Resilience Building in Tanzania: Learning From Experiences of Institutional Strengthening

Review of learning and early contributions to Climate Resilient Development

Sam Greene

Working Paper
May 2015

Climate change

Keywords:
Adaptation, Tanzania, participation,

iied

Tanzania Natural Resource Forum
Jumuiko la Maliasili Tanzania

HAKIKAZI CATALYST Knowledge. Action. Change.

About the author

Sam Greene is a consultant with IIED's Climate Change Group.

Produced by IIED's Climate Change Group

The Climate Change Group works with partners to help secure fair and equitable solutions to climate change by combining appropriate support for adaptation by the poor in low- and middle-income countries, with ambitious and practical mitigation targets.

The work of the Climate Change Group focuses on achieving the following objectives:

- Supporting public planning processes in delivering climate resilient development outcomes for the poorest.
- Supporting climate change negotiators from poor and vulnerable countries for equitable, balanced and multilateral solutions to climate change.
- Building capacity to act on the implications of changing ecology and economics for equitable and climate resilient development in the drylands.

Acknowledgements

Thanks to Ced Hesse, Morgan Williams, Alais Morindat and Fiona Hinchcliffe for their detailed comments, guidance and editorial feedback on various drafts of the paper. Thanks also to Anna Emmanuel, Ally Msangi, Joseph Rutabingwa and Victor Kaiza for support in Tanzania throughout the study. Finally, thanks to those participating in the study for their time and patience in answering our questions.

Partner organisations

The Tanzania Natural Resource Forum (TNRF) seeks to improve governance and accountability in Tanzania's natural resource sector to achieve more sustainable rural livelihoods and better conservation outcomes.

Hakikazi Catalyst is a Tanzanian economic and social justice advocacy organisation based in Arusha

Published by IIED, May 2015

Sam Greene. 2015. *Resilience Building in Tanzania: Learning From Experiences of Institutional Strengthening: Review of learning and early contributions to Climate Resilient Development.* IIED Working Paper. IIED, London.

http://pubs.iied.org/10129IIED

ISBN 978-1-78431-163-6

Printed on recycled paper with vegetable-based inks.

International Institute for Environment and Development
80-86 Gray's Inn Road, London WC1X 8NH, UK
Tel: +44 (0)20 3463 7399
Fax: +44 (0)20 3514 9055
email: info@iied.org
www.iied.org

@iied
www.facebook.com/theIIED

Tanzania's northern districts are extremely vulnerable to climate change. In the past, community livelihood strategies have allowed people to remain productive in the context of climatic variability. But adaptive capacity is being undermined by the changing climate and the government's inability to support people's needs.

This working paper reviews the enabling environment for climate resilient development in Tanzania, and learning from local government efforts to strengthen institutional capacity adaptation and development planning.

Contents

Executive Summary

The threats posed by climate change are forcing governments to become more responsive to greater short-term variability and long-term environmental changes. Local level planning and budgeting systems must be able to react to the priorities raised by a changing climate. Funded by UK AID-DFID, IIED has been supporting the district governments of Longido, Monduli and Ngorongoro to mainstream climate change adaptation into their planning systems and build readiness to access climate finance in support of community driven adaptation. The approach has been to strengthen the existing institutional environment to enable climate resilient development planning. This working paper assesses the readiness of Tanzania's planning environment for climate resilient development (CRD) and the learning generated from the experience of implementing the project.

Key Findings

Planning systems are not yet "climate-smart". National and local planning systems in Tanzania have not been , are not set up to deal with continuing variability and unpredictability offered by climate change. Policies directly supporting resilience building in Monduli, Ngorongoro and Longido are rare. In very recent years, a growing awareness of potential impacts of climate change has driven significant policy development incorporating indigenous knowledge and use of scientific data. However, these changes have not yet translated into institutional change at the local level. Planning systems do not recognise the role climate-driven traditional planning systems and approaches to livelihoods can play in enabling resilience. This can lead to projects which are ineffective, short-lived, or potentially maladaptive in the long run.

Rigid Budgeting stifles local adaptive capacity. Project funded research has also highlighted weaknesses in district level planning, pointing to the top down and inflexible nature of the process. Due to centrally set, annual budget guidelines and detailed spending limits, districts are unable to respond to local climate variability, a key feature of dryland ecologies. Innovative or local context specific projects are often outside the ability of the district to deliver. This can mean government projects are not appropriate or deliver poor value for money. Reallocating funds in the face of changing circumstances or serious emergencies is generally seen to be impossible. In addition, Budgeting for climate change is non-specific – There are few district funded projects at present focussing specifically on climate change adaptation, although many projects do impact on adaptation outcomes indirectly.

Toward greater climate resilience

Project activities have sought to address some of these issues at district level. "Upstream" investments in capacity building and direct engagement with communities have sought to justify a transformative approach to development planning that incorporates resilience building. After a preparatory phase to establish the quality of the existing planning process, consultations identified activities for the implementation phase, creating an enabling environment through planned adaptation (by government) to support and enhance autonomous adaptation (by communities);

- Establishing a District-level Climate Adaptation Fund (CAF) with the necessary financial systems and checks and balances to access national climate finance.
- Establishing Divisional Adaptation Planning Committees (DAPCs) to prioritise investments in local public goods that build climate resilience to be funded by the CAF, and to act as community focal points.
- Supporting district planning processes through enhancing existing participatory planning approaches (O&OD) with more cost-effective resilience assessments and resource mapping.
- Incorporating climate information services to better inform both short and long term decision making, engaging with both community and scientific forecasting methods.
- Developing a robust monitoring and evaluation framework to enhance and share learning from investments in adaptation.

Learning

Broad Participation is key. Inclusion of stakeholders from all levels of community and government Is essential to generating government and community ownership of the project. Use of multi-stakeholder learning groups, district led research and participatory validation workshops has laid a foundation for generating positive changes.

Preparing the ground through "upstream investments". Efforts to improve knowledge on local livelihoods and research the gaps between customary and government planning has laid the foundation for more radical changes.

Targeting key decision makers and district leaders. Engaging support of District Executive Directors, District Commissioners and other community leaders has lent authority to criticisms of the current system. It has also inspired commitment from other key individuals such as district council department heads and two local Members of Parliament.

Impacts

Although CAF's are yet to be established and work is still on-going, participant testimonies reveal the beginnings of a process of change before any investments into physical infrastructures has taken place.

- **Attitudes and awareness:** Involvement in the project has contributed to more sophisticated understanding and attitudes on the flaws in the current planning process, and the need to incorporate resilience building relevant to local livelihoods and economies for better development outcomes. Improved knowledge of elected and appointed officials and learning at community level has led to the beginnings of grassroots efforts to improve the protection of local forests, reinvigorate water management and enforcement of land use plans.
- **Ownership of the change process:** Continuous inclusion of the views of local government staff, MPs, customary leaders and communities has generated a high level of ownership over project activities. This has generated a sense of anticipation about the project, and has contributed to the increasing role of women leaders within the community.
- **Use of climate information:** Improvement of climate information services through relevant radio forecasting is influencing decision-making of both farmers and pastoralists, who are choosing seed types and making decisions about livestock movements as a direct response to receiving climate information. District governments are supporting this process by establishing groups of mobile phone users who can distribute climate information throughout their social networks. In the long term, this will support safeguarding of assets and potential productivity improvements.
- **Participatory and responsive planning:** Use of resilience planning tools has been well received by planners. These tools allow communities to better articulate adaptive livelihood strategies than under the current system. Resource Maps, where completed, are already being used to support land use planning, a key priority in conflict reduction between pastoralists and farmers. All three districts are keen to incorporate findings from Resilience Assessments into their budgeting process where possible.
- **Cost Savings:** Activities so far have cost less than £1m, and early indications, not yet fully valued, would suggest that benefits will exceed this investment. Experiences in Isiolo, Kenya, where devolved finance mechanisms are already established and making investments, are encouraging, with significant returns to communities within three years of fund capitalisation.

Challenges remain. While there has been broad acceptance of resilience planning tools and a willingness to embrace the use of climate information services, old perceptions about sustainability of traditional livelihoods are deep seated. This brings risks that well-meaning district officials will continue their work in a way that leads to maladaptive outcomes in the long run. Central government reluctance to loosen budget rigidity for fear of mismanagement also remains a significant hurdle. With other districts likely to face similar challenges, the project offers a way forward through adoption of open processes that allow local people to clearly articulate and manage their own livelihood strategies.

1 Introduction

The Tanzanian districts of Monduli, Longido and Ngorongoro (together referred to as "MoNgoLo") are likely to be seriously affected by climate change. Home to 500,000 people, the local economy revolves around pastoralist and agro-pastoralist production, and small businesses operating in urban centres. Local livelihoods are heavily dependent on resources such as soil, water and pasture, all of which are being affected by changing weather patterns, such as the increasing variability in seasonal onset, greater intensity of rainfall and average temperature increase. Such changes bring risks of crop, animal or human diseases, affecting livestock and crop longevity and ultimately undermining the long-term sustainability of local livelihoods. Short-term risks include higher chances of flash-flooding or severe, prolonged droughts.

Traditional livelihoods in the three districts are based on planned and careful decision making, flexibility, and communal management of key resources. While agriculture and tourism play an important role, the economy is dominated by pastoralist activities. Pastoralists in particular have been described as "masters of adaptation", naturally equipped to manage change and insure themselves against threats such as drought by accumulating livestock (Msangi *et al*., 2014). However, the risks brought by climatic change are exacerbated by existing inequalities. Long-standing neglect of local infrastructure impinges upon transport and the sale of livelihood products. Many years of policy focused on tourism, conservation and agriculture have challenged the viability of some livelihoods, particularly those based on pastoralism. Misunderstandings about the strategies and the necessary conditions for pastoralism are common, leading to inappropriate policies that weaken adaptive capacity.

The far-reaching and widespread nature of these threats demand an approach to climate-resilient development (CRD) that incorporates disaster risk reduction, adaptation and long-term development priorities at national and local government levels (Ranger, 2013). Climate-resilient development seeks the continued improvement of development outcomes in a way that is robust to both long and short-term threats raised by climate change. An approach that fully takes into account the needs relevant to local people is essential to prevent the impacts of climate change from undermining the local and national economy and threatening the lives of the population.

Climate-resilient development is still relatively new to Tanzania's political and planning discourse. The National Climate Change Strategy (NCCS, 2012) and subsequent sector resilience-building strategies are too recent to gauge any discernible impacts. An appropriate response to climate impacts must involve the mainstreaming of locally relevant climate change adaptation into government planning, budgeting and implementation processes. This will require the creation of an enabling environment for climate resilient development at national and local policy and budgeting level. This strategy is likely to rely heavily on international finance, particularly from the Green Climate Fund, which will dedicate USD50bn of its $100bn pot annually to climate change adaptation.

Responsiveness to the specific needs of individual districts, along with flexibility to deal with increasing variability, requires a significant level of local autonomy. Tanzania has been implementing a decentralisation programme since 1998, placing authority for development decisions in the hands of Local Government Authorities (LGAs) with knowledge of local resilience needs. However, progress has stalled

somewhat in practice, with policy documents pointing out the significant inputs needed to jump start this process (United Republic of Tanzania, 2009).

In this context, the UK Department for International Development (DFID) is supporting an IIED-managed project in partnership with MoNgoLo district governments, the Tanzanian Natural Resource Forum (TNRF) and Hakikazi Catalyst (HKC) to mainstream climate change adaptation into local government planning in the MoNgoLo districts. The project has been implemented in two phases since 2011 and ultimately aims to improve climate-resilient development outcomes and reduce poverty by improving local governments' capacity to respond to both sudden and slow-onset climate hazards. This approach has been underway in Isiolo County in Kenya for the last two years, where a local climate adaptation fund has been set up, and is now being implemented in a further four contiguous neighbouring Kenyan counties. The model is similar to that being trialled in Tanzania in a relatively similar ecological setting.[1]

This paper analyses the costs and benefits of this project in the context of Tanzanian planning, budgeting and climate policy and finance structures. It may contribute to thinking in other states and districts looking to implement similar climate adaptation and mainstreaming projects. The project and its assessment involved a rich variety of methodological approaches, from participatory resilience assessments to total economic valuation and semi-structured interviews. These are outlined in detail in Annexes 1 and 2.

Section 2 assesses the enabling environment in Tanzania for climate-resilient development, providing an overview of national climate and sector policies, as well as decentralisation policies. Section 3 assesses the planning systems at district level, while Section 4 provides a brief overview of project activities so far. Section 5 compares the costs of project activities to the benefits for individuals, communities, local government processes and national awareness. Section 6 concludes by identifying key lessons and future challenges.

[1] For more information on the Isiolo project, see Kenya National Drought Management Authority (2014); and Hesse and Pattison (2013).

2

Assessing the planning environment for Climate Resilient Development

The threats posed by climate change force governments to become more responsive to both short-term variability and longer-term changes. Planning systems – i.e. policy frameworks, institutional arrangements, and financial arrangements – must create an environment that is responsive to the new priorities raised by a changing climate. This section assesses Tanzania's planning environment for CRD, looking at each aspect of the planning system at national and local level, and reflects on how well they contribute to successful CRD planning. It begins by outlining the assessment approach we used.

2.1 Indicators for assessing CRD and planning

To gauge how well the Tanzanian planning environment supports CRD, it is worth establishing principles on which to base an analysis. Tracking Adaptation and Monitoring Development (TAMD) is a participatory monitoring and evaluation tool used to assess how well climate risks are being monitored and mainstreamed, and whether development is improving climate resilience (see Annex 1). It relies on a series of indicators developed to assess the quality of climate risk management (CRM) at government level . The close links between CRM and CRD mean that it is possible to adapt the TAMD indicators for use as a lens through which to assess the planning environment:

- *Institutional capacity for decision making under climatic uncertainty:* Effective responses to climatic variability and unpredictability require capacity for local discretion and authority to plan and use funds to alleviate or avert these threats. Long-term changes may force district governments to make decisions beyond the scope of pre-set policy guidelines.
- *Responsiveness to local needs:* This quality amalgamates two TAMD indicators ("Quality of stakeholder engagement in decision-making" and "Awareness of climate change issues, risks and responses"). An effective response must be context specific, requiring close engagement with local stakeholders with deep knowledge of their local environment, how it is changing, and how their livelihoods can be best supported. In Tanzania, where soil types, temperature, rainfall and other factors can vary both between and within districts, it is essential that planning is relevant to the context. In MoNgoLo, home to significantly higher numbers of pastoralists compared to farmers, planning that suits districts dominated by farming may not apply. For example,

responsiveness may demand reconsideration of some planning initiatives to reflect pastoralist livelihood strategies. The ability to apply both long and short-term climate information to a local context is also key to appreciating what is feasible or at risk in a given context.

- *Extent to which climate information is used to inform responses to climate change:* This can include use of climate information to safeguard existing investments at risk from a range of climate hazards. It may also include use of climate information for forward looking, "climate-smart" investments that reduce the risk of future compromise by predicted future hazards or changes that undermine long-term viability. This is particularly relevant to both agricultural and pastoralist livelihoods, to support governments and the public in making climate-aware decisions that reduce losses and enhance productivity.
- *Extent and quality of co-ordination across relevant institutions:*[2] The wide-ranging nature of climate change impacts demands a cross-sectoral approach. In Tanzania, where relevant institutions include environmental management bodies as well as several ministries, this is a challenging task. Co-ordination must support effective, climate smart and responsive planning across geographical areas and sectors, but also careful monitoring and learning from resilience-building programmes, internalising lessons across stakeholders. Co-ordination requires an institutional infrastructure headed by a body with authority to convene different stakeholders and feed lessons back to central planners.
- *"Financial support for climate change mainstreaming and related initiatives":* A robust financing framework is necessary to support a transition to a CRD pathway. Financial frameworks should be assessed for their ability to cost, budget for and provide necessary finance for climate change related initiatives. This may include approaches to encouraging spending on climate related objectives and tracking expenditure to gain better understanding of progress. Financing must be sustainable and long term. A committed strategy for mobilising both domestic and international resources is necessary. At district level, the need to be flexible and responsive will require local implementing institutions to be able to reallocate funds quickly depending on seasonal circumstances. This demands robust and transparent financial management systems.

Tanzania has only recently begun to develop policies and strategies that focus directly on responding to the impacts of climate change and promoting climate resilient development. As such, much of the enabling environment for climate change responsive district planning is drawn from policy developed before climate change became a noticeable discourse in Tanzania.

The fact that livelihoods are dominated by pastoralism in the MoNgoLo districts provides a litmus test for the responsiveness of national policy. Because pastoralism represents a livelihood approach that is significantly different to those in other parts of the country, priorities in these districts are also different. If a core facet of CRD is responsive planning and flexible decision making relevant to the specific, changing context of livelihoods in a district or even village, then the scope of government policy and planning for supporting these specificities will provide a useful indicator of their ability to ensure climate-resilient development. The indicators detailed above will be used gauge the extent to which government strategies create an enabling environment for CRD.

2.2 Tanzania's climate-relevant policy frameworks

Climate policy in Tanzania stems from the Vision 2025 strategy paper, the cornerstone of strategic development planning, and the National Environmental Policy. The National Growth and Poverty Reduction Strategy papers, known as Mkukuta I and II, highlight medium term goals contributing to Vision 2025, with implementation detailed in corresponding five year plans. Prior to the more climate specific documents of the National Adaptation Plan of Action (United Republic of Tanzania, 2007), and the National Climate Change Strategy (United Republic of Tanzania, 2012), low-carbon, climate-resilient development was not a priority. Policy guidance stemmed from an general environmental focus aimed at the conservation of existing natural resources and wildlife. Tanzania's on-going decentralisation process is another important area of focus, in theory placing Local Government Authorities (LGAs) as the drivers of development, balancing the demands of top-down national growth and development strategies. Given the projects focus in areas dominated by pastoralism, their attention to pastoralist needs should also be taken into account.

