

Resilience Assessment Toolkit

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Resilience Assessment Toolkit



Preface

The resilience assessment is a participatory process allowing local people, differentiated by production system, gender and age, to articulate the rationale underpinning their livelihood strategies. It differs from other planning approaches in that it seeks explicitly to enable and empower local people to explain to those external to their community, such as government planners or NGO staff, the logic of their production strategies in the face of climate variability and change. It provides an opportunity for local governments and communities to discuss how local livelihoods function and interact, the factors that constrain their resilience to the impacts of climate change, and practical ways to build adaptive capacity and long term resilience.

The assessment process and its tools are a work in progress. It was initially developed by the International Institute for Environment and Development [IIED] from tools developed from existing participatory research methods. The approach was first applied in Isiolo County over 2011-12 in the context of a pilot project to mainstream climate change into county government planning under the then Ministry of State for Development of Northern Kenya and Other Arid Lands.

From 2013, the resilience assessment process has been further developed by the Adaptation Consortium [www.adaconsortium.org], an initiative of the National Drought Management Authority [NDMA]. Ada Consortium is piloting an approach in five arid and semi-arid counties to enable county governments to mainstream climate change into county development planning and budgetary systems; and is testing the resilience assessment process set out

The resilience assessment process is informed by the premise that that local people have knowledge and tested strategies for managing climate variability and change, and for climate adaptation to deliver resilience sustainably, these strategies need to be integrated and given due priority in formal planning systems. minorities and marginalized communities

in these guidelines in the three arid counties of Garissa, Isiolo and Wajir. A related approach, the Participatory Vulnerability and Capacity Assessment [PVCA] by Christian Aid, is being tested in the two semi-arid counties of Makueni and Kitui by Christian Aid. The resilience assessment process is also being further tested and refined with local governments in Tanzania, Senegal, and Mali, and will continue to develop in a direction driven by user feedback and the quality of outcomes.

Throughout its development, the aim has been to pilot an approach that can be mainstreamed into the formal planning system thereby institutionalising the integration of local perspectives and knowledge into county and local government decision-making processes. Ensuring the approach and tools are pertinent, affordable and implementable by county or local governments, and which directly builds on the existing planning system to avoid parallel and/or competing approaches, has been central to the process.

Many people in Kenya have contributed to the design and testing of the resilience assessment toolkit so far. Central among these are the local people from Garissa, Isiolo and Wajir, too numerous to list by name, who willingly gave up their time to participate in the process.

We also acknowledge the County Planning Officers from Garissa, Isiolo and Wajir namely Silas Oure, Tom Amek and Stephen Muoka, and County Drought Coordinators - Mohammed Keynan, Lordman Lekalkuli and Yassin Farah respectively. The NDMA management who took the lead in shaping the approach to ensure its compatibility with county planning systems and its relevance for the County Integrated Development Plans. Finally, we wish to thank the following for their hard work in facilitating the resilience assessment process at the community level in the counties of Garissa, Isiolo and Wajir from which we have been able to develop these guidelines: Daoud Tari, Turane Mohammed, Jimale Mohamed, Abdirahman Kusow, Ibrahim Jarso and Omar Jattani.



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Acknowledgement

The tools used to form the resilience assessment have been drawn from a long line of participatory learning and research tools developed by others. Modified participatory learning and action tools have formed a large part of the process, including the seasonal calendar, proportionate piling, spectrum and voting tools. These have been comprehensively collected in a trainers guide by Jules Petty, Irene Guijt, John Thompson and Ian Scoones, as part of the IIED Participatory Learning and Action Series. The wellbeing ranking and proportionate piling tools have been developed and explained by John Rowley in recent work. The theory of change is relatively new to the canon of participatory research tools, originating in the theoretical and development work of Carole Weiss.

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Overview of the Resilience Assessment Process

(1a) Wellbeing and (1b) Livelihoods Tool

Understands categories of wellbeing, inequality, how changes in wellbeing take place, livelihoods divisions. Introduces the process and concept of differentiated resilience

Uses beans through proportionate piling / discussion

(2) Constructing The System - 3 pillars

Establishes livelihoods as a system and introduces the fundamental aspects of that system and the key factors of vulnerability / resilience

Facilitated discussion. "3 pillars" approach to understanding livelihood dynamics

(3) Seasonal Calendar

Describes how livelihood strategies change with the seasons in normal or drought periods. Goes into detail about **why** strategies are used and what benefits they bring. Understands how community planning takes place

Uses local materials / drawn timeline to articulate seasonal change. Discussion and probing questions to draw out details of livelihood strategies

(4) Resilience Spectrum Line

Evaluates where wellbeing groups fall on a spectrum of resilience. Identifies key **factors** that make a household more resilient

Uses a line drawn in the ground/on paper. Discussion to draw out what makes one wellbeing group more resilient than another, and the "factors of resilience" that makes this so

(5) Theory of change

Produces a list of interventions necessary to alleviate constraints to livelihood strategies, and improve resilience

Uses resilience spectrum line as a trigger to ask "how can people improve their level of resilience?". Uses constraints identified in Seasonal Timeline as a basis for further discussion on improving resilience

(6) Ranking Tool(s)

Prioritises interventions according to criteria deemed important by the community.

Uses voting, beans and/or structured discussion to help people articulate the interventions they consider to be most important/urgent/effective

(7) Village Interviews

Interviews with households at village level to corroborate information gained during the resilience assessment and to provide finer details on key issues

A. Facilitating Resilience Assessments – Key Skills

The resilience assessment is a 2 part process. The first part consists of a 4-day workshop with community representatives. The second stage involves household interviews with a sample of people from villages represented in the workshop. As many of these interviews should be performed as time allows.

Facilitating resilience assessments requires facilitators to be aware of three categories of skills.

- 1] Knowledge of content and its purpose
- 2] Managing group dynamics
- 3] Tools and techniques to aid adult learning

A1 Knowledge of its Contents and Purpose

It is essential that facilitators understand the content of the resilience assessment, the purpose of each tool and how they fit together. Facilitators should understand the information a resilience assessment is designed to produce and how each tool contributes to a greater and more detailed understanding of local livelihoods and the nature of resilience. This purpose of the assessment must be shared with assessment participants from the beginning to enhance mutual understanding and build trust between them and the team of facilitators. Working together in this way allows for flexibility when managing groups and the ability to gauge which discussions are relevant to the overall aims. Specifically, facilitators should ensure they have good knowledge of the following:

- Why understanding of livelihoods, resilience, and constraints to livelihoods is important for development and resilience planning at micro and macro level.
- The overall structure of the resilience assessment; how each tool leads logically into the next and how the information produced articulates livelihoods and their resilience to climate change.
- The step-by-step process of each tool within the assessment, including knowledge of necessary equipment, steps to completing it and possible variations if circumstances require.
- Concepts such as climate change, resilience and vulnerability. While such concepts will be discussed with participants, establishing local language equivalents, it is essential to have a sound understanding of these concepts including the range of different, and often contested, definitions. These should be used throughout the workshop. A glossary of key terms with links to more information can be found in Annex 5.

- It is a good idea to prepare a power point presentation and print out any necessary documents you might need before the workshop. These can help to explain concepts early on and provide a point of reference to enhance further discussions.

A2 Managing Group Dynamics

Establishing a good rapport with participants is essential to gaining detailed and carefully considered information. A good rapport is built on a shared sense of equity in the relationship, trust within the group of participants and between participants and facilitators. Do not assume that all of the participants have the same opinions or that they naturally like or respect each other. An environment must be created which fosters mutual respect for the opinions of others, but allows healthy debate and exploration of important issues.

- Consider the way the room is set up. Avoid positioning facilitators or participants in a way that may suggest hierarchy. Seat participants and facilitators around tables (facing each other) or in circles. Avoid a situation in which facilitators are standing at the sides or over the table while the rest of the participants remain seated. See Annex 1 for a suggested arrangement.
- Take time to introduce facilitators and participants to each other. Allow time for social interactions where participants can learn about each other (i.e. over tea and meals). This will build trust and willingness to communicate.
- Remember the names of all the participants – this will build a good rapport between them and the facilitator.
- Be clear about the purpose and objectives of the workshop.
- Explain the timetable of each day and the time demands that will be necessary.
- For each tool, ensure that participants understand what is required of them at each step of the process.
- Establish clear rules of behaviour during the workshop – e.g. use of mobile phones, leaving the workshop, the need for tolerance of other points of view.
- Keep discussion groups to a manageable size (ideally no more than 16 – smaller groups than this are preferred). This will allow facilitators to better control discussions and ensure that all voices in a group are heard.
- Provide opportunities for participants to review the process each day and ensure you respond to criticisms.

A3 Tools and Techniques to Aid Adult Learning

A key aspect of the resilience assessment is drawing out detail that is relevant to the local area [village, ward, county etc.], and understanding how knowledge or details in one discussion fits together with other knowledge or learning from the workshop. Drawing out such details requires careful attention and skill, which you will develop over time and with experience.

Field Notes

Tools are designed to be engaging, participatory and challenging. One of the most obvious signs that the tools are working well is that people are enjoying the process! Be aware of the general atmosphere of the workshop and the level of contribution of different participants.

- One of the most important skills is the ability to discover rich detail about local livelihoods, constraints to their success and how potential interventions might be established and function. Discover connections between different strategies, constraints and activities. For example, when talking about a particular issue [for example, migration], ask how this issue is relevant to the local area. Who does it affect? When in the year does the issue affect them? Has the nature of the issue changed over time?
- Much of the work of the assessment is done in smaller discussion groups. Allow time at the end of each tool to let groups present the outcome of their discussions to each other, and ask each other questions. This has several functions.
 - Corroborates knowledge – hearing more than one group give similar answers gives facilitators an idea of accuracy.
 - Encourages discussion between participants about why there might be similarities and differences in the outcomes – revealing further information.
 - Allows participants to summarise discussions in their own words. This is beneficial and empowering for participants, and allows facilitators and particularly note-takers to ensure they understand what is being explained.

A4 Facilitating Discussion

Remember that people are different! Some individuals are more comfortable in large groups, others may be quieter and reluctant to speak. In some cultures, women are particularly quiet in group settings when mixed with a group with men.

- While it is good to have “champions” in a discussion group who lead the discussion with their opinions, be careful to try to include less vocal participants.

- Try to prevent one or two individuals dominating the discussion by politely but firmly asking them to pause so that others can have their say.
- Allow participants to discuss issues with each other without interrupting them. This is an opportunity for you to listen to their opinions and take careful notes. Be aware of different points of view and who holds them. When discussions become too heated, or veer into a direction that seems irrelevant, it is time for you to intervene and steer the conversation in a calmer or more relevant direction.

Field Notes

One way of calming down a heated argument between a small number of people in a group is to ask participants to stop discussing so you can make sure you understand. Summarise both points of view in a calm manner and check that you have understood. This helps everyone to understand that you are dealing with a difference of opinion, not a personal dispute. It also allows you to open up the discussion to others who may not yet have had the chance to offer their view. These people may introduce new ideas and perspectives which change the debate.

- Stop to summarise points of view from time to time to ensure that you and everyone else understands, and to give your note-taker a chance to check they are recording correctly. Invite clarifications from participant.
- It is often useful to separate women from men in order to more effectively draw out the experiences and opinions of women on different topics. You may find that their perspectives are very different from those of the men. Sharing these opinions at the end of each tool will be a learning process for the group and will provide an opportunity to better understand why women occupy the role that they do.

Ask “open questions” – these allow a range of answers which may leave room for follow-up questions. Below is an explanation of types of question. While there are times when closed questions or even leading questions may be useful, try to use open questions as much as possible.

Types of Question

Closed	Can only be answered Yes or No – <i>“Do you grow Maize?”</i>
Open	Allows the interviewee a range of answers that might be longer and more detailed. Likely to leave room for follow up questions. – <i>“What are your main activities during the dry season”.</i>
Leading	Suggests an answer, makes it difficult for interviewee to choose a different answer. Often responsible for facilitation. – <i>“How much benefit do you think a milk processing plant will do for the community?”</i> . A better question would be <i>“How would establishing a milk processing plant affect the community”</i>
Double Headed	Contains two or more questions. The interviewee has to choose which part of the question to answer. – <i>“What activities bring in most income during the dry season and the rainy season”.</i>
Vague	The interviewee may not understand what is being asked, or provide information that is not useful. <i>“What are your best activities?”</i>

A5 Ensuring Women’s Participation

A gender sensitive participatory approach acknowledges the numerous obstacles to women’s participation and sets up mechanisms for lifting those obstacles. Particular attention is given to the different experiences of women and men, and, thus, their different opinions, concerns, needs, and priorities.

