with 30 percent of respondents answering that they had been involved in the NAPA process. Of those respondents that answered 'other', they specified the stakeholders to be local governments and vulnerable groups (women, PWDs, children, unemployed).
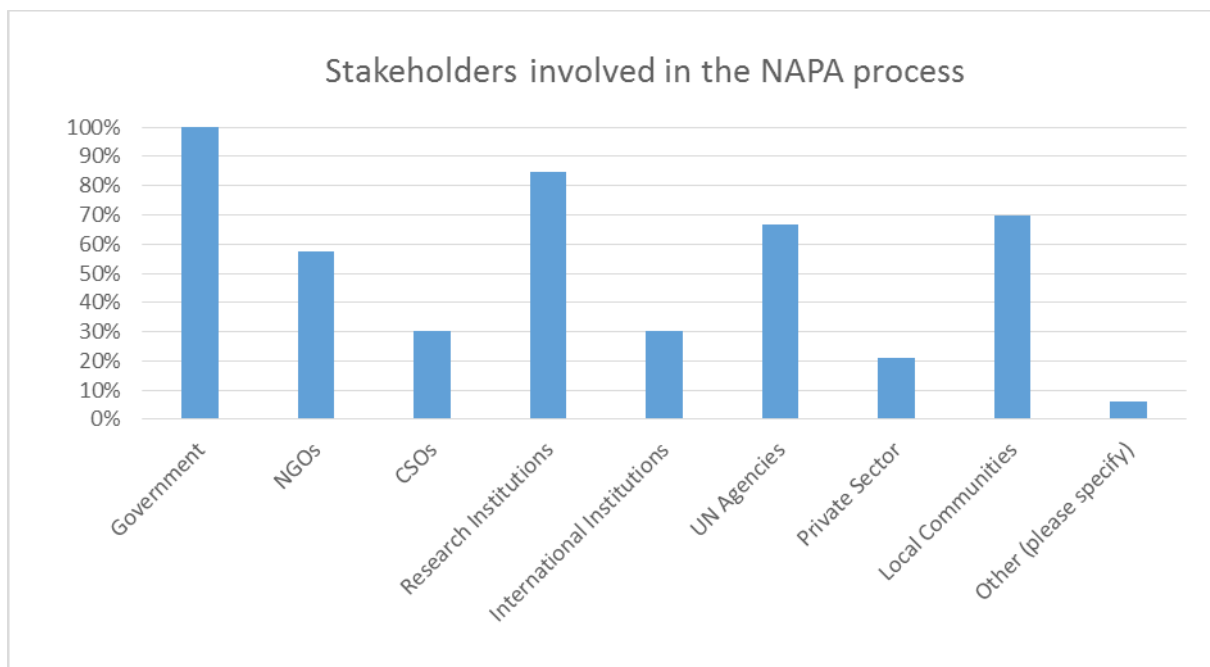
Figure 16 – stakeholders involved in the NAPA process.

A comparison of the stakeholders involved depending on the region where a respondent works was also conducted to analyse whether there was a difference in the stakeholders involved based on region. The results of this analysis can be seen in Figure 17; only the Africa and Asia regions were included as other regions had too few respondents. It would appear that, for the most part, that the stakeholders involved in the two regions are very similar but that NGOs were more involved in Asia than Africa, as 77 percent of respondents that work in Asia indicated that NGOs had been involved versus 50 percent of respondents that work in Africa.
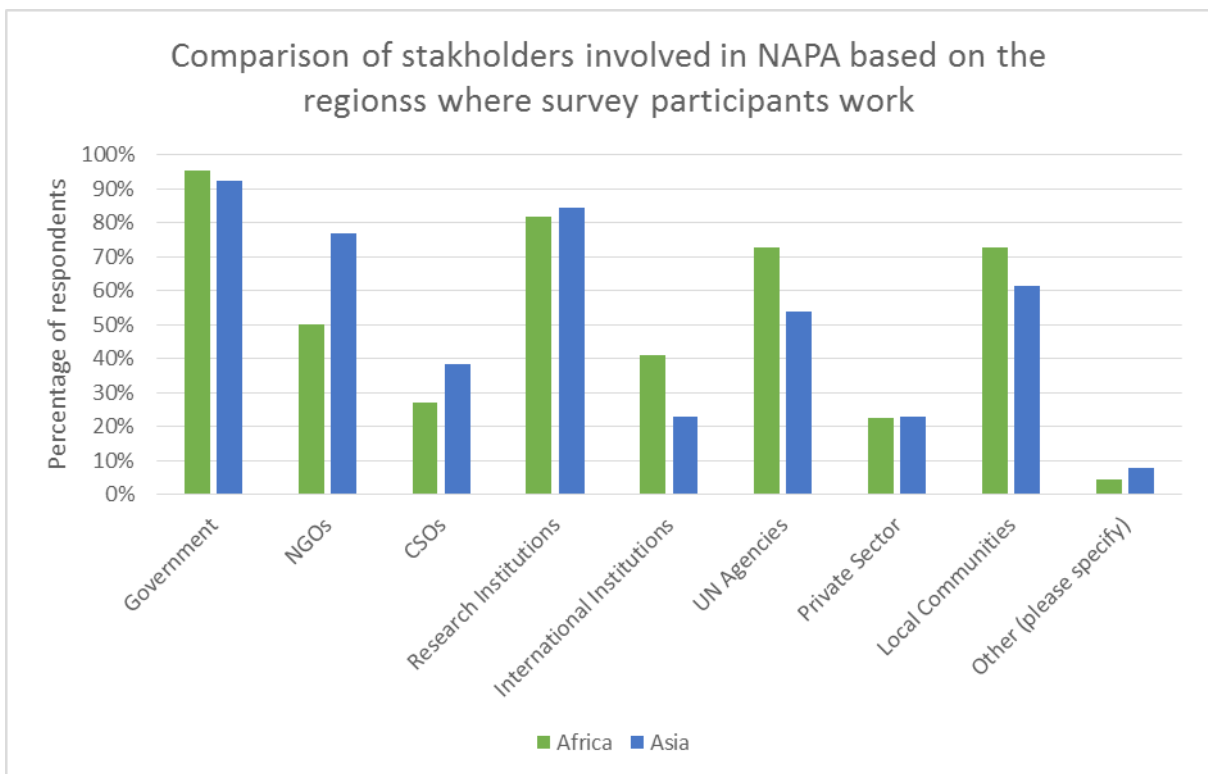
Figure 17 – stakeholders involved in the NAPA process, as indicated by participants who work in different regions.

For the stakeholders indicated, all participants that were involved in NAPA were asked to rank them in terms of their usefulness in terms of results. As can be seen in Figure 18, the participants who were involved in NAPA process ranked government and research institutions as the most useful in terms of results; their average ranking is 1.8 and 3.3, respectively. Private sector was ranked as the least useful in terms of results, with an average ranking of 7.1 out of 8.

Participants who were not involved in NAPA process were also asked to rank stakeholders in order of usefulness and their responses are represented in Figure 19. As can be seen, these participants stated that local communities and government were the most useful for results; their respective average rankings were 2.3 and 2.5 out of 8. For both sets of participants, private sector, UN agencies and international institutions were stated to be the least relevant in terms of results, on average. Local communities were seen as more useful for results by those participants who were not involved in the NAPA process.
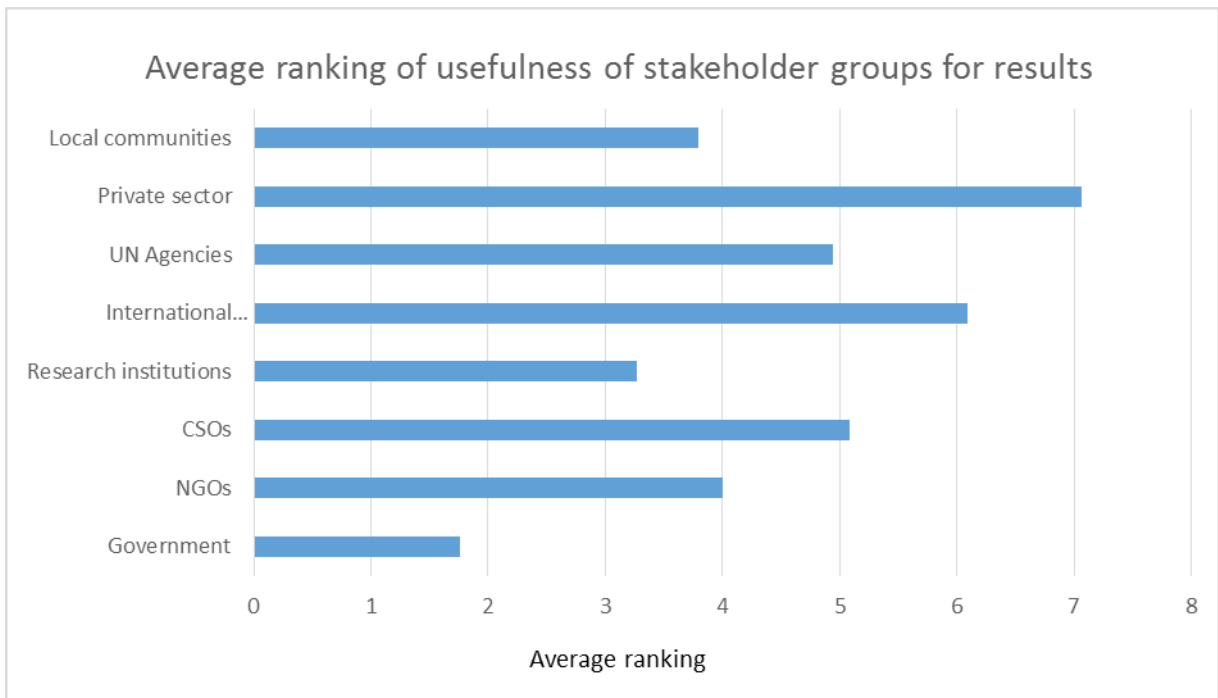
Figure 18 - stakeholders ranked by participants involved in NAPA process in terms of usefulness for results, from the #1 (most relevant) to #8 (least relevant).
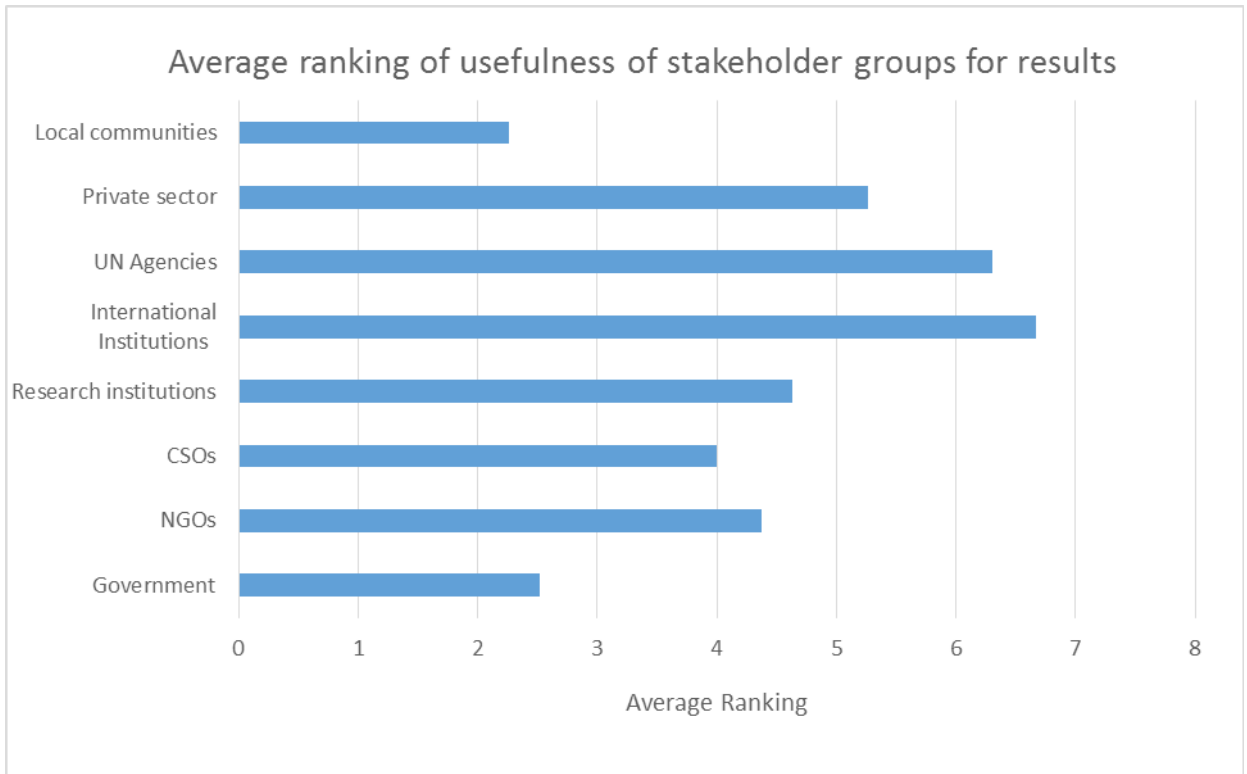
Figure 19 – stakeholders ranked by participants not involved in NAPA process in terms of usefulness for results, from the #1 (most relevant) to #8 (least relevant).
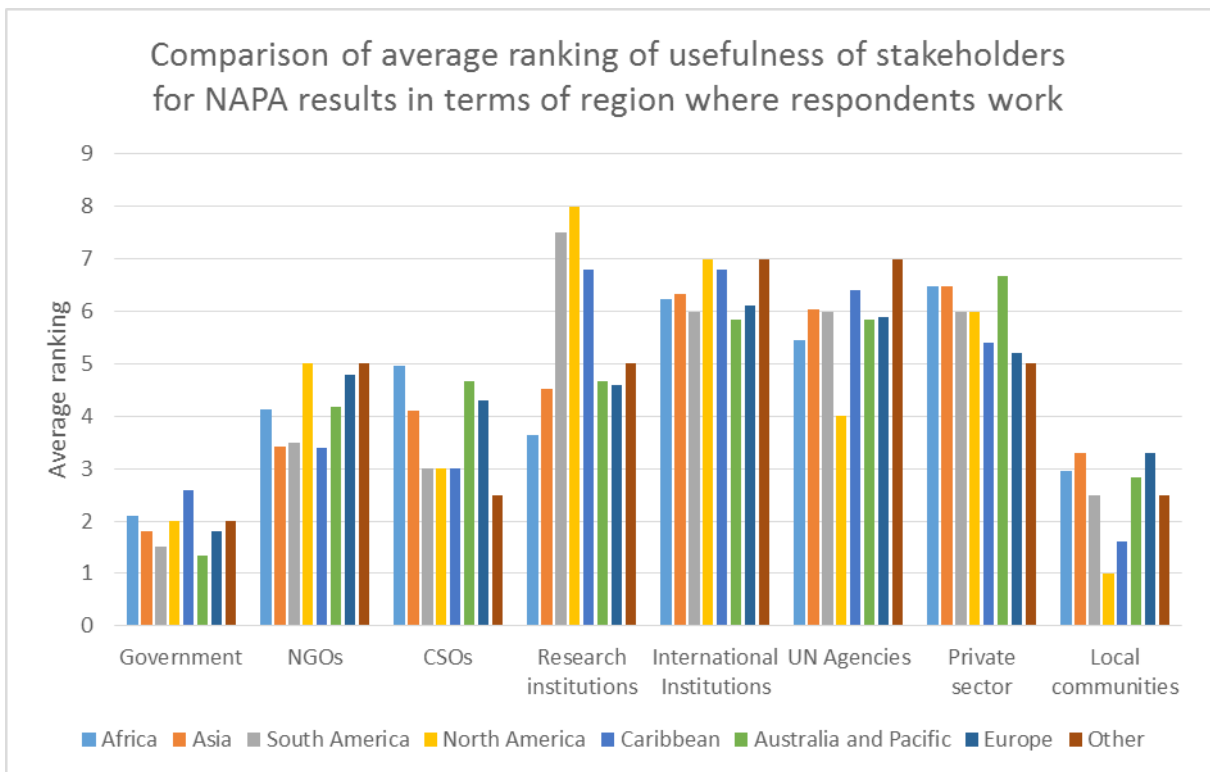
Figure 20 – stakeholders ranked in terms of usefulness for results, from the #1 (most relevant) to #8 (least relevant. A comparison based on the regions where participants of the survey work.
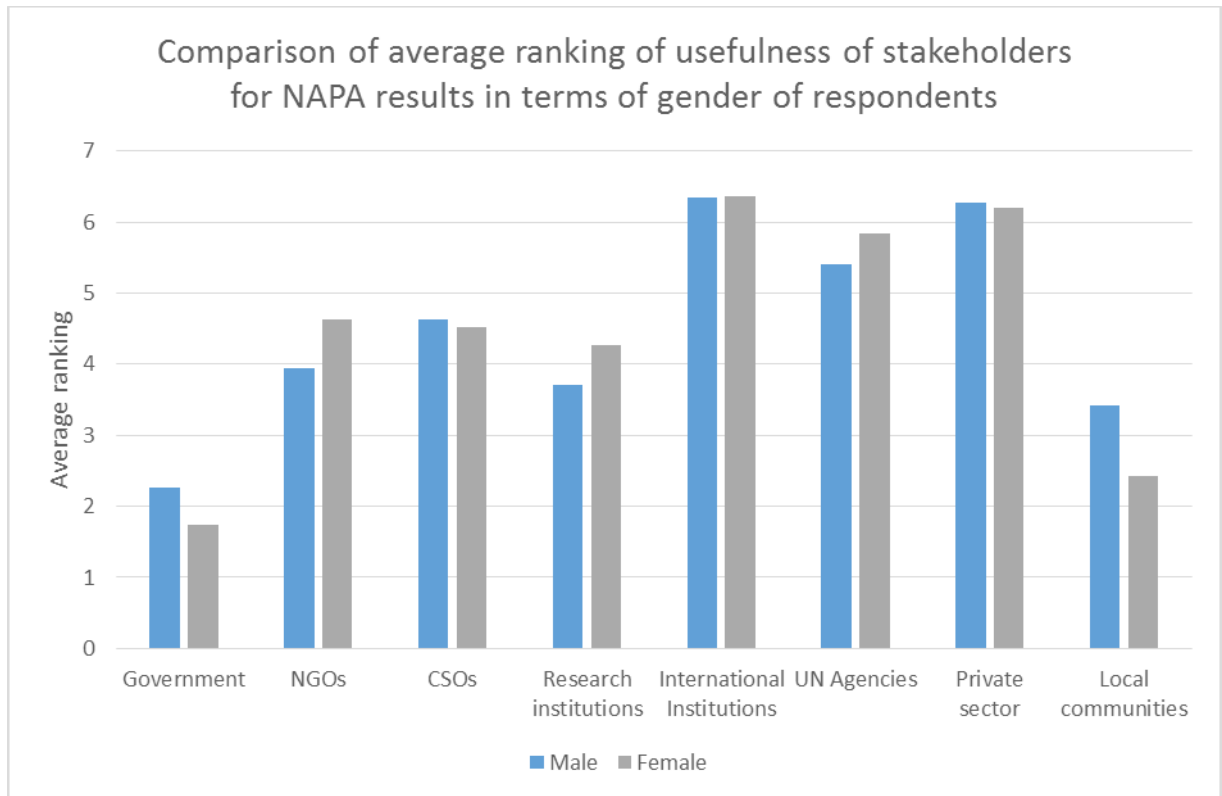
Figure 21 – comparison of average ranking of usefulness of stakeholders for NAPA results in terms of gender of respondents, from #1 (most relevant) to #8 (least relevant).

The ranking of the usefulness of stakeholders was also analysed based on the regions where participants work to determine whether there was a difference in response. As can be seen in Figure 20, the average ranking of the usefulness of stakeholder groups did not differ greatly when analysed in terms of the regions where participants work. The same can be said when the average ranking is analysed in terms of the gender of participants; this is shown in Figure 21.

Methods of stakeholder consultation

Participants were then asked which method/s were used for stakeholder consultation and to indicate how useful they were in terms of results for NAPA implementation. The responses for the participants who were involved in the NAPA process are graphically represented in Figure 22. As can be seen, national workshops were deemed to be the strongest in terms of results for NAPA and surveys were deemed to be the weakest in terms of results.

Participants who were not involved in NAPA process were also asked to assess how useful the participatory methods for stakeholder consultation could have being in term of results for the NAPA implementation. The responses are shown in Figure 23. As can bee seen, group interviews and local-level workshops were deemed to be the strongest in terms of results. Similarly to participants who were involved in the NAPA process, surveys were deemed to be the weakest in terms of results.
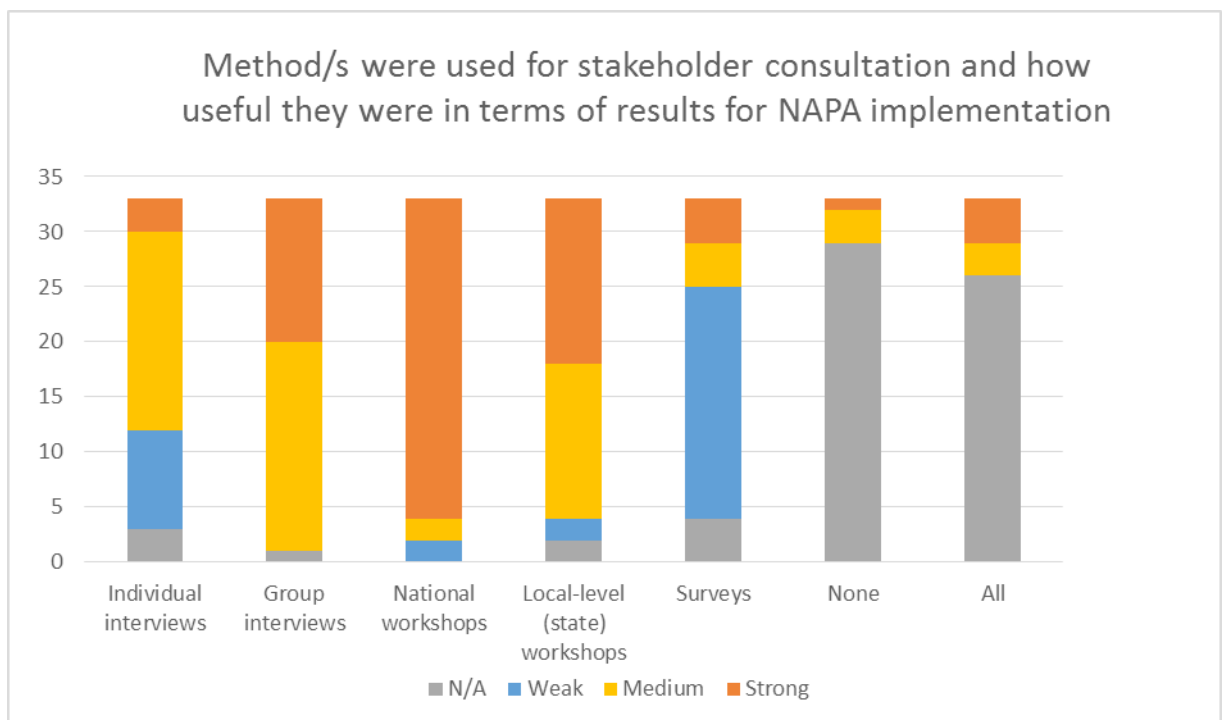
Figure 22 - method/s were used for stakeholder consultation and how useful they were in terms of results for NAPA implementation, as identified by participants who were involved in NAPA process.
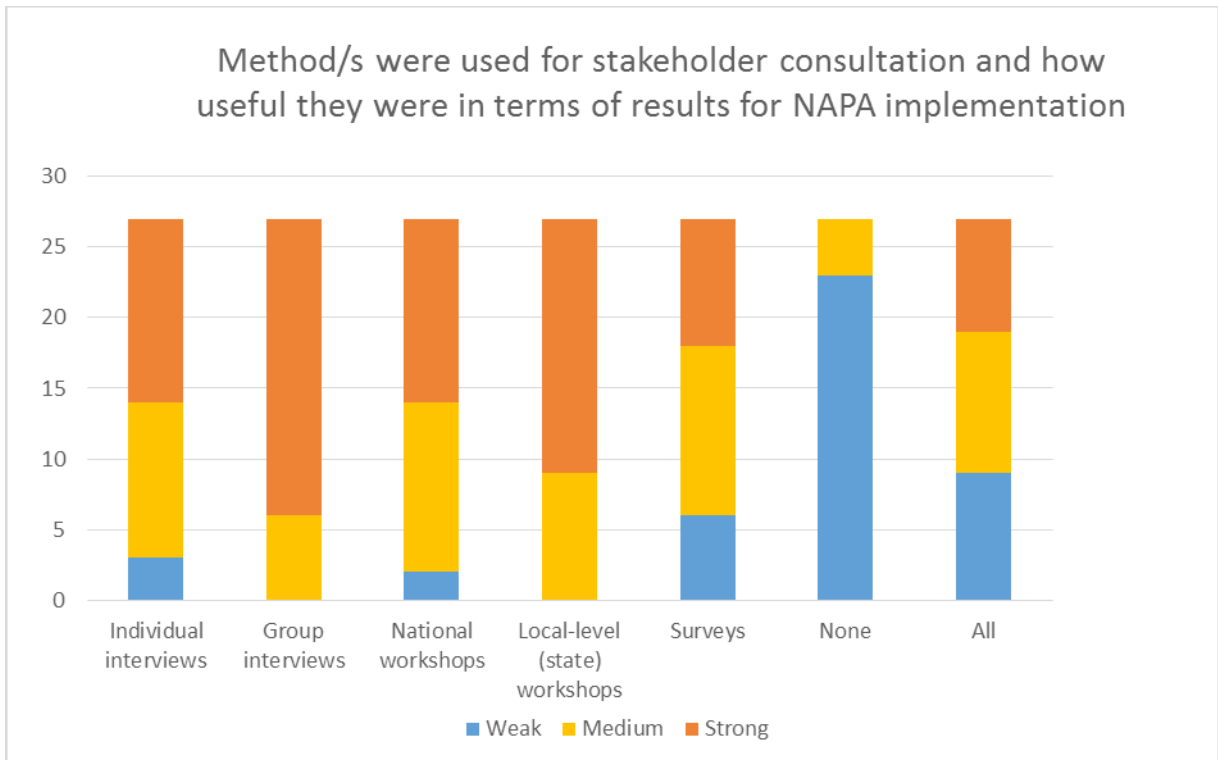
Figure 23 – usefulness of participatory methods for stakeholder consultation could have being in term of results for the NAPA implementation, as identified by participants who were not involved in the NAPA process.

Communication

Climate change is a domain where the underlying science is extremely technical and the projections and associated impacts on human development and on ecosystems in the future are uncertain but potentially very large and negative. Given the uncertainties, communication and sharing of knowledge is imperative. In Decision 28/CP.7 (UNFCCC, 2002b) the need for communication was underlined. Participants who were involved in NAPA were given a list from Decision 28/CP.7 (UNFCCC, 2002b) of phrases that underline the overarching emphasis on communication. They were asked to indicate if, in their NAPA experience these communication elements were implemented, and how useful they were. Their responses can be seen in Figure 29. As can be seen from the graph, the third communication element was deemed to be the strongest in terms of usefulness for the NAPA process. The first communication element, "public dissemination: the endorsed NAPA document will be made available

to the public and to the UNFCCC Secretariat" (UNFCCC, 2002b, p.11), was the only element that participants stated was not useful in the NAPA process; this is demonstrated by the N/A responses in Figure 29.
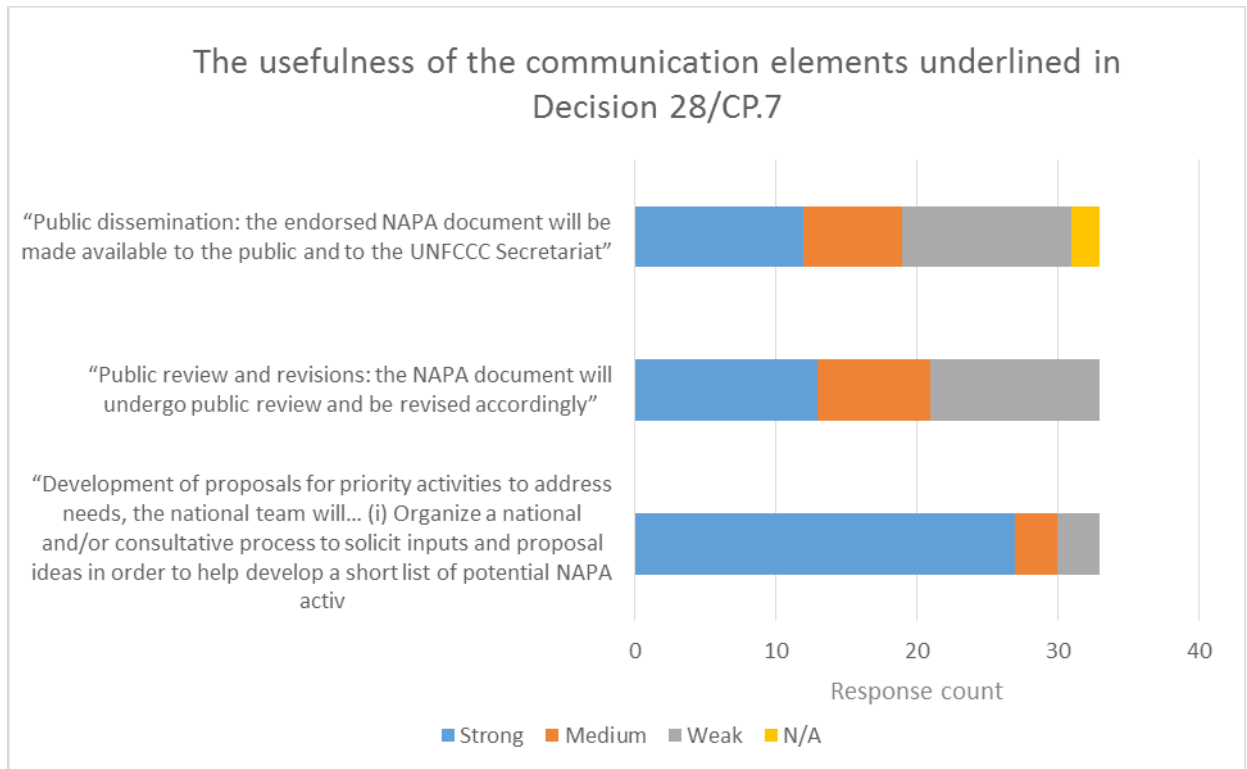
Figure 29 – The usefulness of the communication elements underlined in Decision 28/CP.7, where N/A represents that the communication element was not utilise, as identified by participants who were involved in NAPA.

The same question about the communication elements of Decision 28/CP.7 (UNFCCC, 2002b) was posed to the participants who were not involved in NAPA. Their responses can be seen in Figure 30. The responses from these participants are similar for all of the communication elements and the first, second and third communication elements were deemed 'strongly' useful by 59, 63 and 48 percent of participants, respectively.
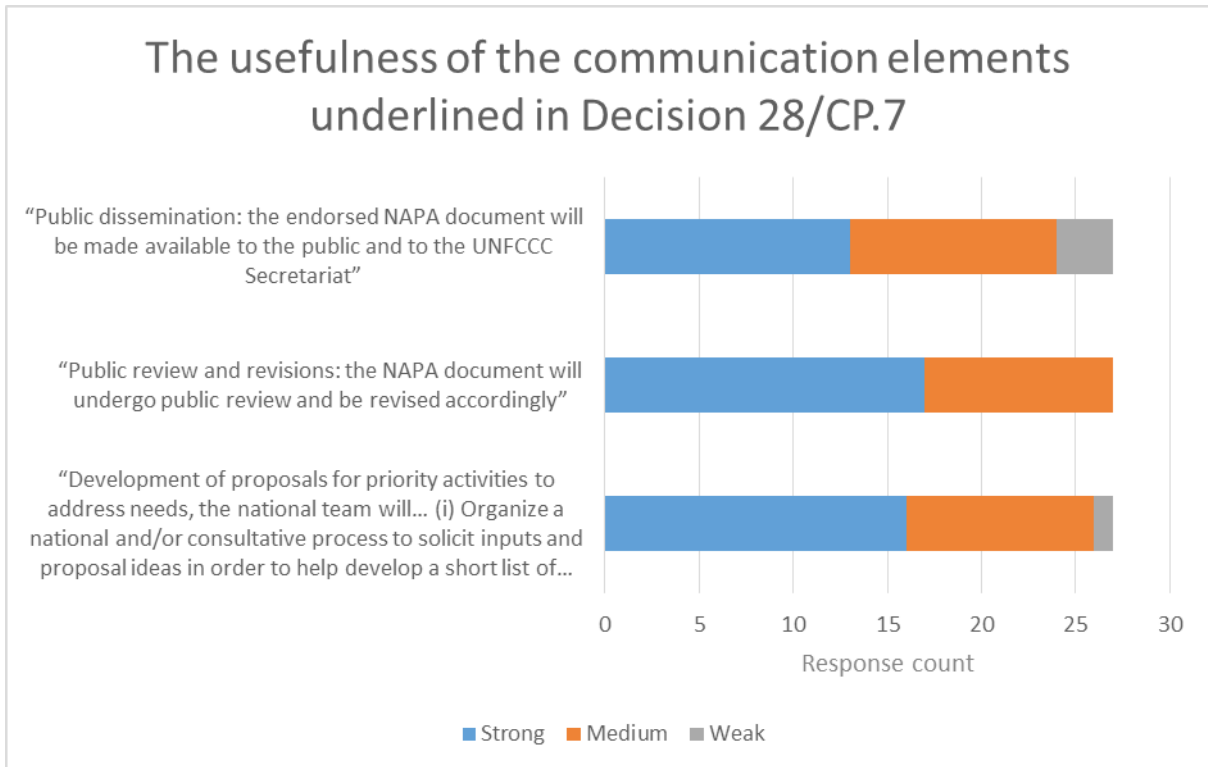
Figure 30 – The usefulness of the communication elements underlined in Decision 28/CP.7, where N/A represents that the communication element was not utilise, as identified by participants who were not involved in NAPA.