National Environmental Policy (1997)

The National Environment Policy remains the central policy for managing environmental issues, and has served as the basis of climate policy development, despite the fact that climate change is not directly referenced (United Republic of Tanzania, 1997). Land degradation, water access, pollution, wildlife and deforestation are key topics. It promotes "management

[2] This has been adapted from the TAMD wording, "Extent and quality of co-ordination of climate risk management across relevant institutions"

and control of the migration of livestock" alongside "restoration and protection of grazing lands" (ibid., p.20), policies which undermine key tenets of pastoralist production strategies. However, it also gives responsibility to LGAs for overseeing planning processes and establishing local policies, and notes local people's right to participate in land management.

Vision 2025 (1999)

Heavily influenced by the Millennium Development Goals, its broad aims include achieving – by 2025 – middle-income status, good standards of governance, inclusive growth, high levels of education and a semi-industrialised, resilient economy. It further envisions a food-secure population, gender equity, quality healthcare and access to safe water. Climate change is not mentioned, although the vision document states that "high priority must be given to organisational learning and creativity in response to the challenges of nature (including disaster) and to development in the regional and global economy" (United Republic of Tanzania, 1999). It also notes the need for affirmative action to provide special support for traditional or indigenous populations (ibid., p17). This is a notable inclusion in the context of years of underinvestment in regions with large Maasai populations.

National Adaptation Plan of Action (2007)

Tanzania developed its National Adaptation Plan of Action with support from the United Nations Development Programme (UNDP) to address urgent climate change adaptation priorities. However, there is little evidence to show that its activities were carried out or monitored (NAPA, 2007). While none of its costed projects were based in Monduli, Longido and Ngorongoro, the document advocated distinctly non-pastoralist approaches to livestock, including zero-grazing (feeding animals without movement across pastures) and controlled movement of livestock. Such practices undermine pastoralists' strategies which involve flexible mobility according to conditions.

Livestock Sector Development Strategy (2010)

The Livestock Sector Development Strategy specifically highlights the conflicts between farmers and pastoralists due to the lack of alignment of land allocation "with secure land tenure rights and infrastructure development" (United Republic of Tanzania, 2010 p. vi). As for the agricultural sector, the focus is on commercialisation, but encouragingly the strategy recognises the need for "proper arrangements to allocate land and give ownership of grazing areas according to traditional or legal procedures" (ibid). It advocates village-level land-use planning in all districts. However, while this may improve participatory land-use planning, the fact that pastoralists need access to larger spatial scales than village boundaries is ignored. Nor does the policy recognise that fixed land-use plans may be made irrelevant by continually unpredictable weather patterns. It also includes directives to support zero-grazing dairy farms, although gives no direction as to where in the country these might be most appropriate.

MKUKUTA II (2011)

The National Growth and Poverty Reduction Strategy – known as MKUKUTA II – guides the achievement of Vision 2025 (United Republic of Tanzania, 2010). This second iteration of the strategy highlights modernisation and commercialisation of agriculture as a route to poverty reduction, economic growth and food security. Climate relevant targets include ensuring "crop and livestock varieties suited to adverse conditions brought about by climate change are introduced and adopted" and improving capacity to "mitigate adverse impact of climate change natural and human made disasters". Environmentally sustainable growth is a key aspect which incorporates the need to co-ordinate climate change adaptation.

The strategy plans significant growth of the livestock sector, the development of "livestock varieties suited to adverse conditions brought about by climate change", and means to support livestock producers in the face of drought (ibid., p58). This breeding approach contrasts with actual practice promoted by district governments, in which livestock breeding is focused on heavier breeds so as to gain higher prices at market, rather than on drought tolerance. In contrast to other livestock policies (see below) however, there is no mention of "zero-grazing" and other strategies that run contrary to pastoral approaches. However, traditional livelihoods and pastoralism are not mentioned, and key issues such as land use and mobility receive only scant attention.

Five-year Development Plan (2011–2015)

The latest five-year plan outlines the implementation strategy for MKUKUTA II (United Republic of Tanzania, 2012). Climate change is identified as a threat to a modernisation process based on infrastructure expansion, and the plan notes that "environmental concerns need to be mainstreamed in all future policy measures", seeking "climate wise economic development policies", although the principles behind how this will look in practice are not clearly defined (ibid., p.39). It recognises that current environmental management policies (which remain the lead approach to climate change), need reviewing, and that an institutional framework for climate change is necessary in order to attract financing.

Productivity problems in the livestock sector are blamed on environmental factors such as seasonal shortages, poor pastures, disease and inadequate breeds of livestock, rather than a weak capacity for appropriate planning, or existing inequalities in land use or financial access. Top-down programmes such as disease reduction and increasing cattle off-take for meat production are therefore prioritised over planning reform. Bottom-up planning is focused on decentralising the Land Use Commission so as to facilitate "equitable distribution and access to land", seeking to double ownership of land certificates. Support for pastoralist mobility, maintenance of the commons as a productive base, and pastoral livestock keeping as a sustainable system are not mentioned. At district level the issues of land ownership and access are complex, yet fundamental to securing resilience for indigenous pastoralist communities. How these issues are worked out in practice in accordance with local needs will be a key aspect of CRD in the long term.

National Climate Change Strategy (2012)

The National Climate Change Strategy (United Republic of Tanzania, 2012) bridges the gap between climate policies of MKUKUTA II and sector-specific CRD activities. It is relatively progressive, promoting traditional and modern knowledge for both agriculture and livestock (including pastoral and agro-pastoralists), including countrywide land-use planning, improved water access and "improved traditional livestock keeping systems" alongside "sustainable pasture and range management" (ibid., p.55). Terms such as "carrying capacity", and programmes to "destock" or encourage "zero-grazing" do not feature in any of the livestock priorities in NCCS, suggesting that recognition of customary pastoralist approaches have been incorporated in its development. Curiously, while decentralised decision making is promoted for wildlife management, water, land use and other key sectors, this is not the case for livestock and agriculture. This may be due to the identification of agriculture as a key growth sector – sectoral ministries may therefore want to maintain centralised control. There is also a series of cross-cutting measures designed to improve co-ordination and research on climate issues. Central ministries are now set to develop their own strategies (such as the Agricultural Resilience Plan below) in order to build resilience in line with the NCCS. There is no detailed finance plan for this strategy save for the suggestion that will be expected to provide significant levels of support through a National Climate Fund, which is still in development.

Big Results Now (2013)

Now in its second phase, Big Results Now (BRN) is a DFID-supported initiative to speed progress towards the on going Mkukuta II goals in key sectors (DFID, 2013). It emphasises robust M&E processes and clear targets. Agriculture features as one of six priority areas, although livestock plays only a minor part in this strategy, and climate change is not discussed in detail. BRN has significant impacts on budget guidelines at district level, emphasising priority areas for funding driven by nationally set targets. With regard to the three project districts, attention to pastoralist needs may be limited as districts seek to bolster irrigation and commercialisation of farming. Perhaps encouragingly, the focus is on increasing productivity rather than expanding the cultivated area, which may prevent the policy fuelling further conflict over allocation of land and loss of grazing space to arable farming.

Tanzania Agricultural Resilience Plan (2014–2019)

In line with the NCCS and MKUKUTA II, Tanzania's agricultural sector plan for greater resilience continues the emphasis on modernisation and increased crop yields from climate-smart agriculture, "promoting practices at district level" (United Republic of Tanzania, 2014, p. 7). It states that institutional and knowledge networks are to be strengthened to improve responses to climate change, and it acknowledges the need for planning in the face of uncertainty. It also recognises that not all regions are appropriate for agricultural investment, with livestock production noted as dominant in arid regions. This sectoral resilience plan advances beyond existing climate change policy, recognising the role of local-level planning, combinations of scientific and local knowledge, and including short and long term forecasting to better prepare for anticipated climatic changes.

The MoNgoLo districts are not designated for specific projects. However, if the principles in this strategy are applied to other sectors, particularly natural resource management and livestock development, then there are encouraging signs that policy development is becoming more climate aware and context specific.

2.3 Tanzania's institutional arrangements for climate resilience

The legal and institutional framework for responding to climate change is set out in the Environmental Management Act (2004), which enforces all environmental policy. The Department for Environment , housed in the Vice President's Office (VPO), co-ordinates all issues related to climate policy. This department acts as the National Climate Change Focal Point (NCCFP) – tasked with co-ordinating climate change activity across sectors, developing policy frameworks and monitoring implementation of climate change strategies. The National Climate Change Technical Committee (NCCTC) provides expert technical advice. An inter-ministerial National Climate Change Steering Group, chaired by the permanent secretary of the VPO, provides inter-sectoral co-ordination and implementation guidance. Nevertheless, questions have been raised as to how often these committees meet in practice and the level of public accountability (Yanda et al., 2013).

The National Environmental Management Council (NEMC), established in 1983, plays an advisory role, with powers to undertake environmental audits, surveys and research, and to make recommendations and enforce institutions' compliance with environmental quality standards.

Each sector ministry now also has an environment section with a climate change desk ensuring that their activities comply with the Environmental Management Act, Vice President's Office, NEMC and policy guidelines. Sector ministries work with environmental experts based in the regional secretariats, who provide further advice on the Environmental Management Act and its enforcement. At LGA level, environmental officers within district councils work to advise urban and rural environmental committees. The Prime Minister's Office is responsible for the LGAs and co-ordinates district climate activities with the demands of sector ministries.

Decentralisation

Tanzania has been implementing "Devolution by Decentralisation" since 1998. Managed by the Prime Minister's Office, the Local Government Reform Programme II aims to make LGAs the "primary and accountable lead actors of socio-economic development" (United Republic of Tanzania, 2009 p. (i)). This benefits CRD because it empowers LGA's who are best placed, with the appropriate tools and capacity, to respond efficiently to the specificities of local vulnerabilities. However, as the Local Government Reform Programme document notes, some sectors are reluctant to devolve discretionary decision-making powers to the local level.

Finance to improve the ability of LGA's to spend as they see fit have come through the Local Capital Development Grant, which may be spent on development infrastructure. There are also plans to improve the level and quality of participation in allocating these funds through increased support for the Opportunities and Obstacles for Development process (Box 1). This participatory process is performed by district staff with village members to determine local development priorities. In practice, however, both the Local Capital Development Grant and O&OD processes are beset with difficulties (see below).

Since environmental policy is supposed to be incorporated in sector planning, local government ministries play a key role in implementing these measures. They are also responsible for planning their own environmental interventions and management through the regular budgeting and planning process. Devolution by Decentralisation means that in theory local adaptation can be assured by the fact that LGAs have a good degree of autonomy in their planning.

2.4 Tanzania's financial arrangements for climate resilience

As the NCCS makes clear, the government believes that the vast majority of funding for climate change programmes should come from international sources – either bilateral or multilateral (United Republic of Tanzania, 2012). A National Climate Fund is being proposed to serve as a "basket" for these funds, although the details are still in development.

Currently, finance for specific climate change adaptation projects comes from donors, who tend to fund programmes whose objectives overlap with the Government of Tanzania's strategic priorities and their own (Johannessen et al., 2014). Although development partner projects were recently included in the national budget, there is no budget code to denote climate change spending, and many projects that have an impact on climate change adaptation do so incidentally rather than by design. Sector resilience plans, due to be produced to detail implementation of the NCCS, are planned to be integrated into the budget via the Medium Term Expenditure Framework, with broader and more complex programmes forming stand-alone projects. LGAs and sector ministries will then report the status of implementation to the NCCFP, which will make information known to the public.

3

Planning and budgeting at district level

Tanzania's decentralisation policy places LGAs at the heart of the planning process, with responsibility for annual, participatory planning and budgeting. However, as we shall see below, in practice this localised power is undermined by other policies or budgeting processes which limit the freedom of LGAs to act independently.

As the foremost implementers of government policies, LGAs include planning, finance and sectoral departments. The latter reflect the main national government sectors: agriculture, livestock, education, health, water, and roads. Local government staff are responsible for initiating, directing and monitoring project implementation. Key decision makers include the District Executive Director, who manages district government sectors; and the District Commissioners, who are responsible to the Regional Commissioner and the President.

Implementation is supported by village councils and the Ward Development Committee. Village councillors are elected by village assemblies, also including a salaried Village Executive Officer and appointed chairperson. There is a community prioritisation process at village level (Box 1), with the Village Executive Officer often taking a key role in finalising plans, aligning them with national policy. Ward Development Committees are chaired by the elected ward councillor, and consist of the Ward Executive Officer, women councillors, all village chairpersons and all Village Executive Officers. Ward Development Committees co-ordinate on-the-ground project implementation and service delivery, working with government staff to discuss future programmes.

BOX 1. THE OPPORTUNITIES AND OBSTACLES FOR DEVELOPMENT PLANNING PROCESS

In 2007, Tanzania introduced a set of planning tools known as "Opportunities and Obstacles for Development" (United Republic of Tanzania, 2007). This is a 12-day village-level process that takes place at the beginning of the long dry season. It involves district planners working through a series of participatory tools with communities at village assemblies. Information is gathered on community priorities, which are then harmonised with Vision 2025 into a community plan, with advice and validation from the village council, Ward Development Committee and a village assembly. The final output is a document listing a series of steps for implementing a community plan, with activities (called "steps to implementation") accompanied by indicators for evaluating progress.

3.1 District revenue

The ability to finance CRD is an important aspect of any planning system. District financing can be separated into three main categories – revenue generation, allocation and financial management.

Revenue generation

The district treasury is capitalised from three main sources:

1) *Domestic revenue generation*: Raised from taxes on small businesses through licenses, sales of minerals, tourism gate receipts, charges on companies using bus stands, billboard sales, local markets etc. In rural areas, these sources are small due to the lack of taxable businesses or transactions taking place. Much domestic revenue covers recurrent costs such as staff salaries and government overheads. District governments have much more discretion over these funds than over those from other sources, requiring only agreement from local elected councillors to approve spending decisions or reallocate funds during the course of the year. However, central government directives do influence how some of these funds are spent in practice.
2) *Interfiscal transfers:* Districts receive the majority of their income from sectoral block grants issued by national government for implementing water, health, roads, education, agriculture and other priorities. They also receive a Local Capital Development Grant (LCDG) for specific, locally prioritised needs. Block grants adhere to the priorities of sectoral strategies, and are often further divided into "sub-grants", each with their own spending and management conditions. Government block grants are rigid: guidelines are issued in November and once allocated, cannot be changed without special permission of the Ministry of Finance. This system aims to prevent mismanagement. In practice, budget guidelines emphasise that development expenditure, including the LCDG, should support the top-down priorities of the Big Results Now initiative, effectively limiting their use for locally articulated needs.
3) *Donor funds:* Donors contribute to the district budget through project finance and occasionally through budget support. Such funds are generally intended for spending on particular goals such as reforestation, school construction, HIV and AIDS related projects, etc. Government Budget guidelines emphasise the need to make sure all donor finance is reported as part of the budget to central government.

Expenditure in district budgets is split between recurrent and development expenditure. Recurrent expenditure includes staff fees, per diems, transport and administrative costs etc. Development expenditure is decided based on the budget guidelines, which emphasise the importance of Big Results Now priorities, sectoral priorities – decided through block grant conditions – and the findings of the O&OD process.

Allocation

Allocation is decided by District heads of department, who take the findings from the participatory O&OD process (Box 1), budget guidelines and recommendations and use the available financial resources to fund development and recurring expenditures. Having been scrutinised by central sector ministries, the Ministry of Finance and the Planning Commission, and entered into the financial management system (see below), the budget is consolidated and presented to parliament, for discussion in parliamentary standing committees and sessions before approval in June. There is no feedback mechanism to include village government or community views in this high-level process. There are numerous gaps between the ideal and the reality, as we will show below.

Financial management

District planners use "PlanRep" software to support development of budgets. Having gained approval from the Prime Minister's Office and the Ministry of Finance, budgets in PlanRep are submitted to the Integrated Financial Management System (EPICOR) at Dodoma. All activities are categorised using centrally allocated expenditure codes, corresponding to centrally established objectives and targets. This allows funds and their uses to be tracked. There are currently no expenditure codes relating directly to climate change adaptation measures, however.

To draw down money from the central system into district bank accounts, staff must obtain a payment voucher detailing the expenditure code and the purpose of the payment. Obtaining a payment voucher requires approval from the finance department and the District Executive Director. Cash can then be withdrawn by appropriate signatories to the account.

The centralised control imposed by EPICOR prevents overspending of allocated funds under a particular budget code. Funds cannot be reallocated from one activity or sector to another without the approval of the Ministry of Finance and appropriate sector ministries. Changes during the course of the year are highly unlikely to gain approval from the necessary authorities. The general perception is that once the budget has

been submitted it cannot be easily changed during the year. Special requests for extra funding for a particular project may be issued during the budgeting process and submitted with the rest of the budget. In extreme circumstances, the government may grant extra funds for disaster relief, in which case subsidiary budgets must be prepared and submitted for approval.

Performance-based reporting takes place quarterly and annually. Quarterly reports identify programme progress, issues and challenges, as well as specified issues such as employment creation. Quarterly reports are also scrutinised by the financial management committee of the elected district council. Annual reports are public performance documents detailing expenditure performance, including progress in service delivery and achievement of MKUKUTA II and the ruling party's targets.

3.2 How conducive is the planning environment to climate-resilient development?

As discussed above, an enabling environment for CRD planning must incorporate certain principles. The most significant problem arising at LGA level is the gap between policy and practice. While recent government policies demonstrate some commitment to these principles, the capacity and co-ordination to implement them has been lost to other agendas. Much of the following critique of district planning systems stems from the planning and scoping study that took place as part of the project's preparatory phase (detailed in Annex 1).