Involving women in identifying problems, finding solutions, and making decisions helps them to understand the issues at stake, discover and value their own experience, skills, knowledge, and strengths, and increases their self confidence. These are crucial elements of empowerment. It also enhances the visibility of women’s capacities and contributions to men and to organisations involved in development and environmental programmes. Moreover, particularly in dryland areas, men are very mobile and are away from the household for several weeks or months for grazing livestock, trading, or working in cities. Thus, women have been taking over men’s responsibilities.

While collecting and analysing information, discussing issues, identifying solutions, negotiating, implementing programmes, and making decisions, we need to be constantly aware of the differential experiences and perspectives that women and men may have, and how these differences can affect the issue to be addressed and the outcomes of the planned intervention.

Meaningful Participation is possible

- When they are expressing their views ...
- When their views are listened to and discussed ...
- When they ask questions for clarification ...
- When they can influence decision making ...
- When decision making integrates their concerns ...
- When decisions addressing women's concerns are implemented

Table 1: Women's participation

<i>Obstacles to women's participation in public meetings and decision making</i>	<i>Steps towards women's participation...</i>
Ignorance of rights and illiteracy, which is emphasised by both women and men.	Use the opening stages of the workshop as an opportunity to verbally remind men and women of their rights.
The mockery, criticism, and brutal attitudes that confront women who speak out.	Try to establish that the workshop should be a "safe space" for all participants to speak without fear of repercussions, mocking or punishment. This can be helped by building into the aims of the workshop that you seeks to collectively find the best solutions, using the opinions of everyone
Distrust from development workers and other members of the community.	Ensure that you have include development workers and key community members from the very beginning of the project process. This will demonstrate that you have nothing to hide and would like to work with, rather than against people.
Traditional roles and power divisions.	When facilitating discussion groups, separate women and men, and ensure female facilitators work with women's groups. This will require enough women facilitators to be on the workshop team. Allow men and women to present their perspectives to each other after each discussion. Use local language translators
The monopoly by men over information and resources.	Try to avoid tools which involve lots of text – particularly when summarising discussions on ipchart paper. If possible, use simple drawing that may represent an idea.
Meetings are organised in places and at times not suitable for women. [i.e. when women are engaged in childcare, domestic activities or income generating activities].	Before arranging a venue, check with women from that community that they would be comfortable with the venue and the time of the workshop– women often feel less comfortable in overly public spaces.
Meetings are conducted in a non-local language.	Try to establish that the workshop should be a "safe space" for all participants to speak without fear of repercussions, mocking or punishment
Lack of access to or control over financial resources. [potentially limiting ability to get to meetings]	Avoid using general terms like "farmers", "traders". Try to be more specific, using "women farmers", "women traders", "male traders", "wealthy women", "poor women", etc.
Lack of solidarity among women or conflict in the community.	Accept that disagreement is natural and often healthy. Ensure that you listen to different points of view first and then help the group to find compromise or resolution. Be firm in ensuring that disagreements are respectful and polite.

Undue pressure on women to succeed.	During the workshop, women should be treated with equality and respect. Their personal ambitions should be respected regardless of the views of facilitators or other community members.
Lack of self-confidence and low self-esteem.	There should be awareness of all individuals in the workshop regarding their level of engagement. Attempt to engage women who seem shy or quiet. It is also a good idea to engage in interviews with women or other marginalized groups after the workshop, in settings where they may be comfortable.

Source: Adapted from, ICIMOD (2009) "Guidelines for a Gender Sensitive Participatory Approach"
- www.icimod.org/resource/1288

A6 Facipulation

"Facipulation" is a combination of the words **facilitation** and **manipulation**. This is where the facilitator leads participants to a specific answer which originates from their own experiences, opinions or assumptions. It is very easy to find yourself facilitating discussions that lead to your own point of view! Be careful of this trap - use open questions to allow participants a range of answers and be prepared to accept opinions different to your own. Most of all, be aware of your own behaviour, background and assumptions.

Field Notes:

Very occasionally, a "leading" question may be useful to enhance discussion. Sometimes, particularly at the beginning of the process, participants may not understand the level of detail you are looking for, providing only very general or simple answers. For example, asking, "What are the sources of food for livestock during the dry season" may yield general answers such as "pastures in dry season reserves". If no more detail is offered, the facilitator may add, "What about tree pods?". This lets participants understand that you are seeking finer details, and may then open up explanations of a range of other food sources.

Sometimes, facilitators may accidentally ask a "leading question", based on their own built assumptions. This is perfectly natural and is not surprising - in normal conversation with others we often ask leading questions! It is up to the facilitator to be conscious of their own questions, and the observer [see below] to listen carefully to ensure that these are noticed.

Leading questions, purposeful or not, should be recorded in the notes. This will make sure that it is clear that the idea or suggestion came from a facilitator when the notes are analysed for useful information.

A7 Documenting Discussion

- Be sure to take notes on all discussions in detail.
- You can do this by assigning roles for each facilitator in a group. Ideally, each group should have 3 facilitators working as a team.

o *1 Facilitator* – Explains tools, asks probing questions and is the main point of engagement for the activity. Also responsible for controlling debate, intervening to ensure it remains relevant, etc.

o *1 Observer* – The observer ensures the tool is being run correctly. They have an important role, identifying participants who may not be contributing, ensuring the facilitator pushes for appropriate detail, ensuring the facilitator is not asking “leading” questions, and asking follow up questions when the facilitator may have missed or misheard an important point.

o *1 Note-taker* – Concentrates solely on taking notes on the discussions. The note taker should write in the language they are most comfortable with, and try to record the details of discussions. Notes can be translated later. They should record different points of view (not just final conclusions), and notice who holds those views. The note taker has a crucial job.

Field Notes:

The note-takers’ role may not be glamorous but is the most important. Without detailed, extensive notes, the time spent on the resilience assessment may be lost. Note-takers should:

- Try to record all the nuances and details of discussions – not just general points.
- Be willing to pause a discussion to ensure they have understood what has been said so they can properly record it.
- Write in a language they are most comfortable with – translations can be done later.
- If appropriate equipment is available, you may want to record discussions for further reference at a later date, although it is not necessary to do so. **You must gain written and verbal permission from all participants in order to record them.** You must also ask for their permission when quoting them in published or public documents.

A8 Review, Feedback and Improvement

- At the end of each day of the workshop, take 15-30 minutes with the facilitation team to review the day. These short reviews can contribute significantly to facilitator learning and improvement, making them aware of successes, failures, pitfalls and the tricks of group management.
- Have a brief review of tools, methods or explanations that helped in the facilitation process – be honest about where there could be room for improvement.
- Consider the “mood” or “atmosphere” of the workshop – were there times in the day when discussion seemed to work well? What tools did participants respond to best, and why? Are there divisions between participants that may be affecting discussions, and how can these be managed? Are there dominant characters that may be silencing or intimidating others, and how can they be managed?

A9 Working with Translators

In some areas, the local language of target groups may be different from the language spoken by facilitators. For example, many of the participants in Wajir County, Kenya, especially women, mainly speak Somali, while some of the county government staff from other parts of Kenya and do not speak Somali. Language is crucial for allowing people to express themselves in detail.

It is possible that some participants will speak both their native language and that of facilitators. However, do not assume that this is the same for all participants. Often, those from poorer backgrounds, and women, have not had the chance to develop a full understanding of the national language. **Resilience Assessments must be conducted in the language all participants are most comfortable in.** This may require the use of translators. Unless they are specially trained, it is worth spending time with translators before the assessment begins. Ensure that they understand the following:

- Their role is to be a “mouthpiece” for what is being said. They should translate what is being said as accurately as possible.
- This means when the participant says, “I think that...” they should translate this as “I think that...” – not, “he says that ...” or “he said that”.
- Similarly, questions from facilitators should be translated exactly. Avoid using phrases such as “he wants to know if...” or “they want to find out whether...”
- Translators need to be aware of unconsciously including their own biases into the translation.
- Translators must remember to translate everything that is being said, even when it seems irrelevant or obvious. It is these unexpected pieces of information that can be crucial to understand the particularities of certain area.
- If participants are talking too fast, or if translators don’t understand, they must be empowered to stop proceedings and make sure they are clear.

Translators need to be aware of how easily words can be misrepresented. See below for an example.

The following sentences can be easily mistranslated from the following sentence. “The pastoralist women travel long distances with donkeys to fetch water”. Note the different emphasis, the possibility of key words or phrases being forgotten or confused, or the possibility of ambiguity in the translation of any sentence. The sentence could be translated in any of the following, inappropriate ways.

- **The pastoralist women walk a long way with donkeys to find water.**
- **Women go a long way to find water for the donkeys**
- **The pastoralists use donkeys to find water a long way away**
- **He is saying that the women look for water.**
- **They are saying that they use donkeys to go a long way for water.**



Using pictures to explain ideas and concepts/photo by Sam Greene

B. Framework of the Resilience Assessment

Setting the scene of the workshop to participants from the beginning is critical to the success of the resilience assessment. It is important that participants understand that the resilience assessment is driven by their knowledge and understanding – and its value ultimately depends on their input. Ultimately, the assessment will allow participants to offer cohesive development recommendations to facilitators who will understand the logic behind them. More explanation of the assessment follows in this section.

The impacts of climate change on dryland areas threatens to exacerbate existing ongoing threats and inequalities affecting communities, to a point where livelihoods risk becoming unsustainable. In regions characterised by climate variability, the ability to manage change and climate extremes is key to successful adaptation. This will require changes of policy at national government level as well as changes of behaviour by both local government and communities.

The resilience assessment launches a process that enables local communities to shape, implement and evaluate climate resilient development activities. The implicit assumption is that in rural dryland contexts, enhanced local participation in development is the most effective way to ensure efficient, appropriate and well implemented interventions. The establishment of devolved level Community Adaptation Funds (CAFs) depends on fund committees with an acute understanding of threats to existing livelihoods. The assessment tools help them to articulate their current level of resilience and assess the constraints and opportunities for successful adaptation. The outputs form the basis for discussions on how CAF's can best invest in public goods which will successfully build long-term resilience. Because of this, communities become drivers of the development process, identifying local values, livelihoods and problems, and taking an active role in solution design and implementation.

For the government, ensuring public participation in development planning is a constitutional requirement. The resilience assessment offers an inexpensive yet effective means of ensuring gender sensitive, meaningful participation in the planning process. This direct engagement with local people can better inform government planners about the complex nature of local livelihoods and the adaptive capacity of their constituents. Because the tools allow for open discussion, local people can honestly and frankly explain the factors that undermine livelihoods direct government staff. The resilience assessment can be repeated annually as part of development monitoring and learning activities.

The Assessment Process

The resilience assessment is a 3 stage process involving a 4 day workshop, composed of individuals from several villages across a ward, followed by village focus group lasting a half day, and household interviews. Individuals are drawn from elected Ward Adaptation Planning Committees, which should also ensure an even balance of men and women. The workshop brings together representatives of a series of contiguous villages to participate in a set of facilitated tools that enable them to articulate the rationale behind their livelihood strategies as well as the constraints that undermine them. The tools then encourage participants to identify the factors of resilience to climate change and interventions which play on those factors to support their communities.

The assessment is designed so that the information generated in one tool feeds into the next. The detailed local knowledge of participants is key to ensuring fruitful discussions - without it the assessment does not function effectively. Discussions identify:

- Key features of wellbeing and common values that drive engagement in livelihoods
- The types of livelihoods used to support households
- The major activities and strategies used by different livelihoods to maximise productivity and minimise loss in relation to seasonal change and climate variability
- The social, political and environmental or economic constraints that undermine successful practice of livelihood strategies and therefore undermine resilience
- The general principles of resilience for a given area
- Key investments into public goods which will improve resilience of local people

Government officials or NGO staff remain very much as facilitators, drawing out and collecting information through tools that guide but should not constrict discussion. Their role is to collect and understand rather than impart or interpret knowledge.

Village Focus Groups

Village focus groups are designed to gain greater understanding about local wellbeing in a particular area. The method used in wellbeing analysis can be a highly useful tool in the project for evaluation and monitoring purposes. Focus groups help to corroborate and add finer detail to the resilience assessment workshop. By obtaining finer details from people affected but not directly involved in the process, detailed information about local wellbeing (and its change over time) and livelihoods can be found.

Participants of local focus groups should be representatives from across the village, including a balance of older men and women, as well as ensuring the youth of the community are represented. Focus groups should not take much longer than half a day, and will help to identify households to approach for individual interview.

Household Interviews

Household interviews helps to reduce some of the risks of participatory workshops – which can sometimes be dominated by powerful individuals, reinforcing existing power divides within communities and silencing marginalised groups such as young people, the disabled and women. Interviews help to add personal experience and opinions to the assessment findings, drawn from people who are likely to be affected by the project but are not responsible for delivering it.

Interview participants are sampled from the wellbeing categories discussed in the village focus groups.

