Scoping study for capacity development in disaster management between Tanzania and Sweden

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1. Introduction

Tanzania and Sweden have a long history together, reaching even earlier than independence. Ever since independence in 1961 (of Tanganyika), extensive development cooperation has taken place between the two countries, and Tanzania is still one the main partners of Swedish development cooperation.

The Disaster Management Department (DMD), under the Office of the Prime Minister, is the governmental coordinating authority for all aspects of disaster management in mainland Tanzania. It functions as the central coordinating body during the response to disasters, and promotes and implements prevention, mitigation and preparedness activities to minimize the adverse effects of hazards. This is a challenging task and DMD is striving to shift the countries current focus from disaster response towards a more balanced approach to disaster risk reduction, response and recovery. A shift that is necessary considering the potential impact of a changing climate onto communities around the country already vulnerable to droughts, floods, epidemics and other hazards that are likely to be exacerbated in the future.

The Swedish Civil Contingencies Agency (MSB) is a governmental agency active in disaster risk management, and with a mandate to support the development of capacities for disaster risk management in other countries.

DMD and MSB have had a dialogue regarding cooperation for some time, facilitated by the Swedish Embassy in Dar es Salaam. To take this dialogue further, the partners performed a scoping study in April-July 2011 to identify challenges for the system for disaster risk management in mainland Tanzania, on which to focus potential capacity development efforts. This report is the output of that scoping study.

The purpose of the scoping study is in other words to form a foundation for further project design, by identifying challenges for disaster risk management and presenting suggestions for which to focus on in order to facilitate sustainable project results in regard to developed capacities for disaster risk management in mainland Tanzania.

2. Methodology

The methodology of the scoping study follows Logical Framework Approach (LFA) and builds upon Örtengren's (2003) work in the form of Sida's guidelines for LFA. The LFA methodology is however adapted to suit the particular context of capacity development for disaster risk management and climate change adaptation.

The rationale of the Logical Framework Approach is that there is a current situation that contains some challenges that are deemed undesirable but possible to resolve through purposeful activities. In other words, that there is a current situation that can be turned into a desired situation through the design and implementation of a capacity development project for disaster risk management (Figure 1).

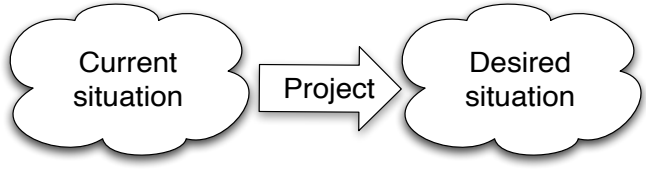

Figure 1. The rationale of LFA.

The version of LFA used is divided into nine steps, three focused on the current situation, one focused on the desired situation and five focused on the project (Figure 2). Thus only the first three steps of the methodology are applied in practice in this scoping study, but the remaining steps are also presented in the methodology chapter to guide further work.

For every step of the methodology, one or a few overarching questions are initially presented (in *italics*) to illuminate the main purpose of that step (based on *Ibid.*). Thereafter follows more detailed questions to answer for each step, as well as methods and sources to use when answering them. The detailed questions are developed from the work of Ulrich (2000), Örtengren (2003) and Becker (e.g. Becker 2010), and adapted to suit the context of capacity development for disaster risk management.

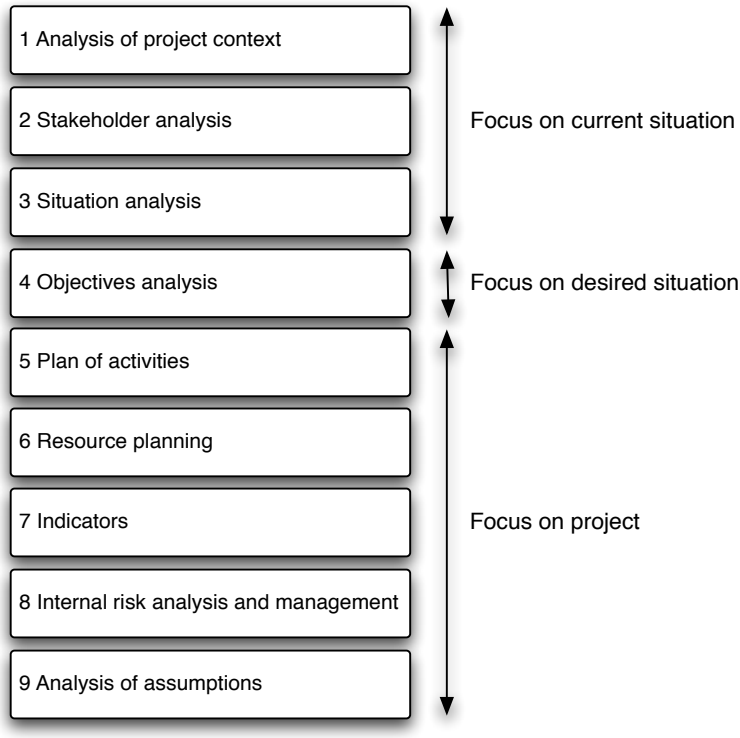

Figure 2. The steps and focus of LFA.

2.1. Analysis of project context

What is the general rationale and context for the project?

When designing a project for capacity development for disaster risk management it is crucial to start the process by contemplating and formulating the general rationale for the project in the first place. Being explicit and transparent about the reasons for the potential project, as well as for engaging in the process of designing it, is important for building trust between stakeholders, for commitment and ultimately for project effectiveness.

It is also important to consider that the notion of "development", in the concept of capacity development, may carry different meanings to different people involved in the project design process. What is considered an improvement for one stakeholder may not be considered

an improvement by another (Ulrich 2000). It is thus essential to think about and present what is to be considered "development" in the particular project.

Finally, it is necessary to identify what contextual factors that may have an effect on the project (Örtengren 2003). Although this initial part of the project design process is restricted to the identification of general factors, there may be a broad range of physical, environmental, political, economical, social and cultural factors to include in the analysis. A common tool to use for such analysis is SWOT analysis, which stands for strengths, weaknesses, opportunities and threats. This acronym is sometimes changed to SWOC, as the idea of challenges may appear less intimidating than that of threats in the original form. The content and methodology is however unchanged.

This step of the Logical Framework Approach is summarised as the answer to three questions:

1. What is the general rationale for the development of capacities for disaster risk management in the particular context?
2. What different visions of "development" are considered, and how are they reconciled?
3. What are the general physical, environmental, political, economical, social and cultural factors that could affect the project?

The SWOT/SWOC analysis of this scoping study was facilitated by DMD and MSB, 4 May 2011, and included a wide range of stakeholders. See section 3.1 for the full list of involved stakeholders.

2.2. Stakeholder analysis

Who are directly or indirectly influenced by and exert an influence on what takes place in the project?

The second step of the LFA methodology is the stakeholder analysis, which is an identification and analysis of who are directly or indirectly influenced by or influencing the potential capacity development project for disaster risk management. The stakeholders can be divided into beneficiaries, decision-makers, implementers and financiers (*Ibid.*). A beneficiary, in this framework, is a stakeholder whose interests are served

by the project, a decision-maker is a stakeholder in a position to change it, an implementer is realising its activities, results, purpose and goal, and a financier is funding the project.

It is also important to think about and decide who is to be considered an expert, i.e. what knowledge is considered relevant, and where those involved could seek some guarantee that improvement will be achieved by the project. Finally, and for legitimacy, it is also important to attempt to directly involve some stakeholder who argues the case of those who cannot speak for themselves, e.g. marginalised groups, future generations, the environment, etc, and who seeks the empowerment of those affected but not involved.

This step of the Logical Framework Approach is summarised as the answer to four questions:

1. Who are the beneficiary, decision-maker, implementer and financier?
2. Who is considered an expert and what counts (should count) as relevant knowledge?
3. What or who is assumed to be the guarantor of success?
4. Who is witness to the interests of those affected but not involved and what secures their emancipation?

The stakeholder analysis for the scoping study is done in dialogue between DMD and MSB.

2.3. Situation analysis

What is the current situation? What are the problems in this situation? What are the causes of these problems? What are the effects of these problems?