Adaptive capacity stifled by rigid budgeting

Responding to local needs requires striking a delicate balance. While decentralisation policy seeks to empower LGAs to be leaders of their own development, there is also a need to co-ordinate activities and funding priorities centrally to achieve national growth and development targets. At present, it is clear that the imperative to achieve top-down targets takes priority over local, district and village level priorities. Annually issued budget guidelines by the Ministry of Finance and the Planning Commission stress the need to direct funds towards the Big Results Now priorities. These policies, and the way in which they are financially supported, are mainly driven by centralised decision makers.

National development strategies and implementation plans allocate funds towards relatively well-defined activities and targets. However, they do not reflect the diversity of local livelihoods across the country – the relatively sparse allusions to either pastoralism or "traditional" livestock keeping are an example. Neither is O&OD, the participatory process intended to drive development priorities (Box 1), mentioned in the Five-Year Development Plan or in MKUKUTA II. While participatory planning and implementation processes are often mentioned, there is little guidance as to how these should be reconciled with national policy or what participation means in practice. While the NCCS and the associated Agricultural Sector Resilience Plan both demonstrate awareness of these issues, particularly with regard to traditional livelihoods and knowledge in the agriculture and livestock sectors, they also demonstrate some internal contradictions. Decentralisation is preferred for water resources and wildlife management, but not for agriculture or livestock development.

Climate resilience, as a relatively new concept, has yet to become embedded in the sector strategies that dominate the spending guidelines for district financing. The dominance of top-down prioritising is ensured through funding for district activities. District budgets are limited by the spending guidelines and conditions associated with sectoral block grants, fitting activities within the boundaries of specific expenditure codes linked to centrally set objectives and targets. These budgets are inflexible, as the scoping study has argued. There also tends to be an overly heavy emphasis on infrastructure, with less focus on supporting local livelihoods and their specific dynamics (Msangi et.al, 2014, p.17).

"District budgets are largely funded from central government sources without devolution of authority over the allocation of funds ... The guidelines issued annually by the government strongly emphasise the importance of budget rigidity ... The process is also sectoral in approach, providing little room for cross-sectoral planning and expenditure in support of local livelihoods and economies that are systemic and holistic in character" (Msangi et.al., 2014 p.15).

In theory, the Local Capital Development Grant should provide finance for local government to invest in specific, locally requested needs. Being a "capital" development grant, such funding tends to be directed towards infrastructural projects such as irrigation, water and health. However, personal communication with UNDP staff housed in the Vice President's Office note that the Prime Minister's Office tends to indicate

how these funds should be spent through nationally issued directives, such as the need to provide homes for the elderly, orphaned children or children with special needs.[3] The Local Capital Development Grant is also directed toward activities that may be poorly financed by the sector block grants, usually Big Results Now priorities.

Even if budgets were more open to effective, locally prioritised funding, it is questionable whether O&OD does an adequate job of representing local needs in planning for either long or short-term change. The project's participatory audit of O&OD in September 2013 pointed out weaknesses in its implementation and incorporation of findings into district planning (Box 2).

The dominance of rigid sector grants leads district staff to use the O&OD process with the knowledge that some suggested priorities will not be funded as they do not harmonise with centrally allocated priorities. This has led to a significant breakdown in trust between communities and government as projects perceived to be promised remain undelivered. In practice the process has often been reduced to government planners using the time to offer the projects they are able to deliver and merely ironing out details such as the location in which the project should be implemented. In other cases, district planners find their only way of incorporating O&OD priorities is by sifting through budget guidelines to see how a requested project can be budgeted under an existing expenditure code.

There are signs of limited progress. Land-use planning, an issue causing significant conflict between pastoralists and farmers in recent years, has been devolved to the regional level, giving district planners authority to create village land-use plans. Unfortunately, poor representation of pastoralists in many of these processes has meant that mobility has been hindered or key resources have not been taken into account. At other times, land-use plans have been ignored by farmers seeking land to cultivate, or have not been ratified or enforced by the appropriate authorities and established village land-use committees.

The role of national policy in directing activities at district level, coupled with the inability of current planning systems to articulate and recognise local livelihood systems and priorities, suggest a deep seated inability to respond to local needs. This has the potential to suffocate the emergence of innovative, locally led adaptive practices, or inhibit the practice of traditional livelihoods that some recent policies aim to support. One example arising in a Monduli resilience assessment describes how government emphasis on agricultural expansion in Monduli has driven the uninhibited spread of farming into former grazing lands, making it impossible for pastoralist planning systems to function due to the lack of access to pastures.

BOX 2. OPPORTUNITIES AND OBSTACLES FOR DEVELOPMENT: KEY ISSUES

- The planning cycle is not aligned with the seasons. O&OD takes place at the onset of the dry season (May/June), but formal prioritisation is in December at the onset of the short rains. Activities prioritised earlier may no longer be relevant.
- Planning deadlines are too short to facilitate adequate participation, leading to a poorly administered process. Unelected Village Executive Officers are left to write much of the community plans without community input.
- Tools are weighted towards agricultural livelihood strategies with little climate change or resilience focus. Local adaptive livelihood strategies and planning are not articulated.
- The process is expensive and rushed, with less priority given to focus group discussions and priorities of marginalised groups. In Ngorongoro, shortage of funds has led to the cancellation of O&OD processes in some years.
- The spatial scale of planning (the village) does not reflect the scale of community resource use in the project districts.
- Communities are aware that the climate is changing but unaware of the causes or long-term implications. Inability to properly articulate livelihood strategies leads to a "shopping list" of projects which are not necessarily urgent or appropriate.

Source: Msangi et.al (2014), Internal project documents.

[3] Interview with Dr. Stephen Mariki, UNDP

Institutional processes cannot respond to uncertainty and change

Unpredictable seasonal changes are generally beyond the districts' capacity to manage. Monduli, Longido and Ngorongoro are already experiencing great variability (failure of rains, onset of flooding events), so the issue is particularly acute. The major factor undermining this flexibility is the annualised, rigid nature of the budgeting system described above, which limits the capacity of district planners to respond to changing contexts. Budgeting and reviews of project suitability are only conducted annually, despite the fact that the failure of the rains in one part of the year can have lasting impacts on community well-being. For example, resilience assessments conducted as part of the project (see Section 5) showed that many pastoralists have still not recovered from the drought of 2009, which wiped out more than 70% of cattle, and in some cases entire herds. According to government staff, the review of the previous annual budget between district heads of department is more focused on reviewing the new budget guidelines and how they relate to district funding budgets, than on their relevance to changing circumstances. In the case of a particularly serious drought or flood, it is possible for central government to allocate extra funds to support the district. These extra grants require a further budgeting process, however, which must then be approved centrally.

"Money may be allocated based on scarcity – you plan to do something and expect funding, but if in the first half of the year you do not receive enough of the money, you have a chance to reallocate. But you can only reallocate within the sector budget –this may be a reallocation of donor funds, with their approval. This tends only to apply to recurrent expenditures". – Treasurer, Longido district council

The control of all district funds through the EPICOR financial management system inhibits movement of funds. While district staff can print out reports and keep a check on remaining budgets for activities, they do not have access to the system to reallocate funds under new expenditure codes.

There are, however, three opportunities for reallocating funds:

1) *During Prime Minister's Office approval in December and January*. At this time, budget allocations are forwarded to the Prime Minister's Office for approval and it is possible to seek approval to reallocate funds from one sector activity to another.
2) *Reallocating domestically raised revenue*. Revenue raised within the districts themselves is not generally subject to central approval, unless it is spent on capital development projects, in which case it must be reported to the Prime Minister's Office. Approval is needed only from elected district councillors, making this the most effective avenue for reallocating funds quickly. Unfortunately, due to the inability of rural districts to generate significant revenue, allocating separate discretionary funds or reallocating sufficient funds during the course of the year to manage a crisis is nearly impossible. Domestically raised funds are also committed to more urgent, recurrent expenditure priorities, or guided by centrally issued directives.
3) *Reallocating under-spent funds.* During the budget review process, under-spend on activities from the previous year may be reallocated according to district approved needs.

The inability of district governments to manage risk and uncertainty hinges on their lack of authority and financial ability to allocate discretionary funds to be used in the event of disaster, or to reallocate funds according to changing local priorities.

Planning is not yet "climate smart"

The novelty of climate relevant planning in Tanzania means it is unlikely that many current policies are explicitly "climate-smart". However, there are signs that meteorological forecasts and preparation for disasters will be incorporated into resilience-building strategies. The NCCS emphasises disaster risk management, proposing vulnerability assessments in the wildlife and water sectors. Goal 4 of MKUKUTA II calls for "sustainable crop production and farming systems reflective of climate change scenarios such as breeding pest resistant crops and livestock" (United Republic of Tanzania, 2010, p.60). The agricultural resilience strategy expressly calls for agriculture to be climate-smart, including the need for risk assessments and insurance to prepare for and cope with climate shocks (United Republic of Tanzania, 2014). This strategy recognises that "indigenous" systems for agriculture can have climate-smart elements, and seeks to combine these with scientific data for effective planning. If these principles are upheld in other sector resilience strategies, it would suggest that new policies will also push towards improved use of climate information. At present, however, the extent to which current planning systems are climate smart is questionable.

The inability of the MoNgoLo districts to plan investments in a climate-smart way is reflected in their inability to incorporate community planning processes and decisions into government planning. The way in which pastoralists traditionally plan allows them to respond to both long and short-term climatic changes –

allocating grazing lands according to season and quality of pastures, remaining mobile over large distances, and managing water use, for example. Traditional leaders discuss reciprocal grazing arrangements across villages and territories, and land is managed communally. Decisions are influenced by traditional forecasting methods which predict the likely onset and duration and intensity of rains. Yet government systems are incapable of incorporating these seasonal processes:

- Opportunities and Obstacles for Development processes do not capture these communal planning processes, concentrating mainly on day-to-day household activities.
- There are few processes, workshops or specific studies that build capacity to understand how climate change will affect the area and how development activities will incorporate these changes. Before project activities began, traditional forecasting methods were relatively unknown and certainly ignored. Weather forecasting, if it is included in planning comes from Tanzanian Meteorological Association forecasts, many of which are agriculture focused, or inaccurate due to the lack of weather recording equipment (rain and temperature gauges, etc.).
- Climate risk management activities are yet to filter down from policy into government programmes.

Poor co-ordination across relevant institutions

CRD requires co-ordination across sectors to plan for the multi-dimensional impacts of climate change. Strong mechanisms are needed to co-ordinate planning between sectors, track progress, and learn and benefit from challenges. It is questionable at present how effectively the National Climate Change Technical and Steering Committees and the National Climate Change Focal Point are able to perform these tasks. Both the technical and steering committees should be seeking to facilitate cross-sector climate change interventions and provide detailed policy guidance – but meetings are infrequent, and "lack a functioning secretariat beyond the NCCFP" (Yanda,2013, p.26). A recurring theme is that these organisations lack the capacity and funding to meet regularly, which hampers co-ordination and development of monitoring, reporting and learning.

The roles of other important institutions are unclear. The National Environmental Management Council is available to provide technical support and guidance, and has the experience and capacity to engage fully with environmental issues. But its significant powers for enforcing environmental compliance, as well as its relatively high level of technical capacity, raise the risk that its work will duplicate or overlap with the specific climate co-ordination mechanisms, particularly the technical committees. Failure to clarify these roles could undermine the efficiency of policy development and implementation. As an ODI report points out, one institutions conspicuous in its absence is the Planning Commission (Yanda, 2013) Established to think strategically about the medium to long-term future of socio-economic issues, its lack of input is notable, and climate change features little in its organisational focus.[4]

Cross-sectoral co-ordination for planning, implementation, monitoring and learning is also limited within districts. Again, the major problem is the significant disconnect between the dictates and strategies of policy documents and the institutional realities on the ground, particularly with regard to decentralisation. This has been noted by the Local Government Reform Programme II and by MKUKUTA II, which directs the "government to continue to address the mismatch between administrative decentralisation and fiscal decentralisation" (United Republic of Tanzania, 2010, p.99). Yet five years on district governments still have little spending authority. While decentralisation exists in principle, it is limited in practice.

As we have seen, O&OD is inadequate for creating a supportive environment for practice of multi-dimensional, holistic livelihood strategies. Local priorities are misunderstood or neglected by government planners, leading to ineffective, short-lived, or maladaptive responses. These issues, coupled with the inability of district planners to improvise or adapt sectoral budgets and plans to fit local contexts and change, leave inter-sectoral co-ordination entirely dependent on how well it has been planned and budgeted for by the central ministries. If there was a robust structure for co-ordinating policy, this might filter down into district budgets, but it is currently questionable that such a structure exists.

Where outcomes from O&OD can be incorporated into budgets (i.e., if they fit with pre-existing funding lines and expenditure codes), it may be possible for district department heads to use the budget finalisation process to encourage cross-sectoral thinking. Heads of department, who form the core of the district financial management team, may be able to harmonise implementation plans in areas where O&OD findings are synchronised with government policy. However, due to lack of training and limited budgets, it is an open

[4] Ibid. p27

question as to whether the capacity exists for this to happen effectively.

Further issues arise during implementation of projects, which can be beset by corruption, local politics and conflicting agendas. Ward councillors are known to manipulate O&OD outcomes or their relationships with government planners to ensure projects are placed in their home villages or those of potential supporters. There is little accountability in the process which sees O&OD community plans translated into spending by district authorities.

Monitoring and reporting processes for climate change are limited at district level. There are no detailed or specific requirements for reporting progress on climate change adaptation measures. Requirements in annual budget reporting to highlight progress on the goals of MKUKUTA II, in particular those relating to climate (Goal 4), depend on the discretion of finance officers writing the report. Without a requirement to specifically monitor projects that support adaptation to climate change, there is no capacity to engage in iterative learning processes that support long-term adaptation and up-scaling to other districts.

M&E processes at district level focus on delivery of outputs rather than impacts. Monitoring ends once a project is completed, and there is little funding for long term evaluation to gauge how well project outputs are benefitting local people in practice. This leaves governments in the dark as to the genuine development outcomes they are achieving and offers few opportunities for effective learning and improvement.

Limited national process for climate change mainstreaming

The NCCS's reliance on donors to lead on the development and capitalisation of this fund suggests little commitment to sustainable financing. At present, the donor-led approach means the climate change agenda reflects external priorities, rather than those emerging through internal consultations and national debate (ibid. 2013). The risk is that climate strategic priorities will be developed primarily to attract funding from willing donors, rather than meet Tanzania's specific needs. The donor-led approach also lacks co-ordination, with donors funding those aspects that chime with their own strategic priorities, leading to fragmentation of activities and lost learning opportunities. This strategy fosters dependence on foreign input and funds, which are not always reliable in times of global economic upsets.

There is no fiscal framework established to finance climate adaptation or mitigation, and no way to track climate relevant expenditure in either sectoral or district budgets. There are no budget codes for "climate", no expenditure codes under a sectoral budget, and no specific requirements to report climate-related spending. Similarly, district budgets are not required by any frameworks to spend on climate change, although work is being done to rectify this situation, in line with the development of the national climate fund.

Conclusions

Tanzania's restructuring of its planning systems to support CRD is still in the early phases. There are signs of good intentions – the problems of decentralisation are recognised in major policy documents, and a process towards developing climate change budget codes and a national climate fund is underway. Climate has become part of the development agenda, but it is questionable how much this is driven by national planners or by donors. It is clear that planning is far from responsive to local needs in practice, and while central government may allocate funds in times of particular need, district governments have very little capacity to remain flexible. The need to be "climate-smart" is creeping into policy, although it is too early to see the extent of implementation in practice. While plans are being made towards sustainable financing, they are currently in the very early stages.

4

Towards greater local resilience: the project so far

IIED has been supporting local partners, the Tanzanian Natural Resource Forum (TNRF) and Hakikazi Catalyst (HKC) to help district governments manage the issues identified above and improve climate resilient planning. This section provides an overview of the project, titled "Promoting adaptation and climate resilient growth through devolved district climate finance" detailing aims and activities to date. Greater detail is included in Annex 1.

The project began in December 2011 with a 15-month preparatory phase. Its aim was to sensitise district level decision makers and planners to climate change and livelihood dynamics and to evaluate current approaches to development planning, including the capacity of the district planning and budgeting apparatus to effectively prepare for and incorporate resilience building into its development activities (Figure 1). To facilitate this, a scoping study led by district staff investigated strengths and weaknesses of community and government planning systems, and officials from all districts were trained in climate change and its role in dryland ecology and livelihood dynamics. The community was also involved through resource mapping in Longido. All activities were channelled through "district learning and consultative groups", composed of 20 officials from each district including district leaders, planning, treasury and extension staff, traditional leaders and civil society organisations.

The lessons and recommendations of the preparatory phase were collected at a final workshop in which participants discussed the potential for poverty reduction, greater adaptive capacity and the activities needed to achieve them. These were summarised into four outputs (Figure 2), which defined the work of the implementation phase (June 2013–March 2015).