Introducing the Workshop to Participants

The success of the resilience assessment depends on the willingness of participants to contribute honestly and in detail to discussions. They are far more likely to do this if you explain clearly how their answers and the notes you take are contributing to the planning process and their sustainable development. It is essential that they are aware (and that facilitators believe) that participants are the driving force of the process. It is their detailed local knowledge and understanding that is key to ensuring effective resilience building.

Your introduction should cover the following topics:

- The expected impacts of climate change in the drylands and the need to adapt

Broadly, these include an increase in the frequency and intensity of drought, and an increase in heavy rainfall events with threats of flooding. There is also a likelihood of higher overall temperatures, affecting the type of crops than can successfully be grown and likely having adverse impacts on the survivability of livestock in harsh conditions. Higher temperatures coupled with intense rainfall events are likely to affect the disease profile of the area, changing the prevalence of crop, livestock and human diseases. Changes in rainfall are further likely to change current water supplies, making availability of water increasingly erratic, unpredictable, and potentially scarce.

- The government planning process and where this workshop fits

An explanation of the county government planning and decision making process will help participants to understand how the resilience assessment fits and how their opinion is going to affect planning decisions. This helps to contextualise the assessment within an ongoing process.

- The process of establishing DAPC's and where this workshop fits

The resilience assessment is a key part of the functions of the Ward Adaptation Planning Committees. The assessment findings form part of the process of proposal development for CAF investments that support the community. It is therefore necessary to explain the DAPC and the CAF, and how the resilience assessment is designed to enhance decision making.

B1 Wellbeing Analysis²

Objectives:

- To understand what the community believes to be a “successful” life or what it is that makes someone have a high quality of life
- Provides a point of reference to aid discussion during the rest of the assessment
- To learn how the community may be categorised into levels of wellbeing
- To understand how people can increase or decrease their level of wellbeing

Equipment:

- A good sized pile of beans, rocks or seeds
- For household interviews: Sticky notes (post-its) or cards. Pens.

Wellbeing refers to the state of a person or groups quality of life. In addition measuring material assets, it can also show how social or cultural factors affect local understandings of poverty and their priorities.

Words for Wellbeing

- Being at ease
- Satisfied with your position
- Cultivation of means allowing a stable life
- Having physical, moral, economic satisfaction
- Having stability and security in life
- Able to seek personal / spiritual fulfilment
- Being at peace

²This wellbeing tool has been drawn and adapted from Rowley, J., [ed.] (2014), “Wellbeing Ranking: Developments in applied community-level poverty research”, Rugby, UK: Practical Action Publishing pp.33-70

It can be a multi-faceted term incorporating the different objectives, goals or factors that contribute to a happy and/or a fulfilled life. Wellbeing is not the same in all places, or even for all people. It may be heavily affected by local culture, history, and current circumstances. “Wellbeing” is open to definition in any way that resilience assessment participants deem appropriate.

Understanding wellbeing is valuable because it uncovers the values and goals a community find most important. It is the upkeep or achievement of these values that resilience building interventions are ultimately striving to support. Just like economic wealth, communities can often be divided according to their “level” of wellbeing, relative to other groups.



Completed Wellbeing Analysis using beans/photo by Sam Greene

B1.1 Facilitation Process

Stage 1: Defining Terms (in Plenary or small groups)

1.1 Establish a local language [Somali, Boran, etc.] word for “wellbeing”.

1.2 Discuss with participants what criteria they use to define “well-being”.. Examples may include economic criteria [a good salary, plenty of animals, a lot of fields], or social criteria [a large and healthy family, many friends, being married, the community’s respect], environmental criteria [living in a beautiful area, having access to fresh water] or even spiritual criteria [feeling at peace].

Stage 2: Qualifying Wellbeing

2.1 Ask participants if there are specific words or expressions to describe people with different levels of wellbeing in their area. For example, participants in Wajir identified three groups – “Ladnan”, “Masikin” and “Fuquara” – loosely corresponding to “very poor”, “poor” and “rich” – be aware that local language words may not necessarily correspond directly to their English translations. They may refer to qualities such as social competence, livestock ownership etc. It is important that you explain the need for categories without suggesting any answers for the participants.

2.2 Use the beans to perform a proportionate piling exercise: Split participants into smaller groups. Explain that that pile of beans represents all the people in the community. Ask groups to divide the beans in a way that reflect the different categories of wellbeing in the community. They can divide the beans into as many piles as they like. The size of the piles should correspond to the relative size of the groups in real life

2.3 Once each group has finished, ask what the defining features of each pile are. Examples may include numbers of cows, wives, acres of land, level of children’s education or other factors. This information will be used in stage 4.

Field Notes:

- **The proportionate piling exercise is most effective with village focus groups, in an environment where individuals have knowledge of most of the other households in a village. In the setting of the workshop, where individuals are drawn from a wide area across a ward, proportionate piling will not be accurate and based on estimations.**
- However, the exercise is an excellent opportunity to begin a conversation on the characteristics of definable wellbeing groups known to participants.
- It is common during proportionate piling for groups to try to reach a definitive answer before dividing the beans. A better approach is to ask one person to “have a go” at dividing the beans according to his/her perception. Once he/she has done this, ask the rest of the group if they agree.
- **Be aware** of the feelings of some participants who may be insulted by the words used. Some words have derogatory meanings. Particularly if participants come from poorer backgrounds, they may be very sensitive about their position within the community and how they are perceived

Stage 3: Understanding dynamics of social/wellbeing mobility

3.1 Ask: *How can households in the lower wellbeing groups move up to a higher group?*

- Be aware that the qualities or activities needed to move from a lower to a middle group may be different to those needed to move from a middle to a higher group.

Ask: *What causes households in the higher wellbeing groups to move down to a lower group?*

Ask: *How have the size of groups changed over time, and why?*

- **Be aware** that the qualities or activities that cause movement from a higher to a middle group may be different to those that cause movement from middle to low. Indeed, disasters may cause a rich family to become poor very quickly.

Stage 4: Quantifying Wellbeing. *This stage is to be performed at the level of a village or pastoral camp where the families or households know one other relatively well – not in broader resilience assessments.*

4.1 Conduct stages 1 and 2 above with as many people as can attend from the village or camp. Their answers to qualities of wellbeing, and the piles made during proportionate piling, should be relevant to their village (i.e. their localized area).

4.2 Follow these steps with your respondents:

4.2.1 Make a list of all the households/families in the village. If the village is large, it may be necessary to divide the village into quarters.

4.2.2 Write the name of each family on a separate card. Give each card a unique number. The number will allow you to keep the names of each family confidential.

4.2.3 Ask respondents to rank each family in order of wellbeing. To make the list, place the first card on the floor or table. Read the name of the family written on the next card and ask if this family has a higher or lower level of wellbeing than the one on the floor. Agree which side of the 1st card indicates a higher or lower level of wellbeing [e.g. lower to the left and higher to the right]. Continue as necessary with the 3rd and 4th card, but ideally hand over the pile of cards to a member of the community who can read and ask them to complete the process until you have all the families in order on a scale of wellbeing. N.B – It may be that respondents prefer to put the cards into separate piles representing different degrees or categories of well-being rather than in a long line or precise order. This is not a problem; consolidating households into a number of categories will need to be done as part of the process.

4.2.4 Once all the families have been ranked, and grouped together into a number of piles representing separate categories of well-being, read the names of each family in each category to allow respondents to change the order, agree or disagree. Allow changes or further subdivisions to take place if necessary.

4.2.5 Take note of which families fall into which category. For example: “Family 1 falls into category 3 [1/3].” Family 7 falls into category 2 [7/2].”

4.2.6 Ask respondents again what the different criteria are that separate each category. For example, numbers of animals, children etc. This should allow you to cross-reference the answers given earlier during Stage 2 of the process [see above].

4.2.7 Ask what the different activities, factors or conditions are that enable families to improve their wellbeing, or the activities factors or conditions that lead them to lose wellbeing.

4.2.8 Repeat the process with other respondents in the village to corroborate findings with different families.

B1.2 Identifying Local Livelihoods

Objectives:

- To identify different livelihood systems active in the local area and their importance

Livelihoods, consisting of a range of production strategies and activities, are an important basis for achieving wellbeing. Typical livelihoods in rural Kenya include “pastoralism”, “agriculture”, “trading”, “fishing”, and often a combination of two or three of these activities. It is rare for a family or household to engage in only one type of production system. Since the mix of production systems and activities can be quite diverse, varying from one locality to another and even within the same locality, the identification of which activities constitute a “livelihood” is open to definition by participants.

Facilitation Process

Stage 1: Identifying local livelihood systems

1.1 In plenary, identify the most important or dominant activities that people engage in to achieve their conditions of wellbeing. Examples may include “rain-fed crop production of maize”, or “livestock rearing”, “agro-pastoralism” etc.

1.2 Either in plenary or in smaller groups, identify the criteria which makes a particular activity more important or dominant than others. Examples might include: “it takes up most time”, “it is the most effective at generating income”, “more people are engaged in it”, “it generates the most food”.

1.3 Using these criteria, establish the most important livelihood that supports local wellbeing. It is possible that there may be more than one livelihood used by different people

Field Notes:

It is very unusual that a household engages in only one livelihood activity. Aside from “dominant” activities, there may be a range of “supplementary” activities [e.g. charcoal production, tobacco or alcohol production, selling firewood, petty businesses selling milk or domestic goods]. Some of these activities may be seasonal, or may even only be used as coping strategies during difficult periods. Be sure to ask about the relative importance of these activities and how they are used, noting them down for future reference.



Community members discussing their livelihoods /photo by
Abdirahman Kusow

Stage 2: Quantifying the importance of livelihood systems

This step will take place at the level of a village or pastoral camp where the families or households know one another relatively well – not during the workshop. It should follow directly from Stage 4 of the “Wellbeing Analysis” Tool [above].

This stage establishes how many people in a village practice particular livelihoods, pointing to the dominance and economic dependence of a local area on particular systems or activities.

2.1 With a representative group of families or households from a village or pastoral camp, conduct 1.1. and 1.2 above, ensuring that respondents are familiar with other households in the community.

2.2 Establish the number of families or households in the village who practice each of the different livelihoods. You can use the same cards used to establish the wellbeing of different household.

2.3 Using a code, note on the cards the livelihood system practiced by each family.

2.4 Repeat this activity in different families to corroborate findings.

N.B It is very important that you keep the cards, as they will be used for monitoring and evaluation purposes at a later date.

B2 Constructing the Livelihood System³

Objectives:

- Generates an understanding that livelihoods are ‘complex systems’ and not just a series of activities.
- Categorises key components of livelihood systems using a “Three-E” framework: ecology, economics and equity [also known as “society”].
- Identifies how each of the components inter-act and impact on each other to either strengthen or weaken the livelihood system overall.

³ This tool has been adapted from that detailed in IIED.2011. *Pastoralism and Policy in East Africa: Trainers’ Manual*. International Institute for Environment and Development, Resource Conflict Institute, MS-Training Centre for Development Cooperation and Feinstein International Centre, Tufts University

Equipment:

- Blackboard and chalk OR Flipchart paper and pens OR Post-its / Cards

This appears a simple exercise but actually demands strong facilitation skills. The three pillars is a simple conceptual framework that helps to conceptualise the systemic nature and complexity of livelihood systems and the drivers that impact on their ability to respond to change and yet maintain their functionality.

Definition of a “Complex System”

Complex systems tend to have a series of common qualities:

- Composed of a large number of inter-connected elements.
- The elements come in many different forms or types and create an internal structure or structures that are self-sustaining.
- The system responds to external changes using its own internal structure. Small external changes may cause significant changes within the system.
- Elements interact in non-linear ways.

The main characteristic of complex systems is that they are self sustaining and sustainable. They consist of interrelated and interdependent components that may be linked in many different ways. Such systems cannot be described through simple rules. Their properties emerge from the interaction of their parts; knowledge of the properties or qualities of the individual parts does not necessarily provide a key to predicting the properties or qualities of the system as a whole. As such, the system may respond to external changes in unpredictable ways, absorbing or adapting to change as necessary.

Sources: Fryer, P., [Date unknown], “A Brief description of Complex Adaptive Systems and Complexity Theory, Accessed [24.9.2015] - <http://www.trojanmice.com/articles/complexadaptivesystems.htm>

For a technical discussion of the concept of complex systems, see: Ladyman J., et. al, [2012], “What is a Complex System”, Accessed [24.9.2015] <http://philsci-archive.pitt.edu/9044/4/LLWultimate.pdf>, pp.1-

When livelihood systems are functioning in ideal conditions, those practicing them are likely to have a regular and sufficient source of food, income, opportunities to save, and a level of wellbeing that is acceptable to them. It is therefore important to understand: (i) how the individual components of livelihood systems function and the factors that undermine or strengthen their functionality, as well as (ii) how the individual components come together to ensure the functionality of the system as well as the factors that enhance or weaken its overall functionality.. Once these are established, it is possible in the next exercise [seasonal calendar] to better understand how livelihood systems integrate or interface with the opportunities and constraints of climate variability to render them more or less resilient and able to adapt to the impacts of climate change.