The situation analysis is an identification and analysis of the problem to be resolved by the project, and thus the reason for its existence. Situation analysis is in other words fundamental as it is impossible to define goal, purpose, results and activities in an effective manner without first describing the current situation which the project is intended to address. Such description is generally guided by questions about what the problems are in the current situation as well as their causes and effects (*Ibid.*:9-11). Similarly, the more recently emerged process of capacity assessment emphasises the importance of analysing current capacities

and capacity needs (UNDP 2008b; UNDP 2008a; UNDP 2009). The challenge is to translate these general approaches to the specific context of capacity development for disaster risk management.

If the goal of disaster risk management is to reduce disaster risk and the goal of capacity development in this context is for individuals, organisations and societies to obtain, strengthen and maintain capacities to do just that (*Ibid.*:5), two clear areas for analysis of the current situation emerge. Firstly, what current and future risk that the individuals, organisations and societies are up against, and secondly, what capacities they currently have to manage it. The situation analysis for capacity development for disaster risk management involves in other words the analysis of risk and the analysis of capacity to manage risk. The sources of information for this situation analysis are:

- Several meetings with Disaster Management Department at the Office of the Prime Minister
- One national workshop with the National Disaster Management Committee and stakeholders from the international community
- One regional workshop with representatives from the Regional Disaster Management Committee in Morogoro Region
- One regional workshop with the Regional Disaster Management Committee in Arusha Region. The participants of this workshop felt that they were not given sufficient time to prepare for the workshop and thus prepared and submitted a written report to shed additional light on the issues at hand a few weeks later.
- One district workshop with the District Disaster Management Committee in Kilosa District
- One district workshop with the District Disaster Management Committee in Arusha District
- One meeting with a ward representative and representatives from her flood affected community in Kilosa District
- One meeting with the village committee of the drought affected community of Lemong'o in Arusha District.
- One meeting with the Regional Administrative Secretary in Morogoro Region.

- Disaster Relief Coordination Act, 1990
- Disaster Relief Coordination Regulations, 1991
- The National Disaster Management Policy (2004)
- National Operational Guidelines (NOG) for disaster management (2003)
- Prime Minister's Report (2001) on Vulnerability Assessment
- Prime Minister's Report (2003) on Vulnerability Assessment
- Disaster Risks and Capacity Needs for Tanzania Mainland (2008)

2.3.1. Analysis of risk

There are many methodologies for analysing risk available in the world. As the DMD has already commissioned a series of risk, vulnerability and capacity assessments in 2001, 2003 and 2008, those assessments are used as input to this scoping study.

2.3.2. Analysis of capacity to manage risk

With a clear picture of what risks that the system for disaster risk management and climate change adaptation is up against, it is time to analyse the current capacities of the system for managing those risks. The concept of capacity is generally defined as "[t]he combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals" (UNISDR 2009:5). However, to be able to systematically analyse the current capacities for disaster risk management and climate change adaptation, it is vital to concretise what strengths, attributes and resources that contribute to what goal, as well as how to do it.

The purpose of the system for disaster risk management and climate change adaptation is to protect what human beings value, now and in the future, and for doing that the system needs to perform a set of functions. These functions are general for all such systems in the world, but how, by who, with what resources, etc, the functions are done are contextual and varies from country to country. To protect what human beings value, the system for disaster risk management and climate change adaptation must be able to anticipate, recognise, adapt to and

learn from threats, accidents, disasters and other disturbances to society. The functions for anticipating such events before they happen are risk assessment and forecasting, and for recognising when they are about to happen, or has happened, are monitoring and impact assessment. To adapt society to protect what human beings value, we utilise the proactive functions of prevention/mitigation and preparedness, as well as the reactive functions of response to and recovery from actual disasters. Last, but not least, to continuously learn and build an increasingly safe and sustainable society, we need to utilise the function of evaluation and use its results for increasing the effectiveness of the system. These nine functions are not only crucial in themselves, but also largely dependent on each other in such a way that the performance of one function requires the output from another function, e.g. to respond by warning the public to take shelter for a coming cyclone necessitates information from forecasting or monitoring the weather. See figure 3 for an overview of functions and their relations.

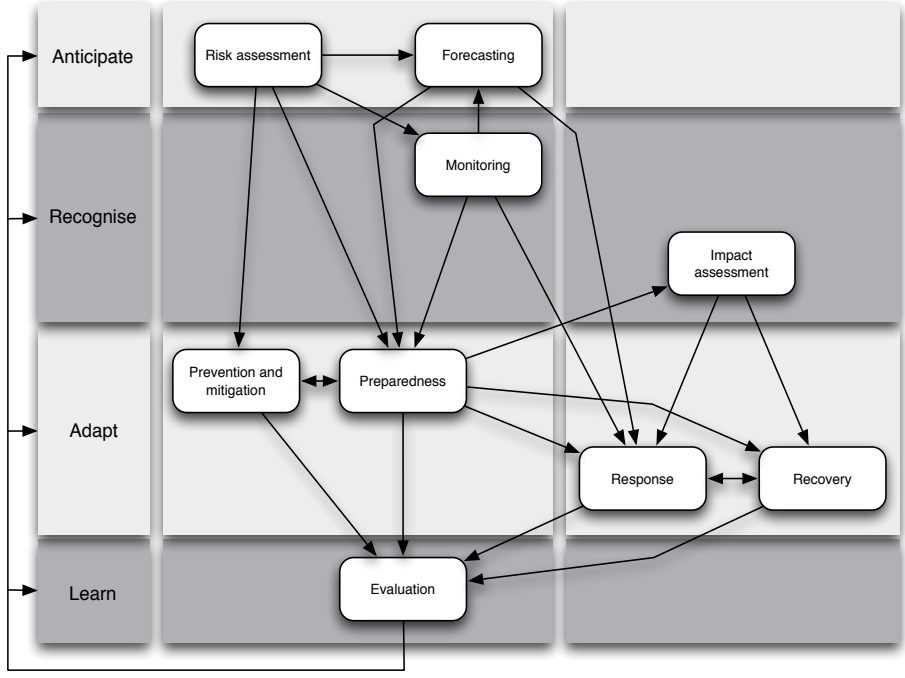

Figure 3. The functions of systems for disaster risk management and climate change adaptation.

These nine functions are required for any system for disaster risk management and climate change adaptation in the world (Figure 3). Analysing the capacity for each function in a specific context, however, entails analysing what actually exists in that context in order for each function to work. These factors can generally be categorised under (A) legal and institutional frameworks, (B) system of organisations, (C) organisation or (D) human and material resources (developed from Schulz *et al.* 2005:32-50). Although there are a large number of potential questions that could be useful to answer to identify and analyse these factors, the methodology of this scoping study limits them to 22 guiding questions that needs answering for each function (Table 1). These guiding questions are not necessarily asked straight out, but needs answering for a comprehensive analysis of capacities for disaster risk management and climate change adaptation.

This step of the Logical Framework Approach is summarised as the answer to three questions:

1. What function is necessary to perform in order to manage the analysed risks?
2. Why is that function necessary to manage the analysed risks and what other functions are necessary to be able to perform that function?
3. What is available in terms of legal and institutional framework, system of organisations, organisation and resources to facilitate the performance of all identified functions?

The series of risk, vulnerability and capacity assessments for mainland Tanzania (2001, 2003 and 2008) include a broad range of hazards that necessitates all generic functions. Thus, the functions and relations in figure 3 directly represent the answers to question 1-2 above.

As stated earlier, the situation analysis is based on workshops, meetings and on documentation, and is focused on getting a rapid general appreciation of the risks that the system for disaster risk management in Tanzania faces, and on mapping the current capacities of that system for managing these risks. The output of this process is a holistic and systematic overview of challenges to use as a basis for prioritising key challenges to address in international development cooperation.