4.1 Towards a local climate adaptation fund

Output 1 envisaged establishing a Climate Adaptation Fund (CAF) to draw down national climate funds for climate resilient development. The CAF is a discretionary fund managed by Divisional Adaptation Planning Committees (DAPC) of elected community representatives. Funds will be held by district government authorities but managed and prioritised by DAPCs. The CAF model's advantage is its transparency, flexibility and the provision of funds for projects identified by a participatory, resilience based planning process. The CAF itself is a direct solution to the lack of responsiveness to local needs and flexibility that hampers long term climate resilient planning. By putting local community members in charge and limiting the influence of councillors, there is an increased likelihood that funds will be channelled directly towards local

Figure 1. Preparatory phase overview

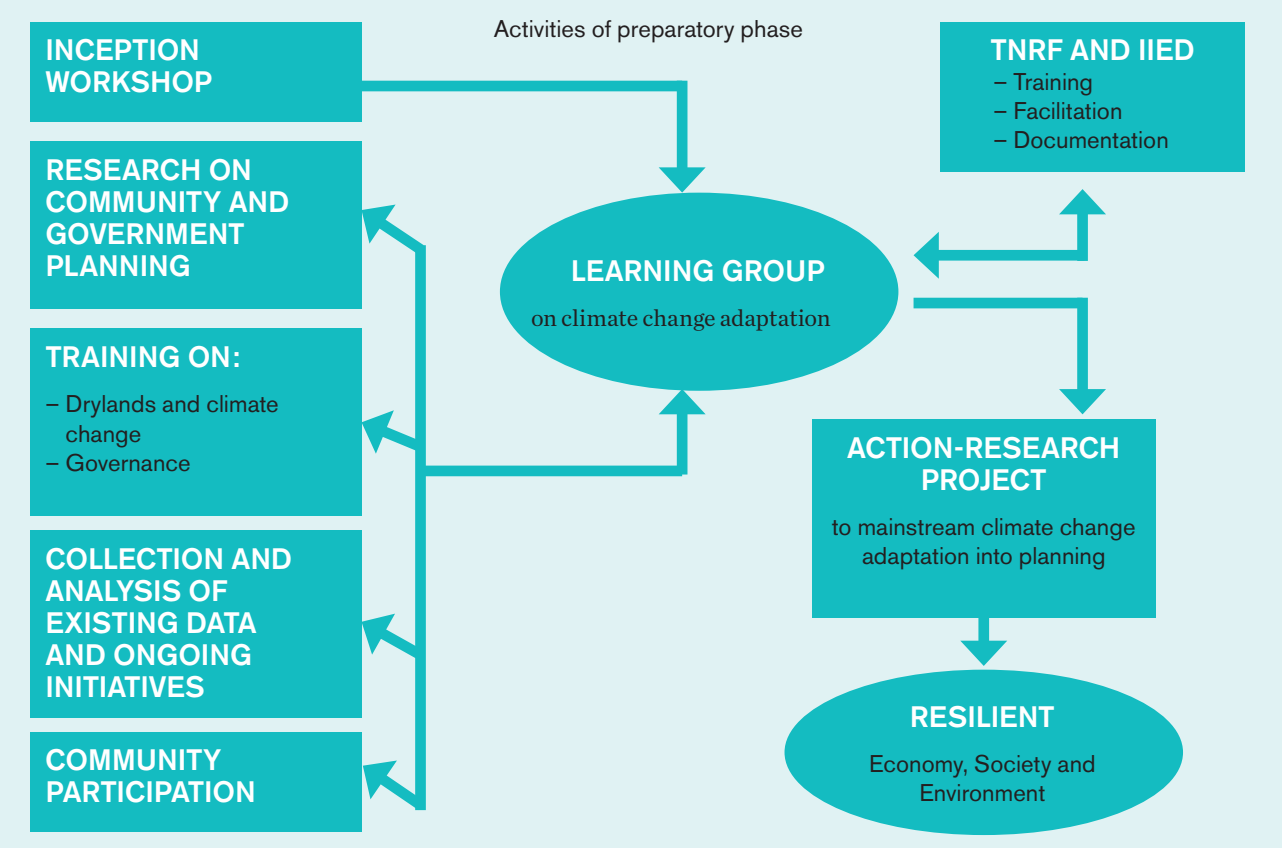


Figure 2. The project's outputs and activities

OUTPUT 1: ESTABLISHING DEVOLVED DISTRICT LEVEL CLIMATE FINANCE MECHANISM	OUTPUT 2: DEVELOPMENT OF PLANS FOR PUBLIC GOOD INVESTMENTS PROMOTING CLIMATE-RESILIENT GROWTH	OUTPUT 3: INFORMATION SYSTEMS AND MONITORING FRAMEWORKS	OUTPUT 4: INFORMING NATIONAL ACTORS
Legal assessment potential fund status	Interdistrict workshops reviewing and refining O&OD, creating resilience assessments	M&E capacity study	Meetings with govt, civil society, parliamentarians and other stakeholders
Financial capacity assessment of districts to manage funds	Resilience assessments and resource mapping	Training on TAMD	
	Election and training of DAPCs	TMA visits to districts	
	Total economic valuation study	Climate risk mapping study	
	Meetings of traditional leaders		

Notes: O&OD: Opportunities and Obstacles for Development process; DAPC: Divisional Adaptation Planning Committees; TAMD: Tracking Adaptation and Monitoring Development; TMA: Tanzanian Meteorological Agency

priorities, regardless of the rigidities of centralised policies and budgets. There is a general assumption that these funds will also allow for some flexibility in the case of changing circumstances. Activities included a legal assessment of potential modalities for the fund and a financial capacity assessment of each district to gauge their ability to manage external finance to the standard required by DFID and IIED.

4.2 Towards more resilient planning

Output 2 envisaged improving district and inter-district planning processes for climate-resilient growth and adaptive livelihoods. It involved workshops to improve participatory engagement in the districts, and audited the O&OD process. This led to the development of a shorter, more cost-effective and resilience-based approach to participatory planning known as resilience assessments. By using livelihood dynamics tools, resilience assessments improve on O&OD by allowing participants to explain the rationale behind their adaptive livelihood strategies (Box 3). Resource mapping workshops provided an opportunity to train district staff in participatory mapping techniques and software, and produced resource maps for use in government planning.

Another approach used as part of Output 2 was a total economic valuation (TEV) of Ngorongoro district. The TEV combines direct (e.g. milk and meat production) and indirect values (the value of preservation, the quality and diversity of livestock breeds in a herd) to compare the benefits of macro-economic sectors in the context of existing ecological conditions and projected climate change scenarios (Box 4).

Output 2 also aimed to create transparent and accountable Divisional Adaptation Planning Committees (DAPCs) to manage the CAF and as focal points for community engagement. The larger spatial unit of the division was chosen over the village or ward, as

BOX 3. RESILIENCE ASSESSMENTS CAPTURE THE DYNAMIC NATURE OF PASTORAL STRATEGIES

Three resilience assessments were conducted by district planners in each district, supported by IIED consultants. Key outputs included descriptions of livelihood strategies, barriers to continued development (as perceived by the community), and prioritised lists of potential interventions. They also helped to train district staff in running such assessments.

Common findings across all districts emphasised the importance of mobility for climate resilience. The ability to move with livestock allows pastoralists to manage and allocate resources according to their own planning processes. Government led land-use planning often hampers access to mobility, as well as the unchecked spread of agriculture by migrants, investors or struggling pastoralists. Other key resilience factors include access to key resources such as water and seeds, ownership of assets (livestock numbers or land), and high levels of social capital. Reflecting these resilience factors, suggested priorities focussed on effective land-use planning, improvement and construction of water infrastructure, support for improved breeds, and improvement of local market infrastructure.

BOX 4. KEY FINDINGS OF THE NGORONGORO TOTAL ECONOMIC VALUATION

- Pastoral livestock keeping in Ngorongoro has an annual value of US$456bn – 20 times the value of crop production
- Through sustainable land use, pastoralists have a key role in maintaining the quality of pastures for wildlife, thereby making a significant contribution to the tourism industry
- Sales of livestock to Kenya are a fiscal loss to Tanzania
- Government must recognise the role of customary land management in supporting both tourism and pastoralist livelihoods
- Pastoralists severely lack access to formal financial services

pastoralists operate over larger spatial scales in order to access resources. DAPC elections took place in March 2014 and elected members received training on internal governance and climate change. Male and female traditional leaders also met to discuss climate change issues and common concerns. This was an opportunity to improve collaboration and networking between different districts. Committees were established to continue discussion on issues such as conflict and influencing government policy.

4.3 Towards climate-smart information and monitoring

Output 3 envisaged setting up climate information systems (CIS) and monitoring frameworks to inform and track progress towards adaptation. Activities involved reviewing district M&E capacity, and training district staff in Tracking Adaptation and Monitoring Development (TAMD) methods, which are better suited to monitoring the level of mainstreaming of climate change in government planning (see Section 2.1). District visits by the Tanzanian Meteorological Agency (TMA) identified methods for improved climate information dissemination and established indigenous knowledge forecasting groups to share scientific and traditional knowledge. A local radio station is planned to support these services. Climate risk mapping drew on community knowledge to identify areas of climate risk and climate hazards in each district, and suggested priority areas for remedial action such as afforestation and reforestation.

4.4 Sharing the findings

Output 4 envisaged informing national actors (government policy makers, donors) of the project findings. This involved dissemination of project reports and studies, meetings with key bodies such as the VPO, NEMC, UNDP, donors, parliamentarians, TAMISEMI and others, and presentations to a variety of national and district government institutions and civil society organisations.

5

Is the project contributing to climate resilient development?

At this relatively early stage CRD outcomes are difficult to gauge in quantitative terms. Activities have focused on creating an enabling environment through planned adaptation (by government) to support and enhance autonomous adaptation (by communities) using trainings, workshops and studies to justify the need for changes and build corresponding capacities. However, until CAFs in each of the three districts are established and making investments, it will be difficult to demonstrate increased community resilience. On the other hand, as this section demonstrates, the project has had some clear impacts on:

- Attitudes and awareness towards climate change and pastoralism
- Ownership of the change process
- Responsive planning
- Use of climate information in government and community planning
- The cost of the planning process

Each of these is discussed in turn in this section (Figure 3).

Figure 3. Summary of project impacts

ATTITUDINAL CHANGE

- Focused understanding of planning systems flaws and necessitiies for improvement
- Increased awareness of local (pastoralist) livelihood strategies and priorities
  - New understanding of the need for mobility and traditional planning systems
- Behavioural change at grassroots level
  - Establishment of community based forest management in Ngorongoro, and water management committee for Mt. Ketumbeine
  - Change in decisions on livestock sales and herd structures

OWNERSHIP OF THE PROCESS OF CHANGE

- District staff owning process of resilience building
- Community ownership of planning process and future CAF – generates excitement
- Improved role of women
  - Evidence of women being able to speak more freely at communal meetings
  - Female traditional leaders given opportunity to contribute to strategy with support from male leaders

INCREASED RESPONSIVENESS OF PLANNING

- Use of division as a spatial scale
- Resilience assessments as an improvement on O&OD
- Incorporation of resilience assessment findings into district planning
- Potential for use of resource maps in land use planning and development of resource committees
  - Use of completed resource maps during land-use planning in Longido
- Improved understanding of M&E

INCORPORATION OF CIS

- Development of indigenous forecasting groups
- Communal use of CIS for day-to-day decision making
  - Seed planing decisions based on forecasts
  - Movement of livestock decided according to prediction of rainfall location
- Support for climate proofing through risk mapping
- Improved access to CIS
  - Restorting of trust in radio forecasting
  - Information distribution groups through mobile phones and social networks

COST SAVINGS

- Time and expense savings of RA process
  - Fewer RA processes (divisional) than village based O&OD
  - Shorter process to implement
- Long term savings through targets projects with lower failure rate (lower risk, higher VFM)

5.1 Shifting attitudes towards climate change, planning and traditional livelihoods

Perhaps the biggest strides have been made in improving institutional awareness of both climate change and the issues surrounding mainstreaming appropriate responses to it. Problems have been clarified for district staff and councillors who are in a position to push for change at appropriate levels.

The project activities have contributed to more sophisticated understanding, attitudes and opinions on the part of LGA decision makers and planners regarding climate change, resilient district planning, and the specificities of livelihoods in MoNgoLo.

There has been a new engagement with communal livelihood strategies. District co-ordinators note the emphasis on "modern" livestock and farming techniques taught in universities and schools, and the dearth of education on pastoralism. This leads to misunderstandings over why pastoralists accumulate cattle, how they define a "successful" life, and their sustainable use of natural resources.

The workshops on climate change and dryland ecologies, reinforced by recaps at subsequent project activities, have sought to tackle these misunderstandings. These trainings have had mixed outcomes. The importance of mobility to pastoralists and their approach to planning land use has been well conveyed. There is an appreciation that pastoralist livestock keeping is a productive form of land use that should be supported. This has been reinforced by the outcomes of the completed TEV study in Ngorongoro, and associated workshops in the districts. However, many continue to hold firm ideas about the "carrying capacities" of rangelands and the effectiveness of destocking, despite the fact that these were concepts which the training warned were not necessarily appropriate in this context. As pastoralists noted during RAs, the problem is not the capacity of land to support existing livestock, but the barriers to accessing high quality forage. Despite this, understanding of the details of pastoralist strategies remains varied.

"We have an understanding that mobility allows pastoralists to secure livestock from dying. When they move to new pastures, there is an awareness that people follow the changing climate... We do try and use this knowledge to try and be flexible in planning – the policy is rigid although we can try to flexible in the way we use resources". – Longido District Planners

"Exposure to some of the changes has led to village committees doing things differently now. They are internalising some of the issues and thinking more effectively about grazing. Previously the plans allowed for haphazard grazing – but grazing needs are being discussed now. There has been an increase in both population and livestock, but the community have been modifying their behaviour to try to take this into account – this is being led by village leaders and the government. "since the pastoralists who are turning to agriculture are now having to go through the village committees to find land rather than just grazing anywhere." (Ngorongoro DAPC)

Encouragingly, workshop discussions noted that national policies such as Vision 2025, MKUKUTA and key sectoral policies are all embracing a recognized agenda or theory with insufficient regard to traditional systems that are more adapted to addressing increasing climate variability and change. Challenging the mainstream approach was recognised by participants as a major task and one that can only be approached by addressing knowledge and attitudes and changing perceptions of what constitutes modernisation.

Impacts on livelihood strategies

In all three districts, District Commissioners and District Executive Directors pointed out the behavioural changes that were taking place as a result of cumulative training. In particular, some pastoralists, including the council vice chairman of Ngorongoro, were choosing to sell off cattle early and reinvest funds in more secure housing or diversified income streams. DAPC members noted that this was an option available only to wealthier members of the community and that comparatively few were engaging in this practice. However, it was often noted by respondents, both from the community and the district, that this was a positive and significant outcome of the project so far in terms of affecting behaviour.

This raises a question over how appropriate this practice is in the long term. Traditionally, and as trainings have pointed out, pastoralists aim to accumulate cattle, using their asset base as both a bank and insurance against inevitable droughts or other calamities. Large numbers of cattle support the rest of the community or clan, with families unable to subsist managing the herds of the wealthy in return for milk, food, or accommodation. The decision to destock and reinvest – without knowledge of an impending drought – is therefore an unusual one given the importance of cattle to clans and communities. It increases the risk of losing entire herds in a severe

drought and therefore undermining any opportunity to rebuild when conditions improve.

There are several possible explanations. The most likely, as explained by the vice-chairman, was that a large herd is difficult to feed adequately during drought and therefore likely to suffer high mortality rates. A smaller and more manageable herd is easier to maintain during difficult periods. Given continued inadequacy or non-enforcement of land use planning and other investments yet to demonstrate impact, pasture and water remains scarce, and selling more animals may be the next best adaptive strategy available. It is possible that this may have negative impacts on poorer dependents on these households, a question which would require further research. A second contributing factor may be the recent successes of a vaccination campaign against East Coast Fever, a disease that significantly increases calf mortality. With more calves surviving the early stages, cattle off-take rates are higher than previously, leading to the impression of "de-stocking".

Awareness of climate change and grassroots action

The committed attendance of district staff, leaders, and particularly councillors has broadly increased the awareness of climate change and its potential risks to livelihoods in the project districts. Education for councillors has led to climate change being placed more regularly on the agenda at meetings of Ward Development Committees, district and village council meetings. Coupled with training for DAPC members in climate change and project management, this has led to grassroots activities to protect local resources. In Ngorongoro, community forest management is now being recognised, with processes underway to finalise appropriate village by-laws. There are also requests by communities for support for afforestation programmes through seed nurseries. At Mount Ketumbeine, as a result of resource mapping work, local communities have re-established a water users committee to manage the water source at the top of the mountain.

5.2 Ownership of the process of change

"Ownership" here refers here to the way in which government staff and communities demonstrate a renewed sense of influence over processes of change. The outcome is the more effective and sensitive delivery of services. Ownership has been generated through opinion seeking and validation workshops, as well as capacity building on climate change and resilience building tools.

Empowerment of District Staff

Findings from early workshops highlighted that in reality district governments have had little ability to direct local development. Officials felt that their role was mainly as implementers of centrally set priorities, regardless of the outcomes of the O&OD process. Project activities differ in that local government staff have been core contributors to project findings and development. District focal people have taken active roles in research (e.g. the scoping study), organising workshops and writing reports. The principle of participation has dominated the research approaches used in the total economic valuation and M&E studies, and the four-year business case was developed directly from the recommendations of an inclusive workshop. Ownership of the process has encouraged officials to incorporate project findings into their thinking and planning. For example, their training in the use of RA tools, as detailed below, has made staff keen to incorporate findings into annual district planning processes.

Improved Participation of Communities

Of the numerous problems identified by the planning study, the inability to genuinely take community opinions into account has been a recurring feature. While the O&OD process aims to bring a comprehensive participatory aspect to district planning, in practice such engagement is wasted through local political wrangling, budget cuts and delays, or lack of community ownership of the projects that do go ahead. One of the key failings of planning systems identified by the scoping study was that communities were required to contribute 20% of their implementation (in terms of investment or labour). Often they could not, or would not, due to other priorities.

"Government projects are often not completed as people did not really want them. As well, money is often squandered by village officers or government staff. Our role will ensure good implementation as we are from the villages. We have the ability to supervise construction rather than government officials who do not care or are too busy to be focused on specific areas." – Ngorongoro DAPC

The process of electing and training of DAPCs has gone some way to alleviating these problems and generating a sense of community ownership and excitement about future investments.