Lessons learnt from NAPA

All participants in the survey were asked whether, based on their experience, what are the lessons learned on NAPAs, related to participation and communication, that can be taken in consideration for the development of NAPs. They ranked each of the possible lessons learnt from 1, most valuable to 7, least valuable. Figure 31 shows that the most important lesson learnt, as identified by the participants who were involved in NAPA, is the 'involvement of all stakeholders from the beginning', with 27 of 33 respondents ranking it number 1 out of 7 and an average ranking of 1.4. The answers provided by those participants who were not involved in NAPA can be seen in Figure 32. Similarly to those involved in NAPA, they ranked 'involvement of all stakeholders from the beginning' as the most valuable lesson learnt that can be taken into consideration for NAPs, with 14 out of 26 participants ranking it 1 out of 7 and an average ranking of 2.3.

The second most valuable lesson learnt from NAPA, as identified by participants who were involved in NAPA, was 'use of communication methodologies and tools in support of participation', with an average ranking of 2.7. The third most valuable lesson learnt from NAPA, as identified by participants who were involved in NAPA, was 'more involvement of local communities', with an average ranking of 2.9. In contrast, participants who were not involved in NAPA ranked 'more involved of local communities' as a more valuable lesson than 'use of communication methodologies and tools in support of participation', with average rankings of 3.0 and 4.1, respectively.

In general, there is more agreement in the answers provided by participants who were involved in NAPA than those who were not involved. This can be seen by the greater difference between rankings for each lesson in Figure 31 than in Figure 32, where the difference in the average rankings is not as large and there is a more even distribution of choice of ranking for each lesson.
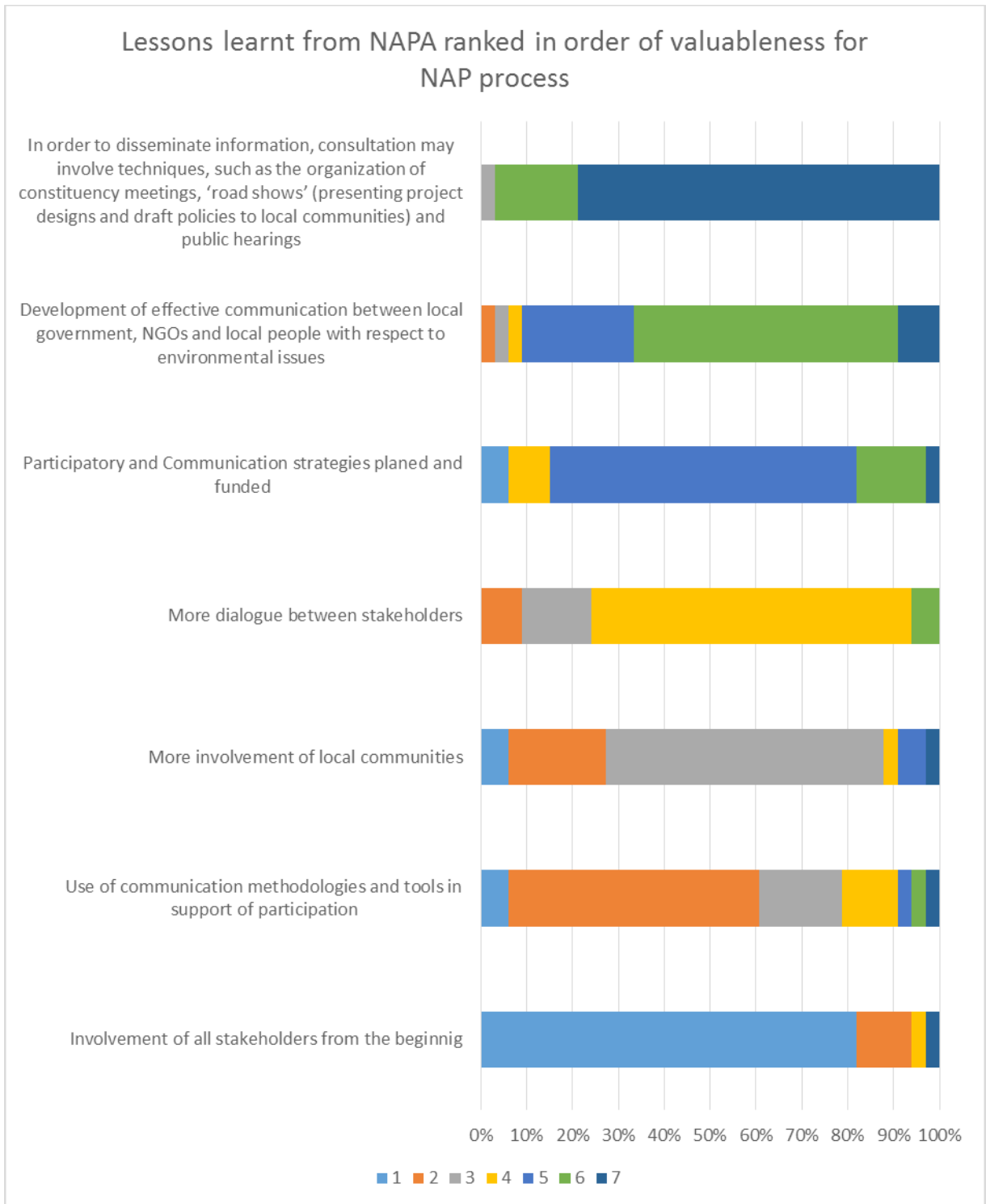
Figure 31 - ranking of how valuable lessons learned on NAPAs, related to participation and communication, are for consideration in the development of NAPs – #1 (most valuable) to #7 (least valuable) – as identified by participants who were involved NAPA.
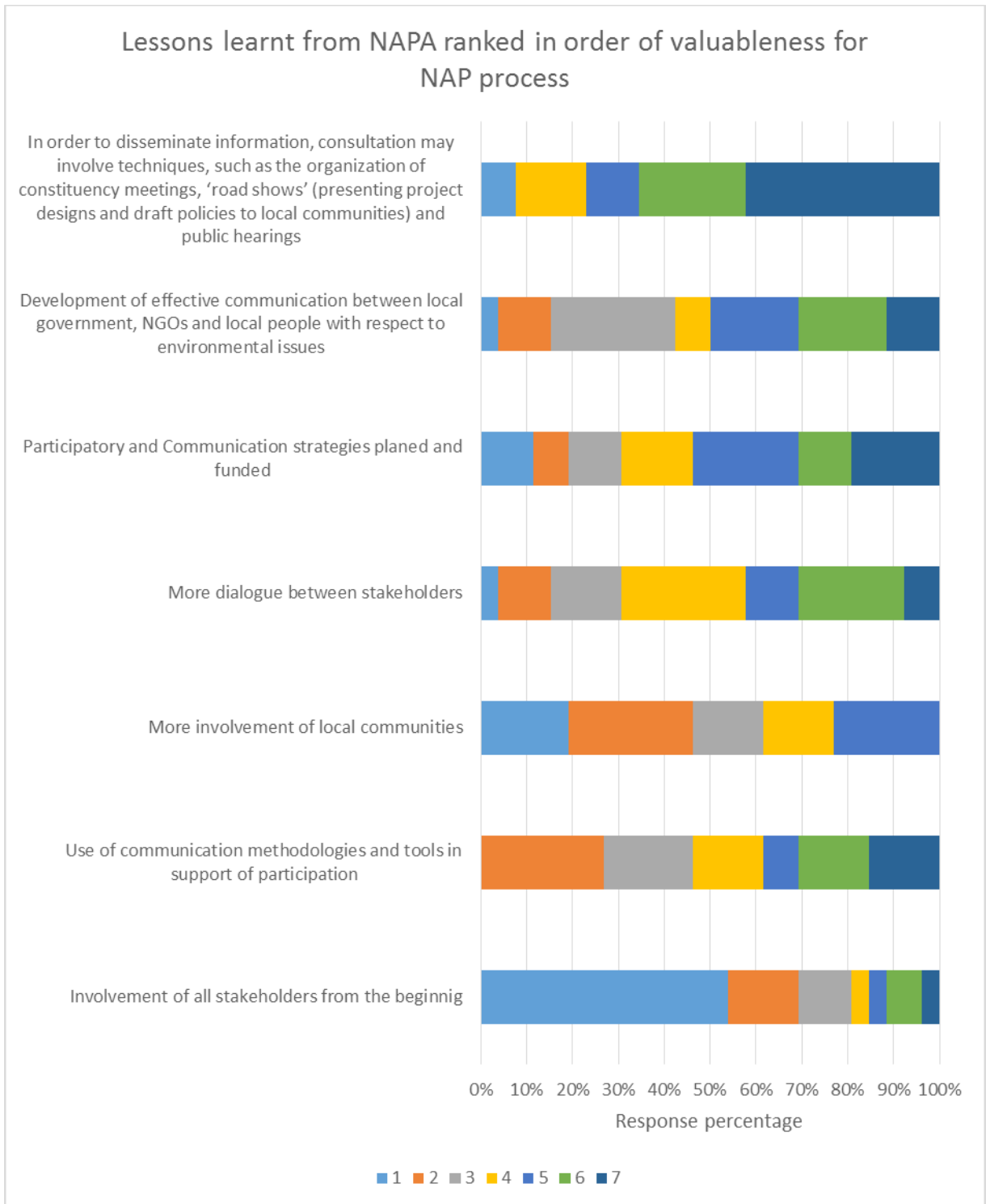
Figure 32 – Ranking of how valuable lessons learned on NAPAs, related to participation and communication, are for consideration in the development of NAPs NAPs – #1 (most valuable) to #7 (least valuable) – as identified by participants who were not involved in NAPA.

NAP PROCESS

Importance of participation and communication

The NAP process aims to be completely country-driven and therefore the process will follow the needs of individual countries. However, the LEG set out overall guidelines for the Parties in the annex to Decision 5/CP.17 (UNFCCC, 2012a). These guidelines contain four main elements: laying the ground work and addressing gaps; preparatory elements; implementation strategies; and reporting, monitoring and review. For each element, participation and communication can play an important role. All participants were asked to assess the importance of the use of participation and communication in each element. The responses of the participants who were and were not involved in NAPA process can be seen in Figure 33 and Figure 34, respectively.

As can be seen from Figure 33 and 34, almost all of the participants deemed participation and communication 'important' or 'moderately important' for all of the elements. The responses of the two groups of participants were very similar, although none of the participants who were not involved in NAPAs deemed any of the participation and communication 'not important' whereas there was one participant who was involved in NAPA who deemed two of the elements of participation and communication 'not important'; these elements were 'Implementation strategies on prioritizing adaptation actions within national planning' and 'Reporting, monitoring and review'.
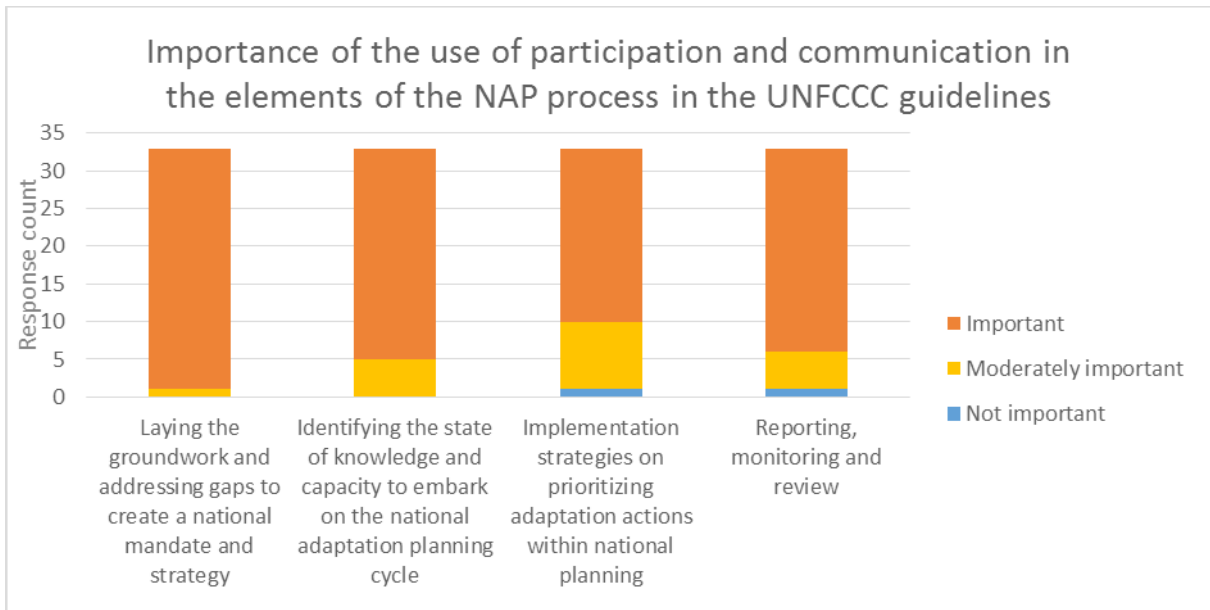
Figure 33 - Importance of the use of participation and communication in the elements of the NAP process in the UNFCCC guidelines, as identified by participants who were involved in NAPA process.
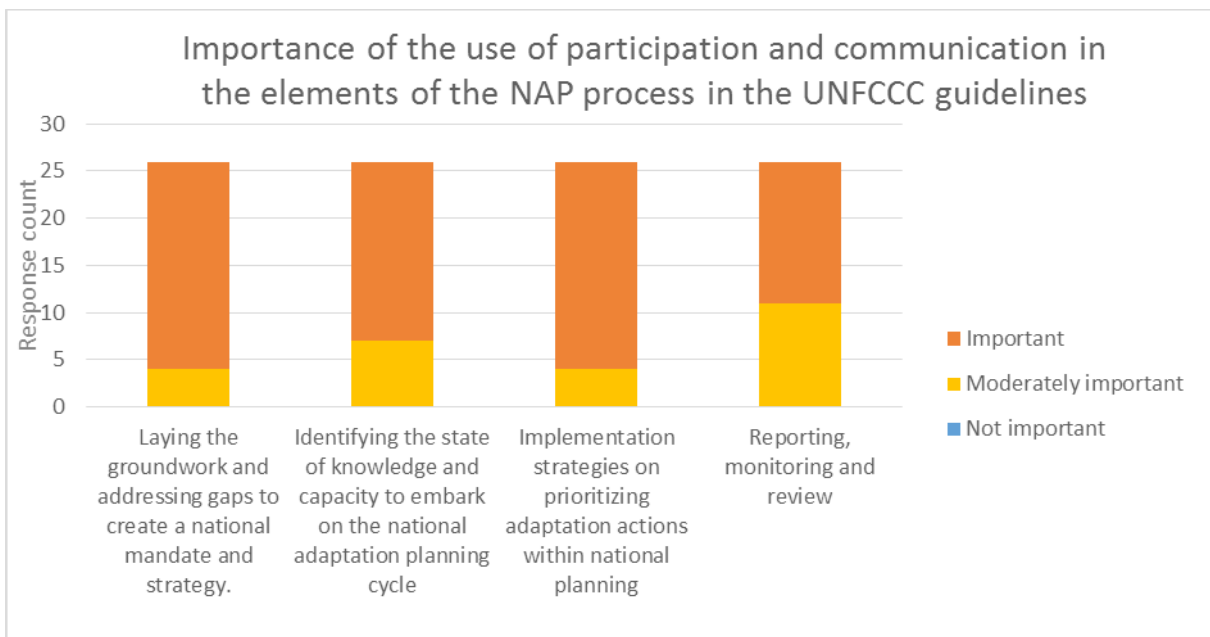
Figure 34 - Importance of the use of participation and communication in the elements of the NAP process in the UNFCCC guidelines, as identified by participants who were not involved in NAPA process.

Methods used for stakeholder consultation

The participants were then asked to identify which methods should be used for stakeholder consultation during NAP development for each of the elements already listed. The responses of the participants who were and were not involved in NAPA are shown in Figure 35 and Figure 36, respectively. As can be seen in Figure 35, National workshops and Local-level workshops were identified as methods that should be used in all elements of NAP development whereas surveys were identified as a method that should be used only for reporting, monitoring and review by most participants. Group interviews were identified by more participants as a method that should be used in each element than individual interviews.

The answers from those participants not involved in NAPA also show local-level and national workshops as being methods that should be used throughout NAP development but more participants (than those who were involved in NAPA) identified individual interviews and surveys as methods that should be used throughout as well.

The methods to be used for stakeholder consultation have also be analysed for each element of the NAP process.
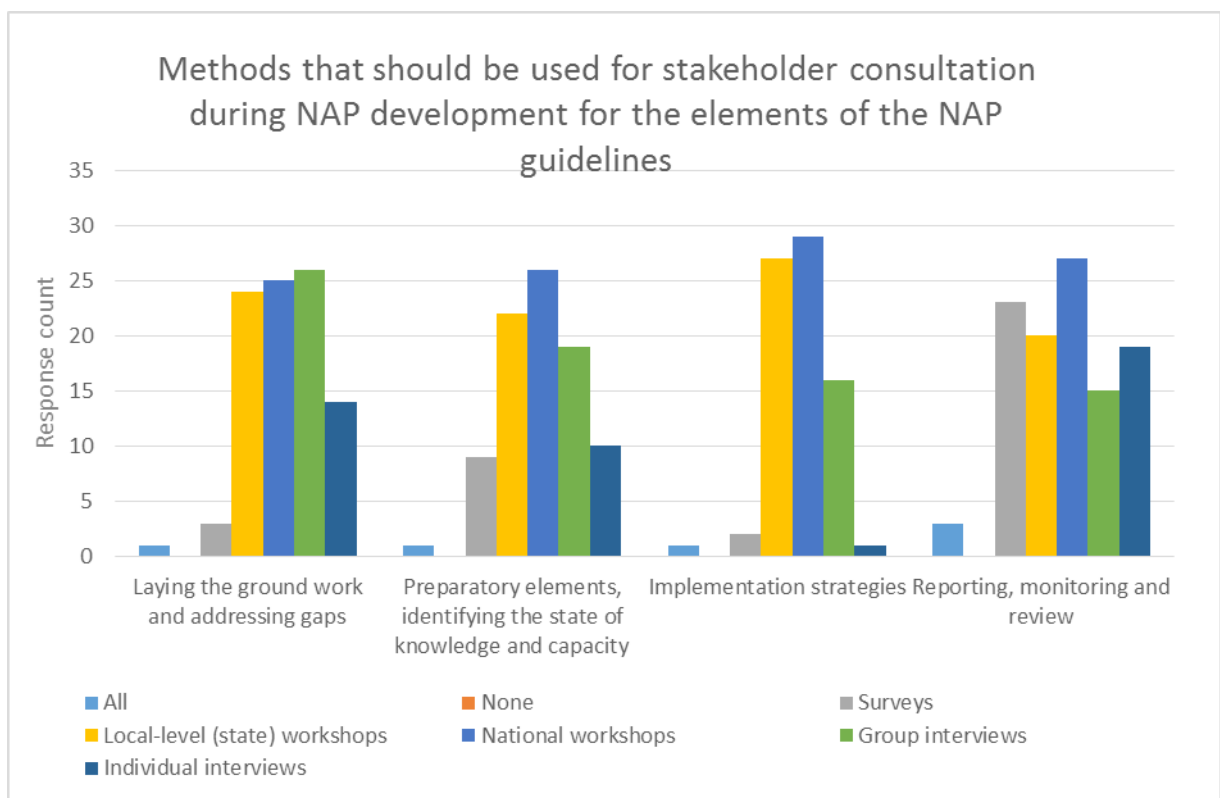
Figure 35 – methods that should be used for stakeholder consultation during NAP development for the elements of the NAP guidelines, as identified by participants who were involved in NAPA.
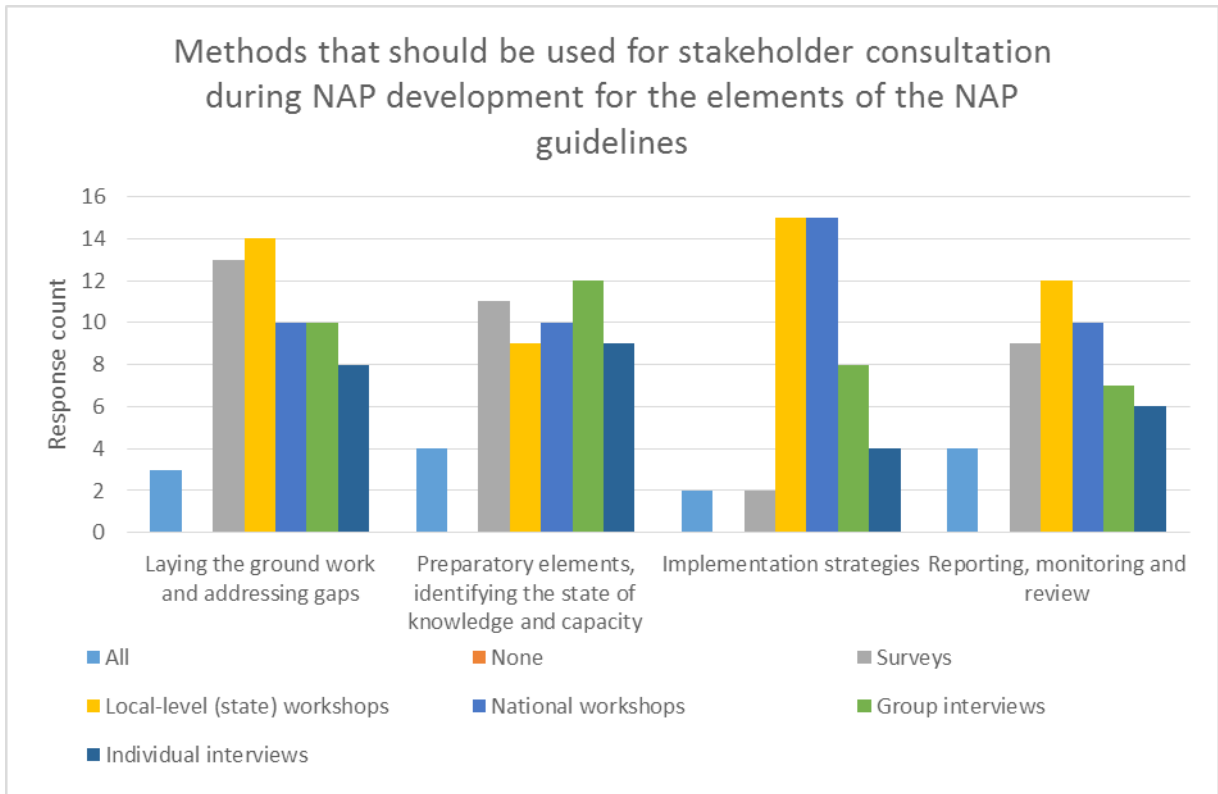
Figure 36 – methods that should be used for stakeholder consultation during NAP development for the elements of the NAP guidelines, as identified by participants who were not involved in NAPA.

Laying the ground work and addressing gaps

For this element of the NAP process, the participants who were not involved in NAPA development indicated that surveys are a much more important method for stakeholder consultation than indicated by participants who were involved in NAPA (with 50 percent of those not involved in NAPA indicating it as a method that should be used in comparison with only 9 percent of participants who were involved in NAPA). For both sets of participants, group interviews, national workshops and local-level workshops were indicated by the most participants as methods that should be used for this element.
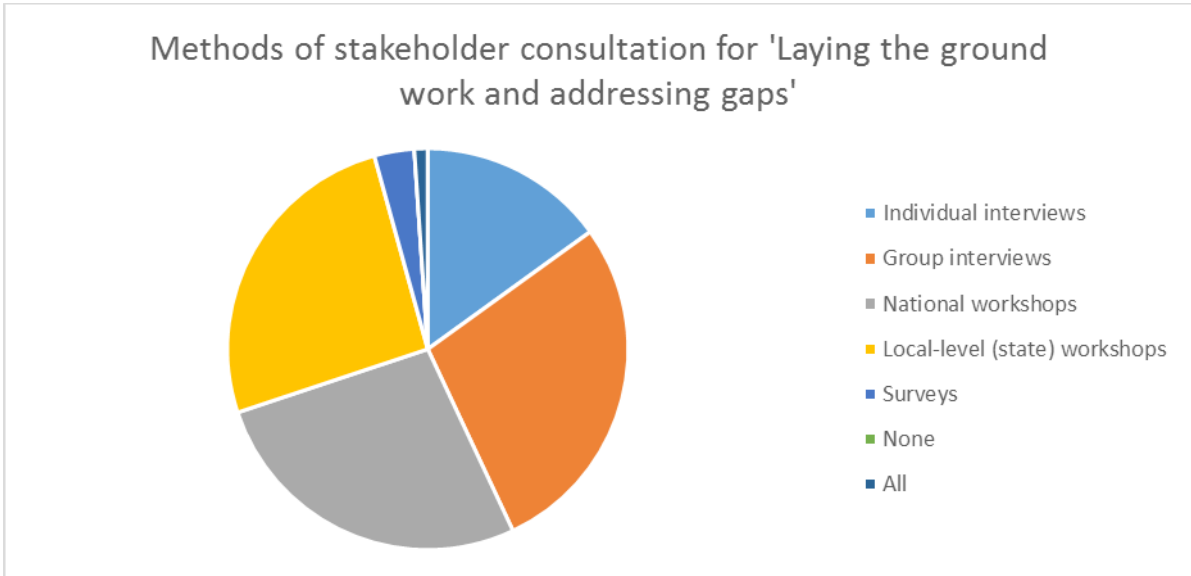
Figure 37 – methods that should be used for stakeholder consultation during NAP development for the 'laying the ground work and addressing gaps' element of the NAP guidelines, as identified by participants who were involved in NAPA.
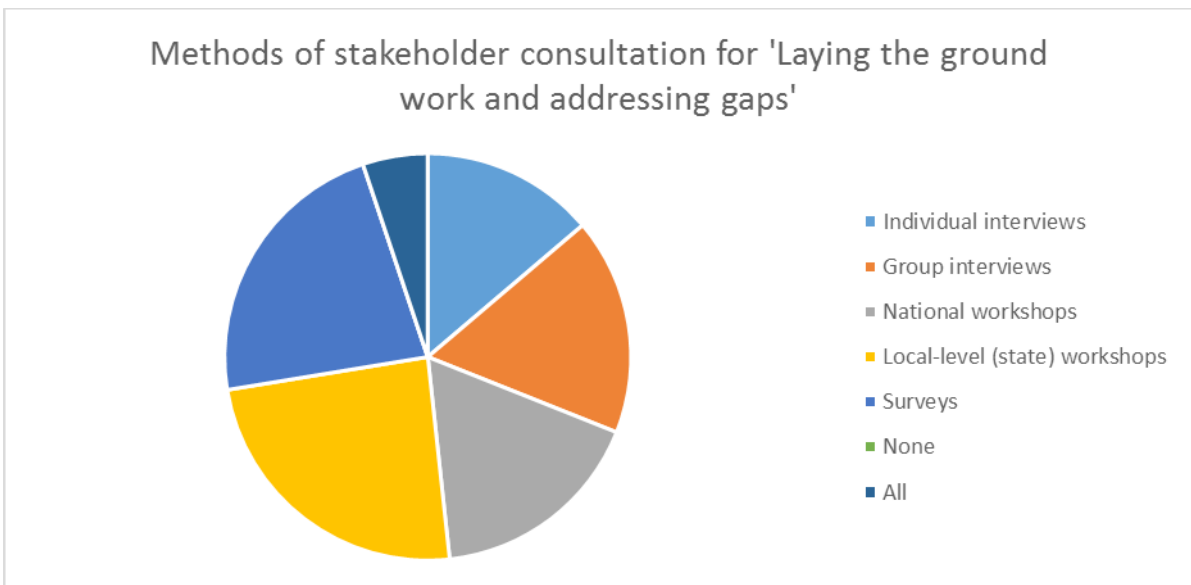
Figure 38 – methods that should be used for stakeholder consultation during NAP development for the 'laying the ground work and addressing gaps' element of the NAP guidelines, as identified by participants who were not involved in NAPA.

Preparatory elements, identifying the state of knowledge and capacity

For this element, national workshops were indicated as a method to be used by the largest number of participants who were involved in NAPA (79%), followed by local-level workshops (67%). However, the greatest number of participants who were not involved in NAPA indicated group interviews as a method to be used for this element (46%), followed by surveys (42%).
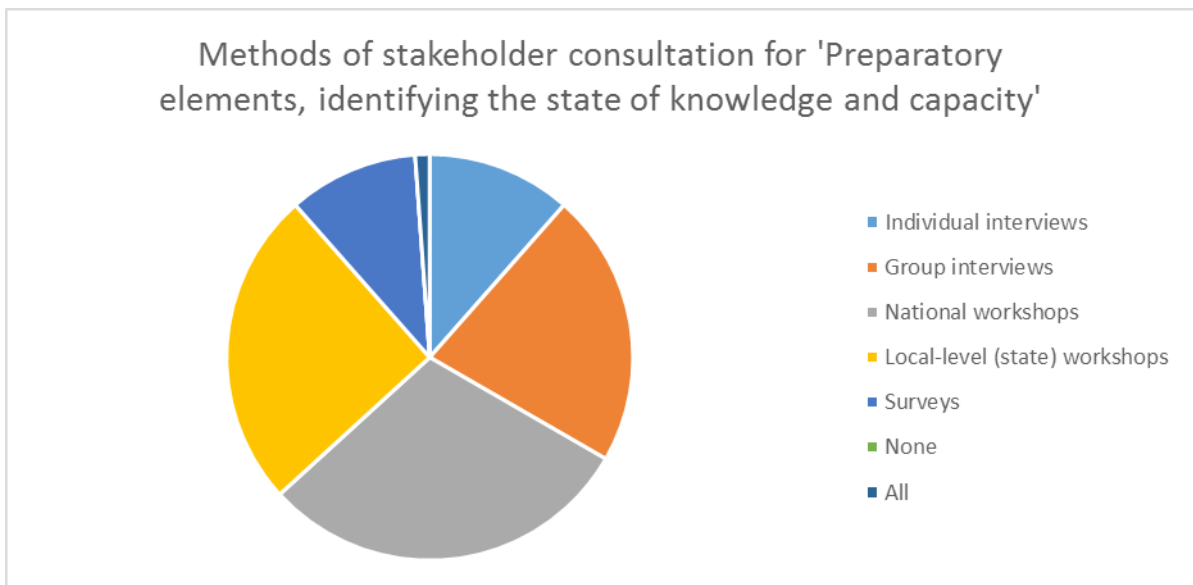
Figure 39 – methods that should be used for stakeholder consultation during NAP development for the 'preparatory elements, identifying the state of knowledge and capacity' element of the NAP guidelines, as identified by participants who were involved in NAPA.
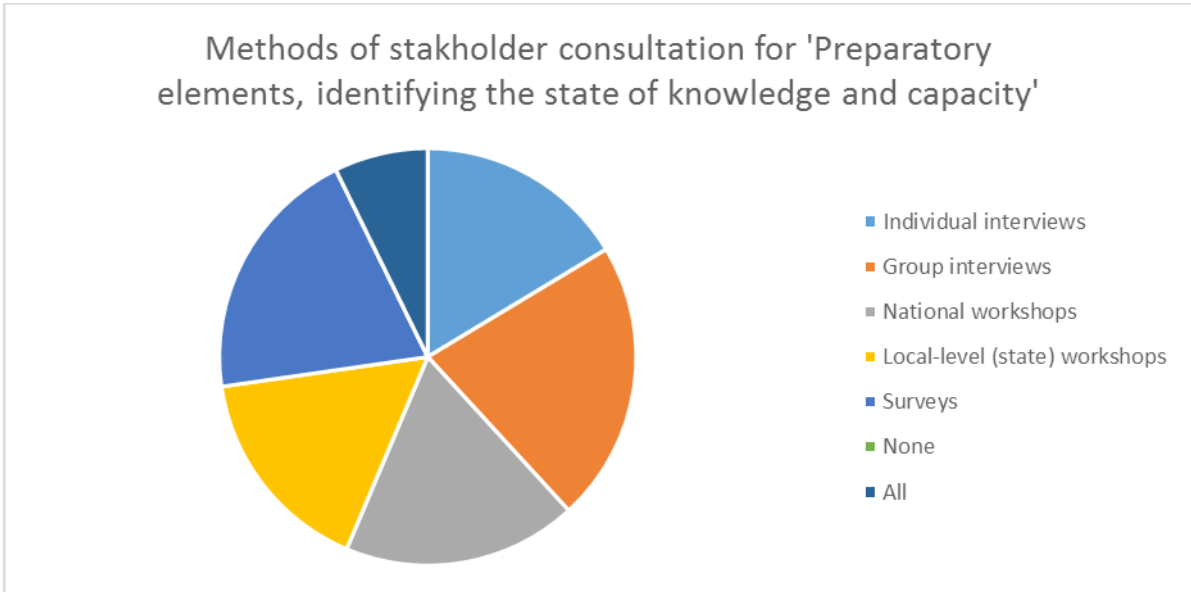
Figure 40 – methods that should be used for stakeholder consultation during NAP development for the 'preparatory elements, identifying the state of knowledge and capacity' element of the NAP guidelines, as identified by participants who were not involved in NAPA.