B2.1 Facilitation Process

The process below focuses on pastoralism as the dominant livelihood system in a dryland area. However, note that dominant systems are likely to contain other systems such as opportunistic agriculture or fishing. A similar process can be followed for agriculture or any other rural livelihood system.

1.1 Ask participants: “What do you need to practice pastoralism in this area? What are the most essential resources that pastoralists need?” You can do this in plenary or ask respondents to work in separate groups.

1.2 Create a list of all the elements that are necessary for pastoralism. You can do this by asking groups to write each element on a separate post-it or card, or make a list on a flip chart or draw a set of symbols to represent each ‘resource’ needed.

1.3 Identify the components/resources most essential to practicing pastoralism. Answers such as “veterinary drugs”, or “animal feed supplements” may be useful, and will increase livestock productivity, but one can still practice pastoralism productivity, but one can still practice pastoralism without them albeit with a lower level of productivity. Eliminate these by asking, **“do you really need to have veterinary drugs or animal feed supplements to practice pastoralism; does it mean if you do not have these it is impossible to practice pastoralism?”** The same is true for an answer such as “supportive government policy” – while life may be more difficult without it, it is still possible to practice pastoralism without it. Through discussion, participants should agree that essential elements include:

“Cattle, camels, sheep, goats, donkeys, land, pastures, trees, grasses, salt pans, people, labour, knowledge, etc.”

1.4 Ask how these elements of pastoralism can be clustered into “components”, such as:

- Pastoral resources [land, water, trees, pastures, water, salt pans]
- Livestock [cattle, camels, sheep, goats etc.]
- Institutions [families, traditional institutions]

Pastoralism is a complex system composed of three core components: Pastoralist resources [rangelands, water], the cattle [or herd], and the family and other institutions.

Each category of elements is unique, yet interdependent on the others, influencing and being influenced by changes in each one as well as external factors [environmental change, insecurity]. The outcomes of these changes are neither linear nor predictable.

Field Notes:

When reducing pastoralism to its essential elements, you may find participants insist that some extra factors other than those above are also essential, for example, “vaccinations”, or “good policies”. You can ask “did pastoralists 150 years ago benefit from these resources?” thereby demonstrating that pastoralism still functioned then albeit maybe not as well as it might have. The point to make is these additional resources, if appropriate, will enhance pastoralism, but they are not essential. If they continue to insist, offer to “park” this discussion by “placing it in the fridge” for further discussion later. When you return to the factor later, ask, “Do you still believe it to be essential?” You can use this method throughout the workshop.

Stage 2: Identifying how elements of the system are interdependent

2.1 Ask participants if pastoralism can work without one of the three components. Take away one of the three components and ask, “Would pastoralism still work without this pillar?” Repeat the exercise for the other two components and conclude that pastoralism needs all three to function effectively as a system. This is like a three-legged stool or a cooking fire with three stones.

2.2 Ask if there are any links between the three components. ***“Does the livestock herd have an impact or depend on pastoral resources or the family?” “Do natural resources affect the herd?” Or, “in what way does the family affect the herd?”***

Through discussion lead participants to recognise that:

- **The herd has an impact on natural resources**, e.g. by eating natural pastures animals have a direct impact on plants.
- **Natural resources have an impact on the herd**, e.g. plants provide food and shade for animals.
- **The family has an impact on the herd**, e.g. they take the animals to pasture, provide them with water, occasionally slaughter them, other cultural uses, transportation etc.
- **The herd has an impact on the family**, e.g. it provides milk, meat and blood.
- **Natural resources have an impact on the family**, e.g. providing fuel wood, water, food and medicines.
- **The family has an impact on natural resources**, e.g. they cut wood for shelter, dig wells for water, burn pastures, etc.
- **Wider social institutions have an impact on natural resources and the family**, e.g. traditional institutions manage access to some natural resources; they also manage conflict.

N.B – Bear in mind that the specifics of these interconnections may be geographically specific. Take note of the details of how pillars affect each other in the context of a specific place where possible.

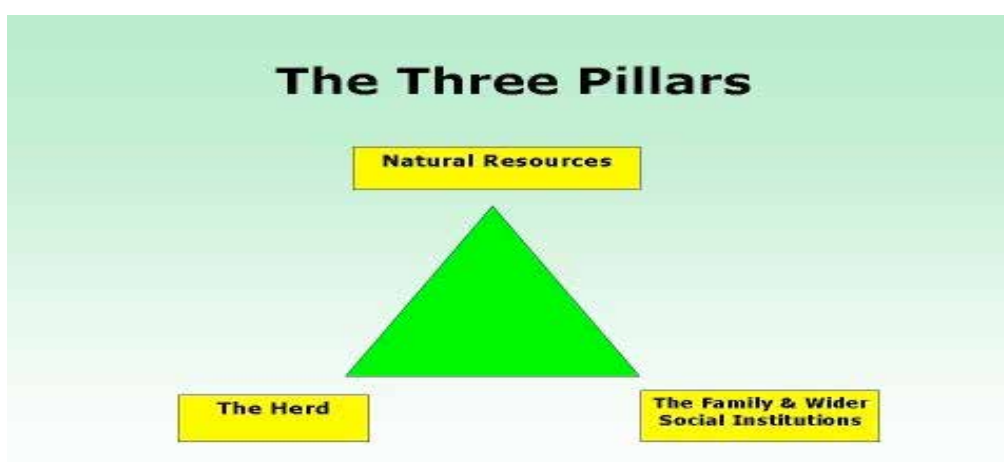
Field Notes:

The purpose of discussing the links between the different components is to be able to demonstrate later, when discussing those factors that undermine the system [step 2.5 below and in the following session on Seasonal Timeline], how development interventions that fail to take systemic approach can undermine the functionality of the livelihood system making it vulnerable to climate variability and extreme events. A simple example in the pastoral context is that of pastoral water development. A deep borehole drilled in a dry season grazing with the objective of opening up new grazing areas can undermine the functionality of the pastoral system if it doesn't consider the following:

- Its impact on surrounding pastures if water discharge levels and numbers of animals using the borehole are not controlled in relation to pasture availability for each dry season.
- Its impact on social relations if the rules governing water access have not been established in a consensual manner with all users, even those from distant locations.
- Its impact on livestock productivity and surrounding pastures if the location of the borehole is not determined with respect to the location of other permanent water points in the locality.

2.3 Ask if these relationships and links have the same impacts on different members of a pastoralist community – men, women, children, rich, poor, etc. For example, changes in the herd can affect men and women differently due to their differing responsibilities. In many pastoralist societies, women are responsible for milk production while men look after the seeking resources for the herd. With respect to resources, women are often responsible for collecting firewood and house building while men are responsible for building wells. It may also be the case that responsibilities are shared. Therefore changes in the herd or availability or quality of resources may or may not affect different parts of the community in different ways.

2.4 Discuss with participants the way in which pastoralism constitutes a system made up of inter-dependent components that work together to make pastoralism work. The description you are looking for is that a system is a unified whole of regularly interacting and interdependent components or units. If participants do not come up with this, explain that pastoralism is a system made up of three components or pillars that are inter-dependent and function together.



EPS/JS2

Ask participants to give examples of other systems (e.g. an electrical system, a water system, a bicycle etc.).

2.5. In plenary, discuss with participants the external factors that might undermine the functionality of the system. Ask participants to consider the way in which some external factors affect pillars of the system, and give examples. A detailed discussion is not necessary, but some consideration at this stage will help begin discussions in the next tool. This should take around 15 minutes.

Field Notes:

It is common for participants to point mainly to environmental factors when thinking of impacts to the system, such as flooding, droughts, disease outbreaks, etc. While these should be noted, it is equally important to consider the impacts of legislation, political changes, government actions, or conversely, the absence of necessary legislation and how it impacts the system.



Participants identifying their resources / photo by Farah Abdullahi

B3 Seasonal Calendar⁴

Objectives :

- Establishes the impacts of climate variability (seasonal and inter-annual variability) and climate extremes on the components of the livelihood system.
- Establishes strategies used to manage seasonal variability and unpredictability to maintain productivity and to minimise losses from climate extremes.
- Identifies the key factors that impact on the ability of each of the components of the livelihood system to function properly, and the relative importance of climate, especially rainfall, as a driver in building or undermining the resilience of each of the components of the system and the livelihood system overall.
- Assesses the effectiveness of community driven livelihood strategies in the context of wider socio-economic and ecological change.
- Identifies strategies and constraints to manage the productivity and resilience of the livelihood system under conditions of increasing climate variability and future change.

Equipment :

- Flipchart paper turned horizontally. You may want to use several sheets alongside each other on the floor or attached to the wall OR blackboard and chalk. If there is no equipment, you can use stones, rocks, twigs, water bottles and other local materials to represent different aspects of the seasons.

Livelihood systems in rural dryland areas of Kenya are intertwined with seasonal change. In dryland environments characterised by high and increasing variability and unpredictability, managing risk requires real-time adaptation to the incidents that arise unpredictably and uncontrollably; avoiding the bad or worse consequences while taking advantage of the opportunities variability can also offer. Accordingly, dryland populations actively integrate variability into their production systems, allowing them to exploit opportunities when they arise to maximise productivity, and adapt to constraints to minimise loss. Specifically, production strategies seek to take advantage of the rainy season (a period of relative abundance and variety of high value and quality resources), and to minimise asset loss or reproduction during the dry season or periods of climate extremes (i.e. drought). Local institutions are designed to enable communities and households to keep their options open. The functionality of the system over time plays a large part in determining the ability of communities to manage climate shocks and long-term stressors independently. This functionality is itself heavily influenced by external factors that can make the system more or less resilient. Factors may include land policies, insecurity, market dynamics etc The seasonal calendar

⁴This tool has been drawn from Pretty, J. Et al [1995], "Participatory Training and Action: A trainer's guide", IIED Methodology Series, IIED:London p.240

allows participants to articulate how the livelihood system is affected by seasonal change, and the activities employed that allow the system to maximise productivity and minimise loss. It then serves as a basis to assess constraining factors that are preventing the system, [or specific aspects of the system] to function effectively..

The seasonal calendar allows participants to articulate how the livelihood system is affected by seasonal change, and the activities employed that allow the system to maximise productivity and minimise loss. It then serves as a basis to assess constraining factors that are preventing the system, [or specific aspects of the system] to function effectively.

Key Techniques

- This tool requires strong facilitation skills. Do not rush – be methodical in asking why pastoralists choose to use certain strategies at particular times.
- **Probe** for details at every opportunity. Seek to understand small details that may help to explain the bigger picture and the nature of the pastoralist system.
- To enhance discussion, ask how particular strategies affect the different pillars, or ask how constraints prevent smooth functioning of the three pillars together. For example, “how does the expansion of settlements affect the family, the herd or natural resources?”

B3.1 Facilitation Process

This can be run in plenary or in smaller groups.

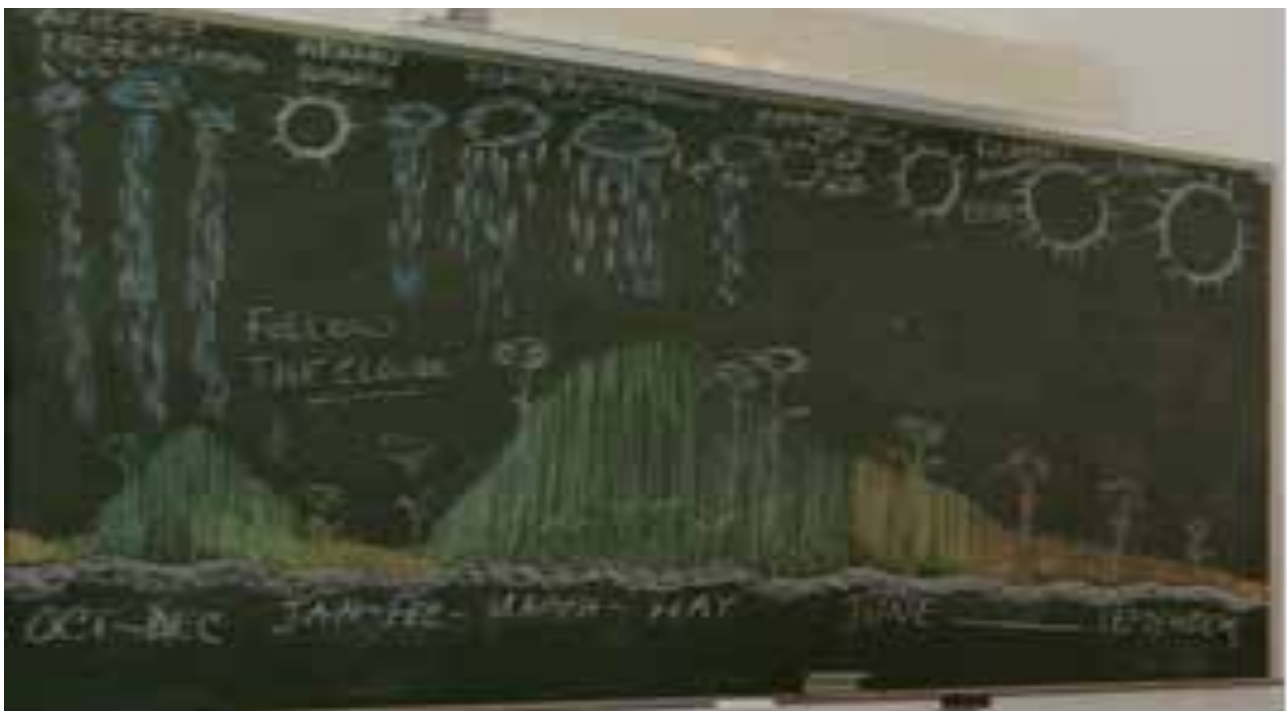


Figure 1: Seasonal Calendar / photo by Sam Greene

Stage 1: Identifying the Seasons

1.1 Start by drawing a line on the ground, or across the centre of the paper (or blackboard), running horizontally from left to right. Explain that this line represents 1 full year. At this stage, it is not necessary to mark the names of the corresponding months or seasons, only that the left side represents the beginning of the year, the right – the end.