DAPCs feel that they have the legitimacy to represent communities more effectively than the O&OD process permitted, particularly since Village Executive Officers and councillors do not have the final say over placement and implementation of projects. Ultimately, this level of

ownership increases the responsiveness to local needs, as communities are more willing to work with and advise government on local priorities.

One subtle contributor to this greater sense of ownership has been the lack of a literacy requirement to join the DAPC compared to its existence as a condition of membership of government established committees. Local people pointed out that this condition would have excluded trusted, respected community members from government committees simply because they had never had the opportunity to gain basic literacy, often through lack of access or opportunity. DAPC members feel that allowing these candidates to be elected has given the committee broader representation and fostered greater trust from the people they represent. This broad support has prevented local politicians from attempting to "hijack" or control the process – elections have given committees legitimacy, and members are expected to report progress back to their villages. Monduli DAPC members noted that candidates who had offered bribes had failed to gain election onto their DAPC. Sidestepping interventions by Village Executive Officers and councillors also helps DAPCs avoid corruption, as these officials are regularly accused of stealing project funds.

DAPC training has played a role in catalysing grassroots activities and making a significant difference to perceptions of climate change and its impacts. District planners noted in interviews the newfound ability of communities to analyse their own problems and organise their own solutions. If improved climate resilience requires buy-in from local people, then there is evidence here that appropriate training on and awareness of impacts is all that is needed to motivate grassroots action.

Renewed voice of traditional leaders

The meetings organised for the traditional leaders have played an important part in fostering renewed community leadership. Many of the resilience assessments noted the significant decline in traditional leaders' authority in recent years. Their inability to manage land effectively in part due to poor or inadequate government land-use planning, has limited their practical role and they now find that they are ignored or disregarded by poorer or younger pastoralists.

Nonetheless, their role as cultural leaders remains significant, and traditional leaders meetings have sought to generate networking opportunities and share knowledge on how climate change is affecting them and other pastoralists in East Africa. Engaging their support is important for community acceptance of the project, and the establishment of committees to help resolve conflict over scarce resources is a significant step forward.

Meetings of female traditional leaders to discuss issues specific to women have been welcomed by both men and women alike. These forums are creating a new and unified voice on common issues, especially girls' education and management of livestock and property in general. There is a sense that these activities, combined with women's representation on the DAPCs, are contributing to a changing role of women in the community. Some interviewees noted that women are speaking for themselves more at community meetings, no longer waiting for permission to speak and being more forthright in their opinions.

5.3 More responsive planning

It is also clear that the project is raising awareness of, and to some extent addressing, gaps in the planning system. Participation, through the introduction of improved community planning tools, has dramatically improved. Interview respondents pointed out that the advantage of this project over others was the widespread and careful inclusion of stakeholders. This participation in itself has raised awareness of the issues and the way forward across a range of government planning levels.

The study of government and community planning systems marked a turning point in the way district and other staff perceived the effectiveness of planning systems. Until now, few formal processes have worked closely with local staff to identify and feed back problems to central government departments. The collaboration with local staff has lent legitimacy to the research, establishing a baseline from which to work towards improved resilience planning. Without this research, a case for improving planning systems for CRD, and designing an appropriate strategy, could not have been made. This was highlighted at the one-day conference for stakeholders, at which representatives from the Prime Minister's Office and Regional Administration and Local Government (PMO-RALG) confirmed their willingness to listen to feedback and work to make the planning process more effective.

"Local knowledge from pastoralists and agriculturalists should be incorporated into the government formal planning; this is because traditional planning does well but loses focus with formal government planning interference. The government should put efforts together to ensure that both formal and traditional planning systems are used to help pastoral communities move forward." Participant – Research Validation Workshop, May 2012

Further contributing activities were the participatory audit workshops of the O&OD process, which laid the basis for the design of the resilience assessment tool that has supported planning.

More responsive planning has a direct impact on CRD outcomes for communities. Development of resilience assessments at the scale of the "division", and resource mapping are filling notable gaps in the planning system.

Division-level planning is more livelihood-appropriate

A division contains several villages with similar socio-economic profiles. The use of division-wide, elected community committees is a significant change in planning scale. The division is not a formal level of local government planning, so planning occurs "village by village". With project support, districts have piloted a division-based approach which is more appropriate to address the needs of the livelihood strategies in a dryland environment. Interventions taking place many kilometres away can have direct impacts on pastoralist survival strategies and ultimately their ability to keep livestock alive. They also affect farmers, as the availability of natural resources such as water and fertile land is often a source of conflict and competition among different groups. District agreement to use this scale as a viable planning unit is a major achievement given the entrenched village-based approach to planning.

Resilience assessments fill gaps in participatory planning

"For climate change, there is no way you can opt for O&OD. The Resilience Assessment and the Resource Mapping are simple tools to use, but for our own projects we have to use O&OD as it is directed by the government…. Processes in planning have not really begun to change and the project is not seen to have really taken off." – Extension worker, Ngorongoro District Council

"The [livelihood dynamics] tools are very good because they directly address climate change issues, while O&OD is very general and does not necessarily identify adaptation needs. This project is strong because it has involved all stakeholders. If strong accountability guidelines can be implemented then an adaptation fund could really do something good at the local level" – Participant, 2nd interdistrict workshop on planning tools

Participatory audits of the O&OD process brought district officials together to improve its effectiveness (Box 5). The workshops discussed concepts such as vulnerability and resilience, and ways to assess them using participatory tools. These capacity-building workshops have been essential for furthering understanding of the need for more climate-resilient planning, and equipping staff with appropriate skills. They also led to the development of the resilience assessment process – a participatory learning approach using livelihood dynamics tools to help community members articulate the complexities of their livelihood strategies (Box 3). The most usable output of the assessments for district planners was the list of challenges to livelihood development as well as the list of prioritised potential interventions. While most planners who have seen the resilience assessment process agree that it is cheaper, more relevant to climate change, and more effective for gathering resilience-building priorities, there is also an acute awareness of the barriers to its full adoption.

BOX 5. IMPROVING O&OD: SUGGESTIONS FROM THE EVALUATION WORKSHOP

- More training and sensitisation on the tools
- Discretionary funds to support locally prioritised processes
- New tools that are adapted to pastoral livelihoods
- Staged implementation to address tension and clarify confusion
- Recognition of traditional governance systems
- Transparency about available funds and the prioritisation process
- Alignment with local planning processes, knowledge and seasonality

While these were initially intended for DAPCs to consider during their deliberations on CAF spending, leaders of all three target LGAs have made some commitment to incorporate RA findings into their budget for the year (Table 2).

Table 1. Resilience assessment priorities – Monduli

PRIORITY	MANYARA	MAKAYUNI	KISONGO
1	Piping water from rangelands to lower areas for irrigation	Harvesting rainwater and drilling	Dam building
2	Inter-breeding programmes to support cattle productivity and competitiveness	Improved cattle breeding (M), health centres (W)	Land management support
3	Removal of invasive species in pasture areas	Farm irrigation (M) Animal laboratories (W)	Removal of invasive species
4	Improvement and construction of cattle dips	Health centres (M), Entrepreneurship groups (W)	Health clinic construction
5	Restocking and business training	Agricultural equipment (M, game scouts (W)	Animal medicine and vaccinations
6	Market development and improvement	Preventing encroachment of migrants	Market construction
7	Reducing environmental degradation	Animal laboratory (M), Agricultural education (W)	Milk processing units

Notes: (M) – prioritised by men , (W) – prioritised by women

Table 2. Proposed interventions – Monduli District Budget 2015/2016[5]

ACTION	PROPOSED INVESTMENT (TSH)	WHERE PRIORITISED (PRIORITY NUMBER)
Village land resource planning in 5 villages	100,000,000	Kisongo (2)
Agricultural education	24,000,000	Makayuni (7)
Rehabilitation and construction of Irrigation infrastructure in Munjerea, Selela-Kabambe, Kabambe Majengo, Jangwani na Kirurumo	100,000,000	Manyara (1), Makayuni (3)
Facilitate training of 10 dip management committees for 10 dips	5,000,000	Manyara (4)
Livestock disease control and surveillance across the district	5,000,000	Makayuni (7), Kisongo (4)
Facilitate training of livestock committee and deployment of units to prevent tse-tse fly infestation in Engaruka	3,000,000	Emerged from evidence in household interviews
Game scouts to prevent losses to agriculture from wildlife in 50 villages	18,000,000	Makayuni (5), numerous household interviews
Forestry interventions – afforestation, forest nursery and tree planting	42,000,000	Manyara (7)

[5] Figures represent preliminary planning and are not definitive, and should be viewed with some caution. The risks of project implementation at local level described above still apply.

Other funds have been allocated to removing human settlements from reserved and catchment forests (TSH 10 million), and resolving conflict between pastoralists and farmers, all issues which were discussed in detail during the resilience assessments and associated household interviews. As with many district activities, some risks remain. Implementation is still in the hands of Village Executive Officers and councillors, who are still potentially able to manipulate the system to change these planned interventions, or siphon away funds for themselves or other projects. The problem of delays in transfers from central government is also ongoing, risking leaving some projects unfunded.

The contribution of resource mapping

Resilience assessments across the districts revealed that land-use planning is extremely important to pastoralists. Tackling encroachment on grazing land by farmers, expanding national parks and investors was often noted as a high priority for government and CAF action. Resource mapping offers a way forward by increasing pastoralists' capacity to articulate their resource use and needs to planners, as well as to illustrate the geographies of livestock routes and water usage. It is a tangible and reusable tool to support fairer, more accurate, and more cost-effective land-use planning.

Recognising the nature of resource usage and management is crucial to taking into account the need for mobility in land-use planning. The participatory and iterative process of mapping an area's resources has allowed some district planners to understand how decisions are made and why certain areas become important at different times of the year (Box 6).

Resource mapping is arguably already making direct improvements to climate-resilient development and district learning, particularly in Longido where maps have been completed. They are currently being used extensively in developing new land-use plans as part of the recently decentralised responsibilities for this process. In Engarenaibor, maps have been used to help resolve conflict between farmers and pastoralists, and to site new dams.

Maps provide a formalised way of identifying resources essential to district livelihoods and allocating their management effectively. While there is no institutional basis at district level to incorporate mobility of long distances into land use planning, which is limited to village boundaries, there is a reduction of pressure on pasture areas through the ability to mark out clear restrictions on where farmers or pastoralists turning to agriculture can establish themselves. Some reports from Monduli note the positive development that pastoralists seeking to obtain arable land to diversify their income sources are being forced to go through village councils first. Previously, they would have been able to simply set up on a patch of land and begin cultivating.

Resource mapping has the further advantage of reducing the time and expense of conventional land-use planning. Such maps avoid the need to travel to areas for surveys, instead allocating land based on traditional maps and guesswork.

A key emerging challenge is enforcement of new plans. Committees to enforce land-use plans do not meet regularly, and there is some confusion over where approval for land-use plans should come from. While responsibility for land-use planning has been devolved to local authorities, officials in Longido suggested that plans submitted in 2013 were still waiting for approval from central authorities. Without approval, it is more difficult for the district to enforce the plans. There are also cultural barriers: a lack of respect for the pronouncements of traditional leaders and for government rules on land use has led many younger

BOX 6. GOVERNMENT VIEWS ON RESOURCE MAPPING

"The resource mapping is showing areas for resources – these are tools for land use plans and they should be protected …. The resource mapping depicts some areas used for cattle routes, pastures and dams… planning for demarcation of setting areas for resources can make sure that cattle routes are protected, particularly water sources… the Maasai tradition says you cannot put chaco dams everywhere because there is a tendency for overgrazing. Using the resource maps, the community is able to show district planners where they want resources." – Joseph Sadua, Longido Council Chairman

"It has raised awareness of leaders of the communities – it was easy and wide ranging, and participants share their own learning with the community … the plans have helped to reduce conflict by stopping farmers encroaching on forests and grazing areas and stopping livestock moving into farmland. The community can introduce bylaws that enforce this based on the maps. However, the bye laws are still being reviewed and are not yet effective or approved". – Agricultural officer, Longido

pastoralists to allow their animals to graze wherever they see fit, undermining a regime designed to regulate this kind of behaviour.

"…current land-use plans are inappropriate and they are not enforced. Grazing takes place everywhere – some areas have become human settlements. Communities have been consulted but their capacity to support the plans have not been built so they are not taken seriously". (Longido DAPC)

Improved M&E for effective learning

An important aspect of climate resilience in the context of unpredictable change and variability is iterative learning and improvement. Project workshops identified significant shortcomings in the existing district M&E process (Box 7). A robust M&E process utilising the TAMD framework is being developed to ensure that project impacts are monitored effectively. Tracking Adaptation and Monitoring Development (TAMD) introduces the concept of climate risk management, and participants chose to contribute to the process by monitoring the quality of links between community and government planning, alongside existing TAMD indicators.

BOX 7. M&E STUDY REPORT AND CAPACITY ASSESSMENT FINDINGS

- Districts monitor outputs rather than impacts
- Current M&E focus is seeking value for money to aid decision making
- Evaluations hindered due to lack of resources and knowledge of M&E
- Evaluations are not participatory
- Little integration of M&E into project management
- Awareness of climate change is widespread, but planning under uncertainty is poor

5.4 Better use of climate information

Effective use of climate information services are key to climate-smart development choices. The involvement of TMA has allowed for incorporation of both backward and forward- looking climate information, resulting in climate risk mapping and improved information services. These are having direct impacts on the behaviour of pastoralists, farmers and district planners, allowing communities to be better prepared for weather events. There is positive movement towards climate resilience as communities become accustomed to decision making based on both indigenous and scientific techniques, and therefore become more effective at safeguarding assets and increasing productivity. Such services have a particular impact on young people and women, who are often responsible for taking out livestock to graze or fetching water. Improved weather reporting may reduce the risks of being caught in potentially dangerous adverse weather conditions, to which young herders are often vulnerable.

Collaboration in weather forecasting

There is a newfound understanding of traditional weather forecasting techniques, which can be as accurate as forecasts based on scientific data. Six community forecasting groups (two in each district) have been established in separate villages and will maintain contact with the TMA. It is hoped that coupling these forecasts with scientifically generated data will support production of more accurate "consensus" forecasts. Incorporating local techniques will increase trust in radio forecasting, making people more likely to incorporate climate information into their livelihood strategies. This process may also help traditional forecasters become more effective, using scientific data to adjust their understanding of the changing natural signs that point to seasonal change.

Use of weather reports

These same visits have generated renewed community interest in radio and mobile phone-based forecasts. Meetings allowed public feedback to the TMA, pointing out the broad and generalised nature of forecasts and their limited use. They also noted that mobile phones would be an effective way of distributing information. District authorities have seized on this learning, with Ngorongoro being the first to establish groups of mobile phone users to receive and disseminate information from an extension officer about climatic or seasonal changes. This programme is a cheap way of ensuring more effective coverage by climate information services.

Respondents at TMA and in the DAPCs appreciated these efforts to make forecasts more relevant to local needs, and there is much anecdotal evidence of resulting behavioural change. In particular, pastoralists have been responding to rain forecasts by moving their livestock to higher ground in advance, and farmers have been asking extension officers for early maturing seeds to match rainfall predictions.

The visits also provided an opportunity to assess the data gathering capacity of local weather stations, many of which have deteriorated since installation of rain gauges in the 1920s. It is clear that more work is needed to ensure effective data collection. The assessment will serve as a baseline for seeking funds for future improvements.

Climate risk mapping

Risk mapping supports districts to make existing structures or systems resilient to potential hazardous events or slow-onset changes which undermine their value. It also supports development by assessing long-term risks to specific areas, guiding district decisions on land use and infrastructure development. One example was given of Samunge valley, which should be able to produce two high yield rice harvests each year. A project has since been planned by government to support this development.

"The climate risk map shows you potential areas of extremes, it shows you how you can invest your resources. For example, road construction and construction of bridges – people would construct bridges but these would be washed out after a season. Bridges incorporating climate information, such as rainfall intensity- you can come up with a structure which can withstand it. Areas like Samunge, close to Loliondo – that valley is very rich, the soils are very rich. If the weather is known and proper investments are made, that valley could feed the whole of Loliondo. " – Faustine Tilya, TMA

It is unclear to what extent this risk mapping will be incorporated into district planning. One district official pointed out that "there is no extra money for engineering to do with climate change". Budgets for enhanced, climate-resilient structures are limited, and yet the infrastructural needs of the district are significant. There is no clear institutional mechanism within district government to incorporate climate proofing or climate risk assessments, leaving this issue purely to the discretion of planners.

5.5 Impacts on national policy

The sheer number of influences on national level decision making makes attribution of policy changes to one project difficult to establish. However, it is clear that since the project's inception in 2012, progress has been made in recognising the rights of pastoralists and in delivering more pastoralist-friendly policy. Most notably, the new Tanzanian constitution has been amended to recognise the rights of pastoralists. This significant development provides a constitutional basis for future policy and legislation that supports pastoralist livelihood strategies. While this must be coupled with appropriate policy, it does mark a significant break from the under-development and denial of pastoralist needs of the recent past.

According to some respondents, particularly the Tanzanian Natural Resource Forum, there are signs that the second iteration of the Big Results Now programme will have an increased focus on livestock. Districts are being asked to develop their own evaluative indicators, giving the project districts an opportunity to use indicators relevant to local livelihoods, rather than commercialised approaches.

There are firm expressions of interest in the project from the District Commissioners of neighbouring Simanjiro and Kiteto. There is a widespread belief among key decision makers within the districts that other LGAs and relevant sector ministries are waiting for the project to be implemented before deciding how to act.