Implementation strategies

For this element of the NAP development, national workshops and local-level workshops were indicated by the greatest number of participants who were both involved and not involved in the NAPA process. Group interviews were the next most identified method by all participants.
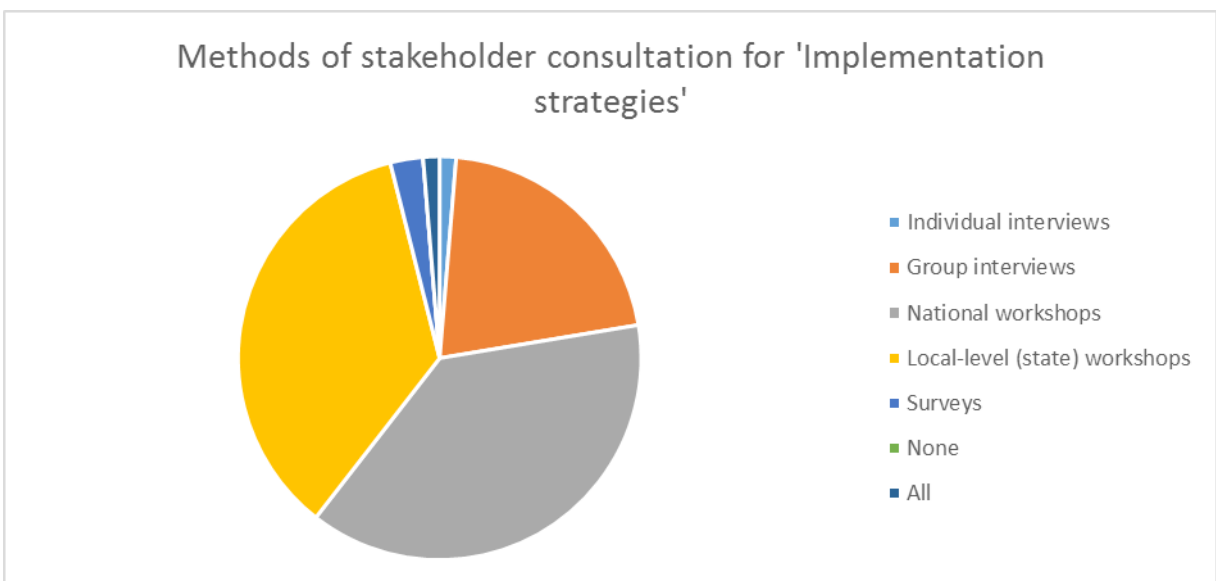
Figure 41 – methods that should be used for stakeholder consultation during NAP development for the 'implementation strategies' element of the NAP guidelines, as identified by participants who were involved in NAPA.
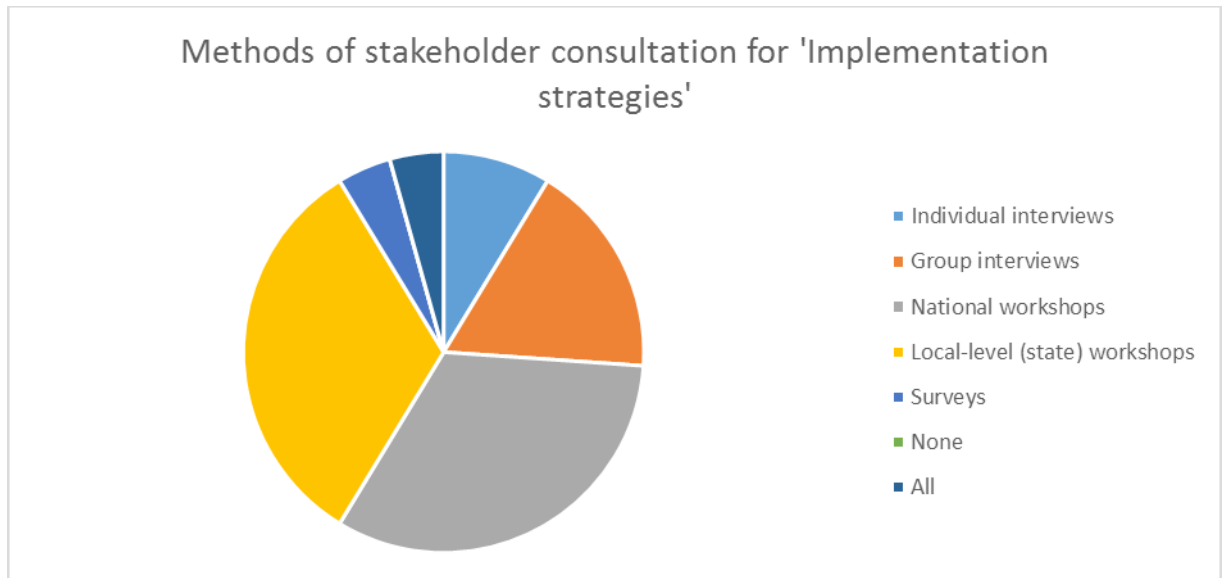
Figure 42 – methods that should be used for stakeholder consultation during NAP development for the 'implementation strategies' element of the NAP guidelines, as identified by participants who were not involved in NAPA.

Reporting, monitoring and review

National workshops, followed by surveys, are the most indicated methods of stakeholder consultation for this element of the NAP process by participants who were involved in NAPA (with 82% and 70% of participants, respectively, identifying them as methods to be used). National and local-level workshops were indicated as the most important methods by participants not involved in NAPA process and surveys were seen as the third most important method (with 46%, 38% and 35% of participants, respectively).
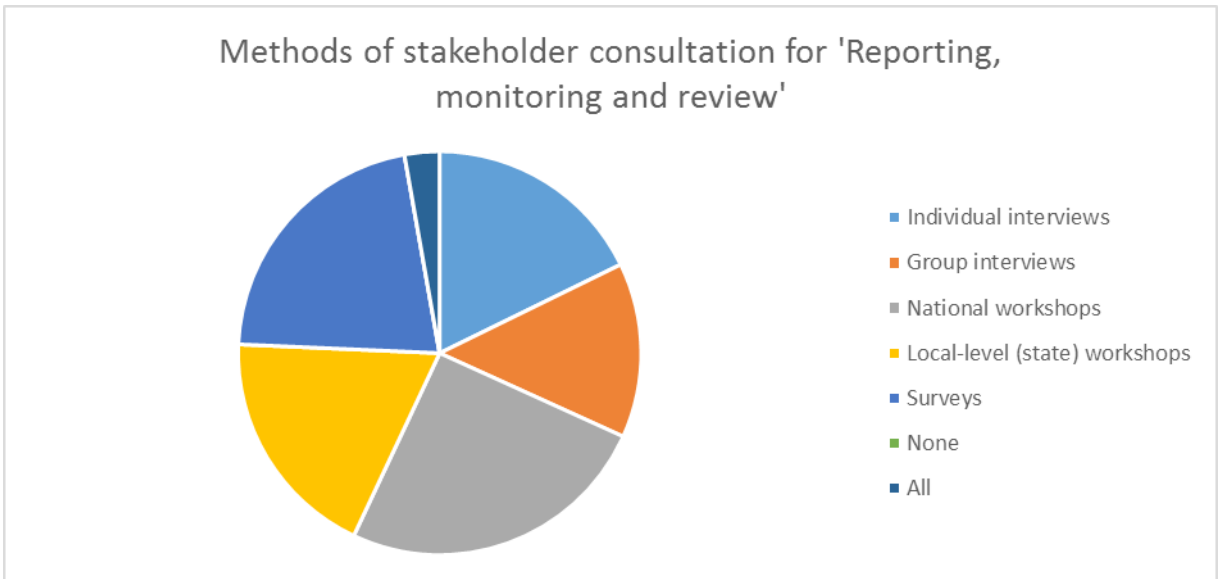
Figure 43 – methods that should be used for stakeholder consultation during NAP development for the 'reporting, monitoring and review' element of the NAP guidelines, as identified by participants who were involved in NAPA.
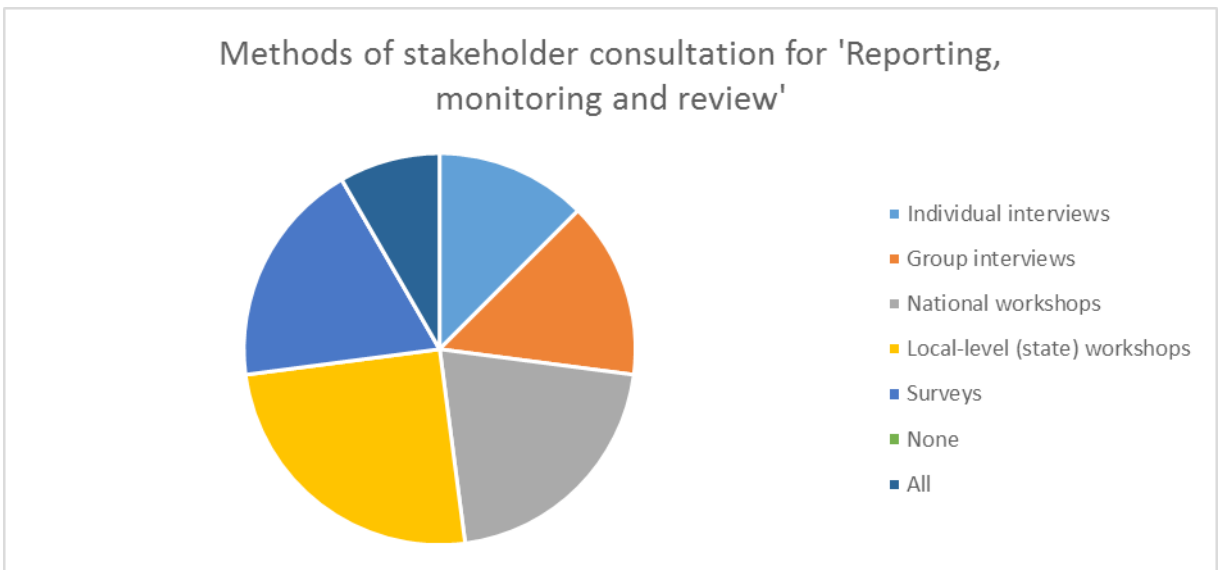
Figure 44 – methods that should be used for stakeholder consultation during NAP development for the 'reporting, monitoring and review' element of the NAP guidelines, as identified by participants who were not involved in NAPA.

CONCLUSIONS AND RECOMMENDATIONS

NAPA steps

It can be gleaned from the survey results that, in most cases, all of the steps within the UNFCCC guidelines (LEG, 2009b) were used during NAPA design and implementation. Furthermore, there were some additional steps that were undertaken. These related to community involvement and mobilisation of indigenous knowledge, and to assessing and developing of communication strategies.

It seems that, in general, the NAPA steps were deemed to be sufficient. However, the comments show that finance and resources were a major limitation on the possible scope of NAPAs. Therefore, it is important that for NAPs the resources mobilised are sufficient for the realisation of the process in full.

Participatory approaches

Participatory approaches were, in general, identified to have been used in all steps of the NAPA process. The most frequently used approaches were participatory poverty assessment, participatory rural appraisal and community based adaptation. Other approaches, such as analytic approach, rapid rural appraisal and appreciative inquiry, were used much less frequently and were also deemed to be approaches that should have been used less by those not involved in NAPA. Those approaches that were used more frequently, or indicated as approaches that should have been used, were also deemed to be more useful in terms of results for NAPA; these are participatory poverty assessment, participatory rural appraisal and community based adaptation.

The results suggest that the participatory approaches that should be brought forward for use in the NAP are participatory poverty assessment, participatory rural appraisal and community based adaptation. Not only are they deemed most useful for results but, given that they have been used most frequently for the NAPA, there will be the greatest capacity in countries to carry out the same approaches again for NAP.

Survey participants believed the greatest benefits achieved by participatory approaches were the following: to build broad-based support for decisions; to ensure local implementation capacity; to promote sustainable practices and accelerate

exchange of views of different stakeholders; and to create common ground for participation in the implementation.

In terms of the effectiveness of the steps in the UNFCCC guidelines (LEG, 2009b), the survey participants indicate that 'establishing a NAPA team with a public participatory dimension' is the most effective in terms of results. As this is the first step in the guidelines this result indicates that survey participants believe involvement of stakeholders from the beginning to be important for the effectiveness of the process. This was also confirmed by the responses of participants to the question to ranking of how valuable lessons learned on NAPAs, related to participation and communication, are for consideration in the development of NAPs, where the most important lesson learnt is the 'involvement of all stakeholders from the beginning'.

Stakeholders

The most represented stakeholders within the NAPA process were governments, followed by research institutions, UN Agencies and local communities. Private sector and CSOs were underrepresented stakeholders. NGOs were found to be more involved in the NAPA processes in the African region than in Asia.

As well as being the most represented stakeholder in the NAPA process, governments are also seen as the most useful stakeholder in terms of results. Research institutions are seen as relatively useful in terms of results by those involved in the NAPA process, whereas those who were not involved in the process indicated that local communities would be more useful in terms of results. For all participants, private sector, UN agencies and international institutions were stated to be the least relevant in terms of results. There is no noticeable difference between the perceived usefulness of stakeholders for results based on the region where participants work or their gender.

This suggests that governments are the most important stakeholders to incorporate in the NAP process, in terms of the results. Research institutions are also important stakeholders to be involved. Local communities may also be useful for results in the process but they are deemed more useful by those who were not involved in the NAPA process so their usefulness may be more perceived than a reality. However, in the results for the questions related to the lessons learnt from NAPA, the involvement of

local communities is one of the most important lessons learnt. The same is true for the 'involvement of all stakeholders from the beginning'. This indicates that local communities should be involved from the beginning of the process.

Surveys were perceived to be the least useful method of stakeholder consultation in terms of results, whereas national workshops, local-level workshops and group interviews were seen as the most effective methods. This indicates the methods that may also work for the NAP process: national workshops, local-level workshops and group interviews. This corresponds with the answers provided in the 'NAP process' section (see below), even if survey is identified by participants as an important tool for monitoring and evaluation.

Communication

The most useful communication element underlined in Decision 28/CP7, as identified by survey participants, is "Development of proposals for priority activities to address needs arising from the adverse effects of climate change: the national team will: (i) Organize a national and/or subnational consultative process to solicit inputs and proposal ideas in order to help develop a short list of potential NAPA activities. The national team would facilitate this consultative process, and would help in translating ideas into activities. This process will allow adequate dialogue between the national team and the public, with time allowed for public comment and revisions." This communication element involves the greatest amount of public engagement and participation. It suggests that for the NAP process a similar inclusive communication strategy would be useful for the results of the process.

Lessons learnt from NAPA

The most important lesson learnt from NAPA, as identified by the participants, is the 'involvement of all stakeholders from the beginning'. 'Use of communication methodologies and tools in support of participation' and 'more involvement of local communities' were also seen as important lessons learnt from NAPA.

NAP process

For the NAP process, almost all of the participants deemed participation and communication 'important' or 'moderately important' for all of the elements in the overall guidelines for the Parties in the annex to Decision 5/CP.17. National and local-level workshops are seen as methods of stakeholder consultation that should be used throughout the NAP process, although this varies for each element. For 'laying the groundwork and addressing gaps', group interviews, national workshops and local-level workshops were suggested to be used, along with surveys. For 'preparatory elements, identifying the state of knowledge and capacity', national workshops and local-level workshops were methods identified by most participants. For 'implementation strategies', national workshops and local-level workshops were indicated by the greatest number of participants, followed by group interviews. For 'reporting, monitoring and review', national workshops, followed by surveys and local-level workshops, are the most indicated methods of stakeholder consultation.

These results, compared with the literature review and the interviews will be used to develop a participatory and communication strategy for NAP.

Annex 1

Full list of home countries of participants:

Afghanistan	Kenya
Austria	Kyrgyz Republic
Bangladesh	Lao
Belgium	Malaysia
Benin	Mali
Bhutan	Mauritania
Burkina Faso	Myanmar
Burundi	Nepal
Cambodia	Nigeria
Cameroon	Philippines
Cape Verde	Senegal
China	Sierra Leone
Comores	Somalia
Democratic Republic of Congo	Spain
Denmark	Sudan
Ethiopia	Thailand

France	The Gambia
Germany	Timor-Leste
Greece	Togo
Grenada	Tunisia
Guinea	Tuvalu
Italy	United Kingdom
Ivory Coast	United States of America
Jamaica	Vanuatu

Annex 2

Full list of countries where participants work:

Afghanistan	Lao
Algeria	Lesotho
Angola	Liberia
Antigua and Barbuda	Libya
Bahamas	Madagascar
Bangladesh	Malawi
Barbados	Malaysia
Belgium	Mali
Belize	Mauritania
Benin	Morocco
Bhutan	Mozambique
Brazil	Myanmar
British Virgin Islands	Nepal
Burkina Faso	Niger
Burundi	Nigeria
Cambodia	Palestine
Cameroon	Philippines
Cape Verde	Rwanda
Central African Republic	Saint Kitts and Nevis
Chad	Saint Lucia
Chile	Saint Vincent and the Grenadines
China	Samoa
Comoro Islands	Sao Tome
Côte d'ivoire	Senegal
Democratic Republic of Congo	Seychelles
Denmark	Sierra Leone
Djibouti	Solomon Islands
Dominica	Somalia
Egypt	South Africa
Equatorial Guinea	Spain
Eritrea	Sri Lanka
Ethiopia	Sudan

Gambia	Suriname
Ghana	Tanzania
Greece	Thailand
Grenada	Timor Leste
Guinea	Togo
Guinea Bissau	Trinidad and Tobago
Guyana	Tunisia
Haiti	Tuvalu
India	Uganda
Italy	United Kingdom
Jamaica	Uruguay
Jordan	United States of America
Kenya	Vanuatu
Kiribati	Vietnam
Kyrgyz Republic	Zambia

Annex 3

Full list of organisations where participants work:

Aarhus University

Abt Associates (formerly Stratus Consulting)

ActionAid, Ethiopia

Africa Development Bank

Agency of Environment, Mali

Austrian Development Agency

College of Development Communication, University of the Philippines Los Banos

Commissariat Général au Plan, Comoro Islands

CTA

Department of Environment, Tuvalu

Department of Water Resources, Benin

Direction de l'environnement et des établissements classés, Senegal

Direction de lénvironnement Ministère de l'environnement et des ressources forestières, Togo

Direction Générale de l'environnement Ministère de l'environnement et de la protection de la nature, Benin

Division Gestion du Littoral (DGL), Senegal

Environment Impact Assessment Division Science, Technology and Environment Agency, Laos

Environmental Conservation Department, MOECAF, Myanmar

Food and Agriculture Organization of the United Nations (FAO)

Forest and natural resources managment national Authority, Benin

Global Environment Facility's Independent Evaluation Office (GEF IEO)

Global Water Partnership Central Africa

Global Water Partnership Mediterranean

International Center for Climate Change and Development, at the Independent University, Bangladesh (IUB)

International Fund for Agricultural Development (IFAD)

International Institute for Sustainable Development

King Mongkut's University Of Technology Thonburi, Thailand

KPMG

Lombardia Informatica

Ministère de l'Environnement, Conservation de la Nature et Développement Durable, Democratic Republic of Congo

Ministère de l'Environnement et du Développement Durable (MEDD), Senegal

Ministry of Agriculture, Livestock, Environment, Waters and Forests, Guinea

Ministry of Agriculture/National Directorate of Agriculture, Italy

Ministry of Environment, Cambodia

Ministry of Environment, Somalia

Ministry of finance and economic development, Sierra Leone

Ministry of Population and Environment, Nepal

National Directorate for Climate Change, Timor Leste.

National Environment Commission, Bhutan

National Environment Protection Agency (NEPA), Afghanistan

National Institute of Meteorology and Geophysics, Cape Verde

National Research Council of Italy

Natural History Museum of Crete

Nigerian Institute of Social and Economic Research

Office of Strategic and Development Studies, Burundi

Overseas Development Institute, United Kingdom

Radio Ntemo (Kongo Central)

Science-Based Initiatives

Secrétariat Permanent du Conseil National pour l'Environnement et le Développement Durable, Burkina Faso

Stockholm Environment Institute

Strategic Environmental Assessment and Planning (SEAP) Consult, Kenya

Sustainable Technology Resource Center, Malaysia

The Joint Graduate School of Energy and Environment (JGSEE), Thailand

United Nations Development Programme (UNDP)

United Nations Environment Programme (UNEP)

United Nations Framework Convention on Climate Change (UNFCCC)

Universite Kongo

Université Libre de Bruxelles (ULB)

University of Cordoba

University of Crete

University of Kinshasa, Democratic Republic of Congo

Vanuatu Meteorological Service

World Food Programme (WFP)

Annex 4

Full list of countries where respondents participated in NAPA design or implementation:

Afghanistan	Laos
Bangladesh	Malaysia
Benin	Mali
Bhutan	Mauritania
Burkina Faso	Myanmar
Burundi	Nepal
Cambodia	Niger
Capo Verde	Philippines

Comores	Senegal
Cote d'Ivoire	Somalia
Democratic Republic of Congo	Sudan
Ethiopia	Timor Leste
Gambia	Togo
Guinea	Tuvalu
Jamaica	Vanuatu
Kenya	Vietnam

CHAPTER 5 - INTERVIEW RESULTS

INTRODUCTION

The surveys give a comprehensive overview of the attitudes of a wide selection of international stakeholders from different backgrounds. However, as a method of inquiry surveys do not allow for in-depth inquiry into people's opinions, or allow for elaboration of responses when they are of particular interest. To complement the survey results, and to allow for more in-depth responses, interviews were conducted with seven experts in their field. The number of experts was limited to selected experts that work on key activities related to NAPA and NAP. Indeed, the selection of interviewees includes a diverse range of experts of work on different aspects of NAPA and NAP and who come from various institutions. As such, they are able to give important insights into what improvements could be made to the NAPA process, in terms of communication and participation that could be used to enhance the NAP process. In the specific, there are: one project manager of climate change adaptation projects and programs for GEF, one communication expert working for UNITAR as part of the NAP-GSP Global Support Programme, one Technical Advisor for Africa Adaptation Program (AAP) with UNDP Cameroon, with the specific task to support Cameroon government in strategic planning for climate change adaptation and in particular for NAP, the Lead Technical Specialist at NAP-GSP, the Programme Coordinator of the "Integrating Agriculture in National Adaptation Plans (NAP-Ag) Programme" at FAO, one international research fellow that assists activities for the GEF-SCCF project on climate change vulnerability, and one technical specialist and consultant on NAP-GSP.

The questions asked in the interviews were tailored to the specific knowledge and experience of each interviewee and the interview took the form of a free-flowing discussion.

In particular, the questions were directed to answer:

1. What are the roles that participation plays in NAPA and NAP process?

2. Who are the key stakeholders within the NAPA and NAP process; did they participate in the process?

3. What is the role of communication within NAPA and NAP?

4. What are the lessons learnt from NAPA and do they lead to recommendations for NAP?

The transcripts of the individual interview results can be found in Annex 1 of this chapter. Presented below is a summary of the common themes that appeared when the responses were analysed. Results of interviews were also compared with results of survey to identify commonality and differences. This comparison will support the identification of lessons learnt and participatory and communication strategy for NAP.

ONGOING THEMES

There were a number of ongoing themes identified by the participants of the interviews.

General themes

Two general themes can be identified from the interviews. The first is the issue of context dependency. Many interviewees stated that many of the processes – communication, participation, etc. – were affected by the context. This was expressed in different terms, such as the level of democracy, the structure of the government, the size of the country, the previous use of participation of stakeholders, the existing climate change knowledge or the existing climate change bodies.

This leads to the second general theme, which is the discrepancy between the guidelines and theory, and the practice. This discrepancy can be explained by the difficulty of adapting the international guidelines to specific country contexts. However, there are also a number of other limitations, including finance costs, time constraints, lack of common understanding between groups, and competition for resources.

Therefore, many of the recommendations and lessons learnt include references to these general themes of: issues to do with the limitations of the process; and therefore ensuring adaptability to context in the future.

Role of participation

Participation was seen by the interviewees to be a key concept, in both theory and practice. A number of different roles that participation could play within the NAPA and NAP process were identified. These were to:

- Identify challenges;

- Increase ownership;

- Identify successes or weaknesses of projects;

- Achieve impact at local level;

- Help to explain what climate change adaptation is and raise awareness (along with communication);

- Help to facilitate long term resilience to climate change; and

- Involve people from different contexts and sectors

Stakeholders

Government are seen as the main drivers/stakeholders within the process but specifically important to include are Ministries or government institutions beyond the Ministry of Environment, such as sectors that were identified as important under the NAPA, and core Ministries, such as planning, finance, etc. Training institutions are also seen as important stakeholders by many. This is because they allow the process to continue into the future with ongoing training, communication and capacity building. National and international NGOs are considered important. Representatives of local communities are another stakeholder, although it is recognised that this is difficult at the national level. Representatives of groups from different sectors, such as farmer organisations, and vulnerable groups, such as women institutions, should also be included as stakeholders within the process. Centres of research and universities are also key stakeholders for providing scientific or social knowledge.

The LEG recognizes the following stakeholders to be important within the NAPA process: "government ministries, academic and research institutions, NGOs, civil society organizations, community-based organizations, political and traditional leaders, private sector, including small to medium sized enterprises" (LEG, 2009, p.12). The

responses of the interviewees follow the LEG guidelines very closely, which suggests that the NAPA experience and/or the NAP recommendations of the interviewees are similar to the recommendations of the LEG.

Lessons learnt from NAPA

Some lessons were identified that can be brought forward from the NAPA into the NAP process that apply to both participation and communication:

- Communication good practice
- Acknowledgement that participatory approaches require more time
- Need for strategic participatory approaches and consultations in order to fulfil long term ambitions
- Integration of approaches into the NAP process
- Participatory approaches and communication need to be extended in a broader way to include more stakeholders
- Communication needs to be improved
- Ensure participation of all government ministries to ensure holistic vision and enhance ownership of process by various institutions

Recommendations for NAP process

The lessons learnt were then drawn on to identify a number of different recommendations on how participation should be used with the NAP process. These can be seen below:

- Adaptability of participation to national context and flexibility of method
- Ensure that there is participation of the finance and planning ministries - because the NAP process requires long term planning of costs and funding for mainstreaming of climate change adaptation
- Ensure participation of scientific institutions
- Ensure that there is a national training institution involved in the process and a government training curriculum

- Deeper engagement of civil society organisations and local, on-the-ground, community-based organisations than in the NAPA process
- Involve key stakeholders from the beginning, taking into consideration context
- Link the NAP process with current structures and current activities that already exist
- Formulate a good plan on financial resources in order to ensure funding for participation, which is costly and requires a long time

Role of communication

The interviewees saw a number of roles for communication. These were to:
- build awareness on the importance of adaptation
- receive feedbacks and build ownership
- communication between subsectors and different ministries to discuss climate impacts
- trust-building between government ministries
- two-way flow of information – both upwards (data and vulnerability information from communities to decision makers) and downwards (knowledge sharing on the impacts of climate change and the importance of adaptation)

Issues encountered with communication

A number of issues were identified by the interviewees in their own contexts. These were:
- The process was too top-down - more of reporting to UNFCCC than education programme
- It is very expensive and countries do not have the resources
- There is often an overload of development workshops and so it is important that there is a specific output set
- They often do not tend to go as far down as the grassroots level because they don't want to raise expectations about the outcomes of the process
- Creating common understanding is difficult

- No communication officer within the team at the outset so direction was confused

Recommendations for communication

The lessons learnt from the NAP and interviewees' personal experiences were drawn on to make some recommendations for communication within the NAP. These were:

- Clear, sustained communication
- Focus on reducing complexity and identify how best to engage different levels in discussion about climate change by identifying the value-added for different people
- Simplify communication – build common knowledge using visual explanations and problem solving methods
- Use local radios and journalists as mode of communication to local communities

The recommendations made by the interviewees correlate with the suggested improvements to the NAPA process made by Kalame, Kudejira & Nkem (2010), where they propose that different tools need to be used for different stakeholder groups and special attention needs to be paid to areas with high illiteracy levels. Their suggestion of "radio and television" and "audiovisual tools" (p.546) as good methods of communication are similar to the suggestions made by the interviewees in this study to use local radio to increase communication to local communities and to use visual tools to improve understanding and make communication clearer.

Financial resources

The interviewees also made some comments on financial resources during the interviews:

- Financial resources for the entire project are too high – participation process takes too long and costs too much
- Need to find funding and budget for the entire process, not just the document or the monitoring

- Internal funds also need to be set aside and mobilised to ensure financial independence
- Calculating costs of adaptation very difficult and understanding what is already being spent on adaptation is hard because it is difficult to separate from other spending

The financial concerns are similar to those expressed by the interviewees in the study by Osman-Elasha and Downing (2007), who said that lack of funding damages stakeholder engagement and the process in general.

COMPARISON OF SURVEY AND INTERVIEW RESPONSES

Role of participation

Role/benefit of participation, as prompted by survey	Role/benefit of participation, as identified in interviews
To build broad-based support for decisions	Help to facilitate long term resilience to climate change
To create common ground for participation in implementation	
To ensure local implementation capacity	Achieve impact at local level
To build collective ownership of problems and solutions	Increase ownership
To create a knowledge base for informed and responsible decision-making	Help to explain what climate change adaptation is and raise awareness (along with communication)
To promote sustainable practices and accelerate exchange of views of different stakeholders	Involve people from different contexts and sectors
	Identify successes or weaknesses of projects
	Identify challenges

Table 1: Roles/benefits of participation, as shown by the survey and interviews. Responses are put in the same row where they are seen to provide similar responses.

As can be seen from Table 1, the responses provided by the interviewees match very closely the prompted roles of participation within the survey. However, the interviewees identified, above and beyond what was suggested by the survey, that participation could also be used as an evaluative tool to identify the successes and weaknesses/challenges of projects.

Stakeholders

There was one key similarity between the responses of the interviewees and participants of the survey with respect to the stakeholders within the process: both the survey and the interviews show government to be a key stakeholder in the process. We can also see that the stakeholders identified in the interviews (government, training institutions, national and international NGOs, representatives of local communities, representatives of groups from different sectors, centres of research and universities) correspond very closely with the stakeholders identified in the survey.

Lessons learnt from NAPA

Lessons learnt, as prompted in survey	Lessons learnt, as identified by interviews
Involvement of all stakeholders from the beginning	Involvement of key stakeholders from the beginning
More involvement of local communities	Involvement of communities important but difficult at the national level
In order to disseminate information, consultation may involve techniques, such as the organization of constituency meetings, 'road shows' (presenting project designs and draft policies to local communities) and public	

hearings	
Participatory and Communication strategies planned and funded	Need for strategic participatory approaches and consultations in order to fulfil long term ambitions
Use of communication methodologies and tools in support of participation	Communication needs to be improved/ Communication best practice
More dialogue between stakeholders	Participatory approaches and communication need to be extended in a broader way to include more stakeholders
Development of effective communication between local government, NGOs and local people with respect to environmental issues	Ensure participation of all government ministries to ensure holistic vision and enhance ownership of process by various institutions
	Acknowledgement that participatory approaches require more time
	Integration of approaches into the NAP process

Table 2 – lessons learnt from the NAPA, as identified by the survey and interviews

The responses of the interviewees differ somewhat from the lessons identified in the survey. The interviewees do not stress the need for participation of all stakeholders from the beginning, rather the participation of key stakeholders at the beginning and drawing on participation of other groups throughout the process, where applicable. There is also a nuance in the opinions on involvement of local communities, as the interviewees, although they agreed that local community participation was important, stated that at the national level this was often a challenge. As one interviewee stated, the NAP process is different from the NAPA in that it is more about the mainstreaming of climate change adaptation into current activities rather than the identification of

adaptation projects. In this way, the participation of local communities from the beginning of the process is less important than the inclusion of key stakeholders such as government ministries.

CONCLUSIONS

The interviews have provided key insights into many of the questions posed in this dissertation and along with the survey results help to identify recommendations for the NAP process. The responses of the interviewees are varied, representing their different interactions with the NAPA and NAP process and the context under which they have engaged. Although the variation in responses makes it difficult to identify specific actions to be carried out, the idea of context dependency is an important concept in itself to use within the NAP strategy framework.

Although there is diversity in the responses of participants of the interviews, there are also some key conclusions that can be drawn and important lessons that should be highlighted. In general, the interview responses show that there is a commonplace difficulty with adapting international guidelines from the LEG to different country contexts, and this means that flexibility is required to ensure that the process adapts to different conditions.

The interviews also showed the various roles of participation within the NAPA process, which were: identify challenges; increase ownership; identify successes or weaknesses of projects; achieve impact at local level; help to raise awareness; help to facilitate long term resilience to climate change; and involve people from different contexts and sectors.

From the interviews, a better insight into why different stakeholders are important in the process was gained. For example, government as drivers of the process, training institutions as ongoing means of capacity building, and centres of research and universities for increasing scientific and social knowledge. Difficulties with involving certain stakeholders were also highlighted, for example, the inclusion of representatives of local communities and various sectors can be challenging at the national level.

Lessons learnt from the NAPA process were also identified from the interviews, which also contributed to recommendations for the NAP process. These were: flexibility to allow adaptability to national context; ensure that there is participation of the finance and planning ministries for long term planning and mainstreaming; ensure participation of scientific institutions; involvement of national training institution and a government training curriculum; deeper engagement of civil society organisations and local, on-the-ground, community-based organisations than in the NAPA process; involvement of key stakeholders from the beginning, taking into consideration context; link the NAP process with current structures and current activities that already exist; formulate a good plan on financial resources in order to ensure funding for participation. These recommendations can be used to develop a participation strategy for the NAP process.

Interviewees were also asked about communication – its role within the process and difficulties. Some of the roles identified were to: build awareness; receive feedbacks and build ownership; facilitate communication between subsectors and different ministries to discuss climate impacts and build trust; to facilitate a two-way flow of information.

Some of the difficulties encountered with communication were also identified and led to recommendations for communication within the NAP process. There is the need for clear, sustained communication; this should be simplified to build common knowledge and understanding between diverse stakeholders. Methods that could be used to facilitate this may be visual explanations and problem solving methods, and to the local communities the best methods were suggested as local radios and journalists.

The responses of the interviews and survey are broadly similar but the interview provides an understanding of some of the nuances within responses and rationale behind them. The interviews also highlight other issues that, whilst not directly related to participation and communication, will inevitably influence the strategy framework. For example, financial resources are a key constraint highlighted by the interviews; this emphasises the need for financial planning of participatory strategies and inclusion of finance and planning ministries in decision making.

Therefore, the interviews provide recommendations and ideas for the NAP communication and participation strategy to be elaborated in the next chapter.

ANNEX 1 – TRANSCRIPTS OF INDIVIDUAL INTERVIEW RESULTS

Knut Roland Sundstrom

As a Climate Change Specialist and Program Manager in the GEF Programs Unit, he plays a central role in the management and development of the GEF's portfolio of climate change adaptation projects financed through the Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF). He currently manages a regionally and thematically diverse portfolio of nearly 100 projects and programs financed through the LDCF and the SCCF, with grants exceeding $500 million. He is the lead author of the GEF's Programming Strategy on Adaptation for the 2014-18 period, and the architect of the GEF's results-based management framework for climate change adaptation projects and programs.

Question 1: In your experience what is the role of participatory approaches in design and implementation of NAPA?