1.2 Establish when local people regard as the start of the year. In dryland environments of Kenya it is usually the start of the first rainy season after the long dry season.

1.3 Establish the names of the seasons and the order in which they follow from the start of the year. Write the names of the seasons along the bottom of the line roughly spaced according to their duration. *Be aware that broader seasons may have distinct “sub” seasons, with their own names and discernible characteristics. For example, the period at the very beginning of the rainy season (and end of the dry season) when rains are very sporadic and unpredictable in both timing and geographical location. This may be before rains become a regular occurrence.*

1.4 Starting with the rainy season at the beginning of the year, ask participants to describe how the weather behaves in each of the seasons across the year. Capture these key features with simple drawings of small and larger clouds with lighter and heavier rainfall, periods of mists or high winds and smaller and larger ‘suns’ to denote colder or hotter periods [See Figure 1 above]

1.5 For each season, ask for more specific comment on specific characteristics. For example, ask about the characteristics of rainfall at the beginning, middle and end of the season. the intensity and the distribution of the rainfall over time and across the landscape. You can write some of these details on the diagram.

Stage 2: Describing the impact of seasons on pastoralist livelihood systems

2.1 Once the seasons and their characteristics have been drawn for the whole year, ask participants to describe the impact of the different seasons on each component or pillar of the pastoralist system. Start with pastoral resources, noting the impact of the different seasons on:

- The quantity of pastures during the dry and rainy season. Again, using simple drawings capture how in very general terms the growth patterns of pastures over the wet and dry seasons – see Figure 1 above.
- The nutritious quality of pastures during the various seasons. This will involve discussing how the nutritional value of grasses change from one season to the next – being generally high in the rainy season and very low in the dry season.

- The distribution of nutritious pastures across time and space in rainy season. Because rainfall is variable in time and space so pasture growth is variable in time and space, and this has an impact on the availability of nutritious pastures.

2.2 Next, ask questions which examine the impact of each of seasons on the other components of the pastoral system and the ‘knock-on’ impacts of changes occurring with one component on the other components. Example questions include:

- How does the rainy season impact on the herd [e.g. high mobility to access nutritious pastures, animals put on weight, produce more milk, increase incidence of water-borne diseases, increase in market price]
 - What implication does this have for the family and especially women [e.g. high labour demands for herding, less labour for domestic water, cash needs for veterinary inputs, improved diets, time of happiness, marriages]?
- How does the dry season impact on the herd [e.g. livestock productivity declines] and
 - What implication does this have for the family especially women [e.g. less milk, livestock sales to buy food, high labour demands to draw water for domestic and livestock needs, people lose weight especially young children]?

How do customary rules and regulations [institutions] governing livelihood activities change or impact decision-making during across the different seasons.

Stage 3: Describe pastoralist production strategies in response to climate variability and extreme events

If you have not already, continue this stage in separate groups of men and women

3.1 Ask about the strategies used by different groups [men, women, etc.] to manage seasonal variability in order to benefit the maximum from the rainy season or to minimise losses during the dry seasons. It is particularly helpful for them to describe their strategies during extreme events [i.e. drought, flood]. Another approach is to begin the discussion is to ask participants to outline strategies from the period of the year they consider to be the “start: of the yearly cycle”, and work through each season.

NB: Although, we would like to categorise these strategies using the 3 A’s framework - [i] strategies of anticipation, [ii] strategies of absorption and [iii] strategies of adaptation [see box below] - it may be easier to let participants describe the different strategies that they use in each season in an open way without referring to these categories as this may cause confusion. Sometimes there is not necessarily a neat distinction between each of these categories – e.g. livestock mobility as a strategy can be used to anticipate or absorb or even adapt to climate variability. Use follow up questions such as “What do you do before the coming of the wet season and the dry season to

prepare for it?” Or “What do you do during the dry season to manage it?” Or “What long-term changes have you made to your production system to better manage seasonal variability?” as a way of getting further information on what strategies pastoralists use to anticipate, absorb or adapt to climate variability. Later, when writing up the workshop report, you can categorise the different strategies according to the 3As framework.

Field Notes:

While you may be working in mainly pastoralist areas, it is likely that many participants will also engage in cultivation of crops, or engage predominantly in a livelihood systems based on cultivation. The seasonal calendar can be used to incorporate both systems, using the “ecology”, “economy”, and “equity” framework. It may be worth taking a moment to consider with participants how this applies to cultivation systems. Rather than “the herd”, “institutions” and “pastoral resources”, you can use “crops”, “institutions”, and “farming resources”. Specifically, consider the following for farming:

- **Economy:** Instead of the herd, use varieties of crops [Maize, Cassava, vegetables, Sorghum, Millet, Beans, etc.] and types of farming land.
- **Ecology:** Instead of pastoral resources such as pasture, use farming resources such as, soil, water, sunlight, heat, insects.
- **Society:** Farming institutions will depend on the community – often the family is the key institution, but there may be customary or traditional institutions which provide support.

The 3 A's Framework – Anticipate, Absorb, Adapt

The 3 A framework offers a simple approach to categorise production strategies that have a bearing on resilience. The capacities to anticipate change, absorb or buffer its impacts, or adapt to reduce negative impacts of change [and enhance positive impacts] are all key to resilience. The framework can be used to analyse adaptive, anticipatory and absorptive capacity. [See Annex 3 for more detail]

- **Anticipate** – What strategies or activities are used in advance of seasonal change to prepare for disturbances, stresses, shortage or abundance of resources?
- **Absorb** – What strategies or activities are used to face and manage adverse conditions [such as dry seasons, drought etc.]. These activities are performed to avoid short-term collapse of the system?
- **Adapt** – What strategies or activities are used to react to developing hazards or stresses so as to reduce the likelihood of them happening or the impact of harmful outcomes? What activities are used to take advantage of opportunities presented by changing circumstances?

The 3 A framework has been drawn from BRACED. 2015. M&E Guidance Notes. BRACED programme. ITAD Associates and ODI.

3.2 Working methodically through the strategies used in the different seasons and during extreme events, ask, “What constraints prevent successful performance of these strategies”. Be sure to ask probing questions to find out the underlying constraints that are undermining livelihood strategies. In pastoralist areas, some of the primary causes include the effects of inappropriate water development policy, the inability of formal institutions to manage land and land-based resources, land fragmentation and/or privatisation by local elites or external actors, lack of proper investments in basic services and infrastructure.

3.3 Ask how the impacts of these constraints affect other pillars in the livelihood system – the ‘knock-on’ effects.

Note-takers can use the table 2 in Annex 6 below to structure their notes.

B4 Resilience Spectrum⁵

Objectives :

- To understand the resilience of different wellbeing groups as perceived by the community⁶
- To find out features or characteristics that make some wellbeing groups more resilient than others to climate variability and change.
- To discuss general factors of resilience and draw out general principles that increase resilience to climate change.

Resilience

Resilience is the capacity of a system, be it an individual, a forest, a city or an economy to deal with change and continue to develop.

The resilience approach works from the basis that any system is not stable, but permanently in a state of change. As such, resilience planning requires prioritisation of flexibility over stability.

Source: Stockholm Resilience Centre – www.stockholmresilience.org

The resilience spectrum line helps to identify a set of factors that contribute to household resilience to both long term impacts of climate change as well as short term climate hazards and extremes. The tool begins the process of identifying interventions that can build resilience for the community by considering the current level of resilience across different wellbeing groups.

⁵This tool has been adapted from from Pretty, J. Et al [1995], “Participatory Training and Action: A trainer’s guide”, IIED Methodology Series, IIED: London p.240

⁶“Wellbeing groups” refer to the categories of wellbeing established in stage 1a. For example, a “high” wellbeing group may refer to a subset of the community with significant material wealth, food security, large family size or spiritual attainment

B4.1 Facilitation Process

Field Notes:

This tool is another opportunity to hand over the pens and allow participants to mark the line in a way that choose. While some will put one mark at a precise point, others may draw a line to demonstrate that resilience for particular group can vary, or is constantly changing depending on circumstances. If this is the case, be sure to probe into how and why resilience can change for a group depending on the circumstances.

Stage 1: Identifying the Seasons

1.1 Ensure that you clearly explain and reach an understanding with participants about what resilience means. Establish an equivalent word in the local language.

Stage 2: Identify Factors of Resilience

2.1 In smaller groups, on a piece of flipchart paper [or along the ground], draw a line horizontally from left to right. Explain that the extreme left end represents “vulnerability” to climate change. The extreme right end of the scale represents “strong resilience”. People at this end are better able to withstand climate extremes and possibly profit from them.

2.2 Reminding participants of the different well-being categories they defined earlier in stage 1a, ask them to mark on the line where they think each group or category is located.

2.2.1 Ask participants why they have chosen to place each well-being group in that specific place, and not elsewhere. Why is one well-being group more or less resilient than another?

2.2.2 Be sure to probe deeply to identify the relative importance of climate variability and change relative to other factors that impact on each well-being group’s relative resilience. One typical answer is that higher groups are wealthy and therefore resilient – you must ask what it is about wealth that ensures resilience [for example, being able pay for vaccinations, or independently truck water, move animals to pasture etc.]. Be aware that lower wellbeing groups may have very different reasons and resources which explain their level of resilience, [for example, good relationships with neighbours, or physical ability to work is often more important for the lower wellbeing groups than the rich].

Stage 3: Identify General Factors or Principles of Resilience for the area

3.1 Based on the previous discussions, ask participants to identify general factors or principles of resilience that make well-being groups more resilient against stresses and shocks [climate related or otherwise]. Again, probe deeply to understand how climate variability and climate extremes relate to other factors.



Undertaking resilience assessment in Kauwi ward - Kitui / photo by Farah Abdullahi



3.2 Once a list of factors has been developed, ask groups to rank their lists in order of the most important factors. For example, in the pastoralist system, key factors may include management of pastures and water points, distribution of water points, access to forage during drought, ownership of assets etc. Be aware that different factors may matter more for different well-being groups.

3.3 Identify if there are links between the factors that ensure that they complement each other to strengthen resilience. For example, resilience is greatly enhanced when management of pastures and water sources accompanies recognition of customary dry season reserves and careful distribution of water points across a wide area.

Stage 4: Identify Factors Which will Strengthen Resilience in the Area

This stage is best performed at village level. The exercise can be done immediately after wellbeing and livelihood tools. This stage will help to corroborate the workshop's Theory of Change tool in Stage 5 (below)

4.1 Conduct stage 1 – develop a consensus about the meaning of the word resilience and establish an equivalent local word to refer to it.

4.2 Draw a line across a piece of paper or marked on the ground. Ask respondents to place the wellbeing groups identified in the earlier activity on the line.

4.3 Ask what the differences are between each group. As before, probe deeply into the relevance of claims to climate resilience. Remember that we are seeking factors of resilience, not simply factors of the ability to survive – **therefore the ability to withstand shocks or long-running changes are important to clarify and understand.**

4.4 Discuss factors which promote resilience. Ask: Can we identify and agree on several principles that make a household more resilient?

4.5 If possible, try to rank these factors in order of importance. Be aware that some wellbeing groups may value certain qualities over others. For example, lower wellbeing groups rely heavily on social interactions and sharing to support resilience. Higher groups rely on their assets and their ability to generate capital..