"You can tell the project is generating something because the parliamentarians and the people in PMO-RALG are noticing the focus on the Maasai... and asking why the project is not elsewhere ... the project co-ordinator has been called to speak at environment and climate change meetings of government. There is a realisation at the national level that this is important – particularly the Ministry of Livestock and Ministry of Agriculture are ready to support ... many people are waiting to see what the impacts are and how they turn out. TMA, NEMC and others are paying attention in a positive way". Karaine Kunei – Former District Executive Director, Ngorongoro

Dissemination

Activities ensuring national engagement with project activities have the potential to add particular value to the project. According to district leaders, attention is being paid to the project at sectoral level, as central government waits to see outcomes from early CAF investments. This has come as a result of the project coordinators use of the project as a form of advocacy for local livelihoods at multiple levels of government. Some respondents to interviews claimed that these dissemination activities were also having a direct impact on policy. One example was given of parliamentarians, having been made aware of the project and elements of pastoralist dynamics in a session with the project coordinator, amending the budget to more than double the allocations of finance to the livestock sector. While it is difficult to attribute these kinds of changes directly to project activities, there is a case to be made that they are influencing policy development.

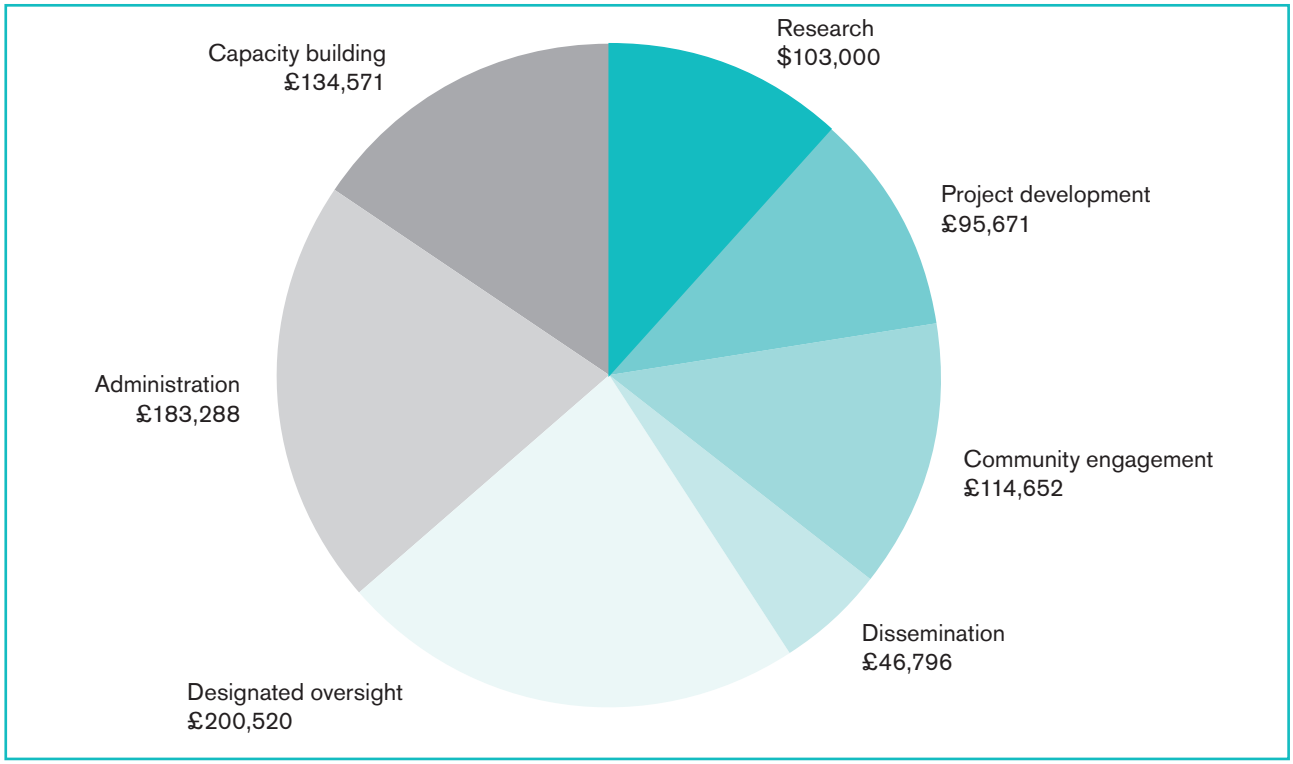
5.6 Cost-benefit analysis

Project activities are likely to be more cost effective than the existing approach in both the long and short term, delivering improved value for money, and benefitting the local economy. Ascertaining the value of these benefits requires an understanding of the costs of activities to both donors and the district.

Figure 3 outlines the costs of key activities for the duration of the project, assigned to six categories (for a detailed breakdown see Table 1 in Annex 1):

1) Capacity building: skills development for district or communities in climate change, project management, resilience assessments, dryland ecologies, etc.
2) Project development: activities necessary to support project progress, such as district leaders meetings, meetings of consultative and learning groups, business case design workshops, inception conferences etc.
3) Research: particularly the planning and scoping studies, climate risk mapping, operational capacity assessments, total economic valuation and other studies
4) Dissemination: of research findings through workshops and conferences
5) Community engagement: investing in activities that have directly worked with communities to elicit priorities, opinions, and develop processes for the improvement of government spending and planning
6) Support costs: separated into i) design and oversight of the programme, including costs of coordinating and planning project activities; and ii) administrative management, including financial management, costs, rents, etc.

Figure 3. Project investments by category



The largest investment was in project support, largely due to the significant costs of air fares and fees for non-Tanzanian consultants who took part in the project. This is also the case for capacity building, particularly through the four workshops auditing O&OD, developing and training in resilience assessments.

Remarkably, the activities with the greatest impact – the resilience assessments, resource mapping and training on climate change, as well as the TMA activities under Output 3 – were among the cheapest to run.

Aside from improved outcomes, the resilience assessment process is notably cheaper than the O&OD process, taking five days and costing less than TSH 6 million, compared to the 12-day, TSH 21million O&OD process. Savings are also made in the reduction of staff time and other costs in visiting each village individually. These savings can be invested directly in other needs.

Resource mapping costs vary significantly depending on the location and the travel costs required to visit larger areas. The average costs of the process, including external support (i.e. by a local consultant), was £3476 per division. While the resource mapping process is time consuming, it is essential to support the fundamentally challenging process of land-use planning, which is the cause of sometimes fatal conflicts between farmers and pastoralists. It is clear that these tools give the participatory planning process significant value for money.

In the long term, more effective planning will reduce the loss of time and resources ploughed into failed projects. Better targeted projects and increased community ownership will vastly increase project benefits, such as productivity, with a direct economic benefit.

The total economic valuation demonstrated the significantly high value of pastoralism to the local economy, as well as indirectly for the tourist industry through pastoralists' roles in maintaining the environment for wildlife. It also highlighted the scale of losses to the economy due to cash sales of livestock in Kenya. One district financial officer noted the missed opportunities for domestic revenue generation to the lack of knowledge about these transactions.

The TMA visits, costing £2210 in total, have altered the existing climate information infrastructure to provide more accurate information and encouraged communities to take up their services more effectively. In this case, a simple listening exercise has had a rapid and direct impact on behaviours in a way that encourages climate resilient planning at both district and community level.

Non-budgeted costs

Outside of project costs, a significant investment of time and staff is required to engage them in the necessary workshops, training and research processes. Over the course of the entire project, workshops have taken up more than 80 full days of training, research and capacity building, on top of the significant days put in by the three district coordinators seconded to the project. Typically, workshops have involved more than 20–30 people, a significant number of which will have been planners or decision makers. This presents the risk of opportunity costs caused by loss of time allocated to regular district activities – as staff are away from their desks and normal responsibilities. However, in the long run, it is argued that attendance at workshops will make the district more effective in its investments, eventually making the area more resilient and more economically productive as livelihood practitioners benefit from established public goods.

6

Conclusions: lessons learned and future challenges

The project's successes and failures and testimonies from community members and district staff highlight lessons that can be learned by those interested in replicating or upscaling the project in other localities, as well as by practitioners and donors. This final section outlines these lessons and some remaining challenges.

6.1 Factors for success

The project approach focused primarily on action research, training and capacity building. Which of these factors did respondents find to be important?

Broad participation

Numerous respondents, particularly the District Executive Directors, pointed out that previous planning processes had not taken public participation seriously enough, or had been unable to take it into account due to planning rigidities. The training, resilience assessments and resource mapping have brought district staff into direct contact with communities in a more meaningful and participatory way than the O&OD process permitted. This has been crucially important in these districts dominated by pastoralism, as many government staff do not fully understand and only occasionally come into direct contact with this livelihood strategy.

The use of learning groups as the focus of activities in the preparatory phase was a helpful way of building a core group of supportive individuals within each district (Box 8). Their effectiveness was due to their broad constitution, including traditional leaders, district agricultural officers, legal officers, councillors, and civil society organisations. Sharing diverse experiences and expertise was valuable in generating informative and productive discussions. Learning groups were key in validating research outcomes, discussing and internalising training and considering practical steps to move forward. They also contributed to a widespread understanding of the demands climate change makes on planning systems, particularly in relation to the drylands.

BOX 8. ADVANTAGES OF THE CONSULTATIVE LEARNING GROUPS APPROACH

- Builds capacity among district leadership and staff
- Brings different stakeholders together for regular dialogue on local adaptive capacity
- Develops project champions within key institutions
- Allows for regular processing of project findings with key individuals, increasing likelihood of subsequent practical action

Participation of district staff has been crucial in making sure the project has been accepted nationally. No previous research into the quality of government planning has been directly led by district planners themselves. The use of workshops for debating findings and problems within the system fostered ownership of the process of both research and the recommendations. This, and the fact that the research team was led by local staff, is arguably what gave the scoping study greater legitimacy than studies by external consultants or NGOs. As a result, the scoping study was widely disseminated and read by high-ranking officials. This legitimacy has allowed district staff to report on the flaws of the government process at other meetings, including the one-day conference with key representatives from PMO-RALG, the Arusha Regional Commission, Vice President's Office and the media.

"First we have learned, now we need to take action, locally and nationally…this is not a job for one person, or one area, it requires time, resources, collaboration across district sectors. We need more people to learn what we have learned and to come together so that collectively we can begin to make changes toward a more resilient economy" – Twailiba Mbasha, District Executive Director, Monduli

Targeting key decision makers

Ensuring participation and eventual support by district leaders (District Commissioners and District Executive Directors) has helped disseminate project activities to higher levels of government. These leaders have more authority to point out problems in the planning system to central authorities with the power to make changes. On-going involvement by district leaders, some of whom attended well over half the project activities, has generated commitment from other key individuals, including two members of parliament. These individuals are more able to take risks in implementing new processes such as resilience assessments or resource mapping.

Upstream investments

These early phases of the project have concentrated more on action research, participatory evaluation and capacity building over infrastructure development. This has been important to build awareness and commitment among district staff to seriously consider how climate resilience is relevant in their specific context. These early activities have repeatedly laid the foundations for further improvement. The planning and scoping study, climate risk mapping, total economic valuation and M&E study all first set out to understand the current situation before using workshops and focus groups to identify priorities and knowledge of government systems in developing recommendations and improvements. This has ensured ownership of the process of change at district level.

This emphasis on changing attitudes before making infrastructure investments is beginning to bear fruit, with early signs of behavioural change at both district and community level. As we outlined in the previous section, communities are beginning to act of their own accord to manage resources more effectively. District governments are trying to incorporate findings of resilience assessments and resource mapping despite being bound by rigid planning processes. While government funding lines remain rigid, planners are taking locally set priorities and seeing how they can accommodate them, rather than coming to communities with preset priorities and asking them to merely iron out the finer details. One example comes from Ngorongoro. While the priority emerging from the resilience assessment was to rehabilitate old water sources in Sale and Loliondo, budget funding lines do not permit this; however funding was available for constructing new water sources and their placement was based on resilience assessment suggestions.

"District planers realised that their past failures and lack of value for money in community-based projects was there because the community was not part of the process. Spoon feeding projects is not enough. This process facilitates dialogue in planning which leads to improved sustainability outcomes" – Former DED, Ngorongoro

"My advice to [other sector ministries] to take from this project is that you don't need to struggle to invent actions to build resilience – some communities have their own actions and the lessons are already there, as long as ownership is driven by the communities." – Dr Stephen Mariki, UNDP/VPO

Participatory evaluations of O&OD, potential CAF structures, and M&E have developed views on how they should be improved. In particular, the series of workshops on O&OD, Livelihood Dynamics Tools and the structure of the CAF ignited a powerful discussion about how best to ensure public participation in planning. Capacity building has helped to mainstream new tools and the districts' ability to perform planning functions better, with some staff now having had training and experience running resilience assessments, and in the competent use of resource mapping software.

Gradual approach

The gradual, incremental nature of the project has been seen by district leaders as one of its strengths. The deliberative nature of the research – using workshops and taking care to validate findings, as well as checking with district leaders at various points about next steps, has allowed time to reduce potential conflicts and iron out problems. While the project may seem frustrating to communities who are waiting to see financial investment, the time taken has been appreciated by those involved. It has also built a sense of anticipation at national level, where it is believed that key individuals are waiting to see how the project will deliver results after funding has been delivered to communities.

Timing

To some extent, timing has played an important role. The drought in 2009 was particularly devastating for pastoralists in the target districts, with an estimated 70% of the communal herd dying, and significant numbers of people losing all their stock (Melewas and Allport, 2010). This has fuelled conflict as destitute pastoralists have turned to agriculture, placing further pressure on land availability and land-use planning. Wealthy pastoralists in particular were heavily affected. The failure of the district to respond to the drought highlighted the need to deal more effectively with these kinds of events. The CAF offers a long-term solution in which communities can potentially manage drought on their own, despite government funding rigidity. The planning and scoping study, completed in 2011, synthesised and clarified these issues and made it clear why the district had been so helpless to support pastoralists during the drought period.

The role of the co-ordinator

The nature of the political process in Tanzania is closely associated with personal relationships. Active participation by traditional leaders, community members, district, regional and national government staff has required a co-ordinator with both personal connections and respect in both government and traditional communities. The project has been fortunate to have a co-ordinator who is an elder within the Maasai community as well as a respected development practitioner known to both Tanzanian government and development partners. The relationship of the Maasai to government has often been one of suspicion and mistrust, particularly in the context of recent policy emphasis on agriculture, and the spread of national parks and private investment in land they deemed to be traditionally theirs. Overcoming these issues has required a person who can bridge these divides.

6.2 Challenges to address moving forward

Challenges to continued improvement remain. With the CAF still unfunded and district budgets remaining rigid, the ability to plan under conditions of climatic uncertainty remains limited. There are also questions about how structures and processes introduced by the project can be incorporated into the existing system based on villages and wards.

Rigidity of government budgets

The nature of funding for districts continues to challenge districts' ability to respond flexibly to local needs and to seasonal change and climate hazards. The scoping study noted a strongly held perception that government rigidity is necessary to prevent mismanagement of funds. Indeed, PMO-RALG representatives at the conference ending the preparatory phase pointed out that it was unlikely this would change. As a result, district planners trying to implement resilience assessments are still fundamentally hindered by the dictates of centrally set policy and budget guidelines. Given funding shortages, their best option at present is to shoehorn locally prioritised projects into pre-existing expenditure frameworks.

The lack of flexibility over fund release in the event of climate hazards such as a sudden disease outbreak, seasonal failures or flooding makes districts vulnerable to such potential disasters. There is no discretionary set-aside for funds held in the case of an emergency exist at district level. The financial control set by EPICOR limits reallocation of funds, and the district has very limited powers to act in the case of changing and unpredictable circumstances.

The planned provision of the CAF should provide a limited solution to these problems. Managed and prioritised by community members, and using the same resilience assessment process, the CAF could enable communities to fill the gaps in infrastructural or institutional investments in the places where district governments find their hands tied. By working with district governments, they may be able to co-ordinate spending in a way that supports local priorities more effectively. Assuming funding for the CAF remains the same as it has been for ICAF in Kenya, then it would represent around 21.8% of an average rural district government's development expenditure – an amount significant enough to make a notable difference.

Bolstering domestic revenue

A further option may be to bolster the discretional authority of local government authorities. Locally raised revenue is not subject to strict standards of central approval, providing scope for spending outside the scope of central restrictions. Approval for reallocation and spending comes mainly from local councillors. This offers a measure of flexibility that is not available elsewhere. At present, these funds are mainly used up by recurrent expenditures (salaries etc.). There is not enough funding to establish emergency or discretionary funds to use throughout the course of the year.

Innovative finance strategies may help to ease this issue without restructuring the entire district budgeting system. First, central government support for district recurrent expenditures could be altered. A larger grant for salaries and office overheads may free up domestic revenue to be spent on development expenditure. In the same vein, easing pressure to spend the Local Capital Development Grant in certain ways, and loosening the strict conditions on sectoral block grants may provide more leeway to spend on resilience assessment priorities. Adding a budget code for "climate change adaptation" which does not dictate what adaptation should look like at district level may prove a useful compromise, allowing central governments to meet some key priorities while supporting decentralised development planning.

Second, seeking sources of innovative domestic revenue could support discretionary decision making. The total economic valuation study in Ngorongoro revealed the volume of financial revenue that is potentially not being collected for lack of efficient financial systems. The study noted that the numerous sales of livestock in Kenya represent a loss to the district authority, with no fiscal benefits. It also noted the neglect of the local banking sector, another potential source of domestic revenue.

Third, the time and money saved bringing resilience concepts into the O&OD process through the resilience assessment can be reinvested in other resilience-building activities, such as discretionary funds for emergencies. This is particularly relevant at a time when Ngorongoro is reducing its O&OD processes due to lack of funds.