A number of role of participatory approaches were identified. These were:

- Identification of challenges;
- Increase ownership;
- Identify successes or weaknesses of projects;
- Achieve impact at local level;
- Help to explain what climate change adaptation is (along with communication); and
- Help to facilitate long term resilience to climate change

It was suggested that participatory activities should be repeated both "at the mid-term and at the end of the project" for monitoring purposes and that a good range of stakeholders should be involved. However, the issue of costs and funding for participatory approaches was identified as an issue because countries do not always understand that additional funds are required for participatory approaches.

Question 2: What are the lessons learned from NAPA that can be taken into consideration for the development of NAP?

The lessons learned from NAPA were as follows:

- Communication good practice

- Acknowledgement that participatory approaches require more time

- Need for strategic participatory approaches and consultations in order to fulfil long term ambitions

- Integration of participatory approaches into the NAP process

- Participatory approaches and communication need to be extended in a broader way to include more stakeholders

Question 3: In your experience, what is the best way to include stakeholders in the process?

In his opinion there is no solution that encompasses every country because it is context dependent; he suggests that the "level of participation in a national context is related also to the democratic participation of a country" and that this could be an issue during the NAP process. However, he suggests that the best way to include stakeholders is to have flexibility of method in order to be able to adapt to the context. He suggests that to permit more stakeholders to participate that participatory approaches need to be more inclusive. He also states that in some cases "engagement of community through national workshops and national consultation" works.

Question 4: What is the role of financial resources to support the use of participation?

The most important point made was that it is important that national governments start now on the process of building and planning financial resources, not just for writing the NAP document but for the entire process. They need to be looking for *additional* funding and that this should not be limited to external resources but the government should be considering and planning internal resources to allow for "independent financial support for the future".

Ilaria Gallo

Ilaria Gallo works for UNITAR as part of the NAP-GSP Global Support Programme. She has participated on missions and guidelines in South East Asia and Ethiopia. Previously she has worked at UNDP on the African adaptation programme that had the function of linking NAPA and NAP.

Question 1: Participation was identified in the guidelines for NAPA as the major approach to use during design and implementation. In your experience, was the participation inclusive and involved all stakeholders?

From her experience in Malawi she believes that the project was not a success and that the pre-identified objectives were not achieved. She thinks that the reason for this was that the leadership of the process was concentrated in the Malawi Environment Ministry and therefore there was no "holistic vision", which meant that participation was limited, the process was not inclusive and failed to identify real problems in the country.

She states that, although the limitations were recognised by UNDP, this failure was not admitted at the political level due to international pressure from funders and so there were no papers at the institutional level.

Question 2: One justification was the limited economic resources. Do you believe this to be the main reason or something else, such as geographic limits or political reasons?

She identifies the main issue being the definition of climate change as an environmental problem rather than a development problem. In this way, the Ministry of Environment had ownership of the process and became the only ministry that had dialogue with institutions about funding, etc. and it caused competition between the Ministry of Environment and the Ministry of Development.

Question 3: In this context, the work that UNITAR is doing to support the workshops to train countries, what is your role? Are you involved in the workshop?

UNITAR, along with UNDP, developed the modules for the training and implemented the workshops in many countries.

Question 4: In the training, how much is participation included? Do you train the participants on the importance of inclusive participation?

She states that there is inclusive participation in the workshops, both in theory and in practice. For instance, the government forms a list of all ministries and other stakeholders, such as women's groups, and this is then reviewed by UNITAR and invitations to the workshops are sent out.

Question 5: What are the topics in the training?

Overall there is a focus on participation within the training. The process of NAP is one of the topics, along with the importance of stakeholders. New modules on gender and socio-economic issues are in preparation.

Question 6: How is communication important to support participation?

She considers communication important to stimulate behaviour change but says that the current communication is superficial and is a weak area.

Banseka Hycinth

Banseka is Program Manager at GWP Central Africa and was a Technical Advisor for Africa Adaptation Program (AAP) with UNDP Cameroon, with the specific task to support Cameroon government in strategic planning for climate change adaptation.

Question 1: What was the role of participation in developing NAP in Cameroon?

During the development of NAP in Cameroon, the activities were "bottom-up" and participation was used in order to involve people in different contexts. He states that to accomplish this a vulnerability analysis study was developed that included

administering questionnaire in the field and conducting interviews. Two Universities of Cameroon collaborated to realise climate modelling aspects of the vulnerability study.

Question 2: Which stakeholders were involved?

He believes that all stakeholders were involved in the vulnerability assessment because three validation workshops were held to ensure ownership of the vulnerability analysis report.

Question 3: Did the validation consider the participation enough or were there gaps?

He states that the participation was enough.

Question 4: What is the next step in implementing NAP?

The process of developing the NAP was as follows:

1. Putting in place of an Inter-ministerial technical committee (built internally by the government) for climate change adaptation;

2. Conduct key climate change adaptation studies: Vulnerability and risk assessment; Climate change communication strategy; Stakeholder analysis and capacity needs assessment; Mainstreaming climate change into educational system; Development of concept note and road map for NAP process;

3. Organisation of National workshop (involving ministers, parliamentarians, local councils, CSOs and government agencies) to discuss and approve the concept note and road map;

4. Production of draft NAP Document

5. Regional workshops conducted – five workshops in the different agroecological regions (all stakeholders participated) to enrich the adaptation issues and measures;

6. Organisation of National validation workshop to approve final NAP document;

7. Ownership and publication of NAP (website of government and partners, website of UNFCCC)

He stated that the process was too long and cost too much money.

Question 5: Communication had an important role in Cameroon's NAP – the government developed a communication strategy in 2010 and there is also a communication strategy within the NAP document. Why this decision to use communication?

The main role of communication was to build awareness on the importance of adaptation because previously the focus had been on climate change mitigation. Therefore, they wanted to explain to people why adaptation was important and why there was such a big effort being made. Furthermore, this was fundamental to receive feedbacks and create ownership. This was led by the Ministry of Environment.

However, he states that contacting relevant stakeholders took a long time and this was an issue.

Question 6: Did you have obstacles to the use of participation and communication? What kind of issues did you have when introducing these activities during NAP development?

The main issue identified was right at the beginning of the process because there was no communication officer within the project team and so there was confusion as to which direction to go with communication.

However, after the initial confusion it was decided to have a joint effort on communication between different entities. Media and journalists (predominantly rural radios as they were the major tools in the country for communication) were trained to help raise awareness on climate change adaptation and communicate the impact of climate change and its issues. This work was delegated to UNESCO, in collaboration with the African adaptation project at the regional level.

Question 7: Do you have suggestions about participation and communication on how to develop NAP?

His key recommendations are as follows:

- Involve key stakeholders from the beginning, taking into consideration context;
- Link the NAP process with current structures and current activities that already exist by emphasising participation;
- Clear, sustained communication; and
- Formulate a good plan on financial resources in order to ensure funding for participation, which is costly and requires a long time.

Rohini Kohli

Rohini works providing technical assistance for countries on defining the next steps for their NAPs. She works specifically through workshops, sensitising teams on the NAP process and helping them draft a work plan or road map. They use an analysis of the NAPA and the experiences countries had implementing the NAPA project to draw lessons out for the NAP process.

Question 1: Do you have any experience of the NAPA process?

She was not directly involved in NAPA but her knowledge is that in some cases there was good participation during the NAPA process. This occurred primarily in countries that had Local Adaptation Plans (LAPs), indicating a lot of community engagement, for example, Nepal. However, in many cases this capacity is now dispersed as it was not institutionalised in regular government processes.

Question 2: Focussing on participation – what are the recommendation that you can see in you work when you have to involve stakeholders?

She gives a few of recommendations:

1. Ensure that there is participation of the finance and planning ministries. This is because the NAP process requires long term planning of costs and funding for mainstreaming of climate change adaptation and so climate risk is needed to be included in planning and budgeting. For countries to be able to get investment from external sources they first need to realise the costs that they are already occurring and the money that they are spending; this is not purely an environmental issue.

2. Ensure participation of scientific institutions. There needs to be more involvement of scientific institutions with decisions when dealing with the uncertainties of climate change.

3. Ensure that there is a national training institution involved in the process and a government training curriculum so that senior government employees have knowledge on the important topics and so that the process can be better sustained over time.

4. There needs to be a deeper engagement of civil society organisations and local, on-the-ground, community-based organisations than in the NAPA process.

Question 3: What are your views on the role of communication?

She believes that there needs to be a two-way flow of information for communication to be effective. This includes awareness raising of climate change from the top-down to ensure that people on the ground understand about the problems of climate change

and the need for support on adaptation; this is especially important because if those who are the most effected are not aware then it is hard to identify their needs and without accurate needs assessments we cannot do long term planning. There also needs to be bottom-up information flow and participation at the grass-roots to be able to gather proper evidence on needs and vulnerabilities.

Question 4: When you carry out training do you stress the importance of participation and communication?

They bring together inter-ministerial people, mostly senior decision makers, from important sectors. They then aid them in stakeholder mapping to identify the key decision makers and institutions.

Question 5: During training, did you see any issues to do with participation and communication that you can see as difficulties or complications in the implementation of the NAP?

Having a common understanding among all stakeholders is difficult because they find the NAP process very complex. Therefore, it is important that communication of the process is simplified into simple steps. For communicating it is good to have visual and interactive methods that create common understanding. She suggests that this could be done using a problem-solving format.

Question 6: Do you see that financial resources could be an issue for the implementation of NAP?

She thinks that the financial resources for undertaking the technical studies, supporting consultations and prioritizing adaptation interventions for the NAP formulation and implementation are relatively straightforward. Monitoring mechanisms are more complex to add into systems. Moreover, costing for adaptation needs is difficult, costing is mostly done at the project level, but calculating a cost on the actual adaptation requirements is difficult as it depends upon many future scenarios. However, with the introduction of the Global Goal on limiting warming

below 2 degrees, this will have implications for costing adaptation which need to be fully understood.

Julia Wolf

Question 1: What was the role of participation of stakeholders in the NAPA process?

She identifies two main roles:

- To create awareness; and
- To enhance ownership of the different sectors to increase their contribution.

She also states, however, that although there may be consultation, it was often an international person or consultant who wrote up the NAPA document and so we need to question "what happens afterwards" or, in other words, the follow up to participation. She thinks that this is where the process often lacks and that there is a "de-link" on the reporting of the implementation and that this is possibly due to a lack of participation within the follow-up process.

Question 2: What was the role of communication in NAPA? I mean in terms of involving people and stakeholders. Do you think communication can help in this way in NAP or do you think that there are other kinds of tools that we can use to involve people?

She notes that the process was still very "top-down" and that it was more about reporting to UNFCCC under the international framework than about educating on climate change. She states that there are a number of issues with comprehensive communication, that:

- It is very expensive and countries do not have the resources;
- There is often an overload of development workshops and so it is important that there is a specific output set; and
- They often do no tend to go as far down as the grassroots level because they don't want to raise expectations about the outcomes of the process.

Question 3: Do you think that experts on participation and communication can help countries to identify the best way to involve people?

She thinks that experts on participation and communication need to be focussing on reducing complexity and that they need to identify how best to engage different levels in discussion about climate change by identifying the value-added for different people. She talks specifically about communication and participation for "change-making" and looking at the change-makers and the process of change and communicating this within the context of the political economy.

Question 4: As someone who works helping countries to develop their NAP from an agriculture perspective, how would you like to use participation and communication in your work?

She suggests that communication and participation need to be used concurrently. There needs to be communication between subsectors and different ministries to discuss climate impacts but also the process. Participation needs to occur so that all ministries feel involved and have ownership of the process. Because there is a competition element over resources, she says that trust-building through communication and participation is very important.

Question 5: You know that in the guidelines for naps you have to involve all the stakeholders is the best way to work but if you have to identify the best stakeholders to involve, what do you think? At which level?

From her experience in Malawi, she says that there are usually NAPs focal points in each sector that report to the interdepartmental working groups and then there is also national consultation with farmer and women organisations for gap analysis and vulnerabilities.

She thinks that government are the main stakeholders and that they are the drivers of the process. Furthermore, she thinks that famers' organisations are important to involve, especially in countries where agriculture is prominent. Also NGOs are important. As are centres of research as they need to provide relevant information and in some cases were actually in charge of writing of co-writing of the NAPA.

Silvia Cazzetta

Silvia's work is not directly linked to NAPA but she is involved in South-South cooperation and works on the EbA South project (ebasouth.org), with activities in three pilot countries – Mauritania, Nepal and the Seychelles – that are based on NAPA. She also participated in the activities of the LEG (UNFCCC) on NAPs.

Question 1: In your work, looking for a common strategy, is there a participatory element?

She states that regional capacity building workshops for the formulation of NAPs create fruitful opportunities for South-South knowledge sharing. Everyone agrees that any strategy, NAPs or others, should have a participatory approach and that stakeholder involvement is important; this includes bringing together representatives from the communities, NGOs, government, academia etc.

In terms of communication she states that the baseline awareness of climate change is still low (based on the assessment made by EbA South in the three pilot countries). Raising awareness is not an easy task and it requires the right expertise. Reporting from her experience in project management, she thinks that communication is often regarded as a side activity (the "cherry on the cake"). It is often under-funded and not always fully integrated into work flows.

Julie Teng

Julie works as a technical specialist and consultant on NAP. She is part of a team that liaise with countries and then organise training workshops in order to help countries with stocktaking. She also deals with overall planning of the support programme, and knowledge management and communication. She also works with the FAO on a project funded by the German Ministry of Environment, which is focused on NAPs in the agriculture sector. Before starting her current work on NAPs in 2014, she worked as a climate specialist with UNDP in Niger.

Question 1: How do you integrate participatory approaches into your job? What are the stakeholders involved in the NAP workshops you organise?

She states that it is the government who decide who to invite to the workshops but, following the LEG guidelines, they encourage the governments to invite:

•   Ministries or government institutions beyond the Ministry of Environment, such as sectors that were identified as important under the NAPA and core Ministry, such as planning, finance, etc.

•   Training institutions (for capacity building), such as national training institutions, private training institutions and universities.

•   Representatives of local communities (although this is difficult because they are national level workshops)

•   National and international NGOs

She says that, although the involvement of these stakeholders was encouraged, in the end it varied depending on countries. For example, there was less involvement of stakeholders beyond the environmental sector in the DRC than in Comoros because DRC is a bigger country with a bigger central administration. She also gives Madagascar as an example of where there was good involvement of stakeholders because there were existing structures, such as a climate change committee that included civil society and institutions, so there was already an established process that could be built on.

Question 2: So do you think that the previous knowledge of climate change in Madagascar was what helped the organisers involve more stakeholders?

She states that it is less about climate change knowledge (although this is important) and more that there were already pre-existing bodies that involved stakeholder participation.

Question 3: In your opinion, can a good communication strategy increase knowledge on climate change and help to increase inclusive participation?

She believes that at the national level, at least with the launch of the NAP process, communicating is not necessarily the biggest factor in order to increase inclusiveness

because it more depends on the willingness of the government to involve stakeholders, rather than the willingness of the stakeholders to be involved. "Communication would help increase the knowledge of stakeholders but if the government doesn't want to invite the stakeholders then the process is not more inclusive."

Question 4: So communication and good training at the government level, explaining the importance of having inclusive participation, can help?

She thinks that in a certain sense it can help but that the problem goes beyond the NAP process to the inclusiveness of policy making and planning in the countries in general. The process should aim to raise awareness on climate change as a development issues and of the added value of the NAP towards key stakeholders, especially Min. of Planning and Finance, and the main development actors.

Question 5: Do you think that participation should be done from the beginning of the process?

She believes that the NAP process is different from the NAPA process in that it may include a National Adaptation Plan but this is only part of the process and it is mostly about mainstreaming adaptation into the planning of the government. From that perspective then she thinks "that stakeholders need to be invited but not all levels of stakeholders and not at all stages". For example, at the launch of the NAP process it is important to have different levels of governments across different sectors and also private sector and national organisations but it would not be important to have representatives of farmer organisations from the local level at that stage. However, she thinks that for the development of local development plans and projects, that will form part of the NAP document, it is important to have stakeholders from the local level.

CHAPTER 6 - PARTICIPATION AND COMMUNICATION STRATEGY FOR NAP

INTRODUCTION

This strategy draws on the literature review and results presented by the survey responses and interviews in order to complement the Least Developed Countries Expert Group (LEG) National Adaptation Plans technical guidelines and provide new ideas for communication and participation within the proposed framework. Insights are also taken from previous studies and guidance, and incorporated into the strategy.

PURPOSE OF THE PARTICIPATION AND COMMUNICATION STRATEGY

The results of the survey and interviews indicate that communication and participation are important for all elements of the NAP process. However, there is not specific strategy for either of these components proposed by the LEG. Thus, participation and communications strategy is required that is flexible, adaptable to national contexts and can be used as best practice. It is also necessary that the participation and communication suggestions that have been identified through the survey and interviews fit with the current LEG guidelines in order to ensure consistency and avoid redundancy. In this way, the strategy strictly follows the elements of the NAP process, as proposed by the LEG (2012).

As stated by the LEG, "the NAP process has been designed to create a comprehensive system through which countries can integrate climate change adaptation into national planning, and produce national adaptation plans on an ongoing basis" (LEG, 2012b, p.15). For this process to be successful, it requires input from all stakeholders and ownership over the process so that it can continue in the long-term. Without participation, the process, along with the successes of the project, are not sustainable. "Stakeholder participation is important at all stages of the adaptation learning cycle, and should cover the full range of affected groups" (Rosentrater and Vincent, 2013), p.9). The participation strategy must acknowledge that the participation of different stakeholders is important at different stages of the NAP process and towards various aims. From the survey and interviews the following important stakeholders have been identified: government, in particular all relevant ministries; training institutions; national and international NGOs; local community representatives; group or sector

representatives or organisations; private sector; and research institutions. When and how these stakeholders should be consulted was also a theme within the survey and interviews conducted and this is elaborated further within specific elements of the strategy.

A number of participatory approaches were highlighted in the surveys that should have been/were used in the NAPA. These approaches may also prove fruitful within the NAP process.

In particular, the three most adopted and efficient approaches identified within the survey are: Community Based Adaptation (CBA), Participatory Poverty Assessment (PPA) and Participatory Rural Appraisal (PRA). While dealing with the Community Based Adaptation approach it is important to understand the concept of a community, which is always multifunctional since it depends on contexts. Thus, the CBA has expanded into a systematic and bottom-up approach in strengthening the resilience of the broad aspects of a community. It helps in creating and disseminating knowledge that will eventually turn into actions, with the use of various techniques such as participatory games or experiential learning activities, enabling to create knowledge through transformation of the experiences and promoting engagement in order to find solutions and build the governance architecture. CBA is a multi-stakeholders approach one should adopt with the use of interactive games for community based adaptation through combination of objectives, rules, platforms, contents, supporting effective communication among different actors (Macklin and Sharp, 2016).

In addition, Participatory Poverty Assessment approach helps in designing ad hoc policies and helping their implementation, while preparing the ground for follow-up research on understanding of limits and potentials. PPA tools are especially conceived as instruments to build strategies and improve actions generally carried out as policy research exercises.

Cost effective information, policy-makers interaction and stakeholders participation is there enhanced also throughout workshops and other face-to-face activities, which help in raising people awareness. An interesting PPA tool of analysis the root causes of risk vulnerability and cause-effect in a community is the "Problem tree" (Hovland,

2005). The tree is presented to a community that has a priori be divided according to focus groups and interviews by a facilitator. The tree trunk represents the main issues, the roots represent influences and tendencies and the branches represent the outcomes. The tree is a concrete example of PPA approach since it is simple to understand, it is direct and emphasizes discussion trough visualization techniques.

Lastly, Participatory Rural Appraisal techniques are more oriented to the "Who? Why? How?" approaches, helping in gaining knowledge and analysing different perspectives through situations mapping and modelling.

Interviews and interactions are enhanced also with a focus on indigenous people. A concrete example of PRA is the "semi structured interviewing and listening technique" in which predetermined questions help in shaping new topics in order to enhance knowledge and communication. Within PRA, another technique adopted and facilitated by an external participant is the use of the "Social Map" (Hovland, 2005). For example, in a community, a social map of a kushet will be drawn by community residents and will result in a representation of the social structures and the main institutions available in the given area. In addition, such a tool helps in understanding social and economic dynamics within a territory as well as the main differences between households (FAO, 2000).

Communication needs to be used in a comprehensive manner to facilitate participation. Similarly, to participation, the communication strategy for NAP needs to encompass the different roles of communication, which are myriad.

Particular attention should be paid in specific areas, such as finance, that directly influence the proposals of any participation and communication strategy. Given the problems with planning for finance within the NAPAs, it is integral to communicate to LDCs the importance of internal financing and make financing more clear in general. NAP-GSP note that there is a "lack of ring-fenced finances for the NAP process" (NAP-GSP, 2015, p.18), specifically for implementation, and that the difference between resources for NAP development and implementation is not always clear.

Role of Participatory Approaches and Communication in National Adaptation Programmes of Action: Lessons Learnt for National Adaptation Plans

Table summarizing participation and communication within each element and step of the NAP process

Element	Step	Participation	Communication
A: Laying the groundwork and addressing gaps	A.1. Initiating and launching the NAP Process	Identification of stakeholders and integration of key stakeholders into NAP coordinating team.	Lateral communication at national level involving knowledge sharing and enhancing understanding.
	A.2. Stocktaking: Identifying available information on climate change impacts, vulnerability and adaptation and assessing gaps and needs of the enabling environment for the NAP process	Inclusion of all stakeholders at all levels and participatory consultation. Stakeholder consultation through group interviews, national workshops and local-level workshops.	Dialogic communication. Stakeholder consultation through group interviews, national workshops and local-level workshops.
	A.3. Addressing capacity gaps and weaknesses in undertaking the NAP process	Inclusion of knowledge and training institutions.	Communication strategy devised, with clear timeline and funding mechanisms.
	A.4. Comprehensively and iteratively assessing development needs and climate vulnerabilities	Drawing on participatory approaches used in Step A.2.	Use of national workshops and group interviews.
B: Preparatory elements	B.1. Analysing current climate and future climate change scenarios	Participation of scientific institutions, through group interviews, national workshops and local-level workshops, and the use of online platforms.	Communication of climate change projections to all stakeholders, using clear information. Through group interviews, national workshops and local-level workshops, and the use of online platforms.

	B.2. Assessing climate vulnerabilities and identifying adaptation options at the sector, subnational, national and other appropriate levels	Participation of all stakeholders and public, through group interviews, national workshops and local-level workshops.	Identifying risks and risk perceptions using survey.
	B.3. Reviewing and appraising adaptation options	Participation of all stakeholders and public.	
	B.4. Compiling and communicating national adaptation plans	Consultation with as many stakeholders as possible to gain useful feedback.	Two step process whereby it is released for feedback (possibly on an online platform) and then communicated more thoroughly, using local radios and journalists.
	B.5. Integrating climate change adaptation into national and subnational development and sectoral planning	Participation of planning and finance ministries, and national and international non-governmental organisations. Where needed Inter-ministerial Task Force implemented.	Inter-ministerial communication to share information and enhance collaboration
C: Implementation strategies	C.1. Prioritizing climate change adaptation in national planning	Specific participation from finance and planning ministries. Continuing use of Inter-ministerial Task Force implemented	Inter-ministerial communication to share information and enhance collaboration

	C.2. Developing a (long-term) national adaptation implementation strategy	Creation of Committees with participation of interested ministries and parliaments. Involvement of key stakeholders in the committees work such as organizations, institutions that work in the climate change adaptation issues.	Inform population and stakeholders on the process of the committees.
	C.3. Enhancing capacity for planning and implementing adaptation	Participation of training institutions to build capacity for adaptation.	Local-level workshops and surveys to identify and improve capacity gaps.
	C.4. Promoting coordination and synergy at the regional level and with other multilateral environmental agreements	Participation of all key actors in other environmental agreements.	Creating synergy through workshops at regional, national and sectoral levels.
D: Reporting, monitoring and review	D.1. Monitoring the NAP process	Participation of all stakeholders to ensure the determinants of the monitoring process are decided through a consultative procedure.	Consultation through national workshops, local-level workshops, individual interviews and surveys to determine metrics for monitoring.
	D.2. Reviewing the NAP process to assess progress effectiveness and gaps	Participation of national scientific institutions and key stakeholders to ensure information is up-to-date.	Communication with international and national NGOs and community organisations to understand lessons learnt.

	D.3. Iteratively updating the national adaptation plans	Intergovernmental and stakeholders task team	Communication between government ministries to ensure timeline is consistent with other activities
	D.4. Outreach on the NAP process and reporting on progress and effectiveness	Participation through national, regional and global meetings and workshops to share lessons learnt.	Sharing of lessons learnt through dialogic communication with international agencies (specifically UNFCCC), international NGOs and other participating national governments. Where possible, creation of platform for sharing information and knowledge.

Table 1. Summary of participation and communication within each element and step of the NAP process

Source: National Adaptation Plans-Technical guidelines for the national adaptation plan process, LDC Expert Group, December 2012

Element A: Laying the groundwork and addressing gaps

Element A is arguably the most important stage in terms of communication and participation because it defines the strategy for the entire process. Indeed, one of the outputs of this stage is "a national mandate and strategic plan for the NAP process" (LEG, 2012b, p.26). This involves the setting up of arrangements by which there can be the "establishment of strong coordinating and cooperating mechanisms whose roles and expectations are clear and in which stakeholders are enabled to participate" (LEG, 2012b, p.26).

Furthermore, one of the key steps within Element A is the identification of capacity gaps that may impede the success of the process. This includes technical and institutional capacity gaps, along with gaps in capacity for effective communication.

Step A.1. Initiating and launching the NAP Process

The first step involves the "initiation of the NAP process at the National level" and it designed to "create leadership and ensure stakeholder participation" (LEG, 2012b, p.28). At this stage it is important that key national stakeholders are engaged with. Having a well-planned identification of stakeholders can help on understanding the situation of relations between them and the key powerful stakeholders to be involved from the beginning. All the three identified participatory approaches during the survey and interviews explained which methods or tools can be used for this purpose. As identified by interview participants, these stakeholders should include government ministries; the ministries included should represent sectors affected by climate change, such as agriculture and environment, but also ministries that will be involved in ensuring that the process has longevity and has appropriate resources, including the finance and planning ministries. Research conducted by NAP-Global Support Programme (GSP) suggests that government representatives are not always clear on "broad institutional nature of the NAP process" (NAP-GSP, 2015, p.18) and this may impede them from fully interacting with the process. The participatory approaches identified in the survey as the suggested to develop on NAP steps have elaborated methodologies for recognizing key stakeholders and how to involve them.

The survey resulted also in the need for involving briefing of policy makers about climate change risks and opportunities. The interviewees suggest that at this stage it is very important to create common understanding between stakeholders. Therefore, communication at this stage should be used laterally to ensure understanding and enhance the knowledge sharing. More than an education mechanism on climate change, it should involve an exchange of views and experiences and best practices, possibly utilizing visual communication tools and problem solving methods in order to ensure common understanding. If "existing in-country coordination mechanisms" exist, these platforms should be leveraged as they provide an "enabling environment" for discussion (NAP-GSP, 2015, p.19). In addition, where platforms or visual communication tool are not in place it would be important to set up workshops of dissemination tools.

One of the indicative activities at this stage is the designation of the "spearheading or coordinating mechanism". This may involve the designation of varied group of national experts from various government ministries with a variety of skills and expertise. This 'NAP team' will guide the following process and, as learnt from the survey, "establishing a NAPA team with a public participatory dimension" was the step deemed most effective by the participants to the survey. As recognized during the interviews, it is important at this stage to ensure that there is a communication professional within this coordinating team, as a lack of one can lead to confusion and lack of direction for a clear communication strategy. Therefore, at this stage communication should be secured form experts and translated to an ad hoc register in order to reach different levels of audience.

Step A.2. Stocktaking: Identifying available information on climate change impacts, vulnerability and adaptation and assessing gaps and needs of the enabling environment for the NAP process

As identified by the surveys and interviews, communication must be a two-way flow that includes collecting information on climate change impacts, vulnerability and adaptation from all stakeholders within the country, including NGOs and civil society. At this stage, the survey indicates that group interviews, national workshops and local-level workshops would be the most effective methods of stakeholder consultation. Local-level workshops may be most effective in places where NAPA projects have been implemented with a participatory process and a good communication.

Step A.3. Addressing capacity gaps and weaknesses in undertaking the NAP process

This stage "designs and implements projects, programmes and other actions to address gaps, weaknesses and barriers" (LEG, 2012b, p.46). As noted by the NAP-GSP, capacity gaps within LDCs can be severe and "most LDC governments face capacity gaps even to initiate the NAP process at both the institutional and the individual levels due to lack of knowledge, skills and personnel (NAP-GSP, 2015, p.18). This means that communication at this stage is integral to build knowledge and skills. The LEG suggests that good communication tools at this stage could

include "workshops and short courses targeting development planners and managers, and could be supplemented by online training methods. Short publications and pamphlets could also be effective tools for creating awareness" (LEG, 2012b, p.48).

This step also includes activities to "design and implement programmes on climate change communication, awareness-raising and education". Interviews suggest that local radios and journalists may be good tools for communicating climate change to the public as they can provide localized reports in the local language. It is important that this communication is simple, clear and sustained. The Stockholm Environment Institute (SEI) suggests that there is the likely to be the problem of "information overload" and that communication is required to "facilitate the transfer of information into knowledge" (SEI, 2014, p.45) through the use of boundary organisations who "translate" information into understanding for various groups.

To facilitate communication over the medium to long term, it may be useful to develop a national communication strategy. An example of such a strategy would be that developed by Cameroon for the period 2012-2014 (MINEP, 2011). This strategy has many elements that ensure that communication for climate change is comprehensive and positioned within the structures and timeframes of the current institutions and mechanisms:

- It sets specific targets for communication in order to be able to evaluate the effectiveness of the plan.

- It outlines the different beneficiaries of the communication strategy – the main beneficiaries, the supervisors and the policymakers.

- It uses scientific data to divide the country into agroecological zones in order to determine specific vulnerabilities and communication requirements.

- It identifies five main communication methods that should be used in different circumstances – advocacy; community mobilization; Information-Education-Communication; communication through mass media; communication by socio-traditional media.

- It includes an operational plan, with 33 actions under the five major strategic axes.

- There is a budget for each action under the strategy and an implementation schedule. This allows for appropriate funding and planning to occur.

<u>Step A.4. Comprehensively and iteratively assessing development needs and climate vulnerabilities</u>

As identified by the LEG, this step requires the inputs of multiple stakeholders to determine current development projects and possible synergies with climate change adaptation measures, whilst remaining "limited in scope, depth and time frame" (LEG, 2012b, p.51). As suggested by the surveys, due to the limited nature of this stage, national workshops and group interviews may make best use of limited time and resources, whilst involving the greatest number of stakeholders and creating discussions and collaboration.

Element B: Preparatory elements

This element suggests that countries "conduct an in-depth impact, vulnerability and adaptation assessment" (LEG, 2012b, p.54).

<u>Step B.1. Analysing current climate and future climate change scenarios</u>

For the analysis of climate change scenarios and associated risks and vulnerabilities, it is important that sources of available information are utilized as to avoid the "risk of duplication" (LEG, 2012b, p.56). As interviews have suggested, important stakeholders at this stage are scientific institutions, who can provide vital information of climate change scenarios at national and local levels. However, the communication of such information should be considered carefully to ensure that it can be fully understood and used fruitfully to contribute to an analysis of risks and adaptation priorities. A valuable platform for clear information on risks and vulnerabilities is easily accessible (PreventionWeb, 2016) and a similar platform could be elaborated for NAPs.

This step also involves the communication of projected climate change information to all stakeholders and the public. It was indicated in the surveys that stakeholder consultation, for this element of the process, would be most effective through group interviews, national workshops and local-level workshops, and the LEG suggest that

it should be closely linked with the awareness raising activities highlighted in the earlier element in the process (LEG, 2012b, p. 62).

Step B.2. Assessing climate vulnerabilities and identifying adaptation options at the sector, subnational, national and other appropriate levels

In this stage there should be the identification of risks at all levels (primarily national, subnational and sectoral) and this should be used for decision analysis of vulnerabilities and adaptation options. There are a number of different methods by which vulnerabilities can be analysed but the most important factors, from a participation and communication perspective, are: that there is broad stakeholder involvement in which method is used; that the method is carried out transparently and the steps noted for later consultation; and that the results are then communicated to all stakeholders. This is similar for the further ranking of the identified vulnerabilities that should be done using a "consultative process" (LEG, 2012b, p.70). The LEG also notes that, "given the fact that this ranking will determine the priorities for action in the future, it is crucial that the ranking be the object of as broad a consensus as possible, including among the general public" (LEG, 2012b, p.70). The LEG suggests that this is conducted using a survey. The survey results in this publication show that many experts also believe that a survey is a useful method of stakeholder consultation at this stage. In addition, in order to identify and assess risks and risk perception it would be useful to use empirical models, metrics and tools from a participation perspective, on the basis of existing online platform although used for different type of risk assessment (e.g. Spotrisk).

The final phase of this step is to identify adaptation options.

Step B.3. Reviewing and appraising adaptation options

Appraising and ranking priority adaptation options will require stakeholder input to ensure that the opinions of all groups within the country are taken into account in the decision making. It should be a consultative process that includes opinions at all levels, including the public. The LEG recognizes a number of different methods for this process, that may need to be used in conjunction with one another such as

questionnaire methods, weights and indicators, cost-benefit and cost-effectiveness analysis (LEG, 2012b, pp.76-77).

Step B.4. Compiling and communicating national adaptation plans

The LEG suggests that the communication of NAPs should be a two-part process in which it is first released and time given for feedback from stakeholders before being fully disseminated across the country. The results of the interviews suggest that dissemination of plans could be done via local radio and journalists; this is coherent with the suggestions of the LEG that recommend "posters as well as radio and television messaging" (LEG, 2012b, p.81). An example of this step is the communication strategy developed by Cameroon Government on NAP realization. As explained in step A.3, since 2011 the Government set a comprehensive framework of communication strategy, strictly aimed at enhancing the adaptation policies throughout a process of spreading information and exploiting all the media available.

Step B.5. Integrating climate change adaptation into national and subnational development and sectoral planning

This step requires, in particular, the involvement of key stakeholders, such as planning and finance government ministries who will play an integrative role. The LEG recognizes all of the following stakeholders: "government actors (head of state's office, environment, finance and planning bodies, sector and sub-national bodies, political parties and parliament, national statistics office and judicial system), non-governmental actors (civil society, academia, business and industry, general public and communities, and the media) and development actors" (LEG, 2012b, p.82).