	Levels of factors determining capacity			
Functions	**A. Legal and institutional framework**	**B. System of organisations**	**C. Organisation**	**D. Resources**
Anticipate 1. Risk assessment 2. Forecasting **Recognise** 3. Monitoring 4. Impact assessment **Adapt** 5. Prevention & mitigation 6. Preparedness 7. Response 8. Recovery **Learn** 9. Evaluation	A.1) Are there any legislation or policy requiring [function]? A.2) Is the utility for [function] stated in legislation or policy? A.3) What stakeholders are identified in legislation or policy as involved in [function]? A.4) Are the legislation or policy stating to whom and how the results of [function] should be disseminated? A.5) Are funds earmarked by legislation or policy for [function]? A.6) Are the legislation or policy implemented? A.7) Are there any values, attitudes, traditions, power situation, beliefs or behaviour influencing [function]?	B.1) What stakeholders and administrative levels are involved in [function]? B.2) Are the responsibilities of stakeholders and administrative levels clearly defined for [function]? B.3) Are interfaces for communication and coordination between stakeholders and administrative levels regarding [function] in place and functioning? B.4) Are interfaces for dissemination, communication, and integration of the output of [function] to stakeholders involved in other functions that depend on the output? B.5) Are interfaces for facilitating coordination between functions in place and functioning?	C.1) What parts of each organisation are involved in [function]? C.2) Are the responsibilities for [function] clearly defined for each involved organisational part? C.3) Are systems for effective collaboration in [function] between the involved organisational parts in place and functioning? C.4) Are there any internal policies for [function] in each involved organisation? C.5) Are these internal policies implemented? C.6) Are interfaces for dissemination, communication, and integration of the output of [function] to parts of the organisation involved in other functions that depend on the output in place and functioning?	D.1) What knowledge and skills on individual level does each involved organisation have for [function]? D.2) What equipment and other material resources does each involved organisation have for [function]? D.3) What funds do each involved organisation has for [function]? D.4) What knowledge, skills and material resources do members of the public have for [function]?

Table 1. Examples of guiding questions for capacity analysis of systems for disaster risk management and climate change adaptation.

2.4. Objectives analysis

What is the desired situation? What are the long-term changes needed to reach that situation? What are the direct effects of the project? What are the direct effects of the activities that are implemented within the framework of the project?

The fourth step of the LFA methodology is the objectives analysis, which includes the evaluation of current risks, according to the risk analysis, the evaluation of current capacities to manage risk, according to the capacity analysis, and the formulation of clear project objectives.

The evaluation of risk, in this context, includes a statement of the desired level of risk, or at least of the intention to reduce the current level. Similarly, the evaluation of current capacities to manage risk includes a statement of the desired level of performance, or at least of the intention to increase the level of performance in order to manage the risks at the desired level. The formulation of objectives entails formulating an overall goal (i.e. what the long-term effects of the project are), purpose (i.e. what the direct effects of the project are) and expected results (i.e. what the direct effects of the activities that are implemented within the framework of the project are).

This step of the Logical Framework Approach is summarised as the answer to five questions:

1. What is a desired level of risk?
2. What is a desired level of capacity to manage risk?
3. What is the goal? That is, what are the long-term effects of the project?
4. What are the purposes? That is, what are the direct effects of the project?
5. What are the results? That is, what are the direct effects of the activities that are implemented within the framework of the project?

2.5. Plan of activities

What are the activities needed to generate the results required to reach the purposes and goal of the project?

The fifth step of the LFA methodology is the plan of activities needed to generate the results required to fulfil the purposes and goal of the project. These activities are in other words no ends in themselves, but

the means to reach the desired ends as specified in the objectives analysis. It is important to note that projects for capacity development for disaster risk management and climate change adaptation often need to comprise of a mix of activities that are connected and depend on each other for generating the required results. The plan of activities is thus not only a list of activities, but a plan specifying when and in what order the activities need to be implemented.

This step of the Logical Framework Approach is summarised as the answer to three questions:

1. What activities are needed to generate the results required to fulfil the purpose to reach the goal of the project?
2. How are the identified activities dependent on each other?
3. In what internal order are the activities implemented?

2.6. Resource planning

What are the resources needed to implement the project activities?

When having a plan of activities to implement to generate the necessary results to reach the purposes and goal of the project, the next step is resource planning. This is the sixth step of the LFA methodology and entails producing a detailed plan of the resources that need to be allocated and when in order to implement the activities. These resources can include funding, venues, equipment, expertise, etc, and can be in cash or in kind. The co-financing between stakeholders can in other words not only involve direct monetary contributions, but also contributions by covering salary costs of own personnel, making own buildings available as venues for activities, etc. It is however central to specify all contributions in the resource plan, as well as who controls them, as unclear or ambiguous division of responsibilities may hamper effective implementation of the project.

This step of the Logical Framework Approach is summarised as the answer to two questions:

1. What resources are necessary for the implementation of the project activities?
2. What resources are controlled by which stakeholder?

2.7. Indicators

How can the success of each activity, result, purpose and goal be verifiably measured?

Effective capacity development projects for disaster risk management and climate change adaptation necessitate, as all development projects, the possibility to measure its success. The way this is done is to identify indicators that are possible to verifiably measure for all levels of objectives in the objectives analysis, as well as for all activities in the plan of activities. There should in other words be at least as many indicators as there are activities, results, purposes and goals in the project, even if it is suggested to attempt to find several indicators to measure each project result and purpose (Örtengren 2003). These indicators can be measuring quantity and/or quality of what the project intends to achieve, and they must be measured in relation to a specific period of time during which the improvements are intended to take place. To be able to determine if improvements have taken place, it is often necessary to have baseline data to compare with.

Having indicators is not only central for making it possible to measure project effectiveness by following up on its intended improvements, but also as establishing indicators necessitates that project results, purposes and goal are specific, measurable, realistic and time-bound.

This step of the Logical Framework Approach is summarised as the answer to two questions:

1. What is the measure of improvement in terms of quality and/or quality for each project activity, result, purpose and goal?
2. When is the improvement intended to have taken place?

2.8. Project risk analysis and management

What are the potential external and internal factors that may limit the success of the project and how can these be mitigated?

Capacity development projects for disaster risk management and climate change adaptation often span over several years. Regardless of how well planned a project is, there may be various factors that can negatively impact its effectiveness. These factors can be external to the project, e.g. global economic crisis or political changes, and difficult or impossible

for the project stakeholders to reduce. They can also be internal to the project, e.g. staff turnover, and possible to reduce through systematic risk management. As the project risk analysis and management is crucial for determining the viability of any project, the LFA methodology includes the systematic analysis and management of project risks as its eighth step.

This step of the Logical Framework Approach is summarised as the answer to four questions:

1. What can happen that can have a negative impact on the project?
2. How likely is that to happen?
3. If it happens, what are the consequences?
4. What can be done to reduce the likelihood of it happening and/or its consequences?

2.9. Analysis of assumptions

What are the factors influencing the fulfilment of each result, purpose or goal, which the project has limited direct control over but are possible to forecast?

Aside of the project risks, there are physical, environmental, political, economical, social and cultural factors that may affect the project but lie outside the influence of the project stakeholders. These factors also need to be analysed, as the viability of the project depends on the feasibility of the assumptions that the stakeholders make concerning the future state of these factors in relation to the project results, purposes and goal. This analysis forms the last step of the LFA methodology and is called analysis of assumptions. Assumptions that may negatively impact the project if not met may also be considered project risks and dealt with accordingly.

This step of the Logical Framework Approach is summarised as the answer to the question:

1. What are the central assumptions that may influence the project results, purposes and goal?

3. Results and discussion

3.1. Analysis of project context

The general rational for the potential development cooperation between DMD and MSB is that Tanzania is a disaster prone developing country with a large population that to a great extent is vulnerable to drought/famine, diseases, vermin/pest infestation, fire, floods, strong winds, civil conflict, major accidents and earthquakes (Tanzania Disaster Vulnerability Assessment, 2003). Of these nine categories of hazards, the first seven is likely to transform over time due to climate change, and most researchers and practitioners agree that this transformation is for the worse. To facilitate sustainable development in Tanzania, the country must have sufficient capacity to manage risk and adapt to climate change. MSB has a mandate by the Swedish government to support the development of such capacities in developing countries.