B5 The Theory of Change ⁷

Purpose

- Identifies necessary and specific changes or investments which the community believe will increase the capacity of local people to adapt to climate change
- Considers the mechanisms through which changes or investments will lead to increased resilience, by considering causes and consequences of each intervention.

The theory of change is a model for exploring the causal connections between different activities or interventions. The process of developing a theory of change encourages participants to consider linkages and relations between aspects of the livelihood system which may be changing as a result of external interventions. A theory of change is typically represented like the diagram in the next page:

In the resilience assessment, this process helps participants to articulate the process through which the interventions they are asking for will benefit the community. The theory of change helps participants to think through a suggested intervention thoroughly, considering its potential positive and negative impacts. This will further help to explain links and dynamics between aspects of livelihood systems, as well as suggesting specific and relevant intervention or investment priorities for the local area.

B5.1 Facilitation Process

1.1 On the basis of the previous tools, ask the participants [in smaller groups] to identify 4 or 5 actions or interventions that they believe will contribute to reinforcing the resilience of their livelihood systems. For each action, participants must identify...

- a) Products generated as a result of the intervention [also known as outputs], and then ...
- b) The effects that those will products will have [also known as outcomes] and then ...
- c) The impact those effects will have on local people and their level of resilience [impacts].

For example, an intervention to “increase the number of water points” will lead to the “product” or an increased number of physical water points. The effects include increased supply of water to both local areas and migrants from elsewhere seeking water for livestock. These effects will in themselves lead to further changes including higher levels of grazing in these areas, healthier livestock for local people, reduced livestock mortality, higher numbers of migrants, altered livestock routes etc. The impact resulting from these effects will be improved resilience.

⁷ The Theory of change tool has been drawn from Anderson, A., A Community Builder's Approach to Theory of Change, A Practical Guide to Theory Development, :Aspen Institute, New York

further information on threats to livelihoods, the impact they are having and the constraints that are seen to be the most significant hindrances.

There are several tools that may be used to uncover priorities. By this late stage in the workshop, you may be limited by time constraints and restricted to using only one of the following suggested tools. Use your judgement to decide which is best.

- Voting tools tend to be quicker, but produce less information.
- Pairwise ranking takes longer, but can provide an understanding of the criteria people are using to gauge the importance or urgency of certain interventions. Pairwise can be particularly useful if you do not feel you have achieved adequate understanding of constraints to the community or the most important livelihood strategies.

B6.1 Voting

1.1 Allocate each participant 10 stones/beans/twigs.

1.2 On a large piece of paper, write down each of the suggested interventions discussed in the previous Theory of Change tool. It is easier for those who are not literate if you can make a visual representation of a particular intervention (through a simple picture), rather than having it in writing. For example, a picture of a needle can represent “vaccinations”. A drawing of a rudimentary map can represent “land use planning”. Whichever you choose, be sure to explain what each picture or writing means as clearly as possible before any voting starts.

1.3 Establish with participants that they will vote one by one, in turn. Each person will not be allowed to see how others vote, and their decision will be confidential. Explain that their 10 stones/beans are a way of indicating how important they think interventions are. The more important they believe an intervention to be, the more beans they should allocate to it. They are not required to place votes on every intervention.

1.4 Ask men to leave the room or sit elsewhere while the process takes place. One by one, ask women to allocate their beans to the interventions by placing them on top of the writing or picture on the piece of paper. Take a note of how each woman has voted, before clearing away the beans for the next person to vote. This is done so that the opinions of one participant do not influence the others.

1.5 Follow the same process with the men, asking the women to leave the room or sit elsewhere.

1.6 Add up the amount of votes collectively by the women for interventions, and do the same for the men. You can also make a “total tally”. This should give you a list of women’s priorities, a list of men’s priorities, and a list of the priorities of men and women as a whole.

⁸ Similar to those above, these tools have been drawn from the PLA tools described in the IIED PLA Trainers guide.

Field Notes:

You can explain this in terms of their household budget. If they have a certain amount for domestic spending, they will prioritise some household investments over others, and allocate more money for these items or services. While they may want some luxury items [i.e. a radio, new pots and pans, a new mobile phone], often no money is allocated towards these things as there are other priorities.

B6.2 Pairwise Ranking

The pairwise ranking tool is used to find out why certain activities are prioritised over others. The pairwise matrix [below] can be used to draw out discussion through comparison of the strengths and weaknesses of each intervention with all of the others. The key to facilitating this tool is to be methodical. While this tool does produce a rank, it is crucial that facilitators listen and are aware of the reasons why interventions are chosen over each other. It is this process which provides valuable qualitative information about the value and need for particular interventions.

1.1 On the ground or on a flipchart, using the interventions developed during the “theory of change activity”, draw out a pairwise diagram as follows. The following is an example.

Table 2: Pairwise ranking matrix

Intervention	Land Use Planning	Increase Govt. Vaccinations	Construct Modern Livestock marketing space	Subsidise Maize Seeds	Repair broken spring pipes
Land Use Planning	X				
Reasons					
Increase Govt. Vaccinations		X			
Reasons					
Construct Modern Livestock marketing space			X		
Reasons					
Subsidise Maize Seeds				X	
Reasons					
Repair broken spring pipes					X

1.2 Using the diagram as a guide, ask participants to compare each intervention with each of the others. Do so methodically, working from the top, left to right. After each comparison, ask why they have chosen one intervention over another.

- Ask – “Which do you prioritise – “Land Use Planning” or “Increased Government vaccinations”? Why?
- Ask – “Which do you prioritise – “Land use Planning” or “Construction of modern livestock marketing space”? Why?
- Ask – “Which do you prioritise – Land Use Planning” or “Subsidised Maize Seeds”? Why?
- Ask – Which do you prioritise – Land Use planning or “repair of broken spring pipes”. Why?
- Then move on to the second row ... “Which do you prefer, “increased government vaccinations” or “construction of a modern livestock marketing space”? Why? Continue to move across as above.
- For each decision, write down which intervention is preferred and why.

Table 3: Sample pairwise matrix, drawn from Isioloanking matrix

Interventions	Land Use Planning	Increase Govt. Vaccinations	Construct Modern Livestock marketing space	Subsidise Maize Seeds	Repair broken spring pipes
Land Use planning	X	Land Use Planning	Land Use Planning	Land Use Planning	Repair broken spring pipes
		Reasons: Agricultural expansion undermining grazing is more important. LUP will reduce conflict	Without LUP livestock mortality will remain too high. Markets important when production system is guaranteed	Livestock keeping is the main source of livelihoods for most people. Seeds is for farmers or opportunistic only	Water infrastructure is poor leading to high livestock deaths and conflict over water access
Increase Govt. Vaccinations	X	X	Increase Govt. Vaccinations Current Spread of ECF is crippling livestock production. Vaccinations needed as soon as possible	Increase Govt. Vaccinations Current Spread of ECF is crippling livestock production. Vaccinations needed as soon as possible	Repair broken spring pipes Conflict is ongoing over water use. Dry seasons are currently causing significant damage and there is no preparation for the next drought which could be disastrous without investment in water

Continued on the next page

Continued from the previous page

Construct a modern livestock marketing space	X	X	X	Construct modern livestock marketing space. Sale of livestock before dry season generate more income than harvest from Maize, which is more for diversification	Repair Spring pipes Conflict / urgency. Unsustainability of grazing at present due to limited water supply
Subsidise Maize Seeds	X	X	X	X	Repair Spring Pipes [As Above]
Repair broken spring pipes	X	X	X	X	X

1.3 Count the amount of times each intervention appears on the matrix. This should provide a ranking. In this case, Repairing Spring Pipes [4], Land Use Planning [3], Govt Vaccinations [2], Construct a marketing space [1].

B7 Village Level/Household Interviews

Objectives:

- Household interviews help to corroborate and cross check information gathered during resilience assessments
- Interviews can provide finer local details and gain more personal, “on the ground” perspectives of the challenges and constraints to livelihood systems and adaptive capacity. They can also help to uncover local people’s experiences of government officials, other resource users, public services and in supporting their families.
- Differences between village responses and the resilience assessments can be probed for closer insight.
- To gain direct access and seek opinions of some of the poorest and/or marginalised people in an area
- interviews take place in people’s own homes where they are likely to be more comfortable and relaxed – this is particularly true for women and young people who can be intimidated in the atmosphere of a workshop.

Why is this information useful for planning?

Performing the semi-structured interviews provides a deeper understanding of livelihoods in the community. They may provide information that corroborates existing learning, but from an individual or family perspective which may be richer in detail than that of the workshop. The household interviews also help to prevent some of the methodological pitfalls of working with groups – that some individuals can be excluded even in a group setting, or that mainstream opinions or points of view voiced by dominant or powerful individuals can obscure other perspectives from minority groups or quieter individuals.

How you perform household interviews will depend heavily on the local customs of the area you are in. It is important that you are careful to follow social etiquette when invited to people's homes, and be aware that you are entering their space and taking up their time. Women in particular may be under pressure to finish tasks, and offering time to answer questions may be a considerable sacrifice.

Who to interview?

The village focus groups will have created a list of households, categorised by their levels of wellbeing. In the time available, try to take a sample from each groups, asking focus group participants to introduce you to families for interviews. If possible try to find representatives of different livelihood systems, in the proportions that they are divided in the community. If there are significantly more pastoralists than any other livelihood, it is worth interviewing more of these groups. It is essential that you try to visit representatives of all the wellbeing groups, but particularly the poorest.

Field Notes:

When arranging interviews, it is important to visit a wide spread of people from the community. Often, representatives from the community who are helping you will assume you would like to speak to more powerful people, traditional leaders, or those who are more articulate or educated. While these interviews are valuable, it is essential that you step outside of these assumptions to make sure you visit those who are from lower wellbeing groups or from marginalised groups. Ideally, you should try to visit more people from lower wellbeing groups than from higher ones.

In arranging interviews, use the criteria established during the **Wellbeing Analysis** tool [1a] to be clear to community representatives about the kinds of households you visit. Highlight that you would like to visit a household with a small family and few livestock, if you would like to visit lower wellbeing groups.

It would also be useful to visit representatives whose dominant livelihoods differ. This will help to gain deeper insight into how livelihoods interact and the constraints facing each one.

Aside from the tools detailed in this toolkit, it is highly recommended that you try to keep conversations informal. Do not try to answer questions in a list, as if performing a survey, as this is likely to generate limited or inaccurate responses. Try to imagine how you would feel if a stranger came into your home and began to demand information about your income, children, house value or bank balance! It is likely you would be less willing to give information. Some communities have had negative experience of surveyors in the past, and many fear that they will be taxed or penalised as a result of their answers. Alternatively, they might offer information that they believe you would like to hear, in the hope of future benefit or simply to be polite.

You should also take care to respect the privacy of those you are interviewing. You may occasionally ask questions that raise personal, painful or emotionally significant issues, [such as untimely deaths, significant losses of income, etc], and your interviewee may not want to discuss these. Be sensitive to these issues.

Be sure to introduce yourself and explain why you are asking certain questions. Show that you are working with the community, not against it or on top of it. As with all other tools, a successful interview comes from probing to get to the bottom of superficial answers. Avoid distractions such as your mobile phone or other people. As with the workshop, a good interview comes from having a good rapport and setting your interviewees at ease.

Try to **avoid leading questions**, and allow the interviewee to develop their own responses. Use the 6 W's. Do not worry too much if you end the interview and you have not got all of the information you need, try to get as much as you can by keeping the interview informal and conversational. If your interviewee is becoming tired or unresponsive, do not force them to continue.

Make sure you thank participants for their time.

One approach to opening the interview

You may find it helpful to ask, "What do you understand by climate change" to begin. Typical answers may include "reduced rainfall", or "increased disease".

1. You can then ask, what are the impacts to you of these changes in the climate. This may help you to discover the persons main livelihood
2. Ask "how were you affected by the last drought". Further probing may help you to ascertain how many cattle were lost, and the coping strategies used to survive the drought.
3. Ask about the constraints to a person's livelihood, and what they hope to achieve in the future
4. Ask, "What makes one family more able to resist the drought than another". This should help to understand factors of resilience.
5. Ask, "How are other livelihoods affected by drought". When they are affected, how might this affect you?
6. Ask, "How are other livelihoods affected by drought". When they are affected, how might this affect you?

Performing Semi-Structured Interviews

Semi-structured interviews are conducted with a fairly open framework which allows for focused, conversational, two-way communication. They can be used both to give and receive information.

Unlike the questionnaire framework, where detailed questions are formulated ahead of time, semi structured interviewing starts with more general questions or topics. Relevant topics [such as cookstoves] are initially identified and the possible relationship between these topics and the issues such as availability, expense, effectiveness become the basis for more specific questions which do not need to be prepared in advance.

Not all questions are designed and phrased ahead of time. The majority of questions are created during the interview, allowing both the interviewer and the person being interviewed the flexibility to probe for details or discuss issues.