Element C: Implementation strategies

Step C.1. Prioritizing climate change adaptation in national planning

The LEG suggests that this step would be carried out by the finance or planning ministry (LEG, 2012b, p.92); this is due to the need for understanding the fiscal implications of adaptation plans and how they fit with the national strategy. It is therefore integral that these ministries have been consulted throughout so that they feel ownership of the process thus far and able to carry out the activities at this

stage. This is also identified as a priority from the interviews, as finance and planning ministries were seen as integral stakeholders to include from the outset to ensure that there is sufficient funding for the development of a communication and participation plan, as well as for implementation of the strategy. Furthermore, this stage cannot be carried out in isolation, as it involves ensuring that the implementation strategy is coherent with the national vision and development activities. In addition, from the literature review it is clear that implementation does not achieve its goals if all stakeholders are not involved from the beginning to guarantee ownership of adaptation by all stakeholders.

Step C.2. Developing a (long-term) national adaptation implementation strategy

The implementation strategy would contain many key elements and builds on the work conducted in previous stages. It is important that the strategy builds on the consultative process and uses the results in a transparent way to ensure that the views of those involved in the participatory approach are represented.

Step C.3. Enhancing capacity for planning and implementing adaptation

Enhancing capacity for adaptation involves increasing capacity of all relevant institutions at all levels. This necessarily requires that every stakeholder understands their role and the framework for the process and is able to communicate their capacity needs. Local-level workshops and surveys, as indicated by the survey results, may be used to understand their capacity gaps and how they can be addressed.

Once capacity gaps are identified, training will likely be required to address them. The interviewees stressed the importance of the participation of national training institutions that could facilitate this in the long-term.

The last phase of this step involves supporting outreach of the NAP process and lessons learnt, both internally and internationally, by ensuring public outreach and public participation that enhances knowledge on adaptation.

Step C.4. Promoting coordination and synergy at the regional level and with other multilateral environmental agreements

This step involves creating synergies at all levels. These include:

Coordination across sectors, which ensures that there is no duplication of efforts and there are win-win outcomes for all adaptation measures. In particular, "collaboration on cross cutting issues is critical to the NAP process" (NAP-GSP, 2015, p.19). This coordination could be achieved through workshops at the sector level, with key representatives brought together by a facilitator to aid mutual understanding and cooperation.

Regional cooperation can also enhance the process, whilst reducing the likelihood for cross-boarder negative externalities. For ensuring coordination across nations, national workshops would seem the most appropriate consultation method for ensuring participation of all stakeholders, as demonstrated by the survey.

Creating synergy with other multilateral environmental agreements is also an important activity at this stage and involves participation with the lead institutions of these processes to determine where the synergies lie.

Element D: Reporting, monitoring and review

Step D.1. Monitoring the NAP process

This step involves determining the metrics for the monitoring process. The LEG suggests that the country needs to decide this based on what it thinks will be "most relevant for measuring success of the overall process" (LEG, 2012b, p.106). Given that the process itself is a consultative one, it follows that this decision should also take into account the views of the various stakeholders. Therefore, it is important that there is input on: what areas should be monitored to determine success; how and what data should be gathered to inform this; and what is the availability of data. The LEG also recognizes that this stage could benefit from stakeholder input as well as from research institutions and statistical bodies.

At this stage, the results of the survey suggest that a broad range of consultation tools could be utilized with equal effectiveness: national workshops, local-level workshops, individual interviews and surveys. It is likely a combination of these methods (and different levels of stakeholders) would be used to determine which areas should be monitored and how this monitoring should be carried out although in a mutual exchange that will secure and harmonize the monitoring process.

Step D.2. Reviewing the NAP process to assess progress effectiveness and gaps

The ongoing review of the process requires gathering new information on emerging science and the results of adaptation measures already undertaken to inform how the process should proceed. Having a national scientific institution or research body to inform this process would be highly recommendable, as identified during the interviews. Furthermore, the compiling of "lessons learnt and best practices" (LEG, 2012b, p.110) from adaptation initiatives already undertaken also requires open and sustained communication with international and national organisations, along with community organisations and NGOs.

The review process also requires "adequate stakeholder participation" (LEG, 2012b, p.111) and should furthermore be communicated to all stakeholders.

Step D.3. Iteratively updating the national adaptation plans

The updating of the NAP should be conducted to coincide, where possible, with the update of other key development policies. This necessarily requires communication among government ministries to ensure that the timeline for these updates is clear. An inter-governmental task team or any other mechanisms that support communication and exchange of information between ministries will help this activity but this mechanism must be created from the beginning of the process in order to guarantee information transfer. The communication of the timeline for updating the NAP would also help UN agencies design assistance strategies.

Step D.4. Outreach on the NAP process and reporting on progress and effectiveness

This step involves communication to the international community, specifically the UNFCCC. It is extremely important as this step feedback into previous steps where synergies can be found between countries at the regional level and sharing of knowledge and best practices can lead to increased effectiveness of the process. Therefore, communication at this stage is not one-way communication, but rather involves a dialogic approach where lessons learnt can be shared and built upon.

CHAPTER 7 - CASE STUDY ETHIOPIA

INTRODUCTION

While most international focus related to climate change is on the critical issue of reducing carbon emissions through mitigation efforts, adaptation as a response to the climate change problem has gained importance in the international policy agenda (Reid and Huq, 2007).

Recognizing that Least Developed Countries (LDCs), including developing Small Island States, are among the most vulnerable to, and have the least capacity to cope with, extreme weather events and the adverse effects of climate change, National Adaptation Programmes of Action (NAPAs) were established as part of the 2001 Marrakech Accords at the 7th meeting of the Conference of Parties (COP) of the United Nations Framework Convention on Climate Change (Hardee and Mutunga, 2010). Despite this, the 2007 Bali Action Plan, an addendum to the UNFCCC, identified the need for enhanced action on adaptation (UNFCCC 2007, UNFCCC 2007a and UNFCCC, 2007b).

Currently, there is growing interest within the international community to revise NAPAs and to move beyond short-term approaches to adaptation for more comprehensive long-term adaptation action plans (Hardee and Mutunga, 2010). As stakeholder participation has been a key issue in the processes of preparing and implementing NAPAs, it is important to backstop on how various key stakeholders have been involved in the earlier submitted NAPAs, and how this could better inform the process of enhancing the existing NAPAs and/or supporting countries that are still working on the preparation and the implementation of their National Adaptation Plans (NAPs).

Therefore, this study, based on Ethiopia's case, aims to analyse: 1. how different stakeholders have been engaged and which participatory tools have been used in the processes of designing and implementing NAPA; 2. how participatory approaches and communication were used in the implementation of adaptation strategy; 3. lessons learned on participation and communication for the implementation of NAP. In addition, a comparison of how these methodologies were used in other countries (Burkina Faso, Cameroon and Central African Republic) and Ethiopia will allow for

recommendations on how to develop a participation and communication strategy for the implementation of Ethiopian NAP; these recommendations will be made available to the Ethiopian Government.

The work of the case study is organized as follows.

In chapter 1, a description of stakeholder engagement and participation in the preparation and implementation of Ethiopia's NAPA will be developed. This chapter described how and with which tools the stakeholders were involved in NAPA's process.

In chapter 2, the evolution of communication and participatory approaches in projects and programmes after the development of NAPA in Ethiopia will be described. In order to understand this evolution a description of issues related to adaptation and participatory approaches and communication that experts and studies have raised over the years on Ethiopian NAPA will be described. After these considerations, a description of the progress of adaptation strategy in the country and if the participatory approach was fostered at local level within the activities developed by institutions and Ethiopian Government after NAPA's design and implementation, will be explained taking into consideration some projects and programmes.

In chapter 3, a description of three experiences in three different countries (Burkina Faso, Cameroon and Central African Republic) on NAPA and NAP and the use of participation and communication will allow to compare these experiences with those settled in Ethiopia. The three countries were identified taking in consideration the following criteria: a) geographic position: all the three countries are in the tropical zone as Ethiopia; b) characteristic of climate change similar to those of Ethiopia (desertification, water management issues and agriculture as important element for the climate change adaptation strategy); c) policy strategy available on adaptation to compare with Ethiopian strategy. In fact, two of them (Burkina and Cameroon) have already developed their NAP and both have identified participation and communication as key elements for NAP and Central African Republic has developed its NAPA that can be compared with Ethiopian one such as one of Burkina Faso.

In chapter 4, a list of recommendations to the Ethiopian government aimed at improving communication and participatory strategy in developing its NAP

programme after the forthcoming submission to UNFCCC, further strengthening the action so far implemented will be developed.

Ethiopia is actually one of the first African countries that completed and submitted its NAPA, and reflecting on Ethiopia's experience could provide interesting lessons for other African countries but also for enhancing the implementation process of Ethiopia's NAP.

BACKGROUND ON ETHIOPIAN CLIMATE CHANGE POLICIES

Ethiopia is dealing with dramatic challenges stemming from climate change consequences and hazards such as irregular rainfall, acute droughts and floods. Since the early 1990s, Ethiopia has demonstrated a genuine commitment to fighting and tackling climate change in collaboration with the international community. In line with this, the country started its path to combat climate change on May 31 1994, ratifying the UNFCCC, followed on February 21 2005 by the signing of the Kyoto Protocol as a Non-Annex I party. Immediately after 2005, the Government promoted and implemented the Climate RESILIENT Green Economy Strategy (CRGE), which offers a new sectoral approach to defining around 60 initiatives on climate change in the country. After the CRGE, several further policies followed, including: Ethiopia's Growth and Transformation Plan (GTP), the National Adaptation Programme of Action (NAPA), the Nationally Appropriate Mitigation Actions (NAMAs), Ethiopia's Programme of Adaptation to Climate Change (EPACC), Energy Policy, Water Policy, Agricultural and Rural Development Policy Strategies (ARDPS).

This framework provided the government with the regulatory tools needed to mobilize adequate financial resources for both mitigation and adaptation actions while integrating climate change within the higher governmental institutions.

Ethiopia has considerable natural resources and its economy is considerably reliant on agricultural production, making the country highly vulnerable to climate change hazards and sensible to rainfall trends. In addition, the country is ranked among the most vulnerable to climate change in terms of low adaptive capacity (FDRE, 2011).

Ethiopia has dealt increasingly with several climate change hazards, such as rainfalls, floods and droughts. Furthermore, the variability and frequency of these dramatic climate events lead in many cases to famine episodes, directly affecting people's

livelihood. In particular, since the 1980, the country has suffered five famine episodes and many other cases of local droughts. In addition, the country also suffered intense floods in 1988, 1993, 1994, 1995, 1996 and 2006 (World Bank, 2010; FDRE, 2011; FDRE, 2011a).

Overall, climate change has a high impact on the national GDP, affecting agriculture, water and human health sectors especially. The reported baseline scenario shows a decrease of 2-6 percent in GDP by 2015 and up to 10 percent by 2045 due to impacts of climate change (FDRE, 2015, p. 193). Among the several social groups, the ones mostly exposed to climate change hazards are small farmers and pastoralist: pastoralists, for example, tend to be more vulnerable to climate change than crop producing farmers. Nevertheless, each single region has specific environmental characteristics plus different social and economic conditions, with consequent variability in terms of vulnerability. For example, the arid, semi-arid and the dry sub-humid parts of the country are affected most by drought (Kidanu, Rovin and Hardee, 2009).

In Ethiopia's Second National Communication to the United Nations Framework Convention on Climate Change (FDRE, 2015) the major adverse impacts of climate variability and change in Ethiopia are set out. These include:

i. food insecurity arising from occurrences of droughts and floods;

ii. outbreak of diseases such as malaria, dengue fever, waterborne diseases (such as cholera and dysentery) associated with floods and respiratory diseases associated with droughts;

iii. land degradation due to heavy rainfall;

iv. damage to infrastructure by floods; and

v. loss of life and property.

(FDRE, 2015, p. 193).

Finally, it is of fundamental importance to remark that the Ethiopian government considers adaptation to tackle climate change of critical importance and an "iterative process" that encompasses the preparation and the implementation of development programmes. Ethiopia's commitment is therefore proved through its national measures, policies and development plans. (FDRE, 2015).

Although committed to adaptation, Ethiopia's Second National Communication to the UNFCCC articulated that there are several obstacles to adaptation:

"i. the inadequacy of current impact assessments for some sectors;

ii. the absence of an effective overall coordination mechanism at both the federal and regional levels;

iii. the inadequacy of guidelines for the mainstreaming of climate change adaptation into the relevant policies and programmes;

iv. the inadequacy of cross-sectoral links between ministries, departments and agencies;

v. the inadequacy of linking elements such as cross-sectoral federal committees;

vi. inadequate capacity at different levels, including the absence of an institution for research and development (R & D) on climate change adaptation;

vii. the inadequacy of an environmental mechanism providing outreach to local communities;

viii. lack of awareness of the long-term environmental impacts of activities with short-term economic benefits;

ix. limited finance available for environment and climate change;

x. the low level of awareness and public literacy;

xi. the high level of poverty".

(FDRE, 2015, p. 209).

As a consequence of its specific climate characteristic and its exposure to climate hazards, Ethiopia identified and developed several meaningful initiatives that provide the country with the instruments to tackle climate change. Policies, regulatory frameworks and national guidelines constitute the breeding ground for the forthcoming policies for managing both natural and man-made hazards. Within this framework, the National Policy on Disaster Prevention and Preparedness plays a pivotal role in dealing with natural disasters. Although the valuable effort in practising a comprehensive approach, there is still room for enhancing the institutional coordination structures at both cross-ministerial level and between national and sub-national authorities.

STAKEHOLDER ENGAGEMENT AND PARTICIPATION IN THE PREPARATION AND IMPLEMENTATION OF ETHIOPIA'S NAPA

Introduction

This chapter is outlined as follows: Section 2 presents an overview of the process of preparing Ethiopia's NAPA; Section 3 analysis the stakeholder involvement; while in Section 4 we present the participatory tools used in the process.

NAPA process in Ethiopia

The process of preparing Ethiopia's NAPA was initiated and coordinated by the National Meteorological Agency (NMA). The process is motivated in part by the recognition that significant potential exists for capitalizing on existing investments, resources and action plans and activities for adapting to climate change. Overall, the process followed the annotated guidelines prepared by the LDC Expert Group (LEG), and includes four main steps, namely, (i) establishement of NAPA coordination and multidisciplinary teams, (ii) synthesis of available information, (iii) identification of priority adaptation projects, and (iv) submission of NAPA document.

The process included a range of activities, such as data collection, consultative meetings, policy/project synthesis efforts, and report preparation, intended to ensure various key stakeholder participation and to gather grass-root information and knowledge in assessing vulnerability and identifying pressing adaptation actions. These activities are outlined below:

- Setting up institutional structures, including establishment of set administrative and oversight Committees.
- Establishing multidisciplinary assessment team.
- Synthesizing available information on impacts of, and vulnerability to, climate change.
- Participatory assessment of vulnerability to current climate variability and extreme weather events based upon multidisciplary and consultative assessment of traditional knowledge of vulnerability.

- Identification of key climate change adaptation options, based, to the extent possible, on vulnerability and adaptation assessment and addressing complementarity between climate change adaptation measures and other national action plans and other initiatives, such as national action plans under the United Nations Convention to Combat Desertification, national biodiversity strategies and action plans under the Convention on Biological Diversity.

- Defining country-driven criteria for selecting priority adaptation activities to address needs arising from the adverse effects of climate change.

- Developing an adaptation project portfolio based upon agreed criteria and describing priority adaptation activities.

- Public review of NAPA draft document through national and regional workshops.

- Submission of final NAPA document to key stakeholders with a formal endorsement by government.

- Dissemination of NAPA document to public.

(FDRE, 2007)

The process involved various stakeholders and made use of several participatory and communication tools to gather local communities' knowledge in the process. In sum, the process led to the identification of thirty-seven potential adaptation projects (FDRE, 2007) in key vulnerable sectors including agriculture, water resources, human health, wildlife and forestry.

Stakeholder engagement

In compliance with the requirements of the annotated guidelines of the LDC Expert Group, the preparation of Ethiopia's NAPA engaged a wide range of stakeholders. Stakeholder participation is intended to: promote a meaningful participatory assessment of vulnerability to current climate variability and extreme events; identify areas of extreme sensitivity and where risks would increase due to climate change; and identify key adaptation interventions as well as the criteria for prioritizing, screening and ranking of the interventions to come out with a prioritized short list of priority projects. Figure 1 summarizes the different stakeholder groups

involved in the preparation of Ethiopia's NAPA. These include policy-makers (represented by sectoral ministries and relevant government agencies), academic and research institutions, local communities and vulnerable groups, NGOs, private sector, and civil society.

Governement bodies	Academic and Reasearch bodies	Business bodies	NGOs and Civil Society	Local communities
• Ministry of Agriculture • Ministry of Water • Ministry of Mines and Energy • Ministry of Health • Ministry of Economic Developement and Cooperation • National Meteorological Agency • Ethiopian Rural Energy Developement and Promotion Center • Road Transport Authority • Addis-Ababa Health Bureau • Addis-Ababa Water and Sewerage Authority • Ethiopian Wildlife Conservation Organization • Science and Technology Commission • Disaster Prevention and Preparedness Agency • Environment Protection Authority	• Ethiopian Agricultural Research Organization • Ethiopian Health and Nutrition Research Institute • Institute of Biodiversity Conservation and Research • Department of Earth Science, Addis-Ababa University • Chemical Society of Ethiopia	• Ethiopian Petroleum Enterprise (Government company)	• Christian Relief and Development Association (CRDA)	• Farmers • Pastoralists

Figure 1: Key stakeholders engaged with in Ethiopia's NAPA preparation

Regarding the engagement of policy-makers, key ministries working on the most climate-vulnerable sectors were involved through their relevant specialized departments. These include Ministry of Agriculture, Ministry of Water, Ministry of Health, Ministry of Mines and Energy, and Ministry of Economic Development and Cooperation. Other government bodies involved in the process include the National Meteorological Agency, Science and Technology Commission, Disaster Prevention and Preparedness Agency, Ethiopian Road Transport Authority, Addis-Ababa Health Bureau, and Addis-Ababa Water and Sewerage Authority.

Academic and research institutions include government research and training centres such as, Addis-Ababa University, Ethiopian Agricultural Research Organization, Ethiopian Health and Nutrition Research Institute and Institute of Biodiversity Conservation and Research. Specific activities related to climate change vulnerability were carried out within Line Ministries and Research Institutes. For example, the malaria vulnerability assessment was headed by the Health and Nutrition Research Institute; the agricultural vulnerability assessment was carried out by the Agricultural Research Institute; and the wildlife vulnerability assessment was carried out by the Ethiopian Wildlife Conservation Organization.

Local communities were represented through farmers' and pastoralists' groups. However, the level of engagement and participation the different stakeholders was variable. For instance, some processes were essentially led by government bodies and research institutions. Several key stakeholders, including the vulnerable groups (farmers, pastoralists, etc.), civil society, local communities and private sector were less represented or ignored at some steps of the process.

Besides the engagement of key concerned stakeholders, use was also made of various existing resources and other relevant existing programs and initiative at both national and international levels. This includes background studies carried out in support of Ethiopia's First National Communication, Ethiopia's National Action Plan for Combating Desertification, the National Biodiversity Strategy and Action Plan and IPCC's Third Assessment Report and other international sources.

Participatory tools

Participatory assessment is strongly advised for the process of designing and implementing NAPA. Several participatory tools can help in this process. Depending on the level of intervention and objective of the consultation, these tools include interviews, questionnaire based surveys, participatory rural appraisals (PRAs), rapid rural appraisals (RRAs), appreciative inquiries, focus groups, multidisciplinary working groups, multi criteria analysis (MCA), informal meetings, workshops, structured events, such as constituency meetings, policy dialogues and public hearings (UNITAR 2002; Bracken et al. 2015; Duraiappah et al. 2005). In case of Ethiopia, several of these participatory tools have been used in order to ensure effective stakeholder participation in the process of developing and implementing NAPA. These include the establishment of multi-disciplinary/-stakeholder coordination and working teams, participatory technical workshops, public meetings, multi-criteria analysis for decision making, appreciative inquiries, and stakeholder discussion forums.

Multi-stakeholder and multidisciplinary teams

Establishment of various multi-stakeholder and multidisciplinary teams are one of the major participatory approaches used in the preparation of Ethiopia's NAPA. This

consisted of setting up of participatory and multi-stakeholder structures, as outlined in Figure 2, which illustrates the links between the various entities involved in the NAPA process to be elaborated in the rest of this section.
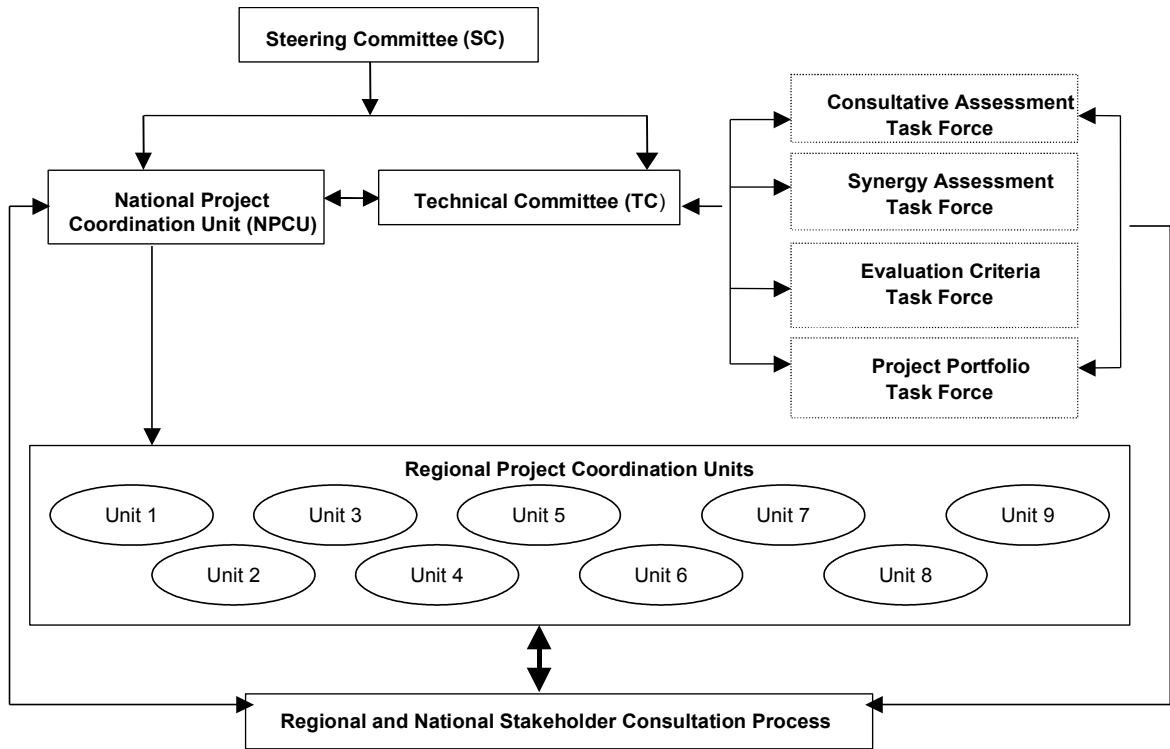
Figure 2 – Institutional structure of NAPA process in Ethiopia. Source: UNDP/GEF, 2003

Project Steering Committee (PSC)

The National Meteorological Agency, in its mandate of UNFCCC national focal point, oversaw a steering committee to provide strategic oversight and policy guidance to the processes of preparing and implementing Ethiopia's NAPA. The PSC is composed of 14 members mainly consisting of high-level representations from government and national research bodies, as follows:

- Ten members from various government institutions, including Ministry of Agriculture and Rural Development, Ministry of Water Resources, Ministry of Finance and Economic Development, National Meteorological Agency (four representations), Ethiopian Science and Technology Agency, Rural Energy Development and Promotion Center, and Disaster Prevention and Preparedness Agency.

- Three members from national/government academic and research institutions, one representation from each: Institute for Biodiversity Conservation and Research, Ethiopian Agriculture Research Institute and Addis-Ababa University.
- One member from civil society body through Christian Relief and Development Association (CRDA).

Details about the composition of PSC are provided in Annex 1. The essential mandate of PSC was to ensure that the NAPA project adequately met its stated objectives. PSC tasks included periodic meeting to review progress, address/overcome logistical barriers, and provide other strategic input. However, it is worth noting that the PSC was highly dominated and led by policy-makers and scientists. None of the most vulnerable groups including farmers, pastoralist, local communities, youth and women groups were part of the PSC. Private sector was also absent from PSC, while civil society and NGOs were marginally represented.

Project Coordination Units

The coordination and monitoring of NAPA process in Ethiopia is ensured through national and regional project coordination units. The National Project Coordination Unit (NPCU) is hosted within the National Meteorological Agency and was mandated to manage and supervise the whole process at the national and state levels and coordinate all of the NAPA activities in cooperation with the hosting agency and other relevant institutions and stakeholders. Specifically, it is tasked to (i) directly undertake certain tasks, including work plan development, liaison with the UNDP/GEF headquarters, design and coordination of the consultative process, monitoring and evaluation, and preparation of the final NAPA document; and (ii) oversee project activities, including technical report preparation by national experts and the development of the adaptation project portfolio (FDRE, 2007). The NPCU is composed of five members, mostly from the National Meteorological Agency. The full list of the National Project Coordination Unit is provided in Annex 2.

In addition, nine Regional Project Coordination Units based in regional agricultural extension offices were set in place in order to help to mobilize stakeholders in the consultative process and to assist the NPCU in coordinating the comprehensive

stakeholder consultative process and report back. Regional Coordination Units were therefore tasked to provide logistical arrangements for the consultative workshops and to draft detailed workshop summary reports of stakeholder input.

<u>Technical Committee and Task Forces</u>

Under NAPA, multidisciplinary technical working groups have been formed to assess the country's vulnerability to the adverse consequences of climate change, gauge current adaptation efforts, and identify ways in which public agencies could assist in minimizing the adverse impacts of climate change. This was undertaken through a Technical Committee (TC) set in place to coordinate all technical activities of the multidisciplinary working groups. Its mandate is to advise the PSC and Project Coordination Units on all technical matters related to the preparation of the NAPA document. Through multidisciplinary working groups and task forces, the TC is supposed to conduct data collection and analysis to draft various technical reports to be used as inputs for NAPA process.

Under TC, a multidisciplinary assessment team oversees four technical task forces: (a) a consultative assessment task force to identify priorities for adaptation project activities; (b) a synergy assessment task force to identify and assess climate change adaptation strategies and projects to include in the NAPA and other environment-based initiatives or multilateral conventions; (c) an evaluation criteria assessment task force to develop relevant criteria for prioritizing adaptation projects; and (d) a project portfolio task force to prepare a portfolio of adaptation projects. In addition, two major expert working groups were also constituted to assess the country's vulnerability to the adverse consequences of climate change, gauge current adaptation efforts, and identify ways in which public agencies could assist in minimizing the adverse impacts of climate change in key sectors such as water, agriculture, health, energy, wildlife and air pollution. However, it is important to note that these various technical groups are exclusively composed of government bodies and national research institutions. Figure 3 shows, for instance, stakeholder representation in the two expert working groups, which, apart government and research bodies, do not include other key stakeholders such as farmers, pastoralists

and civil society. The UNDP/GEF/NCSU has provided technical advice and support as needed to the technical teams.
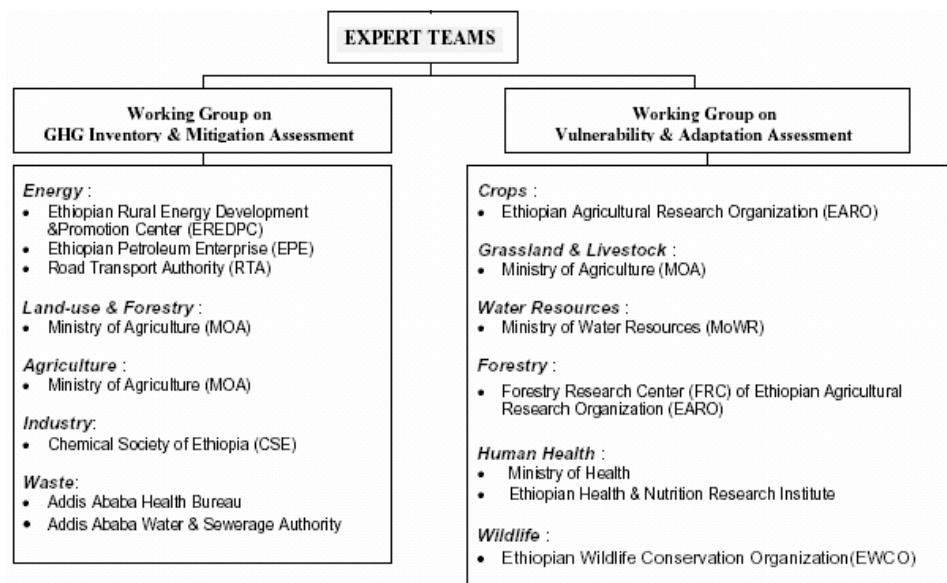
Figure 3: Stakeholders representation in Technical Vulnerability and impacts assessment working groups

Participatory workshops

The NAPA process involved awareness raising and information and knowledge sharing. The use of national and regional participatory workshops were found to be key approaches for ensuring the involvement of a wide range of stakeholders at both national and regional levels, and to gather local knowledge and inputs into the process. Participatory workshops was the technique used to assemble all the stakeholders to discuss and exchange ideas in order to inform the process of prioritization and selection of adaptation options. It was also the approach used to engage local communities and vulnerable groups, such as farmers and pastoralists in the process. The purpose of the workshops was to create awareness of climate change issues and to solicit input on vulnerability and adaptation assessments. Overall, two national and eight regional workshops were conducted, involving nearly 500 participants with various interests and areas of expertise. This resulted in a set of potential climate change adaptation options for agriculture, water resources and human health sectors. A summary of the adaptation options proposed through

stakeholder consultations workshops in at least three regions is provided in Row 1 of Table 1.

Multi-criteria analysis

One of the major objectives of NAPA is to identify and communicate to policy-makers and international institutions a list of prioritized and pressing adaptation projects that can help to effectively reduce vulnerability and to tackle the adverse effects of climate change in key sectors. In the preparation of Ethiopia's NAPA, Multi-Criteria Analysis (MCA) is the tool used to rank alternative adaptation options and projects. It first consists of identifying the potential climate change adaptation options through regional consultation workshops and technical assessments carried out by national consultants. Some potential adaptation options and projects are drawn from the Initial National Communication of the Ethiopia to the UNFCCC. The potential adaptation options identified from these different approaches are outlined in Table 1. The next step of MCA consists of identifying, scoring and weighting a range of country-driven criteria against which the potential adaptation projects are ranked and prioritized. These criteria are selected among the generic criteria as proposed by the Least Developed Countries Expert Group (UNITAR, 2002) and those generated through national and regional stakeholder consultations. The criteria have been selected in such a way that they enable choice of projects that meet the following multiple goals: (i) addressing the country's most urgent and immediate adaptation needs, (ii) ensuring the chances of acceptability and funding of the projects from Global Environmental Facility (GEF) and other donors, (iii) helping to save time, money, and effort, and (iv) improving likelihoods and contributing to poverty reduction. (FDRE, 2007, pg. 48). The process for project ranking and prioritization was first carried out by the Technical Committee through the evaluation criteria assessment task force that identified, scored and weighted the criteria based upon the findings of vulnerability and impact assessments. The outcomes of the Evaluation Criteria Assessment Study were complemented with stakeholder consultation outcomes to further rationalize the weight attached to each criterion. The PSC also endorsed the criteria proposed before the prioritization process started Table 2 summarizes the criteria used for prioritizing adaptation

projects. This Table suggests that priority is given to the activities and projects that reduce poor people's vulnerability to climate change (i.e., advantages in climate risk avoidance) followed by those with poverty reduction and cost effectiveness advantages. After ranking all of the projects using MCA, eleven projects were selected. The List of prioritized projects for each sector is shown in the Table 1 (Row 4).

Potential and prioritized adaptation projects

Proposed projects from the Initial National Communication of Ethiopia to UNFCCC	- Improving/enhancing the range land resources management practices in the pastoral areas of Ethiopia. - Stall feeding promotion and free range grazing restriction in selected regional states of Ethiopia. - Develop community seed bank and food storage facilities in Amhara, SNNPRS, Tigray, Oromia. - Promotion of on farm and homestead forestry and agroforestry practices in arid, semi-arid and dry-sub humid parts of Ethiopia. - Commercial level uses of some indigenous, wild edible fruits in selected arid and semi arid areas of Ethiopia. - Enhancing erosion control. - Improve and changing management practices and techniques such as planting date, seedling rate, fertilizer application rate, etc. - Engagement in obtaining food from other sources and income generating activities in times of crises. - Proper use of climate information for land use planning and early warning systems, etc. - Grow crops which require less water. - Selection of crops and cropping systems that maximize biomass production and therefore, CO_2 and N fixation. - Improve animal genotype and better disease parasite control to take advantage of improved management. - Use of multi purpose cattle that work and provide milk and meat and also breed to provide suitable draught animals, in addition to supplying fuel and fertilizer from their excrement.