When analysing the project context, it is clear that there are several visions of what would constitute development in the context of the potential development cooperation. First of all, DMD voice the view that the overall vision of development in this context includes the substantial reduction of death, human suffering and losses in disaster situations in mainland Tanzania. Both DMD and MSB agree that to accomplish such desired change requires an overall development of the capacities for disaster risk management in mainland Tanzania, which also is indispensable to facilitate future sustainable development. DMD is convinced about the need to develop the capacities for disaster risk management of local government, on both regional and district level, as these levels are the ones closest to the vulnerable people. These visions of development are however not mutually exclusive, but rather the opposite. Development in this context is thus the process towards a safer and more sustainable mainland Tanzania, and to get there requires increased capacities for disaster risk management and climate change adaptation on national, regional and district level.

To identify what general physical, environmental, political, economical, social and cultural factors that influence the Tanzanian system for disaster management, a SWOT/SWOC analysis was performed in Dar es Salaam 4 May 2011. 21 people representing the following stakeholders participated in the analysis:

- Disaster Management Department, Prime Minister's Office
- Fire and Rescue Force HQS
- Ministry of Education & Vocational Training
- Ministry of Health and Social Welfare
- Ministry of Livestock & Fisheries Development
- MSB
- SIDA/Embassy of Sweden
- Tanzania Food and Nutrition Centre
- Tanzania Meteorological Agency
- Tanzania Red Cross
- UNDP
- UNICEF
- Vice President's Office
- World Food Programme
- Lund University

The SWOT/SWOC analysis identifies a number of contextual factors that may influence the potential development cooperation to develop the Tanzanian capacities for disaster risk management and climate change adaptation. Some of these are strengths and opportunities to build on, while others are weaknesses to address and challenges to deal with. However, all these factors must be taken into consideration when designing the development cooperation between Tanzania and Sweden in general and between DMD and MSB in particular. The full results of the SWOT/SWOC-analysis are presented in the matrix below (Table 2).

	Positive factors	*Negative factors*
Internal factors	**Strengths** Have legislation from 1990 Approved policy in 2004 Policy include public, private and civil society Cabinet paper to review legislation Have a department and committee for DM National platform for DRR is ongoing Early warning system extreme weather, food security, epidemics, animal epidemics, TRCS has implemented some DRR activities on community level Strong UN partnership, One UN Starting to work with Min.of Education to integrate DRR in school curricula Few ministries with organisation for DM Zonal strategic disaster relief facilities (prepositioning of relief items, Unicef support) Strategic food reserves on regional level Existing Disaster Management Training Centre at Ardhi University A Emergency and Preparedness Plan is being developed DMD is placed at high political office Good relationships between all stakeholders Having an semi-autonomous institution for weather forecasting	**Weaknesses** Old legislation, focused on response Policy a bit outdated after HFA Policy not implemented on regional and district level, committees meet as Security Committees Committees meet only during disasters Slow process to approve interventions No structure for information management No funding for supporting other stakeholders Lacking emergency operations centre Low operational capacity Limited human resources at DMD for operational tasks Very limited capacity for DRR and Response at local level, both regional and district Lack of capacity for building local capacity Lack of resources for public awareness raising campaigns Not properly stocked zonal strategic disaster relief facilities Food reserves keep only one food stock Low appetite for DM issues on political level Focus on reactive response instead of proactive DRR on all levels Weak early warning system, including weak and slow dissemination of information Lack of long term planning Lack of link response, DRR and CCA Lack of communication and equipment on all levels
External factors	**Opportunities** Mostly low impact and limited scale disasters Predictable trend of disasters in terms of time and location Local people has a culture of helping each other Active media in response situations Active politicians demanding response in disasters Indigenous knowledge One UN approach implemented at present High donor interest in Tanzania Political stability	**Challenges** High illiteracy rate Media not always accurate High level of vulnerability for large parts of the population Government dependent of external support Increasing number and magnitude/effects of disasters, both man-made and natural Climate variability and change = more drought, new areas affected. Rising sea levels in future Lack of long term planning

Table 2. The resulting SWOC-matrix (adapted SWOT).

3.2. Stakeholder analysis

The ultimate beneficiaries of the development cooperation between DMD and MSB are the people of mainland Tanzania, as the project intends to develop the capabilities for protecting these people from treats, accidents and disasters, in both medium and long term. The project is however not intended to directly target the Tanzanian people, but involving DMD, members of the technical committee supporting Tanzania Disaster Relief Committee (TANDREC) and members of selected Regional Disaster Management Committees and District Disaster Management Committees.

The decision-makers for mainland Tanzania are DMD and TANDREC. For Sweden the decision-makers are MSB regarding the project per se, with approval from the Ministry of Defence and Ministry of Foreign Affairs, and Sida regarding the funding. The potential development cooperation is implemented by DMD and MSB, with assistance from whomever the two partners see fit, including relevant international organisations in Tanzania. The potential development cooperation is intended to be funded by Sida. The guarantors of success are in other words DMD and MSB, and it is DMD who is responsible of considering the interests of the ones affected by but not involved in the project.

DMD and MSB acknowledge the need to not only incorporate the knowledge of formal experts into the scoping study and future project, but the knowledge of representatives of all stakeholders from sectorial experts from line ministries and other organisations, to elected members of local government. The stakeholders included in the scoping study is:

- Disaster Management Department, Prime Minister's Office, Dar es Salaam
- Fire and Rescue Force HQS, Dar es Salaam
- Ministry of Education & Vocational Training, Dar es Salaam
- Ministry of Health and Social Welfare, Dar es Salaam
- Ministry of Livestock & Fisheries Development, Dar es Salaam

- MSB
- SIDA/Embassy of Sweden, Dar es Salaam
- Tanzania Food and Nutrition Centre, Dar es Salaam
- Tanzania Meteorological Agency, Dar es Salaam
- Tanzania Red Cross, Dar es Salaam
- UNDP, Dar es Salaam
- UNICEF, Dar es Salaam
- Vice President's Office, Dar es Salaam
- World Food Programme, Dar es Salaam
- Regional Commission, Morogoro
- Regional Agricultural Department, Morogoro
- Regional Engineering Department, Morogoro
- Regional Health Department, Morogoro
- District Executive Director, Kilosa
- District Planning Department, Kilosa
- District Supplies Department, Kilosa
- District Agriculture Department, Kilosa
- District Education Department, Kilosa
- District Legal Department, Kilosa
- District Land Section, Kilosa
- Ward Commissioner, Ward south of Kilosa town
- Members of the community, Ward south of Kilosa town
- District Commission, Karatu
- District Commission, Monduli
- District Commission, Longido

- District Commission, Arumeru
- District Council, Arusha
- District Council, Karatu
- District Council, Meru
- Regional Economy and Empowerment Department, Arusha
- Regional Administration Department, Arusha
- Regional Disaster Focal Point, Arusha
- Regional Agriculture Department, Arusha
- Regional Veterinarian Department, Arusha
- Arusha NGO Network (ANGONET)
- National Muslim Council of Tanzania, Arusha
- WFP, Arusha
- Militia, Arusha
- District Human Resources Department, Arusha
- District Social Welfare Department, Arusha
- District Education Department, Arusha
- District Divisional Officer, Arusha
- District Planning Department, Arusha
- District Financial Department, Arusha
- District Water Department, Arusha
- District Agricultural Department, Arusha
- District Council Representative, Arusha
- Village executive officer, Lemong'o
- Village committee, Lemong'o

3.3. Situation analysis

Tanzania is not particularly prone to large-scale disasters, relatively speaking in comparison to other countries in Africa, but has a wide range of hazards that continuously threaten and impact human lives, property, livelihoods and the environment. These hazards include drought/famine, diseases, vermin/pest infestation, fire, floods, strong winds, civil conflict, major accidents and earthquakes (Tanzania Disaster Vulnerability Assessment, 2003). These hazards have the potential to impact vulnerable individuals, communities, buildings, infrastructures etc, and are constant sources of erosion of mainland Tanzania's development gains. Here follows the results from the analysis of the current capacities in mainland Tanzania for managing these risks.