Major benefits

- Less intrusive to those being interviewed as the semi-structured interview encourages two-way communication. Those being interviewed can ask questions of the interviewer. In this way it can also function as an extension tool.
- Confirms what is already known but also provides the opportunity for learning. Often the information obtained from semi-structured interviews will provide not just answers, but the reasons for the answers.
- When individuals are interviewed they may more easily discuss sensitive issues.
- Help field staff become acquainted with community members. Outsiders may be better at interviewing because they are perceived as more objective.

Using the tool

1. Establish the sample size and method of sampling. Try to approach more poorer people than wealthier ones – this may make the job of organising interviews more difficult.
2. Interviewers can conduct a number of practice interviews with each other and/or with a few community members, to become familiar with the questions, and get feedback on their two-way communication skills. Establish team roles for the interviews with clear signals between you – signals may be to advise that a line of questioning is exhausted, or to signify an intention to speak .
3. Explain clearly who you are. Be clear about how long the interview may last. Be sensitive to the setting. Be very clear about what you want to explore.
4. Record only brief notes during the interview. Immediately following the interview elaborate upon the notes. With the permission of the interviewee, you may like to use the recording feature on your phone or a voice recorder to record the interview for later reference.
5. Analyze the information at the end of each day of interviewing. This can be done with the interview team or group.

Precautions in Using the tool

- A lot of extra information may surface during interviews. Team meetings can help identify similarities in responses.
- Assure that, in a personal interview, the person being interviewed understands and trusts that the responses will be confidential.
- It may take some practice for the interviewer to find the balance between open-ended and focused interviewing.
- In a semi-structured group interview people may interrupt one another or “help one another out,” or not take turns. They may get off the topic completely.
- Interviewers need some skills. The most common problem with interviewers is asking leading questions. Other problems are: failure to listen closely; repeating questions that have already been asked; failure to probe when necessary; failure to judge the answers; and asking vague or insensitive questions.

Good Practice

Use open-ended questions: [The Six “W”s – how, what, where, when, who, why]

- | |
|---|
| <ul style="list-style-type: none">• Start using diagrams as soon as you can. |
|---|

- | | |
|--|---|
| <ul style="list-style-type: none">• Probe• Evaluate• Remain neutral | <p>Don't always stop at the first answer.</p> <p>Fact-Opinion-Rumour</p> <p>Don't show what you think of the answers.</p> |
|--|---|

Make a Record

- Get names of main informants *[if appropriate]*
- Be clear about who the informants are *[gender, age, area, ...]*
- Copy diagrams [use photos] *[leave the original if appropriate]*

Expect some bad interviews.

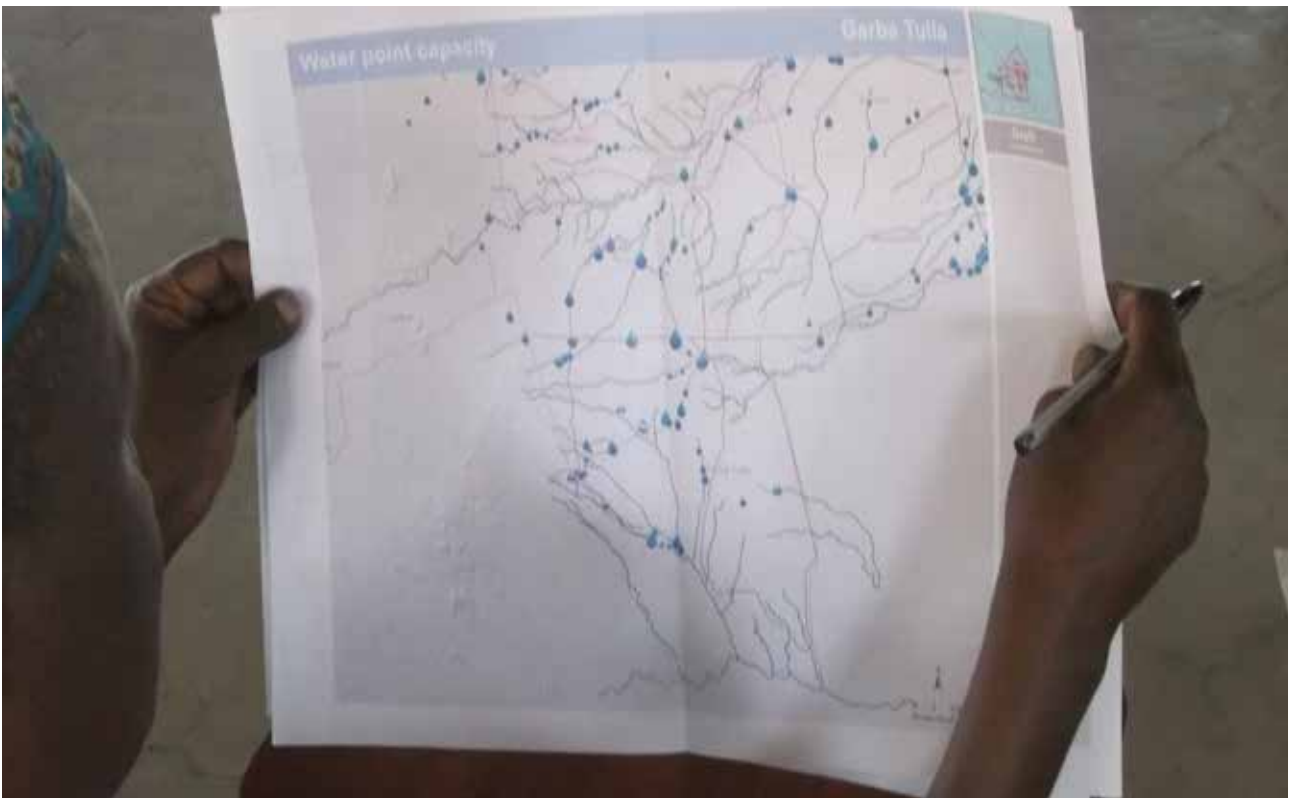
- Be prepared to give up and do something else.
- Be prepared for “sabotage”.

Bibliography

1. Anderson, A. [n.d.]. The Community Builder's Approach to Theory of Change: A Practical Guide to Theory Development. 1st ed. [ebook] New York: Aspen Institute. Available at: <https://www.aspeninstitute.org/sites/default/files/content/docs/rcc/rcccommbuildersapproach.pdf> [Accessed 9 Feb. 2016].
2. BRACED, [2015]. M&E Guidance Notes: BRACED Programme. ITAD Associates, ODI.
3. Fryer, P. [n.d.]. What are Complex Adaptive Systems?. [online] Trojanmice.com. Available at: <http://www.trojanmice.com/articles/complexadaptivesystems.htm> [Accessed 9 Feb. 2016].
4. Gurung, M. and Leduc, B. [2009]. Guidelines for a Gender Sensitive Participatory Approach. 1st ed. [ebook] ICIMOD. Available at: <http://file:///Users/Sam/Downloads/Guidelines%20for%20a%20Gender%20Sensitive%20Participatory%20Approach.PDF> [Accessed 9 Feb. 2016].
5. Ladyman, J. and Lambert, J. [2012]. What is a Complex System?. [online] Philsci Archive. Available at: <http://philsci-archive.pitt.edu/9044/4/LLWultimate.pdf> [Accessed 9 Feb. 2016].
6. Met Office, [n.d.]. What do we mean by climate?. [online] Available at: <http://www.metoffice.gov.uk/climate-guide/climate> [Accessed 9 Feb. 2016].
7. Pastoralism and Policy in East Africa: Trainer's manual. [2011]. International Institute for Environment and Development.
8. Pretty, J. [1995]. A Trainer's guide for participatory learning and action. London: Sustainable Agriculture Programme, International Institute for Environment and Development.
9. Rowley, J. [2014]. Wellbeing ranking. Rugby: Practical Action Publishing, pp.33-70.
10. Theoryofchange.org, [2016]. TOC Origins | Theory of Change Community. [online] Available at: <http://www.theoryofchange.org/what-is-theory-of-change/toc-background/toc-origins/> [Accessed 9 Feb. 2016].
11. Weiss, C. [1995]. Nothing as Practical as Good Theory: Exploring Theory-Based Evaluation for Comprehensive Community Initiatives for Children and Families. In: J. Connell, A. Kubisch, L. Schorr and C. Weiss, ed., New Approaches to Evaluating Community Initiatives: Concepts, Methods and Contexts, 1st ed. Washington DC: The Aspen Institute.



Presenting findings in a workshop/ photo by Sam Greene



Participant familiarising himself with the Isiolo map / photo by Ibrahim Jarso

Annexes

Annex 1: Sample Programme Outline

A workshop can consist of up to 40 people including

- Representatives from each ward or division relevant to the area. Ensure as far as possible that there is a balance of men and women
- Representatives from relevant government services.

Different workshop sessions will be held in plenary, and with separate groups of men and women. Try to ensure that female facilitators lead groups of women.

Sample Programme

Below is a sample workshop timetable – this does not have to be rigid. Facilitators should use their judgement to gauge timings. Some days may be extended a little if participants feel it is necessary to conclude debate. Try to finish each day on a positive note of consensus.

Be aware that participants may have new ideas over night. It is also worth reviewing past tools, to see if anybody has any details to add or change. This is particularly the case for more complex tools such as the seasonal calendar, which may start one afternoon and finish the following morning. Participants are likely to consider new things after the workshop, or come at the issues with “fresh eyes” the next day, offering more nuanced and detailed perspectives.

For many tools, in theory, discussion could continue for many hours after the scheduled time. Do not underestimate the complexity and detail of livelihood systems. As such, it is often the case that tools completed too quickly have not been completed in enough detail. There is always further probing and further detail that may be obtained.

Setting up the room

2 – 3 Tables arranged into squares. This may mean pushing smaller tables together. Place chairs around the edges so that participants are facing each other. Drawing of diagrams or pictures can be done in the middle where all participants can see. It is essential that seating arrangements do not leave some participants sitting outside of a group.

Facilitators should aim to spread themselves across the tables as much as possible. Try to avoid all sitting together in a group. Rapport and trust is more difficult to build when facilitators are seen to be “sticking together”.

Day 1

Hour	Sessions	Comments
9.00 -9.30am	Session 1: <ul style="list-style-type: none"> Welcome and names Introduction of participants Explain the initiative, purpose of the workshop, time, Establish rules of the workshop Prayer [If preferred] 	In plenary
9.30 - 11.00	Session 2: Perceptions of Local change <ul style="list-style-type: none"> A chance to discuss ongoing change in local context: Rainfall, temperature, wind, productivity of livestock/crops, security, government Presentation and discussion of climate change/climate science 	<p>Session 2 can be performed in plenary. Discussions on changing local contexts can be held in plenary. Discussions should take no longer than 5-10 minutes with 3-5 participants in each group, sitting around the table.</p> <p>For the second section, prepare a powerpoint presentation in advance that will help to explain the issues.</p>
11.00-11.30	Tea-Coffee-Snack break	
11.30-13.30	Session 3: Well-Being Analysis	<ul style="list-style-type: none"> Take 15 minutes to explain and complete stage 1.1 – defining the concept 60 minutes in smaller groups [men and women] for stages 1.2, 2 and 3. The remaining 45 minutes can be used for presentation of the discussions of different groups in plenary
13.30-14.30	Lunch Break	
14.30-16.00	Session 4: Identifying Livelihood Systems	<ul style="list-style-type: none"> 15 minutes in plenary to explain the exercise and complete 1.1 – defining concepts 60 minutes in smaller groups [women and men] for stage 1.2, 2 and 3 45 minutes for presentation and debate in plenary
16.00-16.15	Brief Review and conclude workshop for the day	
16.15-16.30	Facilitators Review	Facilitators take time to review what has worked well or not worked over the day. Discuss findings that may have surprised facilitators.

Day 2

Hour	Sessions	Comments
09.00-11.00	Session 5: Constructing the System	<ul style="list-style-type: none"> 15 minutes in plenary to explain the exercise 75 minutes in groups (men and women) for the remaining stages
11.00-11.30	Tea-Coffee-Snack break	
11.30-13.30	Session 5: Constructing the System (continued)	<ul style="list-style-type: none"> 60 mins, continuing discussion 60 mins – Stage 1 + 2.1 of Seasonal Calendar
13.30-14.30	Lunch Break	
14.30-16.00	Session 6: Seasonal Calendar	<ul style="list-style-type: none"> Working in groups of men and women for stage 2.2
16.00	Review day and pause for the day	
16.00-16.15	Brief Review and conclude workshop for the day	
16.15-16.30	Facilitators Review	Facilitators take time to review what has worked well or not worked over the day. Discuss findings that may have surprised facilitators.