	• Introduce mixed farming system, where appropriate.
	• De-stocking of livestock on a regular basis.
	• Promote lifestyle choices of pastoralists through access to education and local urban development.
	• Conservation and utilization of hay from natural pastures.
	• Promotion of grazing management schemes.
	• Integrated approach for pastoral development.
	• Rehabilitation of bush encroached areas.
	• Promote traditional range conservation and management systems.
	• Use of local legume forage including Acacia fruits and leaves.
	• Promotion of irrigation for agricultural development.
	• Establish community gene banks, especially for drought and diseases resistant land races.
	• Capacity building and institutional strengthening of the local community.
	• Community empowerment for improved agricultural production and natural resources conservation.
	• Restrict free range grazing and promotion of stall feeding.
	• Water resources development.
	• Control and management of Invasive Alien Species (IAS).
	• Introduction of various agro forestry systems in the existing farming systems.
	• Promotion of renewable energy sources to minimize the use of agricultural residues for house hold energy rather than using it as soil conditioner to enhance soil fertility and thereby agricultural productivity and production.
	• Conservation of agro-biodiversity resources.
	• Establishment of fodder factory .
	• Allocation of water supply through market based systems.
	• Conservation of water and use of river basin planning and coordination.
	• Flood control.
	• Combating drought.
	• Construction of reservoirs for hydropower, irrigation, water supply, flood control over and /or multipurpose uses and establishment of flood forecasting and drought monitoring system have been identified as high

	effective climate adaptation options in the Abay Basin (FNRC, 2001).
	• Improve the under ground water resources potential and management.
	• Promotion of water resources saving techniques in drought and climate change vulnerable areas.
	• Introduction of Fish Ponds; establishment, legalization and regulation of fish resource exploitation.
	• Introduction of water quality monitoring systems.
	• Building upon the existing traditional irrigation systems by the local communities/water resource users through capacity building.
	• Integrate and implement climate adaptation options in the river basin master plan studies.
	• Introduce wise use and management of wetlands to improve, among others, recharging capacity of underground water.
	• Undertake study on the possible future demand for water by considering future development plans from the rift valley lakes and establish a system to control the amount of water to be abstracted from the lakes.
	• Introduce drip irrigation system.
	• Introduction of integrated watershed management for the management of the vegetation cover and abatement of erosion and siltation of water bodies.
	• Regulation and prevention of discharged of domestic and industrial organic wastes as well as toxic chemical pollutants that cause hazards from entering into water bodies.
	• Establish and strengthen surveillance system.
	• Promote integrated vector control approach.
	• Improve ecosystem management, which are sensitive to malaria invasion.
	• Strengthening research in the health sector.
	• Educating the public about malaria and its control and encourage the use of malaria bed nets.
	• Encouraging utilization of climate and meteorological information in the planning of malaria control.
	• Developing effective malaria drugs.
	• Establish climate and health awareness, training and research programs.
	• Establish climate and health database for analysis of climate and health

	information and make available for village communities.
	• Establish early warning surveillance system program that will enable communities to adapt to potential out breaks of diseases.
	• Avail the required capacity for the realization of National Five year Strategic Plan for malaria Prevention and Control.
Proposed projects from regional workshops	• Promoting drought/crop insurance program in Ethiopia.
	• Irrigation scheme development, promotion of irrigation agriculture.
	• Feed conservation, forage development, rotation grazing and changing of the traditional feeding practices.
	• Crop diversification, promotion of crop types that offer comparative advantage (cash crops).
	• Research on stress/drought resistant and early maturing crops.
	• Improve agricultural productivity through improved inputs, adapting improved farm technologies, improved animal health service, strengthened disease and pest control mechanism.
	• Water harvesting, improved water use efficiency, spring & wells development, river diversion.
	• Water sector strategic policy development.
	• Development of a water dam on Genale-Dawa river for integrated development.
	• Improved health services & health facilities, provision of medicines, use of mosquito nets, health extension, environmental and personal hygiene & sanitation.
	• Research on the tradition coping mechanism of climatic hazards, dissemination of endogenous knowledge and encourage efficient & traditional medication.
	• Improved early warning system.
	• Proper utilization of meteorological information at all levels.
	• Integrated watershed management and practices.
	• Improve access to potable water and water harvesting.
	• Forestry, agro-forestry, participatory forest management, strengthen natural resources conservation and management practices.
	• Awareness creation, educating people, investors and policy makers on climate change at all levels.

	• Capacity building at all levels.
	• Diversify income generating activities, improve market access infrastructure and socio-economic environment.
	• Proper land use policy, resettlement.
	• Improve inter-institutional linkages, NMA, research and other development partners; capacity building; planning applicable policies and strategies.
	• Awareness creation, educating people, investors and policy makers on climate change at all levels.
	• Family planning (mainstreaming into agriculture sector).
Proposed projects from synergies assessment	• Propagation and commercial scale cultivation of wild essential oil crops.
	• Range shift cultivation of selected cash crops in drought prone areas.
	• Reforestation for fuel in the highlands of ethiopia.
	• Reclamation of bush encroached rangelands.
	• Establishment of potato-centered small-sized cottages.
	• Promotion of legume-based agroforestry systems and home-garden agriculture.
	• Aquaculture development for efficient harvest of commercial Spirulina species in the lakes of the Ethiopian rift valley system.
	• Development of new and rehabilitation (upgrading) of the existing watering sites in pastoral areas.
	• Establishment of centre for propagation and commercialization of traditional herbal medicinal plants.
	• Reorganization of drought affected communities community based rehabilitation of degraded eco-systems in selected parts of Ethiopia.
	• Community based carbon sequestration project in the rift valley system of Ethiopia.
	• Establishment of acacia woodland nature reserve in the Ethiopian rift valley system.
	• Development of an incentive scheme for farmers (hill-farming communities) to reforest hill areas in the northern parts of Ethiopia.
	• Institutional re enforcement for bio-diversity conservation.
	• Community based development and commercialization of non-timber forest products (gum arabic, myrrah and frank incense).

	• Establishment of national R&D center for climate change.
	• Participatory approach to rehabilitate degraded hills/ecosystem in northern Ethiopia.
	• Establishment of national environmental education program.
	• Regional capacity building for monitoring and inventorying of biodiversity.
Priority Adaptation Activities/Projects	• Promoting drought/crop insurance program in Ethiopia.
	• Strengthening/enhancing drought and flood early warning systems in Ethiopia.
	• Development of small scale irrigation and water harvesting schemes in arid, semi-arid, and dry sub-humid areas of Ethiopia.
	• Improving/enhancing the rangeland resources management practices in the pastoral areas of Ethiopia.
	• Community based sustainable utilization and management of wet lands in selected parts of Ethiopia.
	• Capacity building needs for climate change adaptation in Ethiopia.
	• Realizing food security through multi-purpose large scale water development project in Genale–Dawa Basin.
	• Community based carbon sequestration in the rift valley system of Ethiopia.
	• Establishment of national climate research center.
	• Strengthening malaria containment programs in selected areas of Ethiopia.
	• Promotion of on farm and homestead forestry and agro-forestry in arid, semi-arid and dry sub humid parts of Ethiopia.

Table 1: Potential and prioritized adaptation projects

Summary of the criteria used for prioritizing adaptation projects.

Criteria	Weights
Level of Climate Change Risk (Loss Avoided by Poor People)	0.30
Poverty reduction potential (Impact on poor peoples' Income Growth)	0.20
Cost effectiveness	0.20
Complementarities with national and sectoral plans, policies and strategies, and other MEAs	0.15
Synergy with national plans including action plans under MEAs	0.15

Table 2: Summary of the criteria used for prioritizing adaptation projects.

Source: FDRE, 2007

Stakeholder discussion forums

Stakeholders' forums have been organized as part of the project, "Food and Water Security under Global Change: Developing Adaptive Capacity with a Focus on Rural Africa". The forums were organized as complementary to the national and regional stakeholder workshops to create greater awareness of climate change, assess the extent of the area's vulnerability, and help identify adaptation options (Deressa et al. 2008). In this regard, three stakeholder discussion forums were held in 2006 in Addis Ababa, Awassa, and Bahir Dar, and involved a wide stakeholder participation including representatives of the government, civil society, business sector and local communities. The forums explored stakeholders' perceptions of vulnerability to climate change and considered ways in which adaptation measures could be further integrated into Ethiopia's development process. These forums solicit local communities' (including farmers and pastoralists) inputs and knowledge into climate change vulnerability and impact assessments, and therefore to elicit information to enable policymakers to make more informed decisions related to climate change adaptation.

Complementary approach

During the development of the Ethiopia's NAPA, consideration was given to ensure that the identified adaptation measures took into account existing national planning and development programs, as well as all existing multilateral agreements on environment and natural resources. The process is supposed to build upon and to explore potential synergic actions with the existing plans and programmes, including national action plans under the United Nations Convention to Combat Desertification, national biodiversity strategies and

action plans under the Convention on Biological Diversity, and national sectoral and development policies. In this regard, the Synergy Assessment Task Force carried out an assessment of the potential synergic projects among the planned activities and projects in framework of existing action plans and the multi-lateral environmental agreements and that can be incorporated in NAPA. This is achieved through the involvement of key members representing the agencies responsible for development and planning as well as through the review and synthesis of existing strategies and development plans in different sectors (such as water, agriculture, health, biodiversity, desertification, poverty reduction strategies, etc.). Synergies assessment led to the identification of a set of potential projects that can meet multiple development goals as required by UNFCCC's annotated guide on NAPA process. A list of identified potential synergic projects that NAPA could build on is presented in Table 1 (Row 2).

Communication approach

The main communication approach used in the process of designing Ethiopia's NAPA was public and stakeholder awareness through national and regional consultation workshops. These awareness and consultation workshops were organized towards the end of the process, and were conducted in both English and national languages. As consultation workshops are the main stakeholder participation tool used in the process, several key stakeholders, including vulnerable groups (farmers and pastoralist) as well as the public were only informed and involved at the end of the process. It is important to note that the preparation of Ethiopia's NAPA was strongly led by higher-government members and technical experts from public research institutions, with less involvement of grassroots and local communities. As a result, consultation workshops resembled political and/or expert meetings rather than a real opportunity to involve grassroots people and gather local knowledge into the process. Most of local communities, farmers, pastoralist and civil society organizations were informed and asked to provide inputs and comments at the final stage of the consultation workshops. Organizing public and stakeholder awareness activities through consultation or insertion workshops at the onset of the process would have been very helpful in explaining the process, raising awareness and receiving feedback from various stakeholders on how better to conduct the process and to ensure an effective participation of each stakeholder. In addition to the national consultations, further awareness raising

initiatives such as radio and TV programs, video, etc. would have also been very useful for mass and large public awareness. Such initiatives have been adopted with success in other contexts (eg., Kiribati island) (Kuruppu and Liverman 2011).

The final outcome of NAPA was a synthesis document that informs policy-makers and other key stakeholders of the nature and magnitude of climate change vulnerability and suggests the most relevant and pressing adaptation actions and projects to be undertaken in order to address the adverse impacts of climate change in various sectors. As a public and policy document, earlier drafts of NAPA were submitted to technical and public reviews. The technical review was carried out by two experts from National Meteorological Agency, while the public review was conducted using public workshops. The final draft was presented and discussed during a national public workshop. The document was improved by incorporating comments and suggestions made during the national workshop. The SC reviewed and approved the final NAPA document. The NAPA document was officially approved and signed by the Minister of Water Resources. The final NAPA document was distributed publicly via electronic and print media, and was also shared with key concerned stakeholders, including international organizations. The endorsed NAPA document was submitted to UNDP/GEF.

Discussion

NAPA is a key policy document that outlines the major climate risks and constraints facing a country along with the pressing adaptation actions to be undertaken in order to address the negative impacts of climate change on livelihoods and in key sectors. Given the local dimension of climate vulnerability and adaptation processes (Kpadonou, 2012), the process of preparing and implementing NAPA is assumed to strongly engage various stakeholders using multi-stakeholder and participatory tools that allow vulnerable groups to understand and assess the nature of the risks they are facing, the way these risks occur and to develop pathways to cope with regards to their needs and interests.

The process of designing Ethiopia's NAPA was outlined in the Project Document submitted to UNDP/GEF for funding for the preparation of a NAPA in Ethiopia (UNDP/GEF, 2003). As suggested in NAPA technical guide (UNITAR, 2002), the Project Document emphasizes the involvement of the different stakeholders throughout the process. However, although the preparation of Ethiopia's NAPA ensured wide stakeholder participation, significant differences can be noticed between the actual adopted process in designing NAPA and the

what is suggested in the Project Document that is supposed to serve as guide for the process.

Overall the process of preparing Ethiopia's NAPA was strongly led and influenced by governmental agencies and public research institutions under control of the Government. NAPA's Project Document as well as the technical UNFCCC annotated guide suggested a broad and bottom-up constituent representation including representatives from governmental agencies, civil society groups (e.g., farmer unions, environmental NGOs, etc.), business groups (e.g., local chambers of commerce, banks, small to medium sized enterprises), academic and professional organizations, private citizens (youth and women organizations), local communities (e.g., herders, carpenters, crop cultivators), political and traditional leaders, other groups. In the case of Ethiopia's NAPA, stakeholder analysis indicates that several key actors, namely private sector and banks, civil society and certain vulnerable groups such as farmers, pastoralists, and youth and women organizations have been neglected in the process at the expense of policy-makers and national research institutions.

Several structures were put in place to conduct the process of preparation and implementation of Ethiopia's NAPA. One of these major structures was the PSC which is mandated to provide oversight on the whole process. To be representative, the PSC should follow a bottom-up approach and comprise members from different stakeholders, including policy-makers, academics and researchers, civil society, local NGOs, farmers and other relevant groups. According to the Project Document, the PSC should composed of nine members, consisting of high-level representation from key stakeholder organizations, as follows: five members from government bodies including ministries of agriculture, public health, water resources, and finance and economic development; and four members from non-governmental organizations (conservation, relief, rural development, and/or farmer/trade union activities). But, in practice the established PSC was top-down and comprised 14 members essentially dominated by government representative (10) and public research and academic institutions (3). Only one NGO was included as representative of civil society. All other key stakeholders including farmers and pastoralist groups, business groups, religious and traditional leaders, etc. were not part of the PSC. As the PSC is a decisional structure and is mandated to provide an oversight on the overall process, such a composition could not provide opportunities to the vulnerable groups to influence the

process, and to ensure that their needs and interests are taken into account at earlier steps. From the perspective of sustaining the process through the mobilization of domestic resources, the engagement of private sector and business groups, including banks, as part of the PSC and throughout the process could contribute to enhance their awareness about the process and increase domestic fundraising.

Among the government representatives, some key sectors such as Ministry of health were not part of the PSC, as required in the Project Document of Ethiopia's NAPA. Also, while powers of the key Line Ministries may be directly comparable to each other, their influence in climate change activities, and particularly regarding vulnerability, was variable. In general, the Line Ministries of Agriculture and Finance and Economic Development exerted the strongest influence in the identification of options and formulation of the initial climate change action plan. This was due to the recognition that climate change-related impacts would disproportionately affect those sectors.

Stakeholder representation in other NAPA structures, including Technical Committee and Task Forces and Project Management Units was also unbalanced in favour of government and public research bodies. As outlined in the NAPA's technical guide of UNFCC (UNITAR, 2002), the composition of the NAPA multidisciplinary technical teams should be based on a bottom-up approach that integrates grassroots participation and indigenous knowledge, thereby increasing the local relevance of suggested interventions. This implies an early and broad-based involvement of stakeholders, including local communities who often disproportionately bear the brunt of climate change impacts and are best placed to discuss immediate and urgent needs and coping strategies and potential project interventions. This could provide more options and solutions to address the barriers to the adoption of NAPA actions and their implementation in the way that meets the interests and needs of most vulnerable groups and local communities and contributes to address the issues of food security, poverty and other multiple goals. But as mentioned in section 4, various technical and task forces established in the process of preparing Ethiopia's NAPA were essentially composed of government and research institutions. Even though academic work and information should not be underestimated in the process of designing NAPA, local communities hold a rich and valuable knowledge and information about how our nature and environment has been, and will continue to be, changed (Reed, 2008).

Regarding stakeholder participation, the level of the participation depends on the types of the participatory tools and envisaged objectives. In the framework of preparing NAPA, a high level of stakeholder participation is advised. While many of the tools and methods can be used to foster grassroots participation and capture indigenous knowledge on climate change adaptation, the best methods for rural areas fall within rapid participatory development, action research, and social transformation including PRA, RRA and appreciative inquiry (UNITAR, 2002). These are quick and systematic methods of gathering information about a specific community, and can be used to facilitate community self-assessment and prioritization of major climate-related problems, identify available resources and knowledge to tackle the problems, gaps in information, and a list of interventions to implement at community level. The stakeholder participation approach used in the case of Ethiopia's NAPA was consultation workshops, which can be qualified, according to Bracken et al. (2015), as passive involvement. But, according to (Reed, 2008), stakeholder participation goes beyond information and consultation, and should consider each stakeholder as a key actor holding the capacity to positively or negatively influence the preparation and the implementation of the envisaged action. In the preparation of Ethiopia's NAPA, several key stakeholders were only involved at final stage of the process through national and regional consultations, and also in small numbers. This may have limited the degree of involvement of these key stakeholders in the process, who could not effectively influence the process as not represented in the major decisional structures such as Steering Committee, Coordination team, Technical Committee and major Task Forces. Also, earlier studies aiming to assemble the available information on climate vulnerability and impacts were essentially conducted by researchers without involvement of local communities, whose inputs were gathered only through consultation workshops.

It also important to note that NAPA process did not follow the multi-stage consultation workshop approach suggested in the NAPA's Project Document. According to NAPA's Project Document, stakeholder consultative assessment should unfold over several stages in the form of a series of workshops and/or public meetings at each step of the process. A 5-stage stakeholder consultation process including 27 regional workshops (three workshops per region), four national workshops and one public workshop, as illustrated in Figure 3, was suggested. These consultative stages were supposed to seek to (i) "ground truth" of the vulnerability synthesis report and Synergy Assessment Task Force multidisciplinary

assessment report, (ii) refine key vulnerable geographic areas, sectors, and communities, (iii) clarify adaptation criteria and priorities, (iv) identify, prioritize, and select adaptation projects, and (v) build awareness. In practice, one two-day workshop was conducted per regions and this is not sufficient to gather stakeholder inputs and local knowledge for all five above mentioned steps of the NAPA preparation process. As consultation workshops are the major participatory approach through which farmers, pastoralist, local communities and other non-governmental and non-research stakeholders have been involved in the process, this could lead to underrepresentation of local communities and other key stakeholders' inputs in the process. The lack of financial resources and time, reported by (Osman-Elasha and Downing 2007) as one the major constraints faced during the preparation of NAPAs, especially in large African countries like Sudan and Ethiopia, may be one of the major reasons for the non-adoption of the 5-stage stakeholder consultation process suggested in Project Document of NAPA.

This under representation of local communities and vulnerable groups in the major NAPA structures undermines the relevance and adequateness of the proposed NAPA activities in regards to the needs and interests of the local communities and vulnerable groups who are most affected by the adverse effects of climate change. Nevertheless, as there are no alternative studies indicating NAPA process would have benefited from an early and broad-based involvement of stakeholders, one cannot make strong assertions about the shortcomings associated with the non-engagement of all the stakeholders. Nevertheless, a study conducted by World Bank (World Bank, 2010a) with a great focus on local communities' involvement, revealed that the proposed adaptation actions in Ethiopia's NAPA document address macro-level priorities and actions, in such areas as agriculture and water resources management, land management, roads, and early warning systems, but are not targeted towards specific communities needs and preferences at local-levels. This is a concern, particularly in the context of Ethiopia, which is characterized by a high agro-ecological, climate and ethnic diversities. The study also revealed local stakeholder preferences for investments in governance, social protection, training and education, urban planning, market development, conflict resolution and peace building (especially in the lowland pastoral areas), controlled population growth and land tenure that are not present in the NAPA document. However, the priority adaptation actions vary according to the regions and the levels of the analysis (household, village, community, etc.). In some cases,

controlled population growth in relation to pressure on natural resources access is emphasized, while conflict resolution and peace building are listed as priorities in other contexts (especially in the lowland pastoral areas). The study concluded therefore that the correct procedure is to build the national adaptation strategies on the basis of the diverse local level experiences and needs in dealing with climate change and long-term development needs.

Moreover, it is important to note that, apart from the Initial National Communication of Ethiopia to UNFCC, most of the data and existing resources used for sectoral vulnerability assessment were not carried out in the framework of NAPA. As a result, one should not expect these documents to meet the requirements of NAPA process, including with regard to stakeholder involvement and participatory tools recommended in NAPA's Project Documents as well as in the UNFCC technical guide. From the perspective of improving or revising NAPAs in African countries, it is important to complement available information and data by specific rapid vulnerability and adaptation assessments in consultation with key stakeholders and experts, in order to ensure that the needs and interest of each actor is taken into account, and to identify what indigenous adaptation knowledge might be tapped, and the sectors, interests and regions that different stakeholders represent.

Analysis of the prioritized adaptation projects indicates that agricultural projects dominate. This may be due to the recognition that climate change will disproportionately affect the agricultural sector. Nonetheless it can also be explained by the strong influence of the Line Ministries of Agriculture in the identification of options and formulation of the initial climate change action plan. Hardee and Mutunga (2010) note that Ethiopia's NAPA is one the rare African NAPAs that identified high population growth as one of the causes or exacerbating factors of vulnerability to climate change, and highlighted mainstreaming of family planning into agriculture as one of the potential cross-sectoral adaptation options. However, there is no component of reproductive health/family planning in any of the proposed priority agricultural projects. This may be related to the lack of involvement of local communities in the process. Actually, the need to include population growth control as part of adaptation actions has been emphasized in a more local communities-focused study conducted by World Bank (World Bank 2010a). NAPA may also identify such adaptation actions if strong focus was given to local communities' engagement in the process.

Conclusions

In response to the urgent need to address the impacts of climatic changes in the most vulnerable sectors and on local communities' livelihoods, Ethiopia ratified both the UNFCCC and Kyoto protocol. This led to the preparation of the NAPA document for Ethiopia as a component of Ethiopia's commitment to develop and implement climate change adaptation programs. The NAPA aimed at identifying urgent adaptation activities that address current and anticipated adverse effects of climate change and building on synergies with other relevant environmental and development programs. To respond to needs and interests of local communities and various stakeholders NAPA process was supposed to promote strong stakeholder engagement and participation throughout the process. In this chapter, we analysed how stakeholders have been involved and contributed in the process of preparing and implementing NAPA process in Ethiopia.

The process of preparation and implementation of Ethiopia's NAPA has been strongly led by higher-government members and technical experts from public research institutions, with less involvement of grassroots and local communities. Most of local communities, farmers, pastoralists and civil society organizations were informed and asked to provide inputs and comments at the final stage, during the consultation workshops.

The NAPA document identified eleven adaptation priority actions. Nevertheless, the appropriateness and relevance of these adaptation priority actions are questionable given the scant focus that was given to the involvement and participation of local communities and vulnerable groups during the process. As Ethiopia, like other developing countries, is now moving towards National Adaptation Plans (NAPs), this document provides several insights to ensure strong stakeholder participation in this new process in order to ensure the sustainability and communities oriented of the proposed adaptation actions.

Flow Chart of Consultative Process

Region 1 meeting	Region 2 meeting	Region 3 meeting	Region 4 meeting	Region 5 meeting	Region 6 meeting	Region 7 meeting	Region 8 meeting	Region 9 meeting	National meeting

Stage 3

Workshops

Consultation synthesis, report preparation, organization of Stage 4 workshop

National meeting

Stage 4

Workshop

Consult synthesis, NAPA report preparation, organization of Stage 4 workshop

Public meeting

Stage 5

Workshop

Figure 4: Flow Chart of Consultative Process

Annexes

Annex 1: Project Steering Committee (PSC) and their role

No	Name	Role in the PSC	Institution
1	Mr. Tesfaye Haile/	Chairman	National Meteorological Services Agency (NMSA)
	Mr. Demlew Aweke		Ministry of Water Resources (MoWR)
2	Dr. Tetemke Mehari	Member	Addis Ababa University (AAU)
3	Mr. Tequame T/Mariyam	Member	Environmental Protection Authority (EPA)
4	Mr. Asress W/Giorgis	Member	Ministry of Mines and Energy (MoME)
5	Mr. Million Bekele	Member	Ministry of Agriculture (MoA)
6	Mr. Hailemariyam Hailu	Member	Ministry of Economic Development and Cooperation (MEDaC)
7	Mr. Abebe Mekuriaw	Member	Ethiopian Science and Technology Commission (ESTC)
8	Dr. Kidane Georgis	Member	Ethiopian Agricultural Research Organization (EARO)
9	Mr. Mitiku Abebe	Member	Christian Relief and Development Association (CRDA)
10	Mr. Abebe Tadege	Secretary	NMSA

Source: FDRE, 2007

Annex 2: Project Management Team

No	Name	Role in the PSC
1	Mr. Tesfaye Haile/ Ato Demlew Aweke	National Project Coordinator
2	Mr. Abebe Tadege	Project Manager
3	Mr. Yohannes G.Eyesus	Technical Coordinator

4	Mr. Ademe Mekonnen	Project Meteorologist
5	Mr. Bedada Balcha	Project Economist
6	Mr. Habtu G.Yohannes	Project Data Organizer
7	Mr. Assefa Jeza	Project Accountant
8	Mrs. Almaz Shiferaw	Project Secretary

Source: FDRE, 2007

PARTICIPATORY APPROACHES IN PROJECTS AND PROGRAMMES AFTER THE DEVELOPMENT OF NAPA IN ETHIOPIA

Introduction

Having illustrated in the previous chapter the communication and participatory approaches used in designing and implementing Ethiopian NAPA, the analysis will now focus on the use of participatory approaches in projects and programmes after the development of NAPA in Ethiopia. In investigating this specific segment, the chapter will answer two main questions utilizing comparative and systematic literature review methodology.

Firstly, some considerations for discussion will be described. This will help to understand the issues related to adaptation and participatory approaches and communication that experts and studies have raised over the years.

Secondly, after elaborating further NAPA's background conditions and preparation, it must be investigated the evolution of adaptation strategy in the country and if the participatory approach was fostered at the local level within the activities developed by institutions and Ethiopian Government after NAPA's design and implementation, taking into consideration some projects and programmes.

Preparing National Adaptation Programmes of Action: further considerations

Participatory Approach in Preparing National Adaptation Plan of Action

As illustrated in the previous chapter, the rationale behind the NAPAs is to aid LDCs in identifying and implementing adaptation projects and activities that respond to their most urgent requirements against climate change and variability. The NAPA is

coordinated by a national team and is supported by a steering and or technical committee, working parties and in some cases by sub-national units (FDRE, 2007). The related tasks are distributed at different level of the organization with the supervision of the national team. Understanding the organizational structure to designing NAPA in Ethiopia is therefore fundamental in order to focus on the segment in which the participatory approach is embedded. NAPA's track can be divided into five main steps: establishing NAPA organization, compiling baseline vulnerability, consulting stakeholders and identifying projects, preparing profiles for priority projects, and finally submitting the NAPA document (Osman-Elasha and Dowing, 2007, p.6). This framework must be kept in mind when assessing communication and participatory approaches.

Consulting stakeholders and identifying projects require the organization of public consultations, both at national and local levels, with the aim of identifying complex project ideas and areas of intervention. To this end, it is reported that all the teams fostered NAPA guiding principles in drafting the programme. Osman-Elasha and Downing (2007) note that "a participatory process that involves a multi-stakeholder consultation, and two-way discussions and feedback" (p.7) was performed in all of the countries assessed, including Ethiopia. Nonetheless, Osman-Elasha and Downing recognize that, along with strengths, several weaknesses and constraints; these were gathered through interviews and questionnaires with the aim of turning the spotlight back onto opportunities and prospects.

The methodology for developing adaptation projects deeply relies on the selection of members for the team. The interaction between multidisciplinary members of the national team and technical experts was supplemented by a Rapid Participatory Assessment (RPA) procedure in order to define vulnerability and focus strategies (Osman-Elasha and Downing, 2007, p.18). In addition, igniting awareness with public consultation was considered a further tool to address the most significant issues and achieve a community-driven NAPA formulation process. In the light of the compared experiences, including those in Ethiopia, workshops at both national and local level, have been recognized as key tools and a valuable catalyst in raising awareness among local stakeholders and communities: "Second to the national workshops was

the use of local-level workshops, used as platforms for discussion and exchange of ideas among local stakeholders" (Osman-Elasha and Downing, 2007, p.20).

As discussed above, Osman-Elasha and Downing conducted interviews to stakeholders in order to gather data and assess key success factors and constraints in designing NAPA's strategy. Among the success factors, emphasis on participatory processes comes first, underlying its importance and that perception that it is an essential tool in bolstering NAPA's rationale.

By contrast, the constraints included lack of communication means and strategy, with difficulties in the exchange of information between central offices and states (Osman-Elasha and Dowing, 2007, p.22). Furthermore, lack of technical capacities and inadequacy of financial resources and time was found to be a considerable obstacle in designing NAPA, especially in Ethiopia (Osman-Elasha and Dowing, 2007, p.22).

Neither NAPA's development, nor its implementation, is an end product but a process. As a process, it implies raising awareness, inclusion of the climate change strategy on the governmental agenda, and a within-country driven approach. This cannot occur without the use of participatory approaches.

In order to design a sound and effective NAPA, consultations and continuous dialogue are required, both vertically and horizontally. Therefore, it entails communication among stakeholders at central and peripheral levels, using workshops, dissemination of information and raising awareness. As such, a participatory approach is considered as a crucial step in the early NAPA formulation process and, as a consequence, in its implementation. However, as maintained in the previous chapter, the NAPA's stakeholder analysis indicated that in preparing Ethiopia's NAPA, many stakeholders, including private sector, banks, civil society and certain vulnerable groups, have been neglected in the process. In particular, it has been reported that several local stakeholders have been involved only in the final stages of the process, leading to the underrepresentation inadequacy.

<u>The National Adaptation Programmes of Action in Ethiopia: the risk of maladaptation</u>**.**

Africa is the most vulnerable continent (Conway and Schipper, 2011, p. 227) to anthropogenic climate change hazards and Ethiopia is considered the first example of African country exposed to these risks. Furthermore, in 2015 Ethiopia faced the worst drought the country has seen in 50 years, akin to the extreme drought which hit the country in 1984 (Jeffrey, 2016). Thus, there is evidence that Ethiopia is highly vulnerable and exposed to future climate change consequences (Conway and Schipper, 2011, p. 227). It is of strategic importance to investigate the relationship between climate change and development within the Ethiopian region. Moreover, a further analysis effort is required in order to split, when possible, the economic impact from the social impact of climate change, although they are very cross-cutting areas. This means that the climate change issue has a double development impact in Ethiopia, where socio-economic droughts spread independently from the meteorological drought (Smakhtin and Schipper, 2008, p. 138).

Conway and Schipper warn about the risk of maladaptation (2011, p.228) stemming from an intervention that inadvertently increases vulnerability or decreases adaptive capacity due to wrong or outdated strategies against climate change. It is thought that in developing and implementing NAPAs, great attention should be paid to the risk of maladaptation. As a consequence, it is necessary to assess previous experiences and strategies in response to climate change, in line with current and future climate change needs (Conway and Schipper, 2011).

At the foundation of NAPA's formulation and implementation in Ethiopia there is the Productive Safety NET Programme (PSNP), thought of as an instrument to cope with not only emergencies but also to establish the new asset building (Conway and Schipper, 2011, p.228). PSNP was launched in 2005 as the main tool to ensure a food security framework. In 2007 more than 8.3 million people in Ethiopia received assistance through PSNP either in cash or food payments for participation in public work projects.

It is worth mentioning that there are two main issues with NAPA programmes, such as PSNP, at internal and external levels. Internally, there are conflicts among national institutions concerning the leadership and management of climate change programmes. Externally, the donors can find it difficult to identify the direct subject to direct funds (Conway and Schipper, 2011, p. 232). However, overall NAPA's funding preparation is assessed as valuable (Conway and Schipper, 2011, p. 232), since it is centred on climate change, with the Meteorological Service Agency as the first Ethiopian Institution in charge of leading the climate change strategy.

Beyond the maladaptation risk, Conway and Schipper (2011) identify three key issues which constitute a baseline for integrating climate change and development. Firstly, it is necessary to work within the framework of existing goals. Secondly, understanding vulnerability reduction should be a starting point. Thirdly, recognizing the importance of communication across sectors. The communication domain has two main dimensions: vertical and horizontal. Vertically, the dynamic involves stakeholders at different levels, from the top to the bottom, from the International Organization to the local level communities, passing through the governmental and regional level. Horizontally, the dynamic involves communication within governmental agencies, ministries, etc. at the highest level, groups and families, interacting within a local net, at the lowest hierarchical level.

National Adaptation Programmes of Action: Considerations on Implementation and outcomes

It was illustrated that a participatory approach was concretely developed at the local level within the preparation of NAPA framework, with partial success. Furthermore, it was maintained that the participatory approach acted as a valuable catalyst in developing NAPA in Ethiopia. To assess participation in Africa, the CGIAR's Climate Change and Food Security research programme (CCAFS), held three workshops in three key regions (in East and West Africa). The CCAFS report highlights the role that should be played by local stakeholders, which is labelled as critical (Kissinger et al., 2013, p.6). However, several constraints regarding local stakeholders participation and engagement within NAPA's implementation arose. In other words, NAPA's implementation process lacks an adequate net of participatory approaches:

Measured constraints (Kissinger et al., 2013, p.6) :

- Low access to information.

- Low coordination, particularly at regional/local levels, low participation of farmers.

- Low participation of the private sector and media.

- Lack of awareness outside the immediate climate change policy circles in government (in East Africa and West Africa).

- Need to build capacity of stakeholders to address adaptation issues.

Box 1. Constraints regarding local stakeholders' participation and engagement within NAPA's implementation

In order to successfully overcome such gaps for NAPs, CCAFS identifies six practices stemming from NAPA's implementation assessment: enhancing the capacity to project climate risk; paying attention to downward accountability and institutions; long-term financial and funding solutions; bring adaptation assessment and policy development domains together; orientate funding towards national budgets in order to guarantee a greater political support and implementation; assess stakeholder participation and quality of engagement (Kissinger et al., 2013, p.6-7). Both constraints and recommendations observed within NAPAs in East and West Africa relate to risk assessment and ranking evaluation, adaptation strategy design, implementation and funding evaluation, stakeholder engagement and capacity building. As mentioned above, stakeholders' engagement remains critical in order to achieve successful development of NAPA and NAP. It is affirmed that reviewed LDCs consider stakeholder participation as an essential feature in their own adaptation planning activity. More precisely, survey results developed by CCAFS indicate that NAPA has been perceived as a participatory process: "Stakeholders responses on Ethiopia, Tanzania and Uganda's NAPA processes: 79% viewed the NAPA preparation process as participatory, while 21% felt it was not. Reasons given: too much focus on meteorological agencies in Ethiopia, and non-representation of smallholder farmers in Tanzania" (Kissinger et al., 2013, p. 29). Ethiopia interviews show that a disproportionate role was performed by meteorological agencies. This conclusion is strictly linked with the above illustrated risk of maladaptation (Smakthin and

Schipper, 2008), where climate change hazards and development issues overlap and, moreover, competition among national Ethiopian institutions is ignited.