3.3.1. Risk Assessment

Legal and institutional framework

The overall legislation for disaster risk management in mainland Tanzania is not at all including risk assessment. This is commonly understood as a result of the legislation being from 1990 and not updated according to the development of the field of disaster management since then. However, the National Disaster Management Policy (2004) it is clearly outlining that hazards, vulnerabilities and risks must be continuously assessed and mapped on national as well as regional and district level. There has been three national risk, vulnerability and capacity assessments for mainland Tanzania done in 2001, 2003 and 2008, mainly by external consultants, but neither legislation nor the policy clarify for what these assessments should be used for or to whom they should be disseminated to.

The National Disaster Management Policy (2004) specifies that it is the responsibility of the Disaster Management Commission (not established as of now and DMD is still part of the Prime Minister's Office) to continuously conduct risk assessments on national level, of the Regional Disaster Management Committees on regional level, and of the District Disaster Management Committees on district level. The policy is

however not implemented and neither legislation nor policy earmarks any funds for the performance of risk assessments.

System of organisations

Although there has been three risk, vulnerability and capacity assessments for mainland Tanzania done in 2001, 2003 and 2008, these have mainly been done by external consultants. In recent years mainly by the Disaster Management Training Centre (DMTC) at Ardhi University (ARU), which is a Tanzanian university situated in Dar es Salaam. However, there are no comprehensive and continuous risk assessments done by the stakeholders identified in the National Disaster Management Policy (2004). There seems to be a lot of individual knowledge about specific hazards, as well as about vulnerabilities in specific communities, among professionals from various sectors and administrative levels, but this knowledge is only in a very few cased collected and used in any systematic way to assess risk.

The policy roughly specifies the responsibility for risk assessment, but not what each stakeholder involved in the different committees should do. The committees on national, regional and district level represent institutional arrangements that could facilitate the necessary communication and coordination for risk assessments on these levels, but these committees do very rarely meet on a regular basis but often only in actual disaster situations. Hence, not fulfilling their intended role. This also means that there are not sufficient arrangements for making sure that the result from risk assessments are disseminated and utilised for other functions vital for disaster risk management in mainland Tanzania, e.g. preparedness planning, prevention and mitigation, etc, or for development planning.

Organisation

There are no explicit organisation for comprehensive and continuous risk assessment at neither national nor regional and district level. The Disaster Management Training Centre (DMTC) at Ardhi University (ARU) is sufficiently organised internally to perform risk assessments, but it is not feasible to have only one stakeholder for the massive task of

risk assessments for national, regional and district level in the entire country.

Resources

There is a chronic lack of funding for risk assessment at all levels of the system for disaster risk management in mainland Tanzania. However, the national level has some resources that has been allocated for this before and could form a basis for more continuous work on risk assessments. The human resources for risk assessment are even more inadequate in the governmental structures and seem to be limited to a few knowledgeable individuals at DMD on national level. The understanding of and competences for risk assessment on regional and district level are more or less absent, as is also the case for most of the political leadership and in the sectorial ministries and authorities on national level. Without awareness among decision-makers of the importance of risk assessment not only for disaster risk management, but also for development planning, it is very difficult to facilitate sustainable development in the country.

3.3.2. Forecasting

Legal and institutional framework

Although the overall legislation for disaster risk management is not explicitly including forecasting, its subsequent regulations (Disaster Relief Coordination Regulations, 1991) mention that weather forecasts should be available in the Command Centre of the DMD. The National Disaster Management Policy (2004), on the other hand, indicates that forecasting is required for specific sectorial ministries and authorities (i.e. Tanzania Meteorological Agency, Ministry of Agriculture and Food Security, and Ministry of Health) in the sense of being a crucial part of early warning systems for weather hazards, food insecurity and epidemics that are explicitly highlighted. There may also be requirements for forecasting these hazards, as well as others, in sectorial legislation. This part of the policy seems to be implemented to a certain degree.

System of organisations

The Tanzania Meteorological Agency provides weather forecasts, but there are weaknesses in the clarity of criteria and in the system for when and how a warning message should be transferred to DMD and other stakeholders. There are also weaknesses in the procedures for how these stakeholders should act on such warnings. At present, warnings about extreme weather are at times ad-hoc and often not acted upon. The Ministry of Health has a forecasting system for human epidemics, but the output of it is mostly used within the ministry itself and disseminated to other stakeholders to limited extent. The Ministry of Agriculture and Food Security has a forecasting system for drought, where several organisations collaborate. Although there are river basin officers responsible for monitoring all larger rivers through mainland Tanzania, there are no forecasts of water levels in rivers disseminated to regions and districts downstream.

Organisation

At present, the scoping study lacks data on how the organisations involved in forecasting the above-mentioned hazards organise these tasks internally. Such details are however deemed unnecessary for the more general focus on disaster risk management of the scoping study.

Resources

The Tanzania Meteorological Agency have resources for basic weather forecasting, but claim to lack sufficient equipment for more detailed forecasting of other forms of extreme weather than too much or too little rainfall. The Ministry of Agriculture and Food Security claim to have, together with their partner stakeholders, sufficient resources, in the form of both material and human resources, to fulfil their responsibility of forecasting droughts. This is also the case of the Ministry of Health. A few participating stakeholders also mentioned local knowledge of signs in the nature for forecasting, e.g. clouds around Mt Meru indicating the local weather for the near future, but these are neither often shared with others nor understood or acted on by individuals involved in disaster risk management.

3.3.3. Monitoring

Legal and institutional framework

The overall legislation for disaster risk management is not including monitoring in its paragraphs. However, the National Disaster Management Policy (2004) states that monitoring of hazards, risks, disaster threats and the conditions of vulnerable populations are the responsibility of all regional and district disaster management committees. The policy is neither specifying the utility of such monitoring, nor with what resources this should be done. The policy is not clear on the responsibilities of the different stakeholders within the regional and district committees, which may be a reason for why hazard monitoring is not implemented to any sufficient degree. The policy is not stating to whom and how the monitoring results should be disseminated.

System of organisations

There is a system of river basin officers that are monitoring the water level in all major rivers in mainland Tanzania. However, at present, there is not a systematic approach in place for disseminating this information to DMD or to regional and district disaster management committees downstream. Monitoring of the same hazards as for forecasting above is done on national level (see Forecasting above for info).

Organisation

At present the scoping study lack data on how the organisations involved in monitoring organise this task internally. Such details are however deemed unnecessary for the purposes of the scoping study.

Resources

At present the scoping study lack data on the resources available for monitoring the river basins in mainland Tanzania, but it is clear that the vital system for systematic information dissemination to stakeholders who need to act on such warnings is more or less non-exiting. For the resources available to monitor the weather, drought and epidemics, please refer to the section on Forecasting above.

3.3.4. Impact Assessment

Legal and institutional framework

The overall legislation for disaster risk management in mainland Tanzania is not explicitly including impact assessment, although it may be implied as a basis for paragraphs concerning effective disaster response. The National Disaster Management Policy (2004) clearly states that rapid damage and needs assessment is a core component of disaster response, but it does not explicitly state its utility, which stakeholders that should be involved, or to whom the results should be disseminated. Neither legislation nor policy earmark funds for impact assessment.

System of organisations

The stakeholders involved in the scoping study give an ambiguous view on the system for impact assessment in Tanzania. Some stakeholders say that the district disaster management committees are doing them and report to their corresponding regional disaster management committees, which is turn report to DMD. Other stakeholders say that the regional level is going out to the disaster struck districts for assessing the damages and needs themselves, as the district lack resources and competence for the task. A third group of stakeholders say that the national level sends out an assessment team. All these accounts can be true in themselves, as different approaches could have been applied in different disaster situations, but it is important to note that the different stakeholders were asked to explain the system for impact assessment in general terms.

Another ambiguity in the reply from the involved stakeholders concerning impact assessment is if the members of the disaster management committees, on any the three levels, do the assessments jointly or one by one. Some of the involved stakeholders claim they do the initial damage and needs assessment jointly and later in-depth assessment sector by sector, while other stakeholders claim that all assessments are sectorial. This can yet again both be true considering the possibility of different groups of stakeholders solving the task differently, but it is essential to bear in mind that these conflicting statements originates from stakeholders from within one committee.