Continued misunderstandings of dryland livelihoods and economies

"Government policy on mobility was felt to be important to the discussion of devolved planning methods because communities may prioritise adaptation actions which run contrary to government policy. It was agreed that District Councils are put in the difficult position of trying to reconcile conflicting land policies (wildlife management areas, game controlled areas etc.) with the clear need for mobility on the ground …. There were also cautionary comments from participants about destocking strategies which need to be implemented very carefully if the resilience of local people is not to be undermined further. Some participants felt that destocking should be linked with carrying capacity and breed improvement, whereas others argued for an approach based more on local knowledge." – Participant, O&OD workshop

Project activities have built capacity to engage with concepts like resilience-building and adaptive capacity. However, the training in dryland ecology dynamics has only partially been internalised and is not yet widespread. The risk is that district planners are trying to improve local resilience based on dated or inappropriate understandings of local livelihood strategies. Talk of carrying-capacities of the land, need for milk processing factories and the value of destocking was common among district planners, alongside their new understandings of the need for mobility for livestock and flexibility in response to variability. Implemented strategies only partially meet the needs of local livelihoods, such as the desire to obtain higher prices for cattle, may prove risky or maladaptive in the long run. For example, Monduli and Longido have both seen government programmes to replace local breeds with Borana and Saihwal breeds. While these may fetch a higher price, they also require more pasture to remain productive and are less hardy in the face of water or pasture shortages. In the context of the increasing risk of severe drought, larger, less well adapted herds are in significant jeopardy. Planning projects based on these mixed concepts risks maladaptation in the long term, or undermining support of dissatisfied communities.

This problem is certainly common to sectoral ministries and the Planning Commission, where priority policies for Big Results Now and medium term strategy are decided. As the former Ngorongoro District Executive Director noted, *"technocrats at district level don't always believe that the local community has sufficient knowledge. They believe that there is a need for scientific knowledge and do not understand the value of indigenous knowledge. This will slow down progress*."

Continued capacity building and training are needed to reduce these risks. In particular, extension departments engage directly with local people, providing advice and services for farmers and livestock herders and have a very real impact on local behaviour and strategies, but have little capacity or awareness of traditional livelihood strategies or climate change impacts. Building extension departments' capacity in and awareness of dryland ecology dynamics in a changing climate may ensure better advice across the district. This may also help to relieve the tensions and widespread dissatisfaction with extension officers, particularly in Longido and Ngorongoro, as discussed in resilience assessments.

Parallel systems of local government

While the establishment of the DAPCs was a significant step towards planning at appropriate spatial scales and improved transparency, they may be seen as a threat by elected or appointed officials in the current government infrastructure. With DAPCs set to gain a level of autonomy and funding, Ward Development Committees and Village Committees will remain hampered by limited budgets and lack of autonomy in project choice. Some hint of this was noted during the Resilience Assessments, at which councillors, who were able to participate but not vote on prioritisations, were seen to use their social status to dominate discussions, and tended to suggest projects in their own areas, or that fit particular viewpoints or agendas. As the DAPCs have noted, the election process has given them a significant level of legitimacy within their communities. However, their role represents a parallel development process which may undermine co-ordination of development projects.

One concern raised by DAPCs is that implementing contractors will offer inflated bills of quantity in order to take advantage of their lack of experience and of perceived bountiful pots of foreign aid money. This is a familiar issue, and a particular risk for the cost effectiveness of projects. A strong public procurement process will be necessary to maintain accountability of both DAPCs and publically hired contractors.

Integrating new participatory tools

There was some difference of opinion between district planners and district leaders as to how easily resilience assessments can be incorporated into planning. Staff claimed that while resilience assessments were superior, they cannot be widely implemented because central government is still committed to O&OD. They were hesitant to base all of their planning on this process due to the entrenched nature of the previous approach. District Executive Directors, on the other hand, believed that it would be easy to incorporate resilience assessments and demonstrate their effectiveness "after the fact" to central government. This confusion remains to be resolved.

"The problem is how you can fit [the resilience assessment] with the government system. We could adopt it, but you need to convince the policy makers. You need approval for it from policy makers – the ministry of Agriculture, Livestock and Planning Commission." – Agricultural Officer – Regional Commission (Arusha)

Inability to manage land-use issues

Outcomes from the resilience assessments place pressure on LGA's to focus on land-use planning. However, district staff often do not feel equipped to deal with the relevant issues. One Monduli district planner recalled a situation in which central government officials came to the area to resolve conflict by developing a communal land use plan. However, village borders in the area were so contested, and conflict so ingrained into local politics, they abandoned the attempt. The sentiment was echoed by the District Commissioner, who noted that the human population and livestock numbers were growing so fast that they were effectively causing "bitter situations" faster than the district could deal with them.

One reason is that that traditional land tenure, in which a family claims an area and develops it according to their own wishes, causes significant problems as households establish farms in areas used for grazing or livestock movement. Attempts to secure modern style land tenure for individual landowners may increase this trend, causing the potential for long-term and permanent threats to pastoralists, who generally prefer communal land tenure. This is exacerbated by the fact there is no legal basis for ensuring mobility of pastoralists. The village-by-village system of land use planning is not conducive to securing mobility for herders who regularly cross divisional, district, and even national borders.

There is no legal or institutional scope for a "district" land use plan, certainly not one that can be responsive to pasture locations that vary according to the nature of rainfall in a season.

Movement of key staff

Recent political appointments in Tanzania have seen key decision makers moved on to other districts. Supportive figures such as the Regional Commissioner and his deputy, the Ngorongoro District Commissioner and District Executive Director, as well as several others, have been promoted or moved elsewhere, to be replaced by staff with no knowledge of the project or dryland livelihoods. While in some ways this represents a benefit for other districts, who will receive authority figures with an understanding of climate change and the requirements of successful resilience building, the project areas risk a loss of momentum and political leadership for change.

References

Brooks, N., *et al*. 2013. *An Operational Framework for Tracking Adaptation and Measuring Development*, IIED, London.

Department for International Development, (2013). *Big Results Now delivery programme Phase II [GB-1-204010]* – http://devtracker.dfid.gov.uk/projects/GB-1-204010/ (acc. 28/05/2015), DFID, London.

Hesse, C. and Pattison, J. 2013. *Ensuring Devolution Supports Adaptation and Climate Resilient Growth in Kenya.* IIED, London.

Johannessen, L.M., Ligot, J. and Lukumbuzya, K. 2014. *Evidence on Demand: Roadmap to support the implementation of the Tanzanian National Climate Change Strategy and Zanzibar Climate Change Strategy.* DFID, London.

Kenya National Drought Management Authority. 2014. *Isiolo County Adaptation Fund: Activities, Costs, Impacts after the 1st investment round.* Kenya National Drought Management Authority, Nairobi. See http://pubs.iied.org/G03806.html.

Melewas, J. and Allport, R. 2010. *Assessment of the Impact of the 2009 Drought on Pastoralist Livelihoods in Northern Tanzania.* Report commissioned by FAO, TRiAZ the Tanzania Natural Resource Forum and VETAiD.

Msangi, A. et al. 2014. *Community and Government: Planning together for climate resilient growth: Issues and opportunities for building better adaptive capacity in Longido, Monduli and Ngorongoro Districts, northern Tanzania*. IIED, London.

Ranger, N. 2013. *Evidence on Demand: Adaptation, Decision Making Under Uncertainty*. DFID, London.

United Republic of Tanzania. 1997. *National Environmental Policy.* Vice President's Office (Dodoma)

United Republic of Tanzania. 2009. *Local Government Reform Programme II: Decentralisation by Devolution, Vision, Goals and Strategy, July 2009–June 2014.* Prime Minister's Office: Regional Administration and Local Government. (Dodoma).

United Republic of Tanzania. [1999]. *The Tanzania Development Vision 2025*. Planning Commission (Dodoma).

United Republic of Tanzania (2007). *Opportunities and Obstacles for Development. A Community Participatory Planning Methodology – Training Manual.* Prime Minister's Office: Regional Administration and Local Government, Dodoma.

United Republic of Tanzania. 2010a. *National Strategy for Growth and Reduction of Poverty II.* Ministry of Finance and Economic Affairs (Dodoma).

United Republic of Tanzania. 2010b. *Livestock Sector Development Strategy.* Ministry of Livestock and Fisheries Development (Dar Es Salaam)

United Republic of Tanzania. 2012a. *The Tanzania Five Year Development Plan 2011/2012–2015/16: Unleashing Tanzania's Latent Growth Potentials.* Planning Commission (Dodoma).

United Republic of Tanzania. 2012b. *National Climate Change Strategy.* Vice President's Office (Dodoma)

United Republic of Tanzania. 2013. Agriculture Climate Resilience Plan, 2014–2019. Ministry for Agriculture, Food Security and Cooperatives (Dodoma)

Yanda, P., et al. 2013. *Tanzania National Climate Change Finance Analysis*. Overseas Development Institute, London. See www.cbd.int/financial/climatechange/tanzania-climate.pdf.

Related reading

Greene, S. (2015), Enabling Resilience: bridging the planning gap in Tanzania, IIED, London – http://pubs.iied.org/17288IIED.html

Hesse, C., and Pattison, J. (2013), Ensuring Devolution supports adaptation and climate resilient growth in Kenya, IIED, London – http://pubs.iied.org/17161IIED.html

Msangi, A., Rutabingwa, J., Kaiza, V., Allegretti, A., (2014) Community and government planning together for climate resilient growth: issues and opportunities from Longido, Monduli and Ngorongoro Districts, northern Tanzania – http://pubs.iied.org/10075IIED.html?c=dry

Annex 1 – Project Narrative

The 15-month preparatory phase sought to sensitise district level decision makers and planners to climate change, livelihood dynamics and to evaluate current approaches to development planning. A final conference brought a wide range of stakeholders together to discuss the progress and learning from the project so far. The subsequent 18-month phase has continued this process. Activities focussing on continued training and learning, climate information services and the establishment of a devolved level climate finance mechanism are providing a basis an effective response to climate change into community and district development approaches. This annex overviews project activities to date and their purpose.

Preparatory Phase (December 2011 – February 2013)

The aims of the preparatory phase were:

- To strengthen the technical capacities of district-level authorities and civil society actors in the districts of MoNgoLo to design and implement the proposed project, and ensure their 'ownership' of the process;
- To secure national level interest in the proposed work including the identification of mechanisms to ensure that project experience informs national policy processes and programs in support of climate change adaptation and mitigation.

The preparatory phase sought to establish and share understanding of the existing capacity of the district planning apparatus to effectively prepare for and incorporate resilience building into its development activities. An important aspect was not simply to gauge this capacity, but to ensure that stakeholders internalised understanding of the need to improve the system to achieve climate resilient development outcomes. This would require an improved understanding of climate change and its impacts on the livelihoods of people living in the project districts, as well improved institutional ability to include new perspectives in development planning. Project activities are summarised in Figure 1 in Chapter 4.

Co-ordination arrangements

District government staff were seconded to the project as focal people to provide logistical support and local knowledge. In this role, they have organised workshops, performed research on planning, and provided inside knowledge of district systems and their functioning. They have also been responsible for reporting on the project within the hierarchy of the district authority and providing feedback as part of their place on the Project Implementation Team (PIT).

The targets of project activities in this phase were district consultative and learning groups. Each group consisted of twenty participants drawn from the district council, district executive, heads of department, community traditional leaders and wider civil society, making sure to also feature a number of women. Members of the groups formed the attendees for all the workshops and trainings as part of the preparatory phase. District groups served as forums to process learning from project activities, making subsequent recommendations for improvements and supporting networking and open discussions about the planning system between key district stakeholders. Formal meetings were held three times during the year.

Inception Workshop (25–27 January 2012)

After a series of preparatory meetings with national level stakeholders to garner support and interest, a three-day workshop was attended by participants from the target districts as well as representatives from central ministries and agencies.[6] The workshop featured presentations on climate forecasting, the impact of the 2009 drought on government understanding of pastoralist needs, and an introduction to "dynamic systems modelling", a way of effectively mapping

[6] Preparatory meetings were held with the Vice President's Office (VPO), Tanzanian Meteorological Association (TMA), the Ministry of Livestock Development and Fisheries (MLDF), District Commissioners (DC's), District Executive Directors (DED's), and Members of Parliament (MP's) from MoNgoLo.

changing resources through participatory learning. Pertinent discussions were held over emerging policy responses to the need to improve adaptive capacity, validating the project approach, and on mechanisms for learning exchanges both horizontally and vertically.

Scoping study on planning (field work – April, Workshop – May 2012)

A study was conducted by the three district focal co-ordinators and a consultant with the following objectives:

- To assess impacts of climate change on the rural livelihoods and the response of communities in planning to adapt their strategies.
- To understand the formal government planning system and its ability to address the changing climatic conditions and support to local adaptive capacity.
- To examine the level of cooperation between formal and traditional planning processes.
- To identify challenges and potential opportunities for achieving climate resilience and adaptation.

Through focus groups, interviews with district planners and community members, and a multi-stakeholder workshop, the study uncovered the strengths and weaknesses of district and traditional planning systems. In particular, it noted the top down, rigid nature of government planning and the limited nature of community participation in planning outcomes, despite the use of the "Opportunities and Obstacles for Development" (O&OD) methodology. By contrast, traditional planning systems are highly flexible in the context of changing seasons. The incongruity of local and government planning systems undermines development outcomes. The study made recommendations for improving the flexibility and coordination necessary to improve climate resilient development outcomes. These recommendations were further discussed at a validation workshop in May 2012, also incorporating the VPO, TAMISEMI, donors and civil society. It provided an opportunity to raise awareness of the issues and discuss necessary changes to make planning more holistic. A DVD was also made summarising research findings to aid dissemination.

Training on Climate Change and Dryland Ecology Dynamics (April 2012)

These trainings sought to improve understanding of climate variability on local adaptive capacity, and strengthen understanding of the implications for development planning. The training discussed the concept of adaptive capacity, in particular explaining the nature of pastoralist planning systems. Pastoralists were explained to be "masters of adaptation", using systems that are adaptive, dynamic and variable, dependent on traditional systems of decision-making. These systems were noted to be at odds with government planning cycles, and highlighted the need for holistic planning which could incorporate the requirements of pastoralist livestock keepers to support climate resilience.

Business Case Design Workshop (October 2012)

An initial planned output of the preparatory phase was a 4 year business case to submit to UK-DFID for funding to continue the project. This case was built on the learning and recommendations of this first phase, which were collected at a final workshop. Using a problem tree, impact analysis, stakeholder mapping and risk assessment, participants discussed potentials for poverty reduction, improved adaptive capacity and the activities needed to achieve these goals through mainstreaming adaptation in development planning.[7]

Completion of Resource Mapping

Throughout the activities of the preparatory phase, a participatory resource mapping process had taken place in Longido. Resource mapping works with stakeholders to identify the location of resources key to their livelihoods – in this case water sources, salt licks, livestock routes etc. Maps can help district planners understand and identify resources in a way that can help with project placement and land use planning far more effectively than previously. By February, this process was complete, with finished maps and a DVD of the process ready for dissemination.

One Day Conference (Feb 2013)

With unspent funds from the initial grant, UK-DFID granted a 3 month no-cost extension to the preparatory phase, to facilitate enhanced awareness of national level stakeholders of the project. The workshop presented the implications of the findings from the preparatory phase in strengthening local and national planning

[7] In the event, UK-DFID were more in favour a more incremental approach to funding, opting to fund a 12 month continuation of the project, later to be followed with a 6 month extension.

processes for increased climate resilience, and shared plans for the next stages. 43 participants including district representatives, civil society actors, international institutions, local and national government officers, donor representatives and journalists attended.

Implementation Phase (June 2013 to March 2015)

The implementation phase of the project sought to carry through the key activities identified during the business case design workshop. Its stated outputs were (see Figure 2, Chapter 4):

1. Establishment of a devolved district level climate finance mechanism (the Climate Adaptation Fund or CAF) to draw down national climate funds for climate resilient development
2. Development of district and inter-district plans for public good investments that promote climate resilient growth and adaptive livelihoods
3. Establishment of information systems and monitoring framework to inform planning and assess adaptation success and the delivery of results
4. Establishment of a mechanism to enable project findings to inform national actors (government policy makers, donors)

Introducing the Project

An inception workshop (June, 2013) reviewing the previous phase and featuring supportive presentations from VPO, PMO and TMA launched the project. Further detail and knowledge on how a successful CAF might look was gained from an exchange visit to Kenya in January 2014. District leaders (DED's, DC's, MP's, Council Chairmen) embarked on a 10-day visit to learn from the experience of the Isiolo Climate Adaptation Fund (ICAF). The ICAF experience is particularly relevant as it works with pastoralists in areas with low historical infrastructural investment and in a context of increasing unpredictability of climate. The group also visited Nairobi to understand Kenya's policy frameworks on climate change adaptation and drought management.

Output 1 – Establishing A Devolved District Level Climate Finance Mechanism

Activities under Output 1 have concentrated on identifying legal and financial modalities for fund management and assessing the capacity of target districts to manage funds to a level of transparency and accountability that meets both IIED and UK-DFID standards. This process began with development of understanding of the legal basis for the fund, followed by institutional and financial capacity assessments, completed in August – September 2014. The later studies found that while Monduli and Ngorongo have robust enough financial structures to self-manage funds, Longido will require more financial supervision.

Output 2: Development of District and Inter-district level plans for public good type investments that promote climate resilient growth and adaptive livelihoods

Activities under output 2 formed the basis of supporting the planning system. They took place under four main themes:

Inter-district workshops on O+OD, planning, Resilience Assessments and Resource Mapping

A series of 4 workshops took place with the aiming and reviewing and improving on current district participatory planning approaches.