However, Ethiopia has since recognised this issue and the coordination of climate change activities was moved from the National Meteorological Agency to the office of the Prime Minister (Kissinger et al., 2013, p. 20). It is worth mentioning once more that not only the stakeholders' engagement step in designing NAPA, but also the capacity building step in implementing NAPA requires, or might require, a participatory approach. Among the capacity building inadequacies in Ethiopia there is a lack of strong coordination mechanisms to maximize benefits from ongoing and planned activities, lack of effective outreach to communities, and limited internal capacity to finance the projects (Orindi and King'uyu, 2013). In conclusion, the CCAFS report highlights that inefficiencies emerged in stakeholder engagement and capacity building steps, which may lead to a reduction in participatory approaches and practices.

Evolution of Adaptation Strategy in the Country

Ethiopia's Programme of Adaptation to Climate Change: Experiences and Lessons Learnt.

Ethiopia's Programme of Adaptation on Climate Change (EPACC) renovates and replaces Ethiopia's National Adaptation Programme of Action (NAPA) which was submitted in 2007 (The REDD Desk, 2016). EPACC is a programme of action centered on the pillar of climate-resilient Green Economy through support for adaptation at the sectoral, regional, and community levels. It was initiated by the government to update the NAPA with a more participatory approach at the grassroots level, implementing a top-down and bottom up strategy, encompassing districts' institutions, local stakeholders and communities (The REDD Desk, 2016).

This programme links climate change adaptation strongly with the economic and physical survival of the country and identifies key climate change adaptation measures, strategic priorities, and intervention areas to address the adverse effects of climate change (FDRE, 2011b). The main objective of EPACC is to create the foundation for a carbon-neutral and climate-resilient path towards sustainable development in the country (FDRE, 2011b). The programme states that the residents

and farmers at the local and district levels will implement most of the solutions to climate change, thus the role of the federal institutions will be to initiate, facilitate, and monitor activities with the exception of some cases that need the intervention of the concerned federal organs (FDRE, 2011b).

The programme identifies 20 climate change risks and the institutions responsible for countering and mitigating each of them. The climate risks identified are broadly in the areas of human, animal and crop diseases, land degradation, loss of biodiversity, decline in agricultural production, dwindling water supply, social inequality, urban waste accumulation, and displacement due to environmental stress and insecurity. It identifies adaptation strategies and options in the various socioeconomic sectors, including cloud seeding, crop and livestock insurance mechanisms, grain storage, societal reorganization, renewable energy, gender equality, factoring disability, climate change adaptation education, capacity-building, research and development, enhancing institutional capacity, and building political momentum (FDRE, 2011b). The work programme adequately captures the growing threat of climate change in Ethiopia, and clearly spells out the need to mainstream climate change in all spheres of development policymaking and planning at all phases and stages in the implementation process. The programme clearly states the urgency of taking practical adaptation and mitigation actions in the various social and economic sectors. (FDRE, 2011b)

During The "Africa Regional Training workshop" organized in 2014 by the National Adaptation Plan Global Support Programme (NAP-GSP) in the UN Conference Centre in Addis Ababa, the "Ethiopia's Programme of Adaptation to Climate Change (EPACC); Experience and lessons learnt from Ethiopia" position paper was illustrated by Berhanu Solomon from the Ministry of Environment. Solomon Berhanu explained that the EPACC is grounded on three main pillars. Firstly, the preparation of the EPACC; secondly, the preparation of the NAP; thirdly, action learning and adaptation learning projects. (Berhanu, 2014)

The NAP's framework consists of the constitution of a team composed by national and regional states, districts, administrations and ministries, with the final result of 11 regional city and administration units and 8 key agencies. At this point, the team

formulated the NAP relying on regional and sectoral agency adaptation plans. In 2010, the NAP's draft was finally submitted for national consultation. This is a crucial point, since as remarked in the document (the only source available is a governmental power point), the main stakeholders in the country participated to the consultations, at national and regional level, namely sectoral federal government agencies, regional governments, research organizations, institutions of higher education, religious institutions, national non-governmental organizations and the private sector (Berhanu, 2014). It must be stressed that the consultation process proceeded also at local level. In fact, it is reported that the same consultation followed at regional, zone, district and kebele[6] levels with the following development of each respective adaptation programme. Finally, a bottom-up and top-down iterative process was implemented in order to improve and sharply coordinate the national and sub-national adaptation programmes (Berhanu, 2014).

After having concluded the second step, the country started the preparation of learning projects with three main goals. The first purpose was to test the technology, encompassing two domains at the same time: mitigation and adaptation, which can positively overlap, being very crosscutting areas. The second objective was to address policy directions (e.g., the Ethiopian Climate Resilient Green Economy Strategy, the Growth and Transformation Plans (Berhanu, 2014). The third, entailed the use of the lessons learnt from NAP in Regional Adaptation Programmes (RAP).

The described overall mechanism in finalizing the preparation of Ethiopia's NAP has several strong points, which have been of fundamental importance in identifying the current and the future scenarios related to climate change. For example, the expectation that in the coming years climate refugees from neighbourhood countries will try to establish in Ethiopia emerged as dramatic. However, beyond hazards and constraints, the effort in integrating climate change adaptation into national, sub-national and local levels has been successful. Indeed, it led to the "Ethiopian Climate Resilient Green Economy (CRGE) Strategy" which is underpinned by two pillars: agriculture sector resilient green economy strategy; and energy and irrigation sector resilience strategy (to be implemented) (FDRE, 2011).

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[6] A *kebele* is the smallest administrative unit of <u>Ethiopia</u> similar to a <u>ward</u>, a neighbourhood or a localized and delimited group of people.

In conclusion, the Ethiopian practice in developing and implementing its adaptation strategy shows a deep commitment at policy and law making levels, which are a sort of springboard for NAP's launch. Finally, akin to NAPA, NAP is also grounded on an increasing awareness of local communities towards climate change and a bottom-up and top-down approach to participation: "problem identification from grass root level to policy level and vice-versa" (Berhanu, 2014).

Ethiopian Climate-Resilient Green Economy Strategy (CRGE)

As maintained above, EPACC renovates and replaces Ethiopia's NAPA. Therefore, it is of fundamental importance to center the following analysis and data gathering on the core of the EPACC, which is, as declared by Minister of Environment in 2014 (Berhanu, 2014), the Ethiopian Climate Resilient Green Economy Strategy (CRGE). The main goal of the set strategy is to bolster economic development through a sustainable path. The first target is therefore "to achieve carbon-neutral middle-income status before 2025" (FDRE, 2011), to boost GDP growth from current USD 380 to USD 1000, to decrease the income relying on agriculture, and to shift from farming towards industry and service production (FDRE, 2011, p.6). To this end, the first objective is to attract more foreign investment which can underpin this effort.

However, Ethiopia is one of the most vulnerable countries in Africa and one of the poorest, dealing with cyclical droughts, flood events and food insecurity. As a consequence, this backdrop urges immediate response in terms of food security policies (FDRE, 2011).

The pivotal point for mitigation remains financing sustainable growth, given that "If Ethiopia were to pursue a conventional economic development path – represented in a business as usual scenario – greenhouse emission would more than double to 400 tonnes of CO_2 equivalents in 2030" (FDRE, 2011, p.7).

In sum, the key points of the CRGE are growth, development and financing. In particular, financing remains the first concern of the Ethiopian government in its path towards a green economy model of development. The CRGE is grounded on four main pillars, namely: "Improving crop and livestock production practices to increase food yields, hence food security and farmer income, while reducing emissions; Protecting and re-establishing forests for their economic and ecosystem

services, including as carbon stocks; expanding electric power generation from renewable sources of energy fivefold over the next five years for markets at home and in neighbouring countries; Leapfrogging to modern and energy-efficient technologies in transport, industry, and buildings" (FDRE, 2011, p.7).

CRGE is intended to raise macroeconomic growth and social development, promoting and encouraging soil fertility, food security, rural employment and energy efficiency finally. Although the strategy set essential and critical goals and targets, it seems to remain in the domains of mitigation, financing and technology, putting in the background the issue of adaptation.

Regarding the use of participation, it emerges that there is a concrete effort in promoting a proper participatory approach within CRGE: "Consultations have taken place throughout Ethiopia with hundreds of stakeholders in order to raise awareness of the new strategy, and the process of enlisting public- and private-sector support for the CRGE development initiatives has begun" (FDRE, 2011, p.12).

Climate Change and Development-Adapting by Reducing Vulnerability Programme Practice

The "Climate Change and Development-Adapting by Reducing Vulnerability" Programme (CC DARE) was set up by UNEP-UNDP with funds provided by the Ministry of Foreign Affairs of Denmark. The programme offers both technical and financial support to enhance and bolster the ongoing climate change programmes in Sub-Saharan Africa. In particular, CC DARE relies on flexibility within adaptation programmes. Flexibility is recommended as a valuable catalyst since it allows the expansion of the opportunity horizons and, notably, the engagement of new stakeholders "who normally would not have been opportune to participate" (Nkem, Munang, Jallow 2011, p.4). The framework of action designed under UNDP and UNEP is composed by seven stages: Country-driven actions, Engagement/participation; Fast delivery; Flexibility; Sustainability; Replicability; Monitoring and Evaluation. Along with each single step, the CC DARE promotes a broader participation linking the programme with real life. With the aim of creating a sound net of stakeholders both at vertical and horizontal level, at governmental and local community level "irrespective of the scope or scale of action" (Nkem, Munang,

Jallow 2011, p. 11), the programme promotes workshops for disseminating, sharing and facilitating, knowledge and experiences.

In Ethiopia's case study, CC DARE implemented its participatory framework in several sectors: education and training; restoring ecosystem; potable water; household energy; health; and agriculture (Nkem, Munang, Jallow 2011, p.17). The overall assessment entails ten countries beyond Ethiopia: Benin, Ghana, Malawi, Mozambique, Rwanda, Senegal, Seychelles, Tanzania, Togo and Uganda. Although the individual data is not available, it is interesting to analyse the aggregate data: from adaptation plans emerges the involvement of several different actors. The less significant in terms of overall percentage is private sector, followed by meteorological services and local governments. On the contrary, NGOs, national governments and academic institutions constitute the greater part of the actors participating in the process (Nkem, Munang, Jallow 2011, p. 28). Slightly diverting from the described path, Ethiopia relies for its adaptation programmes on its Meteorological Service Agency. Although government participation in implementation dynamics is vital to the programme, it is considered to excessively slow the implementation process down. This stall is mainly due to bureaucratic and administrative procedures. By contrast, working along with local governments and administrations is considered a priority, since they operate as an accelerator in terms of policy influence and on-the-ground development (Nkem, Munang, Jallow 2011, p. 29).

Along with flexibility and participatory mechanisms, a great emphasis is given to innovative action. The innovative action is defined as an action which offers an emerging opportunity, as transition pathway out of poverty. In Ethiopia innovative action was used successfully, involving local actors, improving knowledge and facilitating change in farming sector. An example is "adapting bee farming to climate change by modifying beehives to enhance the acclimatization of bees to warming conditions in protection of the colony" (Nkem, Munang, Jallow 2011, p. 21). Therefore, using farmers in promote successful practices is considered a winning initiative.

In its focus on Ethiopia, CC DARE identified three main barriers or constraints which prevent the country from improving and moving forward its climate change adaptation response. Within local communities inadequate and insufficient knowledge, capacity and skills towards climate change challenges are highlighted. More precisely, local community have limited expertise in managing risky lands, in financing their activities and finally in fostering climate-resilient crop varieties and animal breeds (Nkem, Munang, Jallow 2011, p. 63). Several activities have been identified and implemented by CC DARE, aiming at bridging the gaps and overcoming the recognized barriers:

- "Community led buffer zone establishment around Gilgel Gibe I hydropower development;
- Introduction and promotion of local climate change adaptation measures for the challenge of unemployment and food security;
- Field level demonstration of community based adaptation to climate change in the North Western Lowlands of Ethiopia;
- Improvement of water harvesting capacity in schools in central Rift Valley;
- Identification of adaptive traits in indigenous cattle adapted to drought prod arid and semi arid areas of Ethiopia;
- Assessment of vulnerability and development of mechanism to adapt climate change impacts from hydrological extremes;
- Development of National Acute Watery Diarrhoea Prevention and Control Strategy;
- Identification, documentation and dissemination of control and management of rangeland invading alien plant species for enhancing the communities' resilience to climate change adaptation in Jijiga zone of Somali Region, Eastern Ethiopia;
- Participatory promotion and demonstration of conservation agriculture as climate change adaptation option in East Gojam zone, Amhara regional state" (Nkem, Munang, Jallow 2011, p. 67);

The participatory approach is embedded within each single stage with regular and consecutive stakeholders' consultations, the provision of skill trainings, dissemination of materials and manuals in local language (eg. beekeeping manual in Tigrigna local language [Nkem, Munang, Jallow 2011, p. 64]), extensive consultation with actors, field level demonstrations, consultative meetings, consultations with local governments, zonal and district agricultural offices, conduction of validation workshops, preparation of toolkits, and conduction of surveys. Remarkably, the most relevant activity in terms of participatory approach strategy is the last stage implemented in the East Gojam zone. This stage was split into ten further segments entailing national and local workshops, visits on the ground, training workshops, distribution of brochures and bulletins, and pilot demonstrations. All these activities encompassed local, national and international stakeholders, including NGOs, national agencies and, above all, farmers (Nkem, Munang, Jallow 2011, p.68). To sum up, in Ethiopia CC DARE implemented its participatory framework in several sectors: education and training; restoring ecosystem; potable water; household energy; health; agriculture. The programme identified strong points and constraints, designing a highly participatory-driven strategy aimed at creating concrete opportunities – a pathway out of poverty.

COMPARISON BETWEEN ETHIOPIAN EXPERIENCE AND BURKINA FASO, CAMEROON AND CENTRAL AFRICAN REPUBLIC EXPERIENCES

Having illustrated in the previous chapters communication and participatory approach in designing NAPA and NAP in Ethiopia, the analysis will now focus on three other countries. The objective of this analysis is to extract lessons learnt from experiences in three different countries (Burkina Faso, Cameroon and Central African Republic) on the use of participation and communication on designing NAPA and NAP. This analysis will allow to compare the activities developed by these countries with those elaborated by Ethiopia on adaptation.

In order to have a logic and systematic comparison, the three countries were chosen taking in consideration the same geographic location (Sub-Sahara) and climate change issues of Ethiopia. In fact, the Burkina Faso's priority domains in order to tackle climate change (agriculture, water resources, livestock and

forests/biodiversity) (UNFCCC, 2014) coincide largely with Ethiopia's projects' priorities (agriculture/food security, water resources, public health, terrestrial ecosystems, wildlife and biodiversity (FDRE, 2007)). In the same framework, Cameroon identifies health, agriculture and coastal zones as the three main areas of vulnerability (LSE, 2016) that are the same encompassed within the Ethiopian NAPA: agriculture/food security, water resources, public health, terrestrial ecosystems, wildlife, biodiversity (FDRE, 2007). Regarding CAR's, CAR's strategy in formulating its NAPA identified the following main areas of action: agriculture and food security, forestry, water resources, health and energy (Crawford, A. Hove, H. Parry, J., 2011) that overlap partially with Ethiopia's selected areas of intervention (agriculture/food security, water resources, public health, terrestrial ecosystems, wildlife, biodiversity (FDRE, 2007)).

The analysis will be developed as follow.

Firstly, the NAPA and NAP preparation and implementation in Burkina Faso will be investigated, focusing on its participatory and communication efforts. Secondly, the background of climate change policies in Cameroon and the challenges so far faced by the country will be investigated, in the light of its communication strategy launched in 2011 and the further NAP preparation process. Finally, the analysis will focus on a very specific case of NAPA preparation and implementation, the Central Africa Republic' NAPA, submitted in June 2008.

Burkina Faso, Country Overview

Burkina Faso is a landlocked Sub-Saharan country (World Bank, 2016) defined as a least developed country (UN, ldc-list), with low average income ($690 gross per capita income in 2015) (World Bank, 2016). Burkina Faso population, which is increasing at an average annual rate of 3 percent, was estimated at almost 17.9 million inhabitants in 2014 (World Bank, 2016). The country has limited natural resources and its economy is considerably reliant on agricultural production, with close to 80 percent of the active population employed in the sector (World Bank, 2016). Cotton is the country's most important cash crop, while gold exports have gained importance in recent years (World Bank, 2016). Burkina Faso is located between the Sahara Desert and the Gulf of Guinea, with almost 50 percent of land

characterized by a progressive desertification process. Furthermore, it is exposed to decreasing trends in rainfall leading to stress on water resources, and land degradation. Due to these features, this country is heavily exposed to the hazards of climate change, making climate change policies a turning point for development and population wealth.

Climate Change Policies Towards NAPA

As a consequence of its specific climate characteristics and its exposure to climate hazards, Burkina Faso identified four priority domains in order to tackle climate change focusing its actions on: agriculture, water resources, livestock and forests/biodiversity (UNFCCC, 2014). These priorities overlap largely with Ethiopia's projects' priorities, namely: agriculture/food security, water resources, public health, terrestrial ecosystems, wildlife and biodiversity (FDRE, 2007). The Rio Conference in 1992, the United Nations Conference on Environment and Development (UNCED), constitutes Burkina Faso's first step in tackling climate change (UNFCCC, 2014). During the 2000s, the country established a common institutional framework in charge of the implementation of three Rio Conventions (on climate, biodiversity and desertification) and the Convention on Wetlands (UNFCCC, 2014). As a consequence, when the NAPA process started, the country and its institutional structure were ready and aware of the challenge (UNFCCC, 2014). Furthermore, NAPA's steering committee components were already working together well before the NAPA process started (UNFCCC, 2014).

Following the UNFCCC indications and consequently the Bali roadmap (UNFCCC, 2007a), Burkina Faso started the preparation of its NAPA in the early 2003. In July 2003, the GEF approved the final funding proposed, followed by the GEF agency approval in 2004 (UNFCCC, 2014). On September 2005, the preparation process of the NAPA started and lasted two years overall, with a final submission to the UNFCCC in 2007. Burkina Faso's NAPA preparation identified three zones in which to intervene: the first relies heavily on livestock, the second on agriculture and the third on water resources (UNFCCC, 2014).

In sum, the country identified 12 main priority activities, which can be divided into 3 main areas (UNFCCC, 2014):

- Strengthening of national capacities: funded by the Danish International Development Agency (DANIDA) and the International Union for Conservation of Nature (IUCN);

- Strategic planning: funded by UNDP/Government of Japan;

- Six climate change adaptation pilot projects: funded by the LDCF.

It is of fundamental importance to underline that: "Each of the six pilot projects of the LDCF component corresponds to a village or group of villages and a project director is appointed to each project. As implementation progresses in the six villages, the lessons learned and best practices will be captured in order to be used in the planning of future adaptation projects (UNFCCC, 2014)". It is crucial because this process allows the implementation of the project at grassroots level with knowledge and best practice sharing, from the bottom level to the upper ones.

The Implementation of NAPA Process

Burkina Faso chose a comprehensive approach in implementing the NAPA projects, facilitated by the previous preparation experience which involved many different actors and stakeholders with a good synergy among UNDP, the NAPA team and LDCF. In addition, Burkina Faso actively involved all the donor members, inviting them to the steering committee meetings, achieving the result of support in co-financing the projects. Finally, the government contributed directly with 450 FCA francs (UNFCCC, 2014). Overall, the UNFCCC judges NAPA process in Burkina Faso as a valuable experience: "Burkina Faso's experience shows that well-established institutional arrangements to deal with climate change issues in the country can greatly facilitate NAPA preparation and implementation and foster early strategic thinking for the consideration of medium- and long-term adaptation options." (UNFCCC, 2014).

<u>Communication Strategy and Participatory Approach in Preparing Burkina Faso's NAPA.</u>

The preparation of Burkina Faso's NAPA saw the typical threefold approach, developed on three different levels: governmental action; central and national level action; and regional and local level (Burkina Faso, 2007).

Burkina Faso's government activated the inter-ministries' committee to comply with the UNFCCC and fostered the "Burkina Faso Strategy for Climate Change" in 2007 (Burkina Faso, 2007, pg. 27). Under the supervision of the Permanent Council of the Environment and Sustainable Development, the steering committee managed the NAPA's preparation in collaboration with African and international organizations, social and labour organizations and other organizations representing the civil society, such as NGOs. Finally, the government constituted an interdisciplinary group of experts.

At central and national level, a group of experts working on the procedures concerning the elaboration of NAPA and an office for the harmonization and the comprehension of the methodology were set. This step was crucial in order to correctly implement the next accelerated method of participatory research and fundamental to reach the validation of the NAPA document.

At regional and local level, the process identified fine main regional zones or districts to both inform and inquire about the NAPA philosophy. This information step included all the relevant regional and local stakeholders, such as administrative authorities and local communities. In addition, the preparation set the establishment of five regional offices in charge of identifying sectors and linked groups considered particularly vulnerable in term of climate change hazards, sensitive territories and inquiries about the accelerated method of participatory research: "la formation des enquêteurs sur les outils de la MARP" (Burkina Faso, 2007, pg. 27). In the light of the participatory approach fostered under the NAPA at general level, it is possible to sustain that Burkina's NAPA proves a positive effort. They have indeed set sessions of dialogue and consultation with local communities and within the little villages aimed at gathering more information, specific and urgent needs, and the past and

current practices of adaptation. More in detail, several sub-groups have been set (Burkina Faso, 2007, pg. 28):

- Women;

- Elders;

- Young people;

- Farmers and breeders;

These sub-groups are fundamental in terms of participatory approach and communication strategy for several reasons. Foremost, they represent the most vulnerable stakeholders and, at the same time, the first to concretely implement the best practices and project on the field. In addition, they constitute the groups which mostly benefit from the improvements introduced by climate change framework policies. In conclusion, it is possible to argue that a complete and comprehensive participatory approach must necessarily include grassroots groups with the aim to enhance both NAPA preparation and implementation process.

Criticisms to the NAPA process in Burkina Faso

Although the government made a consistent effort on using participation and communication during the NAPA process, there are significant criticisms on the effective utilisation of participatory and communication approaches.

Kalame, Kudejira and Nkem (2011) present another evaluation of the NAPA process in Burkina Faso. They used a variety of methods in order to carry out a full assessment. They used Poverty Reduction Strategy Papers (PRSP), NAPA and vulnerability assessment reports to determine vulnerability of sectors to climate change to determine whether projects relate to the most vulnerable sectors. They supplemented this information with "open-ended questionnaires to gather information about the NAPA research process and implementation of NAPA priority projects" (Kalame, Kudejira and Nkem, 2011, p.539) with key stakeholders within the NAPA process in Burkina Faso. These stakeholders included: NAPA researchers (experts from government departments, research institutions and NGOs); NAPA implementers; funding bodies; national-level focus group discussion (FGD); FGDs in "communities and villages in which NAPA researchers are assumed to have collected local-level field data in preparing the NAPA documents" (p.539); and FGDs in villages

selected for implementation of priority projects. They also used direct observation over a period of five months.

The study collected information at the national and local level and is therefore able to evaluate how communication and participation proceeded at both levels. They find that, at the national level, the projects identified and selected were highly influenced by the area from which the members of the NAPA teams came from. For Burkina Faso, this was primarily National Resource Management (NRM), and the projects reflect this. Furthermore, there were issues at the national level with the arrangement of different stakeholder institutions and their inputs to the implementation: "Key informants we interviewed expressed concerns that stakeholders such as NGOs and the ministries in charge of decentralization, economy, and development may not participate in implementing identified NAPA projects because they had not been involved in the initial planning stage or because they are unaware of what they are expected to do" (Kalame, Kudejira and Nkem, 2011, p.546).

At the local level, Kalame, Kudejira and Nkem (2011) find that the local level participation was inadequate. They make three main points in reference to the failings of the local level participation:

4. The 15 months given for the elaboration of the NAPA document did not provide sufficient time to mobilise community participation for a fully participatory process;

5. Not enough of the relevant stakeholder were consulted - "Residents of only 67 of the country's 8,000 villages were interviewed during the NAPA elaboration process. Although all three of the ecological zones in Burkina Faso were represented in the research, the sample size was too small (<1%) in relation to the total number of villages in Burkina Faso" (p.542); and

6. Information was only gathered on sectors, which were selected prior to community participation "without any representation from local communities or any detailed studies" (p.542).

Kalame, Kudejira & Nkem (2011) then identify two main areas in which the NAPA process could be improved:

3. Identification of specific community groups that will be beneficiaries of the projects is essential to enhance efficiency and prevent confusion, such as "women's or smallholders' organizations or certain types of community NGO" (p.546); and

4. A broader range of communication tools need to be used within the NAPA process in order to "improve awareness-raising efforts, especially at the community level" (p.546). This is especially important in communities with high illiteracy levels. The study recommends the use of tools such as "community meetings and workshops, national radio and television broadcasts, and other audiovisual tools" (p.546).

From NAPA to NAP

The process for preparing and implementing Burkina Faso's NAP started in the early 2013, with the action of NAP-GSP following up closely with UNDP Country Office, assisting Government of Burkina Faso with requests for support (Climate Change Adaptation-UNDP, 2015). In April 2014, a government delegation attended the regional training workshop for Africa (NAP-GSP) in order to prepare the ground for NAP preparation. Finally, the launch of Burkina Faso NAP took place in Ouagadougou on 17 February 2015 (Climate Change Adaptation-UNDP, 2015), gathering the participation of more than 100 representatives from 40 national institutions, associations, civil society and technical and financial stakeholders: "NAP-GSP and partners including GIZ, GWP and UNITAR, shared a consolidated technical review of the draft Burkina Faso NAP with CONEDD via the UNDP Burkina Faso Country Office (Climate Change Adaptation-UNDP, 2015)."

Following this comprehensive timeline, it is possible to compare two different documents relating to NAP in Burkina Faso. The first one concerns the preparation of NAP, officially presented in the regional workshop held in Addis Ababa in April 2014 (Climate Change Adaptation-UNDP, 2015). The second one is the final version of NAP submitted by Burkina Faso in May 2015 (Climate Change Adaptation-UNDP-Burkina Faso, 2014). The final NAP document has been approved by the Council of Ministers, followed by a governmental workshop to strengthen the understanding of the NAP vision and projecting its results into the next phase of the 2016-2020 Strategy for

Accelerated Growth and Sustainable Development (SCADD), which is under development. The NAP adopted by the Council of Ministers was officially submitted to the UNFCCC in October 2015 (Burkina Faso, 2015).

In 2012 Burkina Faso started the preparation of its NAP as the natural progression of three NAPA projects and the Decision 5/CP.17 of Durban (2011) concerning NAP. This NAP is conceived as a long term action with a progressive plan of action (Climate Change Adaptation-UNDP, 2015) stressing, the need to implement a participatory approach at general level[7]. The document which offers a deeper view over the participatory approach fostered in NAP's preparation, is the final version released in May 2015.

The document is divided into two parts: formulation and methodology. The methodology framework is further divided into four sections. Three of four sections develop a participatory approach within their own domain, namely (Burkina Faso, 2015):

- Preparation phase: NAP formulation and stakeholder consultation;
- Implementation: communication strategy; and
- Monitoring and evaluating: importance of monitoring and evaluation.

It is clear that, maybe taking in consideration the criticisms of Kalame, Kudejira & Nkem (2011), the Government of Burkina Faso decided to include participation and communication strategies in the design of NAP.

Preparation Phase: NAP Formulation and Stakeholders Consultation

The implementation of NAP was thought as the natural progression of NAPA for two main reasons. Firstly, in order to comply with the UNFCCC indications, formulating the NAP with the aim to replace the previous NAPA (Burkina Faso, 2015, pg. 25). Secondly, in order to provide a better aligned document and programme under the UNFCCC recommendations, especially because "NAPA programming did not reflect the UNFCCC proposals in either name or content" (Burkina Faso, 2015). As a consequence, the Ministry of Environment and Sustainable Development fostered a methodology and a roadmap for the NAP and instituted a technical inter-ministerial technical monitoring committee to lead the NAP formulation process. The large

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[7] Slide n. 20 ppt available at http://www.adaptation-undp.org/projects/burkina-faso-nap-process

room was given to the stakeholder consultation, within a participatory and inclusive framework (Burkina Faso, 2015):

- Organisation of nine stakeholder consultation workshops, one for each development sector: (i) agriculture; (ii) animal production; (iii) environment and natural resources; (iv) meteorology; (v) energy; (vi) health; (vii) infrastructure and housing; (viii) women's associations; (ix) civil society organisations);
- Organisation of four meetings of the technical monitoring committee; and
- Organisation of one NAP validation workshop.

Implementation: Communication Strategy

The communication strategy of Burkina Faso is grounded on three main features: selection of stakeholders, selection of media, and tools of communication (Burkina Faso, 2015, pg. 122). The selected stakeholders are: (i) centralised and decentralised administrative structures, (ii) local authorities, (iii) civil society and the private sector, (iv) communications and media experts, (v) educators, (vi) researchers, (vii) women, (viii) young people, (ix) technical and financial partners, (x) opinion leaders and traditional and religious authorities, (xi) local communities in the countryside and in towns (Burkina Faso, 2015, pg. 122).

Secondly, the document outlines several media: structures and facilities of the ministry responsible for communication, private media, and traditional channels of communication (such as the direct collaboration with the main stakeholders). The main tool, or channel, is the national language combined with tailored information, depending on the audience.

Monitoring and evaluating: the importance of monitoring and evaluation

The NAP document considers monitoring and evaluating activities of fundamental importance. These activities rely on three main features: human resources, technical resources and financial resources. It is necessary to stress that both monitoring and evaluating operations, throughout the entire process, are crucial in order to provide an up-do-date overview, recommendations, and identify shortcomings in order to consequently redirect action. In addition, monitoring and evaluation provide the NAP

with larger visibility during the implementation timeline (Burkina Faso, 2015, pg. 125).

Cameroon, Country Overview

Cameroon is a lower middle income country with a population of 23.3 million people and a gross domestic product per capita recorded at 1309.33 US dollars in 2015 (World Bank, 2015). Situated in Central Africa, it shares a border with Nigeria, Chad, Central African Republic (CAR), Equatorial Guinea, and Gabon. Two regions are Anglophone (the northwest and southwest regions that border Nigeria) while the rest of the country is Francophone. The country has significant natural resources, including oil and gas, high value timber species, minerals, but relies largely on agricultural products such as coffee, cotton, cocoa, maize, and cassava (World Bank, 2015). Although more than a decade of impressive economic growth, poverty in Cameroon has remained almost at the same level since 2001 with the increase in poverty in the northern region, which is of great concern. Climate change constitutes one of the major drivers of poverty rate increase (World Bank, 2015). However, there are other strictly climate-change related features which affect both well-being and wealth: the situation in Cameroon is worsened by land degradation, high population growth, poor economic growth, large social problems, spread of diseases, and a general degradation of the ecosystem (World Bank, 2015).

Climate Change policies in Cameroon towards NAP

Although Cameroon was not eligible for implementing a NAPA process, it had all the requirements to start the preparation of the NAP programme. Before proceeding in assessing the preparation of Cameroon's NAP and its communication strategy, it is of fundamental importance to illustrate the general background constituted by the national policies aimed at tackling climate change promoted by the country. There are three main relevant policy documents concerning environment issues: Poverty Reduction Strategy Papers (PRSPs), the Forest-Environment Sector Programme (FESP) and the First National Communication to Climate Change NC1 (Bele, Somorin, Sonwa, 2011). Until 1980s climate change was not among the main concerns of Cameroon policies. Only in 1992 when the Country signed the UNFCCC convention,

followed by the creation of the Ministry of environment in the same year, which was ratified in 2004. At the end of the century, in conjunction with the Millennium Development Goals and the Poverty Reduction Strategy Paper, the country fostered the Strategy Document for the Development of the Rural Sector (DSDSR) to ensure agricultural and environmental sustainability as tools to bolster food security, increase agricultural production and reduce poverty (Bele, Somorin, Sonwa, 2011, pg. 376). Following this path, other initiatives were promoted: the Forest-Environment Sector Programme (FESP) and the Preliminary National Development Plan (PNDP) and, in 2002, a National Energy Action Plan for Poverty Reduction (Bele, Somorin, Sonwa, 2011, pg. 377). Nevertheless, the First National Communication submitted to UNFCCC in 2005 is the only document which puts the issues of climate change at the very centre of the strategy, though mostly focused on mitigation aspects and related issues. It identifies health, agriculture and coastal zones as the three main areas of vulnerability (LSE, 2016). These three areas are the same encompassed within the Ethiopian NAPA: agriculture/food security, water resources, public health, terrestrial ecosystems, wildlife, biodiversity (FDRE, 2007). After communication, in 2004, the Ministry of Forests and Environment was split into the Ministry of Forests and Wildlife and the Ministry of Environment and Nature Protection (MINEP), and in 2012 MINEP became the Ministry of Environment, Nature Protection and Sustainable Development (MINEPED) in order to better respond to sustainable development challenges (LSE, 2016); the MINEPED is now the main subject in charge of climate change activities and policies. Finally, in 2009, a presidential decree established the National Climate Change Observatory (ONACC) under the authority of MINEPED, which plays a crucial role to "propose mitigation and adaptation measures to the government and serve as the instrument for co-operation with regional and international initiatives" (LSE, 2016). In 2009 Cameroon fostered a development plan, Cameroon Vision 2035, acknowledging the need for climate change considerations in national growth planning. Another considerable step in Cameroon climate change policies is constituted by the collaboration with REDD+ and the final approval of REDD+ Readiness Plan (RPP) held in 2013. Within the domain of adaptation policies, many of the country's adaptation programmes

are funded by bilateral and multilateral initiatives. Among them, Cameroon is one of the 20 countries participating in the Africa Adaptation Programme (AAP), USD 92 million initiative launched by Japan International Co-operation Agency (JICA) (LSE, 2016).