The only conclusion that the scoping study can make is that, even if there is a predetermined system for impact assessment in mainland Tanzania, it is not implemented to any substantial degree around the country.

Organisation

All stakeholders state that it is the technical experts of each line department who are deployed in the impact assessments, regardless of administrative level, and that the team is put together based on the need of each specific situation. The expert from each sectorial line department is responsible for collecting data related to that specific sector. However, this appears to be done on an ad hoc basis, and the scoping study has not come across any policies or guidelines directing impact assessment on national, regional or district level.

Resources

DMD has developed hard copy templates for impact assessment, which are intended for multi-sectorial assessments on national, regional and district level. However, the template is not utilised on regional and district level outside a few isolated cases. Most of the stakeholders involved in the scoping study were even unaware of its existence. This may be connected with the lack of training for impact assessment that appears to be more of a rule than exception among the regional and district stakeholders. Ad-hoc training on disaster management has however taken place in some regions and district, but staff turnover have a tendency to quickly undermine the increased capacities as the few trained individual leave. As side of templates for impact assessment, basic equipment for being able to assess the damages and needs in disaster situations, e.g. cars, phones, etc, exists at all levels and places in mainland Tanzania. However, funds for being able to utilise resources for impact assessment are not earmarked on beforehand on regional and district level, but must be reallocated from the budgets for the normal everyday services of local governments. The national level has emergency funds that can be utilised for impact assessment. These funds can be transferred to regional and district level, but the process is claimed to be bureaucratic and too time-consuming to plat an operational role in

facilitating timely impact assessment. However, considering that each district and region have paid personnel, basic vehicles for moving around, phones for communication, etc, the actual extra monetary cost of assessing the impact of a disaster within the administrative boundaries is limited. What is the main deficiency is in other words according to this scoping study the lack of knowledge, skills and basic tools for doing it.

3.3.5. Prevention/Mitigation

Legal and institutional framework

Although it is stated by DMD and other stakeholders involved in this scoping study that prevention and mitigation is largely missing in mainland Tanzania, the Disaster Relief Coordination Act, 1990, points out explicitly and recurrently the requirement of such activities. The legislation is however not fully implemented. The National Disaster Management Policy (2004) states clearly the requirement and utility of prevention and mitigation. Moreover, it mentions such activities as the responsibility of all stakeholders, however not explicitly in all instances. Although there are risk reduction activities done within several sectors, neither legislation nor policy earmark funds for prevention and mitigation, which is seen by several stakeholders as a major challenge. Several stakeholders mention widespread values, attitudes and behaviours of being more reactive in the way of life in mainland Tanzania, than proactive and planning, as one important factor complicating the commitment to preventive and mitigating policies and activities in the country.

System of organisations

There are committees on national, regional and district level that are responsible for facilitating and coordinating prevention and mitigation activities. As side of discussions in the technical committee supporting TANDREC on national level, prevention and mitigation is not on the agenda for these committees, except perhaps in some rare instances. These committees mostly meet in actual disaster situations to attempt to mobilise resources, and are largely either unaware and/or incapable of

their more proactive responsibilities. After larger disaster, there are at times risk reduction initiatives mandated from the national level and most often implemented by national stakeholders, e.g. the Army, or through procurement of private companies. These are however not proactive and based on the result of any risk assessment, but a reaction by attempting to reduce the risk of the same devastation as in the last disaster. The responsibilities of the committees are in other words not sufficiently met.

Organisation

At present the scoping study lacks data on how the organisations involved in Prevention/Mitigation organise this task internally. It seems like the Army is sufficiently organised to implement more technical risk reduction activities, e.g. constructing dikes etc, but such details are deemed unnecessary for the overall purposes of the scoping study.

Resources

There is a severe shortage of funds for prevention and mitigation activities, as they are not a priority among decision makers with a broad range of other services to the public on their mind, e.g. education, healthcare, infrastructure, etc. This is obviously a difficult balance to strike, but not integrating prevention and mitigation into these other activities is a very cost-ineffective way of governance, as recurrent disasters continuously destroy the investments made and the development gained. There is however a general lack of awareness among decision-makers of the utility and cost-effectiveness of prevention and mitigation, and even more so regarding the importance of informing the design of such activities as well as development planning at large by the output risk assessment. Most of the involved stakeholders, outside the DMD and a few other stakeholders on national and international level, also do not grasp these vital connections.

The technical knowledge of actually implementing prevention and mitigation activities is available in mainland Tanzania, but limited to a few experts on various administrative levels with full agendas and tight budgets. However, as there is no systematic input from risk assessment, stakeholders do neither know what risk to prevent or mitigate in the first

place, nor how to best address it in practice. Most stakeholders do state that lack of funding for prevention and mitigation is the main problem, but with more knowledge and skills they may start seeing how the very limited funds they have for performing their everyday tasks of education, road maintenance, etc, could be used more cost-effectively as they make sure to reduce the risk of disasters destroying their development gains.

3.3.6. Preparedness

Legal and institutional framework

The Disaster Relief Coordination Act, 1990, points out explicitly and recurrently the requirement of preparedness activities in mainland Tanzania, although in no detail. The National Disaster Management Policy (2004), on the other hand, reiterates this requirement and states clearly the utility of preparedness for response. It also specifies what preparedness activities include, and to some degree allocate the responsibility of part of these activities to different stakeholders. However, both the legislation and policy fall short of explicitly mentioning preparedness for effective recovery. The Disaster Relief Coordination Act, 1990, mentions an Tanzania Emergency Operations Plan but neither the act nor the policy specifies the utility of or responsibility for preparedness planning (including contingency planning). The policy is not implemented. No funds are earmarked in legislation or policy for preparedness, which is stated by most stakeholders as the main challenge for preparedness. Again, several stakeholders state that common values, attitudes and behaviours of being more reactive in the way of life in mainland Tanzania, than proactive and planning, is one vital factor complicating the commitment to preparedness activities.

System of organisations

Aside of a few activities implemented in recent years with the assistance of international partners, there is not many coordinated preparedness activities implemented in mainland Tanzania that involves several organisations. There are institutional arrangements for facilitating such in the form of the committees on national, regional and district level.

However, with the exception of a few meetings in the technical committee on the national level supporting TANDREC, very few committees meet at all concerning proactive issues but only in actual disaster situations. The few preparedness activities that do take place is not informed by the output of any risk assessment, which makes it difficult to appraise their necessity, if not done as a reaction to a recent disaster event, or effectiveness.

The policy allocate, although roughly, the responsibilities for preparedness to a whole range of stakeholders. According to this, it is the responsibility of local government to prepare for effective disaster management, but all but a few stakeholders on these levels expressed that they had sufficient procedures in place to be able to live up to the task. There are for instance not sufficient procedures or guidance for comprehensive preparedness planning, which is a key for effective response and recovery. Some national stakeholders may have preparedness plans, but the lack of an all-encompassing plan entails a risk of overlaps and gaps, which may lead to waste of resources and/or that vital needs are not addressed.

Organisation

At present the scoping study lacks data on how the organisations involved in activities relevant for preparedness organise this task internally. Such details are however deemed unnecessary for the purposes of the scoping study.

Resources

There is a general lack of knowledge and skills regarding the crucial connection between risk assessment and preparedness. There is also a widespread unawareness regarding various preparedness activities at all administrative levels in mainland Tanzania, except among a few knowledgeable individuals at DMD. There is a lack of tools and processes for systematic and comprehensive preparedness planning. There is a need of a systematic strategy for education, training and exercises on various administrative levels.

In terms of material resources, there are prepositioned stocks of relief items in a few regions and emergency food reserves together covering the entire country. The prepositioned relief items are deemed by all stakeholders to be insufficient to fully meet the needs in even the small and medium scale recurrent disasters in the country, and more so if something bigger would happen. There is an emergency fund available, but the process of applying for funds from it is bureaucratic and slow. The funds are deemed insufficient by most stakeholders and can only be used reactively. There are no emergency funds or specific funds for preparedness activities on regional or district level. Funds can also be applied from the government, but then the application has to compete with other needs for funding for healthcare, education, etc. There are in other words insufficient funds for preparedness activities at all administrative levels in mainland Tanzania.