WORK-SHOP NO.	DATE	KEY THEMES
1	Sept 2013	Participatory Audit of O&OD, Introduction to complementary participatory approaches, Introduction to Resource Mapping
2	Oct 2013	Further Analysis and Review of O&OD. Introduction to Livelihood Dynamics Tools. Community Resource Mapping.
3	Nov-Dec 2013	CAF structure discussion. Review of ICAF model and adaptation to Tanzanian context. Field Testing new participatory tools
4	May 2014	Resilience Assessment Training and field testing

After workshops one and two had clearly highlighted the weaknesses and strengths of O+OD, IIED continued to develop the Resilience Assessment – a participatory tool that identifies factors of resilience and attempts to solve the problems of length and expense that plague O&OD. Using Livelihood dynamics tools and household interviews, it attempts to capture the holistic nature of community priorities and thinking. This was completed and conveyed in the final workshops.

Resource Mapping for Monduli and Ngorongoro was completed from June–September 2014 with support from Geodata and the hired resource-mapping expert. Trainees in mapping from the districts were also part of this process in order to build capacity.

Development of DAPC structures, elections and subsequent training of DAPCs

Having planned the structure of the CAF and DAPC's during the 2nd inter-district workshop, and later with district leaders, elections took place in March 2014. Meetings of village assemblies were asked to vote for those they felt could represent them accurately, with honesty and integrity. While there were some delays as Village Executive Officers were persuaded to take an active role, all elections were completed by the beginning of April. Training on internal governance and climate change soon followed, at which the roles and responsibilities of DAPCs were decided, along with education on the likely causes of vulnerability in the districts.

Total Economic Valuation (TEV) study to demonstrate economic value of local livelihoods (October 2013)

The Total Economic Valuation (TEV) study in Ngorongoro assessed macro-economic sectors and comparative benefits in the context of the area's ecological conditions and projected climate change scenarios. TEV brings together direct (e.g. milk and meat production) and indirect values (the value of preservation, the quality and diversity of livestock breeds in a herd), through workshops with district stakeholders, data collection from national and district sources and previously document value in the literature.

Meetings of Traditional Leaders to enlist their engagement with the process (December 2013, May 2014)

Traditional leaders assembled to improve their understanding of climate change and provide space to discuss their concerns about the vulnerabilities of pastoralism to climate change and possible adaptation strategies. It was also an opportunity to improve collaboration and networking between different districts. Over two meetings, traditional leaders discussed the importance of climate information services (CIS), mobility, resource management, national policy, and the development of the constitution. Committees were established to support conflict monitoring and resolution, and parliamentarians were contacted regarding constitutional development.

A female traditional leaders' meeting also took place in Mtu Wa Mbu. The meeting explained the likely impacts of climate change on the area, the relevant policies to child and maternal health, and women leaders discussed the particular impacts on women given their position in society. The meeting also reminded women of their political rights to stand and be elected.

Output 3: Establish information systems and monitoring frameworks to inform planning and assess adaptation success

Output 3 activities took place under several themes:

Monitoring and Evaluation (M&E)

TAMD is a participatory M&E tool which monitors the level of mainstreaming of climate change into government planning, and introduces theories of change that can be developed at both district and community level to outline activities, outputs and their intended impacts. The theory of change is a tool to support monitoring and development of indicators in partnership with communities, who are able to set their own goals and targets.

Similar to reviews of the planning system, the M&E process established the current capacity, strengths and weaknesses of district M&E systems, before developing and introducing improved concepts such as Tracking Adaptation and Monitoring Development (TAMD). Initial studies and workshops in late 2013 established some of the weaknesses of M&E, such as insufficient funds, minimal training and capacity on indicator development, lack of technical support and a focus in outputs (completion of projects) rather than long-term impacts. M&E is rarely participatory or qualitative.

TAMD training took place in January 2015, aiming to equip staff with skills to use the TAMD approach and develop district theories of change based on adaptation actions drawn from resilience assessments. A capacity assessment identified lack of resources and knowledge of M&E as a key challenge. Participants were introduced to theories of change, designing them for improving district planning for adaptation and developing appropriate indicators. Field work to practise developing theories of change and monitoring indicators took place in Monduli. Plans were made to formalise this process across other districts and to collect climate data to support adaptation planning.

Climate Information Services

The Tanzanian Meteorological Association (TMA) visited the districts three times between November and February 2014. Visits identified cost-effective methods for collection and dissemination of climate information, sharing modern forecasting techniques and meeting indigenous knowledge forecasts. Community members gave feedback on current CIS, requesting downscaled projections which could support decision making. Further meetings reviewed current rain and temperature monitoring equipment, and established indigenous knowledge groups with the intention of sharing knowledge and distributing "consensus forecasts. Meetings with districts emphasised the need to incorporate CIS into planning.

In the long run, the project hopes to establish a local radio station to support these kinds of services. Scoping for the feasibility of this process began in May 2014.

Climate Risk Mapping (August 2014) established a baseline history of frequency and magnitude of climate extremes that have occurred in MoNgoLo districts over a period of at least 50 years from a combination of communities' knowledge and the available scarce recorded climate data. The two will facilitate identification of climate related disaster risk areas requiring planned remedial action, using existing community knowledge. The mapping identified areas such as Selela, Engagaruka and Samunge where large-scale irrigation may support agriculture, as well as the need for afforestation and reforestation across the 3 districts. It also noted the paucity of data gathering equipment, evaluating the state of rain gauges.

Output 4: Establishment of a mechanism to enable project findings to inform national actors (government policy makers, donors).

Activities to support national engagement with the project have included production and dissemination of project reports and studies in English and Swahili, and meetings with key bodies such as the VPO, NEMC, UNDP, donor, parliamentarians, TAMISEMI and others. The project coordinator has been asked to present learning from the project at a variety of national and district government institutions, civil society organisations, parliamentarians from nearby districts, officials from ALAT as well as a wide variety of other organisations interested in the projects activities.

Many of these meetings have been organised on an ad-hoc basis, taking place as various organisations have heard about the project or are holding their own events to deal with climate change and adaptation.

Table 1. Project costs[8]

ACTIVITY	CATEGORY	£
Preparatory Phase		
Inception Workshop	Project Development	22700
Planning and Scoping Study	Research	45815
District Learning Group Meetings	Project Development	7589
Climate Change + Dryland ecology Dynamics training	Capacity Building	57300
Business Case Design Workshop	Project Development	25345
Resource Mapping – Longido	Community Engagement	6952
Resource Mapping Validation	Community Engagement	7912
One day conference on Project Learning	Dissemination	41400
IIED/TNRF Support Costs	Support Costs	88339
Inception Phase		
Inception Worksop	Project Development	11588
Kenya Exchange Visit	Project Development	15024
Output 1		
CAF Legal and financial development	Research	18854
CAF structure planning (with govt officals)	Project Development	11258
Output 2		
Resilience Assessment Development and training	Capacity Building	65179
District Leaders Meeting to review progress	Project Development	2167
DAPC Elections and Training	Community Engagement	19577
Resilience Assessments For 9 Divisions	Community Engagement	29565
Resource Mapping – Ngorongoro + Monduli	Community Engagement	13994
Traditional Leaders Meetings x 3	Community Engagement	36740
Total Economic Valuation Study	Research	5989
Output 3		
TMA Visits x 3	Research	12033
M&E Study inc Workshop	Research	20309
TAMD Training	Capacity Building	12092
Output 4		
Meetings with Institutions	Dissemination	2500
Dissemination of Evidence. + Quarterly Highlights	Dissemination	2896
M&E and Learning Officer (Anna)	Administration	18150
HKC Support Costs	Administration	42012
District Coordinators (Salary+ Travel, Accommodation)	Administration	34787
IIED – Support Costs	Design and Oversight	200520
Total		878586

[8] Activity costs include logistical costs (meals, accommodation, halls/conference rooms, travel, consultant fees and their travel and living expenses).
Consultant fees are calculated by their daily rate x amount of days of commitment + 5 extra days for preparation and write up time.
Accommodation and living costs for district staff during workshops range between TSH 50,000 and TSH 80, 000 depending on rank and available budgets.
Design and oversight include the costs of project management and 50% of the project coordinators' time.
Administrative costs include financial management, overhead costs etc, and a further 50% of the project coordinators' time).

Annex 2 – Methodology

Desk Based Research

Preliminary work for the study involved researching Tanzania's climate change relevant policy. This involved reading through policy documents relevant to climate change, natural resources, agricultural sectoral development, livestock production, decentralisation and poverty reduction. Other relevant documents included Vision 2025 and other long and medium term strategy papers, as well as implementation plans such as the five year plan. In addition, detailed understanding of the project necessitated a review of all project documents, including published research, briefs, workshop and other activity reports.

Interviews

Interviews took place between 17th – 28th January 2015 at Monduli, Ngorongoro and Longido district headquarters as well as in Arusha town and Dar es Salaam. The interviewees are listed below.

NAME	ROLE	LOCATION	NOTES
Isihakah Haji	Veterinary Office, Regional Commission	Arusha	Regional co-ordinator of district agricultural development projects
Jowika Kasunga	District Commissioner,	Monduli	Interviewed together
Twalib Mbasha	District Executive Director	Monduli	
Joseph Rutabingwa	Project Focal Person	Monduli	
Godfrey Luguma, Ridhiwania Kombo	Heads of department	Monduli	
Bakari Kilango, Bonphace Peter, Fauma Kilango, Sofia Lesingo	DAPC Members	Monduli	
John K Mgarula	District Executive Director	Ngorongoro	New to the role with very little information
Dr. Karanei Kunei	Former District Executive Director	Ngorongoro	Present at much of the project activities and was heavily involved
Chrietine Magessa, Kowini Rogo, Paulo Cyril, Thomas Munka, Pirias Maingo, Tumbes Saing'eu	DAPC Member	Ngorongoro	
Raphael Long'oi	Council Vice Chairman	Ngorongoro	
Elinlaa M Kivaya	Planning Department	Ngorongoro	
William Martin	Treasury	Ngorongoro	
Elias Wawalali	District Commissioner	Ngorongoro	Interview shortened due to time constraints

NAME	ROLE	LOCATION	NOTES
Joseph Sadira	Council Chairman	Longido	
Fulla Yassin	Agricultural Extension Officer	Longido	
Issai Mbilu	District Treasury	Longido	
Julius Chalya	District Executive Director	Longido	
Thomas Charles Mbaga	DAPC Member	Longido	Interviewed together
Naomi Mollel	DAPC Member	Longido	
Edward Kasiga	District Agriculture, Irrigation and Cooperative Officer	Longido	
Ringo Clemence	Planning Department Economist	Longido	Based in Longido but experience project activities during previous role in Ngorongoro
Alais Morindat	Project Coordinator	Arusha	
Zakaria Faustin	Pastoralism Programs Manager, TNRF	Arusha	
Stephen Ngowi	Accountant, TNRF	Arusha	
Faustin Twilla	TMA	Dar Es Salaam	
Dr. Stephen Mariki	UNDP	Dar Es Salaam	

Interview Questions

While the questions were used as a guide, interviews were semi-structured to allow for probing into more detail on necessary points. Some questions were tailored depending on the organisation the respondent was representing.

- How has your understanding of pastoralism and pastoralist planning approaches been affected by project activities (such as pastoralist training, the planning research study, workshops on planning), if at all?
  - How has this knowledge affected your approach to your work? Are there any practical processes or systems that you now use or approach differently as a result of these activities?
  - Which project activities do you feel had the biggest impact on yourself and other colleagues. How? Why?
- How have project activities affected your views on the district prioritisation process? *(If possible, be specific about new understanding and **which** activity these may have come from. It may be the case that Pastoral training had a different set of benefits to the planning systems study etc).)*
  - How relevant / effective is O+OD for planning? *(answers from the workshops included lack of local relevance, cultural sensitivity, length, funding capacity (it remain un-reviewed), rushed and poorly implemented and timed – with the VEO making the plans, unfunded project drive disempowerment, and low capacity)*
  - What advantages (and / or disadvantages) does the Resilience Assessment and Resource Mapping bring to the planning process. Is it an improvement on previous approaches – in what way?[9]
    - If you attended RA training, how well equipped do you feel to run RA's independently?
  - Does the process maintain the accountability and transparency that was a key benefit of O+OD. If so – why?
    - To what extent is it likely that the RA and RM's will be used in place of O+OD in the future on a regular basis
    - What barriers might this face

[9] RP workshop 1 noted that O+OD does not address the scale of community resource use, undermining ability o discuss mobility, resource use and service provision

  - How has information generated from the RA's and RM's contributed to either district planning OR your own personal approach in recent months
  - What tangible changes are noticeable in district planning systems that point to improved mainstreaming of climate adaptation (specifically, incorporation of local livelihood processes) *If possible, split this question into "planning and prioritisation", "implementation systems (have relevant institutions changes structures), and "finance and budgeting".*
    - Is planning "climate smart"? – responding to climate variability
  - To what extent have TMA forecasts and information systems been integrated into planning?
  - How much have forecasts been shared with local actors
- How effectively does national policy (5YP, Mkukuta, NCCS, BRN get operationalised in practice?
- What (non financial) factors have made activities successful / unsuccessful? (personnel / attitude / opportunity of personal reward / ethics of members etc etc)

Finance and Budgeting

Exploring the extent to which climate change is integrated into finance and planning. In particular, Budget Circulars issues at the beginning of the planning process to Sector / District Levels (Domestic revenue generation), Budget and/or Expenditure tracking codes, Integrated Software (financial management systems).

- What movement or progress has been made toward integrating climate change into these processes? Is there any movement or progress in this direction
- Are there by-laws or regulations that enforce spending on anything climate related
- Are there budget codes that encourage strategic spending on anything to do with adaptation
- Are their expenditure codes that do the same to allow tracking of adaptation or climate relevant financing
- What kind of financial management or tracking software is used to monitor spending
- How effectively does national policy (5YP, Mkukuta, NCCS get operationalised in practice?
- Who exactly has been most impacted by these activities and in what ways?
- Have you experienced any negative impacts from the project?
  - *i.e. confusion about planning and policy, disagreements between levels of government over progress,*
- *These questions can apply to personal approaches to service provision or to aspects of the planning process in general*
- What (non financial) factors have made activities successful / unsuccessful? (personnel / attitude / opportunity of personal reward / ethics of members etc etc)

Regional Secretariat

- How do climate related projects in the target districts differ to elsewhere
- To what extent do district governments have the ability to implement locally relevant planning processes and enact bylaws etc for improved resource protection.
- What are your opinions on the rationale or concept of the project
  - How much does it promote greater gender balance
  - What barriers might there be to successful integration of mainstream planning, budgeting or implementation
- What differences in approach, performance, feedback or statements do you notice from district staff since their involvement in the project
  - (Ie. After the planning research, DC's started discussing planning)
- If there are these changes, what impacts might they have on development outcomes, if at all
  - How robust is the system for monitoring and evaluating the project at this level
- To what extent have project activities affected people outside of the districts?
- How does the reallocation of key decision makers (i.e. the regional commissioner) impact the project

Vice President's Office

- In your view – to what extent is the institutional infrastructure able, in practice, to deal with the needs of pastoralists (or locally specific needs elsewhere)?
  - What needs to happen to enable necessary changes to take place in future
  - How can local needs be reconciled with national CCS priorities – where is the balance to be found and how much do you think project activities successfully bring these together?

- To what extent does the project contribute to the National Climate Change Strategy (NCCS)
- How much do you think this concept can prove beneficial? How much do you think it is worth scaling up this particular approach, if at all? If not, why not? If so, how and what barriers might you face?
- To what extent has the project influenced policymakers at national level?
  - If it has done – how. (One day-conference, project updates with national level actors, publications,)
- What progress is being made toward integrating finance for climate change into planning processes.

UNDP

How do you view the project concept and rationale?

- What lessons do you think are being learnt at national level from the project – do you think this is leading to any changes in the approach to climate change adaptation / mainstreaming
- How does the project contribute to NCCS, Agricultural Resilience
- What barriers do you think there might be to up-scaling this kind of approach to other districts
- What barriers do you think there may be at national policy or planning process level that may inhibit mainstreaming in the way the project has attempted in MoNgoLo
- How appropriate is the institutional infrastructure for climate change (drawn from the NEA) – how do you think project activities can fit into this infrastructure. Does it warrant modification or changes?
- How much does the project address gaps in the planning system?

TMA

- *Activities include study and workshops, meetings with pastoral representatives*
- What do you think has been the key learning for TMA regarding its approach to activities
- How is the process of interacting with indigenous knowledge groups contributing to TMA' work?
- One of the recommendations from TMA studies was to downscale weather information to be more focussed – how have you done this (if at all) and what prevents further progress
- How do you track the impact of TMA activities – have you noticed any differences so far
- How is progress in implementing recommendations from the study/workshops – what barriers are there to continued improvement
  - How do these changes represent an improvement in TMA service delivery, and what outcomes do you think are possible from improved CIS in the districts

Tanzania's northern districts are extremely vulnerable to climate change. In the past, community livelihood strategies have allowed people to remain productive in the context of climatic variability. But adaptive capacity is being undermined by the changing climate and the government's inability to support people's needs.

This working paper reviews the enabling environment for climate resilient development in Tanzania, and learning from local government efforts to strengthen institutional capacity adaptation and development planning.

IIED is a policy and action research organisation. We promote sustainable development to improve livelihoods and protect the environments on which these livelihoods are built. We specialise in linking local priorities to global challenges. IIED is based in London and works in Africa, Asia, Latin America, the Middle East and the Pacific, with some of the world's most vulnerable people. We work with them to strengthen their voice in the decision-making arenas that affect them – from village councils to international conventions.

International Institute for Environment and Development
80-86 Gray's Inn Road, London WC1X 8NH, UK
Tel: +44 (0)20 3463 7399
Fax: +44 (0)20 3514 9055
email: info@iied.org
www.iied.org

Knowledge Products

This research was funded by UK aid from the UK Government, however the views expressed do not necessarily reflect the views of the UK Government.