<u>Preparation of NAP Process: the Communication Strategy (2012-2014)</u>

In the framework of the general background given in the previous paragraph, Cameroon's government promoted the adoption of periodical reports on the pollution of the environment. Moreover, the regulation adopted in the 1990s put at the centre of its action a comprehensive strategy of communication and accurate dissemination of information about climate change and pollution. More in depth: "Thus, as part of a development program like the one led in recent years the Government of Cameroon, aiming at strengthening adaptive capacity to climate change, the domain of communication refers to the use of the transmission process information, techniques and medias tools to help people become aware of the changes occurring in their environment and working and adjust their lifestyle and their activities to such change" (MINEP, 2011). In other words, since 2011 the Government set a comprehensive framework of communication strategy, strictly aimed at enhancing the adaptation policies throughout a process of spreading information and exploiting all the media available. This approach is grounded in the communication domain, with several channels of analysis and action (MINEP, 2011, p. 1.):

- The state of art: communication and climate change analysis (global, regional, national);
- Analysis of Satisfaction-Insatisfaction-Potential-Hazards-Objectives (SIPR-O in its French acronym);
- Concerns and problems relating to communication;
- Strategic framework:
  o Communication goals
  o Communication target groups
  o Communication lines
- Communication channels and support.

Among these features, the strategic framework constitutes the backbone of the communication strategy, with remarkable participatory elements entailing target groups. The strategic framework (MINEP, 2011, pp. 60-68.) aims at achieving in the medium term a continuous, intensive and massive flux of information about climate change, targeting specific groups.

Therefore, the first goal is the set-up of a social background favourable to adaptation policies' comprehension and dissemination (MINEP, 2011, p. 63.). In addition, there are further communication goals: 1) information, explanation, acknowledgment 2) convince, mobilize, solicit 3) boosting participation, action, support.

The second element of the strategic framework is given by the target(ed) groups (MINEP, 2011, p. 63.): 1) **priority group** constituted by stakeholders from local communities, farmers, breeders; the "education community"; the specific group of women. 2) The **second group**: NGOs, associations; local leaders and religious leaders; opinion leaders; media; administrative and local authorities; business stakeholders. 3) Finally, the **third group** in order of importance: political decision makers, academic researchers, technical and financial partnerships and execution agencies, head of central administration, trade unions and professional associations.

The communication directories constitute the communication framework's last element. There are five "lines" (MINEP, 2011, p. 63.) or communication approaches which suggest the target groups for adaptation strategies to climate change, namely: petition, Information-Education-Communication, massive communication through classic media, massive communication though socio-traditional media. In sum, it is of fundamental importance to stress that Cameroon approach to communication strategy, more precisely its strategic framework, seems to invert the hierarchical framework of communication target groups. Local communities, local leaders, farmers, sensitive group such as women, are indicated as main targets of the action and policy message, with the aim to better communicate and practice adaptation measures to effectively tackle climate change.

<u>Cameroon National Adaptation Programme to Climate Change (June 2015): Communication and Participatory Features</u>

The "Communication Strategy" illustrated in the previous paragraph prepared the field for the following National Adaptation Programme to Climate Change (NAPCC), which is grounded on a sound participatory approach, as maintained by the minister of environment Hele Pierre (Cameroon, 2015). The NAPCC is thought to set a national strategy for accompanying the government and the main actors throughout the path of adaptation to climate change. In other words, the NAPCC is conceived as a framework which will guide Cameroon activities concerning climate change (Cameroon, 2015, p. 27).

The core of Cameroon framework of action is constituted by the participatory mechanism in action (Cameroon, 2015, p. 27). Since transparency is considered the first requirement of NAPCC preparation, the action was launched in a public workshop, allowing a collective and critical approach to the plan and its elaboration. The second step saw the constitution of regional workshops and working groups referring to a team of experts (consultants). More in depth, there was an overall participation of 625 individuals, split in groups of 125, namely:

- Heads of the periphery structures of the ministries, regional and departmental offices;
- Representatives from academic institutions or research institutions working in the agriculture domain;
- Representatives from local institutions and traditional chefs and leaders;
- Representatives from development projects and relating missions;
- Representatives from civil society organization (associations, trade unions, cooperatives);
- Member of the parliament, member also of the REPAR (Renforcement des Partenariats dans la Recherche Agronomique au Cameroun), accompanied by experts;
- Representatives from private sectors;
- Representatives from structural programmes; and

- Representatives from media.

These working groups have been engaged in two steps negotiation (Cameroon, 2015, p. 28), grounded on two different approaches. The first step, which is constituted by a ten day workshop centred on a "learning by doing" approach aimed to align the general sensitivity and knowledge to climate change issue. The second step, constituted by a three day workshop centred on a "bottom-up" approach. In sum, the poignant successful effort in organizing a working group structured representing all the relevant stakeholders, producing a complete and "participative" programme to submit to the government emerges. Finally, it must be mentioned that this NAPCC has been approved during a national workshop organized by MINEPDED in 2014. In addition, the NAPCC has been integrated and again validated by the MINEPDED and the Government in 2015.

Comparing approaches

Having investigated Burkina Faso and Cameroon strategies in the preparation of their NAP, it is now possible to make comparisons. When comparing the paths followed is of fundamental importance to use a twofold analysis: on the one hand the preparation phase, the communication strategy on the other. Finally, these data will be integrated into a list of recommendations to the Ethiopian government, with the aim to enhance its efforts in delivering a sound NAP.

The Communication strategies table compares communication features which Burkina Faso and Cameroon, respectively, consider as crucial. The three key features per each country, can be defined as the backbone of their communication approach.

Communication strategies	
Burkina Faso	**Cameroon**
• Selection of stakeholders	• Communication goals
• Selection of media	• Communication target groups
• Tools of communication	• Communication lines

Table 3. Communication features which Burkina Faso and Cameroon, respectively, consider as crucial

The stakeholder consultation process constitutes the pivotal step in both preparing and implementing NAPA and NAP strategies. Table 4 illustrates the Stakeholder Consultation that compares Burkina Faso's consultation dynamic with Cameroon's one.

Stakeholders Consultation	
Burkina Faso	**Cameroon**
• Nine stakeholder consultation workshops by development sector	• regional workshop and working groups accompanied by consultants;
• Organisation of four meetings of the technical monitoring committee;	• Periodical permanent consultation;
• Organisation of one NAP validation workshop;	• Final NAPCC validation workshop;

Table 4. Burkina Faso's consultation dynamic with Cameroon's one

Table 5 compares the stakeholders encompassed in the participatory scenario in each country. Among the several stakeholders it is possible to identify in both cases, high level subjects such as ministries and other governmental authorities and grassroots stakeholders such as local communities. More in detail, Burkina Faso included vulnerable groups, such as young people and women, while Cameroon favoured the participation of local and traditional leaders and on the field organization, such as NGOs and associations.

Comparing Stakeholders	
Burkina Faso	Cameroon
• centralised and decentralised administrative structures; • local authorities; • civil society and the private sector; communications and media experts; educators; • researchers; • women;	• Heads of the ministries, regional and departmental offices; • Academic institutions or research institutions; • Local institutions and traditional chefs and leaders; • Development projects missions; • Civil society organization

- young people; - technical and financial partners; - opinion leaders and traditional and religious authorities; - local communities in the countryside and in towns	(associations, trade unions, cooperatives); - Member of the parliament; - Representatives from private sectors; - Representatives from structural programmes; - Representatives from media;

Table 5. Stakeholders encompassed in the participatory scenario in Burkina Faso and Cameroon.

Central African Republic, Country Overview

The Central African Republic is a small landlocked country in Central Africa with a population of 4.2 million as of 2015 (World Bank, 2016a). Its Gross Domestic Product per capita was last recorded at 282.64 US dollars in 2015, with a poverty rate of 62 percent, one of the highest in the world (World Bank, 2016a). As a consequence, Central African Republic ranks 180 out of 186 countries classified by UNDP in terms of their Human Development Index (World Bank, 2016a). Central African Republic's history is unfortunately characterized by political instability and a consequent inability in promoting development policies and the exploitation of natural resources. In particular, it should be underlined that the country is rich in diamonds and wood, lying at the core of Congo Basin rainforest. The political instability reached its peak in 2012 when the Séléka movement started an insurrection which culminated in a coup d'état in March 2013. In 2013 President Bozizé was ousted and replaced with Djotodia, leader of the rebel movements and the first Muslim leader as head of a majority Christian country. The immediate crisis, ignited by the violent sectarianism, led to the killing of more than 1000 people during the clashes and caused the internal displacement of more than 2.2 million people, in need of international aid. In the early 2014 the Economic Community of Central African States (ECCAS) reached a first agreement which led to the election of Catherine Samba-Panza, the mayor of Bangui, as interim president by the National Transitional

Council (NTC). It is clear that the country is facing a more than challenging crisis and its extraordinary effort in maintaining order and peace is dependent on international aid and support.

Although the fragile institutional background, Central African Republic made fundamental steps forward on the route of climate change policies under the UNFCCC, until the submission of it NAPA in 2008. However, this peculiar political and institutional environment considerably diverges from Ethiopia, Cameroon and Burkina Faso, making its commitment to putting forward mitigation and adaptation policies only partially effective. Finally, the internal political conditions and the civil war experienced until 2014, made it impossible to implement a proper participatory approach within NAPA. However, the decision to include this country on the research allows to address an important topic related to climate change: the relation between climate change issues and political instability and conflicts. During the general analysis of NAPA and NAP process and the interviews held with experts it was clear that institutional capacity is a fundamental element to elaborate climate change strategy but in countries where war and conflicts create instability facing with climate change issues is more complicated. In addition, climate change generates more negative impacts increasing political instability, economic weakness, food insecurity and large-scale migration (Smith, and Vivenkananda, 2007). Also in this case, participation and communication can play a significant role. In countries where conflicts and climate change impacts are effecting social and economic life, it is possible to use a different approach, "based on peacebuilding, engaging communities' energies in a social process to work out how to adapt to climate change and how to handle conflicts as they arise, so that they do not become violent. It is an approach that brings the hard science of climate change – which local communities do not and cannot be expected to know in the first instance, and which must be communicated clearly – together with local knowledge and understanding to figure out the best mode of adaptation" (Smith, and Vivenkananda, 2007, p. 4).

Climate Change Policies Towards NAPA

The Central African Republic has considerable natural resources, such as forest and wood, rich agricultural lands and general positive climate conditions; 75 percent of

its population relies on the agriculture sector (Crawford, A. Hove, H. Parry, J. 2011). Following the scientific projection produced by the World Bank (World Bank, 2016b) it is possible to assume that CAR will face an increase of temperature between 1 and 2.5 degrees Celsius, which in the long-term, after 2050, could expose the country to increase in rainfall, floods and threats to biodiversity. These kinds of general hazards are more likely to hit the wetter lands such as the Southern Guinean forest belt and the Northern Sahelo Sudanese region. Grounded on scientific evidence, CAR's strategy in formulating its NAPA identified the following main areas of action: agriculture and food security, forestry, water resources, health and energy (Crawford, A. Hove, H. Parry, J. 2011). These priorities overlap partially with Ethiopia's selected areas of intervention, namely: agriculture/food security, water resources, public health, terrestrial ecosystems, wildlife, biodiversity (FDRE, 2007). However, in comparison, Ethiopia, Cameroon and Burkina Faso's starting points in tackling climate change, are by far more advanced. Nevertheless, the overall climate change strategy implemented by Bangui is in line with UNFCCC recommendations and is composed by three main documents (Crawford, A. Hove, H. Parry, J. 2011). Firstly, the National Communication of the Central African Republic under UNFCCC submitted in June 2003 by the Ministries of water, forest, hunting, fishing and environment, with a precise focus on agriculture, energy and forests. The second one is constituted by the NAPA, submitted in June 2008 with a focus on agriculture, food security and forests. Although climate change is at the very centre of CAR's concerns, the Poverty Reduction Strategy Report published in August 2009 does not mention the issue (IMF, 2009). By contrast, CAR's National Plan to fight against Desertification and the National Biodiversity Strategy (Crawford, A. Hove, H. Parry, J. 2011) are in line with the NAPA and climate change commitments.

The NAPA process in Central African Republic

Central African Republic submitted its NAPA to UNFCCC in June 2008. The document is divided into six sections, namely: general background, environmental and climatic framework, background and reasons for NAPA, sectorial evaluation of vulnerabilities caused by climate change, identification and formulation of priority actions, elaboration of projects profile (Central African Republic, 2008). In particular, the

document, after identifying the main areas of interventions which are agriculture and food security, forestry, water resources, health, energy and natural catastrophes, elaborates 10 specific projects and related cost (Central African Republic, 2008, pp. 3-6).:

- Enhancement of development-environmental institutions in Bangassou, 250 000 USD;

- Urban and peripherical promotion of Bossangoa Forestry, 250 000 USD;

- Management of local vegetation and rehabilitation of deteriorated pastorals lands in Bossemptele region, 250 000 USD;

- Community participation in refunding the management of the Southern-East zone of L'Ombella M'Poko, 250 000 USD;

- Promotion and development of education in the field of biodiversity variety resistant to climate change in the Central-Northern region, 250 000 USD;

- Carbonization promotion of wood waste produced in Imohoro, 250 000 USD;

- Drinkable water system management in Imohoro, 250 000 USD;

- Early alert system to natural disasters in the local communities, 500 000 USD;

- Enhancement of local communities tools to tackle climate change, 250 000 USD;

- Prevention of water related diseases in the rural areas in the Northern-East region, 500 000 USD.

As stated in the official NAPA, the areas of intervention and the following projects are identified through feasibility, vulnerability and adaptation studies grounded on a participatory approach and a multi-criteria analysis: "Having finalized the study of sectoral vulnerabilities based on a participatory approach, the NAPA team proceeded in the selection of priority activities prioritization criteria (of Adaptation Options list) in different sectors selected. The team used the Multiple criteria analysis (MCA) which enabled to take into account qualitative variables and parameters, and integrates the necessary information concerning the degree of adverse effects of climate change (Central African Republic, 2008, p. 4)".

In addition, the document provides a specific section (Central African Republic, 2008, p. 20)" focused on the participatory approach developed in preparing the NAPA process. It must be underlined that the participatory framework is sharply reported, following UNFCCC guidelines. More in depth, the fostered framework is composed of five steps: working group set up, assessment of vulnerability to climate change, local and regional consultations, preliminary NAPA draft, and NAPA validation. It is therefore clear that the participatory dimension entailing the preparation of NAPA is encompassed in the third step where the local communities are reported to have been involved: "The local communities have contributed to the preparation of the final NAP" (Central African Republic, 2008, p. 21)".

Although the overall CAR's NAPA offers a sufficient analysis and a satisfactory participatory pattern in its preparation, it must be remarked that the document itself stresses two main inadequacies and concerns. Firstly, the political and institutional conditions which, as illustrated in the country overview paragraph, are characterized by deep instability. Secondly and consequently, the poverty threshold which has sharply increased during the last 10 years. As a consequence, even though CAR is rich in natural resources with high potential, such as water resources, forest and mineral resources, the institutional scenario of the last decade had a very negative influence over the country development (Central African Republic, 2008, pp. 12-13)" and the NAPA implementation.

Preparing and implementing the NAPA

In April 2014 Addis Ababa held the NAP-GSP / PAG-PNA Africa Regional Training Workshop and the Central African Republic has presented and discussed its experience in preparing and implementing the NAPA, with the aim to further proceed towards the NAP process. Firstly, it should be said that the NAPA prepared the ground for the second Poverty Reduction Strategy Paper 2011-2015 (Climate Change Adaptation-UNDP, 2014). Secondly, the NAPA favoured the adoption of the Rural Development, Agriculture and Food Security Strategy (SDRASA 2011-2015). Thirdly, the NAPA solicited the National Programme of Investment in Agriculture (PNIASA 2011-2015). Focusing the action on agriculture and food security, it has been possible to improve the general conditions of the rural communities and to

achieve the goal of food self-sufficiency (Climate Change Adaptation-UNDP, 2014). Although the reported achievements seem to be excessively optimistic, in particular those concerning food security goals, a general improvement is recorded in the agriculture domain and rural communities' conditions. Finally, in 2014 CAR submitted to the Word Bank, with FAO endorsement, a project entailing a system of early alert for food security. All these accomplishments are clearly directed towards the preparation of the NAP. Although there is political evidence of this intention, the process is still far from reaching the proposal step. In addition, there is no information available about the NAP progression since the UNDP website at both Country Projects and Country Overview section does not provide news beyond CAR's participation to Addis Ababa forum in 2014 (Climate Change Adaptation-UNDP, 2014).

Central African Republic, Obstacles and Constraints

Central African Republic published its Intended National Determined Contribution (INDC) paper in September 2015. This document aims at providing the country with a national budgetary contribution to the overall framework designed to fight against climate change, therefore in line with its NAPA commitments. The contribution is quantified at 2.248 USD billion over the period of commitment for the mitigation policies, with 2.022 USD billion conditional, while for adaptation there is a contribution of 1.554 USD billion over the period of commitment, 1.441 USD of which is conditional (Central African Republic, 2015, p. 3). There are two features which are fundamental for this analysis. Firstly, it is affirmed that the INDC has been formulated taking into account: the relevant literature, the consultation of the stakeholders and the indications for evaluating greenhouse gas emissions of the Intergovernmental Panel on Climate Change (IPCC) (Central African Republic, 2015, p. 5). Although the declared intentions, there is no proper participatory framework methodology developed within the document, while an adequate "status quo" analysis, cost/benefits analysis and basics data for dynamic models are provided. Secondly, it is of fundamental importance to underline, over and above, that CAR identifies its main obstacles and constraints in the institutional instability which affected the country. More in depth, several obstacles to overcome are listed:

- Military and political crises;

- Inadequacy of synergy between sectoral policies and institutions;

- Low education rate;

- Social and economic inequality leading to social clashes;

- The central government's lack of budgetary resources to cover the INDC;

- Funds mismanagement; and

- Extreme poverty.

In sum, CAR demonstrated a sound effort in complying with its international commitments related to the challenge of tackling climate change. The country finalized the formulation of its NAPA which was submitted in June 2008. In addition, CAR's government started to move the first steps towards the formulation of its NAP, as mentioned during the Addis Ababa NAP-GSP / PAG-PNA Africa Regional Training Workshop in 2014.

In conclusion, although the remarkable achievements, there is still large room for improvement and advance. In particular, the completion of transitional path, will guarantee pace and stability to the country and its neighbours constituting the breeding ground for the forthcoming climate change policies. This experience must be a significant example for Ethiopia to avoid or solve conflicts inside the country.

RECOMMENDATIONS FOR ETHIOPIAN STRATEGY ON CC ADAPTATION

The findings of this research suggest that the framework deployed in preparing the forthcoming submission of Ethiopia's National Adaptation Plan, can be improved and strengthened.

The overall analysis concludes that a participatory approach was concretely developed at local level within the preparation of NAPA framework, with partial results. However, the NAPA's stakeholder analysis indicated that during the preparation process many stakeholders, including private sector, banks, civil society and certain vulnerable groups, have been neglected in the consultations. In particular, it has been reported that several local stakeholders were involved only in the final and lowest stages of the preparation. As a consequence, the preparation process of Ethiopia's NAPA has been strongly led by higher-government members

and technical experts from public research institutions, with less involvement of grassroots and local communities.

On the contrary, it was reported that the participatory approach performed as a valuable catalyst in implementing the activities after NAPA strategy. Remarkably, the most relevant activity in terms of participatory approach strategy is the last stage of the project implemented in the East Gojam zone. This stage was split into ten further segments, entailing national and local workshops, visits on the ground, training workshops, distribution of brochures and bulletins, and pilot demonstrations.

Considering both preparation and implementation of the NAPA in Ethiopia, the design of appropriate institutional structures for adaptation is recommended. This framework must take into consideration the most influential stakeholders and institutions with high leverage potential in the NAP's policy environment at local level.

In the previous chapters, constraints of Ethiopia, Burkina Faso and Central African Republic's NAPA were identified, as well as the Burkina Faso' s and Cameroon's NAP, with the aim to provide new insights for the NAP's implementation phase in Ethiopia. Having collected data and findings with other countries through a comparative methodology, it is possible to focus on Addis Ababa's NAP implementation. NAP's implementation leaves huge room for renovation and advance.

This research on Ethiopia might also help other countries with NAP design and implementation as generic lessons learnt on how to develop communication and participatory approaches in the strategy of climate change adaptation.

Having compared NAPAs' outcomes, specific recommendations can be formulated for the NAP's implementation:

- NAP's implementation phase should widen stakeholder's engagement in assessment, design, implementation and monitoring of adaptation plans, particularly the private sector, which is critical in many contexts for implementation. Inclusion of marginalized groups is fundamental (Kissinger et al. 2014, p. 1);

- Improvement of community awareness is a crucial factor towards climate change action through participatory approach tools:
  o Participatory Scenario Development;
  o Participatory workshops;
  o Interviews;
  o Data gathering and assessment;
  o Dissemination of information material;
  o Practical guidance;
  o Facilitation toolkits;
  o Pilot demonstration;
  o Pictures and video;
  o Monitoring tables;
  o Questionnaires, interviews;
  o Participatory observation; and
  o Facilitator debriefing notes (Nkem, Munang, Jallow 2011, p. 69).
- Governance Institutions should be adaptive to the process (Kissinger et al. 2014, p. 1);
- Mapping of the local communities to involve during the implementation (knowledge elicitation);
- Leading Institutions of the process must include agencies, actors and stakeholder at all levels:
  o Steering committee
  o Project Coordination Units
  o Technical committee and task force
- Clearly identify funding resources and donors coordination in the implementation phase of NAP;
- Monitoring the NAPs process through (SEI, 2014, p.6):
  o Formal decision-making;
  o Participation and engagement;
  o Facilitation toolkits.

In order to overcome the widely discussed hazard of maladaptation, further recommendations can be formulated stemming from the comparative study between Burkina Faso and Cameroon. More in depth, Addis Ababa government should equally take into consideration both the communication strategy and participatory framework implemented by the two countries, in the light of a broader stakeholders selection. Lastly, in view of the analysis, a new communication approach, following the already successfully tested "learning by doing and bottom up"[8] frameworks can be recommended. In conclusion, in proceeding with its NAP, Ethiopia should foster and develop the following recommendations with the aim to boost the process:

1) Adopting a **communication strategy** grounded on three main pillars: selection of stakeholders, selection of media, traditional and new tools of communication (Burkina Faso). In addition, it must complete the overall strategy identifying precise communication goals, target groups, lines (Cameroon).

2) The **stakeholder consultation** is a crucial moment within the communication framework, both for preparation and implementation. Regional working-groups must cyclically negotiate and leverage in terms of communication policies at least once per month.

3) It is of fundamental importance to focus on the stakeholder engagement step, shifting from a top-down approach to a **bottom-up framework** and selecting a priority group constituted by stakeholders from the local communities, farmers, breeders; the education community; the specific group of women (Cameroon). More in depth, the inclusion of the following stakeholders is highly recommended at all levels:

- centralised and decentralised administrative structures;
- local authorities;
- civil society and the private sector; communications and media experts; educators;

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[8] Cf. p.272.

- researchers;

- women;

- young people;

- technical and financial partners;

- opinion leaders and traditional and religious authorities;

- local communities in the countryside and in towns

- Heads of the ministries, regional and departmental offices;

- Academic institutions or research institutions;

- Local institutions and traditional chefs and leaders;

- Development projects missions;

- Civil society organization (associations, trade unions, cooperatives);

- Member of the parliament;

- Representatives from private sectors;

- Representatives from structural programmes; and

- Representatives from media.

In addition, considering the highly localized, site-specific nature of adaptation strategies in Ethiopia, climate change capacity building and adaptive governance is strictly required at lower regional, administrative units and especially at district levels. Finally, it must be underlined that as CAR's study case sharply demonstrated, a stable and sound institutional environment constitute an essential feature for implementing a successful participatory framework within both NAPAs and NAPs. In fact, political instability and bad governance make it hard to adapt to the physical effects of climate change and hard to handle any conflicts that arise without violence (Smith, and Vivenkananda, 2007).

Smith and Vivenkananda (2007) elaborated twelve recommendations for addressing climate change in fragile states. However, the fourth (Improve knowledge and generate policy through dialogue) can help on understanding the importance of participation and communication.

Smith and Vivenkananda (2007, p. 39) have argued "three points about dialogue: a) That the best way to garner information includes drawing on local knowledge and

the best way to achieve that is through dialogue; b) That the best way to develop policy is by putting local interest and scientific research into dialogue with each other; c) That dialogue around climate change can be a means of peacebuilding and that cooperation on adaptation to climate change can be a joint task to emerge out of a peacebuilding dialogue. International cooperation needs to focus on providing the financial resources, training and enabling environment for multiple levels of dialogue to be pursued by local communities, national governments and regional organisations. In this nascent field, cross-border information sharing and lessons learned will provide examples of good and bad practice" (Smith and Vivenkananda, 2007, p. 39).

CHAPTER 8 – CONCLUSIONS

This dissertation has highlighted participatory approaches and communication methodologies and their use in development projects, the climate change domain and the NAPA process, more specifically. For participation, in its most general sense, the goals and sources of participation were outlined, along with guidelines for effective participation and the modes for evaluating the effectiveness of participation. Some critiques of participation were also elucidated. Following from this general discussion of participation, participatory approaches for development (and climate change) were then discussed; these include Rapid Rural Appraisal, Participatory Rural Appraisal, Participatory Poverty Assessment, Appreciative Inquiry, Analytic Deliberative Approach and Community Based Adaptation. Communication methodologies were then introduced and discussed in relation to the climate change domain.

The NAPA process was then introduced and its background and rationale was established. Evaluations of the NAPA process, along with gaps in these evaluations, were outlined in order to determine the relevant questions for the dissertation and where new findings could emerge. Two key research questions were identified:

1. To what extent were communication and participatory approaches embedded into NAPAs (according to global/local stakeholders)?

2. Is it possible to identify the impact of participatory approaches and communication on the implementation of NAPAs (according to global/local stakeholders)?

In a final introductory step prior to the collection and analysis of survey and interview results, the NAP process was looked at and how the fundamental principles of communication and participation have been embedded in the NAP process. The lessons learnt from the NAPA process, such as the use of a multidisciplinary NAPA team and monitoring and review of the process, were identified to be taken forward for the NAP strategy.

There were a number of conclusions and recommendations from the survey results:

- The steps in the NAPA process were sufficient but finance was a limitation on the scope of NAPA.

- Participatory poverty assessment, participatory rural appraisal and community based adaptation were the most used participatory approaches in the NAPA and were also those that were deemed to be most useful for results.

- The greatest benefits achieved by participatory approaches were the following: to build broad-based support for decisions; to ensure local implementation capacity; to promote sustainable practices and accelerate exchange of views of different stakeholders; and to create common ground for participation in the implementation.

- 'Establishing a NAPA team with a public participatory dimension' is the most effective step in the NAPA process in terms of results.

- The most important lesson learnt from the NAPA process was 'involvement of all stakeholders from the beginning'.

- The most represented stakeholders within the NAPA process were governments, followed by research institutions, UN Agencies and local communities. Private sector and CSOs were underrepresented stakeholders.

- Governments were considered the most useful stakeholder in terms of results.

- National workshops, local-level workshops and group interviews were the most effective methods of stakeholder consultation.

- National and local-level workshops are methods of stakeholder consultation that should be used throughout the NAP process.

The conclusions from the survey were supplemented with conclusions and recommendations drawn from the interview responses. These can be summarised as follows:

- The NAPA and NAP process, and the efficacy of communication methodologies and participatory approaches, are highly influenced by context.

- There are many limitations that may affect the outcome of the NAP process.

- Participation was viewed as important and had many roles within the process, to: identify challenges; increase ownership; identify successes or

weaknesses of projects; achieve impact at local level; help to explain what climate change adaptation is and raise awareness (along with communication); help to facilitate long term resilience to climate change; and involve people from different contexts and sectors.

- Government is the main stakeholder for driving the NAP process.

- Other important stakeholder identified are: centres of research; training institutions; representatives of local communities; and representatives of groups from different sectors.

- Key stakeholders should be involved from the beginning of the NAP process.

- Communication should be clear and sustained, making use of local radio and journalists.

- The cost of the NAP process is a concern and this needs to be planned appropriately and adequate national and international funds need to be set aside for designing, as well as implementing, the plan.

- The NAP process should be linked with current structures to enhance efficiency.

The final chapter elaborates the strategy for communication and participation within the NAP. It follows the LEG guidelines and supplements each step with insights from the literature review, survey and interviews. The strategy makes clear recommendations of the participatory approaches to be used, the methods of stakeholder consultation that could be most useful for each element, and the types of communication methodology for each step. The context dependency of the strategy is explicitly recognised.

The case study elaborated for Ethiopia allows to demonstrate the important role of participation and communication at the field level and the recommendations elaborated for Ethiopia could be helpful for other countries that are in charged on develop policies and strategies for climate change adaptation. In particular, the case study identified the following recommendations for the NAP's implementation:

- NAP's implementation phase should widen stakeholder's engagement in assessment, design, implementation and monitoring of adaptation plans, (Kissinger et al. 2014, p. 1);

- Improvement of community awareness is a crucial factor towards climate change action through participatory approach tool (Nkem, Munang, Jallow 2011, p. 69).

- Governance Institutions should be adaptive to the process (Kissinger et al. 2014, p. 1);

- Mapping of the local communities to involve during the implementation (knowledge elicitation);

- Leading Institutions of the process must include agencies, actors and stakeholder at all levels;

- Clearly identify funding resources and donors' coordination in the implementation phase of NAP;

- Monitoring the NAPs process through formal decision-making, participation and engagement, and facilitation toolkits (Rosentrater and Vincent, 2013 p.6).

In order to realise these recommendations, countries should:

4) Adopt a **communication strategy** grounded on three main pillars: selection of stakeholders, selection of media, traditional and new tools of communication and identify precise communication goals, target groups, lines.

5) Ensure **stakeholder consultation** during preparation and implementation. Regional working-groups must cyclically negotiate and leverage in terms of communication policies at least once per month.

6) Shift from a top-down approach to a **bottom-up framework** and select a priority group constituted by stakeholders from the local communities, farmers, breeders; the education community; the specific group of women;

7) Ensure that climate change **capacity building and adaptive governance** is strictly required at lower regional, administrative units and especially at district levels.

8) Ensure that **dialogue between different stakeholders** will be regular and will reduce or moderate conflicts and that international cooperation will focus on providing the financial resources, training and enabling environment for multiple levels of dialogue to be pursued by local communities, national governments and regional organisations.

In conclusion, taking in consideration the results of research and the main research questions identified, we can say that participatory approaches and dialogic communication are key priorities for the climate change domain and the NAPA and NAP process. This is because they have been identified as methods for improving the outcomes of decision-making processes, both in terms of the representativeness of the decisions for all relevant stakeholders and for the longevity and uptake of projects in the long-term. Furthermore, participatory approaches have normative considerations of governance, self-determination, rights and voice of those most directly affected by climate change and decisions about adaptation, mitigation and development. Communication is an important facilitative tool for NAPA and NAP processes, being the tools for awareness raising, identifying vulnerabilities, sharing best practice and learning, among others. It is therefore essential to have vertical and horizontal communication at all stages of climate change policy processes.

The results of the analysis and literature review show that there are still many ways in which participatory approaches and communication methodologies can be enhanced within the NAPA and NAP process. However, in order for this to occur, the limiting factors need to be removed, for instance, financial and time constraints, and low national institutional capacity. Carrying out a participatory process can be more time consuming financially draining and institutionally demanding, and therefore it is important that the positives of the approach are widely broadcast and that the process is supported with adequate funding and resources for training, including from international sources.

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Estratto per riassunto della tesi di dottorato

Studente:Federica Matteoli   matricola: 955985

Dottorato:Scienza e Gestione dei Cambiamenti Climatici   Ciclo: XXVIII

Titolo della tesi[9] :

Role of Participatory Approaches and Communication in National Adaptation Programmes of Action: Lessons Learnt for National Adaptation Plans
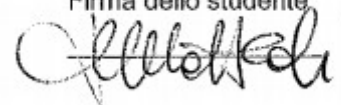
Ruolo degli Approcci Partecipativi e della Comunicazione nei Programmi d'Azione Nazionali di Adattamento (NAPAs): Lezioni Apprese per i Piani Nazionali di Adattamento (NAPs)

Abstract:

This research explores how participatory approaches and communication were used in the implementation of Nation Adaptation Programmes of Action (NAPAs) to detect lessons learnt and to understand how to deploy these approaches in Nation Adaptation Plans (NAPs). The research assesses how these approaches are utilized in NAPAs and what are their effectiveness in order to identify possible gaps. In particular, the research investigates the similarities and differences between NAPA and NAP processes on using these principles and it evaluates whether these are embedded in the NAP process. These analyses are supported by a survey and interviews involving experts on NAPA, NAP, participation and communication. In support of the thesis a case study for Ethiopia is presented and recommendations for the use of participatory approaches and communication in the design and implementation of NAPs in Ethiopia is provided. In conclusion, a participatory and communication strategy for NAP is presented in order to complement the LEG technical guidelines on NAP and provide new ideas for communication and participation.

Questa ricerca esplora come gli approcci partecipativi e la comunicazione sono stati utilizzati nella realizzazione di programmi d'azione nazionali di adattamento al cambio climatico (NAPA) per rilevare le lezioni apprese e per capire come utilizzare questi approcci nei Piani Nazionali di Adattamento al cambio climatico (NAP). La ricerca valuta come questi approcci sono utilizzati nei NAPA e quale e` la loro efficacia al fine di individuare eventuali lacune. In particolare, la ricerca indaga le somiglianze e le differenze tra i processi di NAPA e NAP nell'usare questi principi e valuta se questi sono incorporati nel processo dei NAP. Queste analisi sono supportate da un sondaggio e da interviste che coinvolgono esperti di NAPA, NAP, partecipazione e comunicazione. A sostegno della tesi un caso di studio per l'Etiopia viene presentato e vengono fornite raccomandazioni per l'uso di approcci partecipativi e comunicazione nella progettazione e realizzazione del NAP in Etiopia. In conclusione, la tesi fornisce una strategia partecipativa e di comunicazione per i NAP al fine di integrare le linee guida tecniche sui NAP e fornire nuove idee per la comunicazione e la partecipazione.

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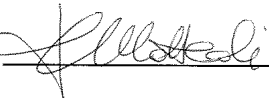
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