3.3.7. Response

Legal and institutional framework

The Disaster Relief Coordination Act, 1990, gives the president the mandate to declare a disaster area, which then make emergency resources available for the issuing response operation. It allocates the operational decision-making powers to Tanzania Disaster Relief Committee (TANDREC), which is a committee with high-level officials from the prime minister's office and relevant ministries. The legislation also forms the Disaster Relief Coordination Department at the office of the prime minister to support TANDREC in executing its responsibilities. This department is however called Disaster Management Department in all but the actual legislation, which together with a whole range of inconsistencies in details between legislation and practice raises questions marks on its general implementation. For example, the act mentions the Disaster Prevention Committee, the Disaster Relief Coordination Regulations, 1991, call it the Disaster Operations and Preparedness Committee, while there is no such committee or committees active in reality. The legislation earmark funds for disaster response in the form of the disaster relief fund, but the funds are according to most of the stakeholders managed in a way too

much similar to ordinary funds, and not as emergency funds, which make the process of allocation too bureaucratic and slow to meet the needs it was intended to meet.

The legislation states clearly the requirement and utility of disaster response. It also states generally that all relevant ministries and organisations must support with their resources the effective response to disasters. The National Disaster Management Policy (2004) clarifies this to some degree in listing a number of organisations and their very general responsibilities in the response to disaster situations. However, although the prime minister signed the policy in 2004, it has not been implemented to any substantial degree at the time of the scoping study. For instance, the policy calls for the reorganisation of the DMD into a free standing commission with more executive power to speed up disaster response through quicker allocation of funding, increase its possibilities for coordinating all stakeholders, etc. It also calls for the identification of lead agencies for different types of disasters, disaster management units at all stakeholders' offices, disaster response teams, etc. The policy is, as previously noted, however not implemented.

System of organisations

The disaster response system in Tanzania is formally based around the committees on national, regional and district level, which in a disaster situation meet to mobilise resources and attempt to coordinate the disaster response. However, except for the technical committee that support TANDREC on national level, there committees do in many cases only include the traditional security stakeholders (army, militia, police, etc), in some cases also include other line departments (health, agriculture, education, etc), while in only very few cases also the Red Cross, NGOs and international organisations. Although the traditional security stakeholders have resources that can be mobilised and effective in the field, looking at the actual disaster response, any disaster have a large contribution of the Red Cross and NGOs, and if larger in size also international organisations. This division of stakeholders leads in most instances to parallel coordination structures, with insufficient coordination as a result.

There is a system for responding to droughts, which by governmental stakeholders are described as sufficient for meeting the needs of the people identified as in need of food aid in the stricken communities. However, the local communities involved in the scoping study described the assistance as insufficient as they had been drought stricken for many months and only received five kilos of maize per person in the community for three months. A low figure that is explained by the agricultural department as a result of the community sharing the food aid equally between all households and not only for the household that the assessment had identified as in need. Regardless if it is the assessments that underestimate the number of households in need, or if it is the way the food aid is distributed, even the relatively advanced system for responding to droughts seems to have its weaknesses.

Organisation

At present the scoping study lacks data on how each organisation involved in disaster response activities organise these tasks internally. Several stakeholders state however that the army, police and militia, as well as the Red Cross and the larger NGOs are organised in a manner to be flexible and effective in the field. Such details are however deemed unnecessary for the purposes of the scoping study.

Resources

The majority of the involved stakeholders state that regional and district level government are too weak in both human and material resources to fulfil their responsibilities in disaster response. They contribute the best they can and often in a rather ad hoc manner, while the Red Cross, army and NGOs, and in large disaster also international organisations, implement the bulk of the response activities. There is a disaster relief fund at national level to apply for funds from, but the process is described as almost too bureaucratic and time-consuming to fill its purpose of meeting the most immediate needs. There is also a system of applying to the government for additional funds, but this is understandably enough even more time-consuming.

Stakeholders voice a common view that there are not sufficient material resources, e.g. relief items, equipment, etc, in place to cover such a large

country. The Tanzania Red Cross Society has volunteers with basic training all over the country and some relief items in stock. The army has also personnel that are trained for fieldwork, although perhaps not specifically for disaster response, and vehicles, equipment, tents, etc. The police and militia are viewed as having sufficient human and material resources for fulfilling their responsibilities. Although these organisations fulfil an important task, not all individuals are educated and trained for their tasks.

The Tanzanian population are hardy and do a large share of the immediate response themselves. However, a large part of the population is poor even before they are struck by a disaster and may loose the few assets they have to secure their livelihood, leaving them even more vulnerable than before.

3.3.8. Recovery

Legal and institutional framework

The overall legislation for disaster risk management in Tanzania is not mentioning recovery. The National Disaster Management Policy (2004), however, clearly states both the requirement and utility of disaster recovery. It spans the spectrum from immediate recovery of lifeline services, e.g. water, health, etc, to rehabilitation and recovery of society as a whole. The policy states that all sectors should budget for such contingencies, which unfortunately, together with most other statements in the policy, has not been implemented yet.

System of organisations

Recovery is largely assessed, planned and implemented in a sectorial manner, without much inter-sectorial coordination. The national government also at times involves stakeholders not normally responsible for the construction and maintenance of a specific infrastructure, such as the army for reconstruction of railroads and dikes, and private contractors to rehabilitate dams, etc. It is clear that it is a gap between disaster response and recovery as there are generally different stakeholders involved and not much of a connection in between. The entire recovery system seems ad hoc and not sufficient, and the local

community members involved in the scoping study voiced frustration over so any families still living in tents 1,5 years after the disaster event.

Organisation

At present the scoping study lacks data on how each organisation involved in disaster recovery organise these tasks internally. Several stakeholders state however that the army is well organised for reconstructing infrastructure, such as railroads and dikes, and most often private contractors are procured for various recovery projects. The details concerning their internal organisation are however deemed unnecessary for the purposes of the scoping study.

Resources

There are no specific funds allocated for recovery at any administrative level. Regional and district level can apply for funds from the national government and voice frustration over the slow process and unreliability of success. This means that the regional or district level are hesitant of reallocating funds from other important services to start up recovery, as if they do not get any extra funds they will not be able to supply the services. Most stakeholders involved in recovery activities either have the necessary human resources or have ways to get it from the outside. The recovery activities of national, regional and district level are however in all but a few cases focusing on infrastructure and services, and not on private houses etc. Poor people are I other words largely left to rebuild their own lives, with the assistance of the Red Cross and NGOs at times. An exception of this is the agricultural departments, which often assist rural people to plough and plant after disaster for the recovery of their livelihood.

3.3.9. Evaluation

Legal and institutional framework

The overall legislation relevant for disaster risk management is not including evaluation. However, the National Disaster Management Policy (2004) clearly states that post disaster review should be made mandatory by the government in order to collect and implement lessons learnt. This is however not sufficiently implemented, and although basic

post disaster reviews are done occasionally, there is neither any system in place for structured comprehensive reviews, nor for how the lessons learnt should be used to develop the disaster risk management system in mainland Tanzania. The evaluation of other disaster risk management functions than the reactive function of response is not mentioned at all in legislation or policy, and there is no funds earmarked for evaluation.

System of organisations

The system of organisations for evaluation of disaster risk management is there in the form of the committees on national, regional and district level. Aside of occasional post disaster review discussions in the technical committee supporting TANDREC on national level, these committees do however not do any systematic and comprehensive evaluation of the performance of any disaster risk management functions. A few stakeholders participating in the scoping study mentioned that they go through the meeting notes from the last meeting to follow up. However, considering that these committees only meet once or twice in each actual disaster situation, and has no meetings after the disaster situation is over, going through meeting notes for another past disaster would not have any impact on current response effectiveness.

Organisation

There is to the knowledge of the scoping study no specific organisational set-up at any of the organisations involved in disaster risk management for evaluation the effectiveness of those activities. Responsibilities are not allocated and there is to the knowledge of the scoping study no system for sharing any lessons learnt with the parts of the organisations that would benefit from taking them onboard.

Resources

Evaluation of the performance of disaster risk management functions seems to be a low priority function at all administrative levels in mainland Tanzania. There are no funds allocated, there are no processes, methods and tools available, and no individuals with specific evaluation training and education. There is no comprehensive system on national, regional or district for recording earlier events, which is of vital

importance for other functions, such as risk assessment. The oral tradition of the elders in villages is deemed by several of the participating stakeholders to be a valuable resource to get the record of the most significant events in recent history.

4. Conclusions

It is apparent in the scoping study that the system for disaster risk management and climate change adaptation in mainland Tanzania has both strengths to build on and challenges to address. For doing so it is vital to make sure that the activities implemented in any potential project is sufficient to reach its intended results, purposes and goal on their own and not being dependent on addressing other challenges that are not focused on. To achieve capacity development in mainland Tanzania also necessitates involving a mix of activities. In other words, it is seldom enough to develop an advanced legislation and train a few individuals. For developing real capacities for disaster risk management, it is also necessary to develop the system for how the various stakeholders collaborate and coordinate their activities, as well as organisational development of key stakeholders.

A central challenge in relation to capacities for disaster risk management and climate change adaptation in mainland Tanzania is the more or less entirely obsolete Disaster Relief Coordination Act, 1990, and Disaster Relief Coordination Regulations, 1991. Large steps towards updating the legal and institutional framework have been taken in the form of the National Disaster Management Policy (2004), but this policy has not been implemented to any substantial degree.

To be able to develop effective and sustainable capacities for disaster risk management, it is vital to develop a new legislation, outlining the system for disaster risk management in mainland Tanzania, in combination with and a comprehensive disaster risk management policy. This policy must specify in detail the what, why, when, where, how and who in relation to all the nine required functions for disaster risk management and climate change adaptation, including the crucial connections between the functions, e.g. between risk assessment and preparedness. This would entail systematic advocacy on the highest political level, preferably in collaboration with high level policymakers and professionals from other countries and international organisations. This would also entail technical support and advice in the process of drafting the legislation and policy.

Another central challenge to address is the system for coordination and collaboration between organisations involved in disaster risk management in mainland Tanzania. There are committees for this on national, regional and district level, but with the exception of the committee supporting TANDREC on the national level and a few one-off cases on regional and district level, these committees are only meeting once or twice during the actual disasters, and not on any regular basis. The committees on regional and district level are also in many cases mainly including the traditional security stakeholders (army, militia, police, etc), in some cases also other line departments (health, agriculture, education, etc), while in only very few cases also the Red Cross, NGOs and international organisations. These committees are in other words generally not fulfilling their intended purposes to any substantial extent.

To be able to develop any effective and sustainable capacities for disaster risk management in mainland Tanzania, it is vital to revive and continuously maintain these committees so that they can play the vital role of coordinating and facilitating both proactive and reactive disaster risk management and climate change adaptation activities. However, Tanzania is a large country with many regions and districts, and disaster risk management is a comprehensive issue. Also considering the general limitations of international development cooperation, this requires a focused approach that would entail two parts. It would entail activities developing the capacities for a selected set of the most central disaster risk management functions of the national and a group of selected regional and district committees. More importantly, it would also entail the development of a system for continuous maintenance of the functioning of the committees through a cascading system in which the national level support the regional level to support the district level, etc.

The functions that in this scoping study are deemed the most pressing for this context are risk assessment (including its central role for prevention/mitigation and preparedness, as well as for development planning), forecasting and monitoring of water levels in major rivers (including sharing potential warnings with regions and district downstream), preparedness for response and recovery, impact assessment

and evaluation. If the capacities of the targeted committees increase for coordinating and facilitating these functions, other functions would benefit accordingly. Developing the system of organisations as described above would entail awareness raising workshops, trainings, development of templates and standard operational procedures, exercises, send lists for warnings, etc.

The scoping study is in other words pointing towards the pressing need for a comprehensive programme to support the development of good local governance in relation to disaster risk management and climate change adaptation. To be able to accomplish that, not only structures for inter-organisational collaboration and coordination are needed, but also well functioning organisations in themselves. Here the first need is to strengthen the Disaster Management Department (DMD), not only so it can improve its own operational capacities, but also its ability of supporting the development of capacity of local government on regional and district level. However, activities for organisational development of local governments in selected disaster prone regions and districts are also needed. This is not only to support the development of good governance in relation to disaster risk and climate change in the selected areas, but also to develop and initiate the continuous cascading system for revitalising and maintaining of the functioning of the committees on regional and district level as described above. These organisational development activities would focus on risk assessment, impact assessment, preparedness and evaluation. Finally, efforts of organisational development is also necessary at the Ministry of Water in order for the current forecasting and monitoring systems of the water levels in all nine major river basins to be developed into a functioning system for disseminating flood warnings to regions and districts downstream.

Finally, the system for disaster risk management and climate change adaptation is chronically underfunded, has insufficient equipment and relief items, and lack to a large extent the necessary human resources. Especially at regional and district level. This is obviously the most difficult thing to address in a sustainable manner, as donating funding and equipment, as well as implementing one-off trainings, may only

increase the capacities for a short period of time. This is particularly pertinent concerning funding and equipment. However, in order to show the government why it would be cost-effective to allocate more resources for disaster risk management and climate change adaptation, the potential capacity development project would need to involve some degree of funding and equipment. For developing the limited human resources in mainland Tanzania, the potential project would entail the implementation of awareness raising workshops and trainings of the current staff of DMD and selected regional and district governments. These activities would focus on risk assessment, impact assessment, preparedness and evaluation, and be complemented with basic methods and tools for performing the functions on a daily basis. To facilitate the sustainability of the human resource base, it is important to build on and develop the educational system for disaster risk management and climate change adaptation in the country. The project would thus benefit of involving the Disaster Management Training Centre (DMTC) at Ardhi University (ARU), both in the design and implementation of trainings per se, and in developing the continuous cascading training system described earlier. Similarly, the resource base for the flood forecasting and monitoring system at the Ministry of Water would also need to be developed accordingly.

The purpose of the scoping study is only to form a foundation for further project design, by identifying challenges for disaster risk management and presenting suggestions for which to focus on (Table 3 for overview). The next step of the LFA methodology is to formulate in more detail what goal, purposes and results that the project must generate. Results that would generate a sufficient legal and institutional framework, system of organisations, organisations and human and material resources for risk assessment; impact assessment; flood monitoring, forecasting and warning; preparedness planning and exercises; and evaluation, in the selected project areas.

	Levels of capacity			
Functions	**A. Legal and institutional framework**	**B. System of organisations**	**C. Organisation**	**D. Resources**
Risk assessment	Yes, including all functions	Yes, on national level and in selected regions and districts	Yes, for DMD and selected regional and district governments	Yes, for DMD and selected regional and district governments
Forecasting		Yes, concerning floods along the major rivers, including warning the regions and district downstream.	Yes, for Ministry of Water for the nine river basins	Yes, for Ministry of Water for the nine river basins
Monitoring		Yes, concerning floods along the major rivers, including warning the regions and district downstream.	Yes, for Ministry of Water for the nine river basins	Yes, for Ministry of Water for the nine river basins
Impact assessment		Yes, on national level and in selected regions and districts	Yes, for DMD and selected regional and district governments	Yes, for DMD and selected regional and district governments
Prevention and mitigation		Not directly, only how risk assessment should be used to guide the design of activities	No	No
Preparedness		Yes, on multi-sectorial preparedness planning and exercises at national level and in selected regions and districts	Yes, for DMD and selected regional and district governments	Yes, for DMD and selected regional and district governments
Response		Not directly, only as a result of preparedness activities	No	No
Recovery		Not directly, only as a result of preparedness activities	No	No
Evaluation		Yes, on national level and in selected regions and districts	Yes, for DMD and selected regional and district governments	Yes, for DMD and selected regional and district governments

Table 3. Overview of suggested challenges to focus on in the proposed capacity development project..

5. References

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