Day 3

Hour	Sessions	Comments
09.00-11.00	Session 6: Seasonal Calendar (continued)	<ul style="list-style-type: none"> Continue working in the same groups for stages 3-4
11.00-11.30	Tea-Coffee-Snack break	
11.30-13.30	Session 6: Seasonal Calendar Session 7: Resilience Spectrum Line	<ul style="list-style-type: none"> 60 minutes continuing discussion/debate 15 minutes in plenary to explain resilience (Stage 1) of Resilience Spectrum Line tool 45 minutes in groups – (men and women) for stage 2
13.30-14.30	Lunch Break	
14.30-16.00	Session 7: Resilience Spectrum Line (continued)	<ul style="list-style-type: none"> 60 minutes – stage 3 in groups 30 minutes presentation and debate
16.00-16.15	Brief Review and conclude workshop for the day	
16.15-16.30	Facilitators Review	Facilitators take time to review what has worked well or not worked over the day. Discuss findings that may have surprised facilitators.

Day 4

Hour	Sessions	Comments
09.00-11.00	Session 8: Theory of Change	<ul style="list-style-type: none"> 15 minutes in plenary to explain the exercise
11.00-11.30	Tea-Coffee-Snack break	
11.30-13.30	Session 8: Theory of Change (continued)	<ul style="list-style-type: none"> -60 minutes to continue debate and final conclusions
13.30-14.30	Lunch Break	
14.30-15.45	Session 10 : Ranking Interventions	<ul style="list-style-type: none"> 15 minutes to explain tools 60 minutes to complete activities
15.45-16.00	Session 11 : Closing the workshop	<ul style="list-style-type: none"> Briefly Review the findings. Explain
	Facilitators Review	clearly what will happen next in the process. Be sure to thank participants and those who have organised and given their time.
16.00-16.15	Brief Review and conclude workshop for the day	
16.15-16.30	Facilitators Review	Facilitators take time to review what has worked well or not worked over the day. Discuss findings that may have surprised facilitators.

Annex 2: Constructing the Livelihood System of Pastoralism, Wajir

Below is a summary of notes from a constructing the system tool used in Wajir, Kenya. Notes in reality are likely to be more detailed

List of Elements:

- Rain, Vaccinations, Grasses, Trees, Government policies, dry season reserves, camels, goats, hired labour, children, cattle, dry season reserves, dams, government policies, water pipes, financial resources, weather information, knowledge of locations, market place, donkeys, traditional institutions families, sheep.

Essential Elements:

- **Pastoral resources** [land, water, trees, pastures, water, salt pans]
- **Livestock** [cattle, camels, sheep, goats etc.]
- **Institutions** [families, traditional institutions]

External Factors: [N.B, these are shortened from the resilience assessment. More detail is needed to ensure a full understanding of the pressures on aspects of the livelihood system].

Pastoral resources:

- o Changing rainfall affecting pasture growth and quality,
- o Conflict preventing access to pastures and water,
- o Expansion of settlements placing strain on water resources and reducing space for grazing
- o Corruption undermining customary land management practices

Livestock:

- Prevalence of diseases increasing mortality, reducing milk production [driving food insecurity],
- Lack of vaccinations or treatments for livestock – high expense needed to obtain them
- Lack of water sources causing long journeys for water increasing risk to animals

Institutions:

- Government food aid leading some to settle in urban areas, causing their growth
- Lack of formal recognition of local planning processes undermining traditional leadership and sustainable grazing regimes
- Education of children leading to young people failing to learn about pastoralist techniques and livelihoods.

The following table can help to explain factors affecting different aspects of the livelihood system

	Environment (resources)	Economy (Herd)	Social (institutions)
Environment (resources)	Changing rainfall reducing pasture quality/quantity	· Expansion of settlements into pasture areas – less resources for livestock	· Conflict – preventing access to pastures · Food aid driving settlement expansion
Economy (herd)		-Lack of vaccinations or treatment facilities	
Social (institutions)		· Prevalence of disease undermining food security	· Government corruption · Lack of recognition of traditional resources · Education preventing children learning about pastoral livestock keeping

Annex 3: The 3 A's Approach¹⁰

Why the 3As approach?

The Resilience is understood to be the capacity of a system to change and adapt in the context of multiple and interacting shocks and stresses. As such, measuring project 'outputs' is not enough to gauge whether a system [household, community, village etc.] has become resilient. It is vitally important measure the 'outcomes' of resilience building processes as a set of interlinked capacities to absorb, anticipate and adapt to shocks and stresses [the 3As]. These capacities in turn, help ensure that wellbeing and human development of communities carries on in spite of shocks and stresses. For example, it is vital to understand the manner in which the capacity building of communities on understanding disaster risk [input] that may lead to the preparation of household preparedness plans [output] results in the household's capacity to absorb, anticipate and adapt to shocks/stresses [outcome] which in turn helps in the community's wellbeing and development processes continue undisturbed [impact].

This '3As approach' is informed by a foundational analysis of close to 50 resilience frameworks undertaken by the KM in the inception phase. Looking at these three capacities not only provides an effective way of understanding the outcomes of processes to build resilience, it also provides a standard lens through which to analyze the achievements of BRACED as a programmed [across all projects].

Defining the 3A's?

Table 3: Summary - the 3As defined Anticipatory Capacity

	Anticipatory Capacity	Adaptive Capacity	Absorptive Capacity
Definition	Ability to undertake proactive actions to avoid upheaval from shocks and stresses	· Expansion of settlements into pasture areas – less resources for livestock	· Conflict – preventing access to pastures · Food aid driving settlement expansion
Hazards	Specific shocks and stresses	-Lack of vaccinations or treatment facilities	
When is this activated / exercised?	Before Disturbances	During and after disturbances	After Disturbances
Time Horizon	· Heeding early warnings · Building houses on stilts · Issuance of codes for buildings And infrastructure and necessary compliance	· Changes in crops grown to better engage with changing climatic conditions · Mainstreaming climate change into sectoral development policies	· Community access to savings and streams of finance Disaster preparedness activities · Building in redundancy in the provision of basic services
Example actions to build this capacity?			
Illustrative Indicators			

¹⁰ Extract from BRACED Monitoring and Evaluation Guidance Notes, March 2015

Anticipatory Capacity

Anticipatory capacity pertains to the ability of individuals in a system to undertake proactive actions to avoid upheaval from disturbances¹¹. This can result from strategies that aim to avoid exposure and/or reduce vulnerability. As such, it is in sharp contrast to 'reactive' actions that necessarily take place after a disturbance has been felt, assuming that the community in question has not been overwhelmed to the point of collapse. It is exercised well before a disaster event and should become evident in advance of disturbances. Anticipatory capacity is usually exercised in the context of specific shocks.

There are a number of actions that would demonstrate the presence of this capacity in a particular system. At the local level, these could include heeding early warnings and relocating out of the path of an incoming hurricane to avoid exposure, diversifying from only farming to also growing poultry in anticipation of flood events and building houses on stilts to hedge against the risk of inundation from high intensity rainfall events precipitation and flooding. At higher levels of governance, illustrative actions could include the installation of early warning systems and the issuance of codes for buildings and infrastructure.

Adaptive Capacity

This is the ability to take deliberate and planned decisions that are based on an awareness that conditions have changed or are about to change and that action is required to achieve a desired state. This includes the ability to "...react to evolving hazards and stresses so as to reduce the likelihood of the occurrence and/or the magnitude of harmful outcomes resulting from climate-related hazards¹². Importantly, adaptive capacity also includes the ability to take advantage of opportunities that changing circumstances present. Adaptive capacity is also different to anticipatory capacity as it does not emphasise the avoidance of exposure to the same extent and is more about adapting to and living with shocks and stresses. There are a number of illustrative actions that are demonstrative of adaptive capacity in a particular system. At the local level this may mean a change in crops grown to better engage with changing climatic conditions [potentially for a higher return] or altering the architecture of houses to make them cooler by including ventilators. At higher levels adaptive capacity can be evidenced by mainstreaming climate change into sectoral development policies so that, for instance, national agricultural strategies demonstrate a sensitivity to changing climatic conditions.

Absorptive Capacity

Absorptive capacity is similar to 'coping capacity' and as such pertains to '...the ability of people, organisations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters. By definition absorptive capacity is the ability of systems to buffer the impacts of natural hazards in the short term to avoid collapse. More specifically, this refers to the degree to which people's livelihoods and basic needs suffer as a result of specific disturbances. As such, absorptive capacity is centrally concerned with the 'persistence' of communities, it is vital to the survival of communities and is the foundation of longer term

adaptation and resilience. At the local level, absorptive capacity is evidenced from actions such as community access to savings and streams of finance to help tide over periods of turmoil. Also, a number of activities and actions that are traditionally a part of 'disaster preparedness' activities including the advance placement of stocks and medicines allow communities to absorb shocks and avoid catastrophe. At the national level actions such as effective emergency management policies; building in redundancy in the provision of basic services (e.g. water and electric supply) so that shocks don't overwhelm these life support systems - are all indicative of absorptive capacity; and the provision of safety nets for vulnerable communities.

Annex 4: Strategies of Anticipation, Absorption, and Adaptation

Seasonal Variability - Pastoralism [sample]

Capacity	Factors of Resilience	Strategies Used / Purpose	Constraints
Anticipation	<ul style="list-style-type: none"> Financial assets, physical/social factors Access to services 	<ul style="list-style-type: none"> Sale of smaller cattle to purchase feeds for dry season feeding Deepening/digging wells to prolong availability of water healthier animals Livestock vaccinations Negotiations with farmers to access crop residues to diversify feed and improve quality Planned dry-season grazing areas scouted to ensure ability of grazing areas Mobility to highland areas for pasture. 	<ul style="list-style-type: none"> Poor market prices or lack of market infrastructure Declining cattle numbers Smaller families cannot afford cost of labour Face vaccinations High cost prohibits access May have negative impact on animal digestion Livestock routes to reserves blocked. Not enough area of pasture to last dry season due to growth of agriculture etc.
Absorption	Governance institutions	<p>Sale of ruminants</p> <p>Establish petty businesses selling charcoal, tobacco etc</p> <p>Sharing of water and food sources with family, friend</p> <p>Poorest beg from clan/age mates/neighbours</p> <p>Seek Information on weather changes, pasture and water towards end of season to take advantage of pasture growth</p> <p>Reduce family food intake to one meal a day</p> <p>Purchasing veterinary products</p> <p>Dipping to remove ticks</p>	<p>Market failings / lack of transport infrastructure</p> <p>Environmental degradation reduces trees for charcoal. Illegal tree cutting risks fines</p> <p>Risks health of children causing malnutrition</p>
Adaptation	<p>Availability of infrastructure</p> <p>Social Capital</p>	<p>Seek recognition of need for mobility to preserved dry season areas</p> <p>Enhance weather information</p> <p>Mobility with livestock to maintain sustainable use of pastures in the long term. Prevents conflict through reciprocal sharing and management of common resources.</p> <p>Diversification of income/food generation</p>	<p>Inability of local government to recognise pastoral needs</p> <p>Prejudice against pastoralism</p> <p>Blocked livestock routes. Expansion of settlements and agriculture into grazing lands</p> <p>Shortage of capital to diversify</p> <p>Little financial services access for savings</p>

Annex 5: Key Terms

Adaptive Capacity

“Adaptive capacity refers to the potential, capability, or ability of a system to adapt to climate change stimuli or their effects or impacts. Adaptive capacity greatly influences the vulnerability of communities and regions to climate change effects and hazards” (IPCC definition).

Adaptive capacity has become a key indicator in measuring the success of adaptation focused interventions, as well broader development programs. Adaptive capacity is key because it refers to the capabilities and qualities an individual, household, community or government has to independently prepare for, cope with and recover from the impacts of climate change, both positive and negative. It is therefore an important factor in understanding the vulnerability of a household or population.

Key debates centre on the components of adaptive capacity, with an awareness that different factors may matter more in different contexts. While more traditional approaches focused heavily on economic or financial capacity of a household, more recent frameworks include the ability to innovate, knowledge and information of risks, decision making ability, available assets and the existing institutional setting in which a given climate impact occurs. Adaptive capacity may also include other less tangible factors such as cultural imperatives to certain kinds of behaviour, personality traits [deference to authority, pessimism or optimism, willingness to take risks etc.].

Climate

Climate refers to the statistics of weather. In other words, the average pattern for weather over a period of months, years, decades, or longer in a specific place. Climate can vary seasonally or annually [e.g., because of El Niño or La Niña], over decades [e.g., because of the Pacific Decadal Oscillation], or over much long time scales [centuries or more]. Climate has always varied because of natural causes. Increasingly, however, human increases in greenhouse gas emissions are beginning to cause changes in climate as well.

Climate projections provide insight into possible future changes in average conditions [e.g., temperature and precipitation] for a given location for a given period of time [e.g., the decade of the 2020s, 2040s, or 2080s]. Changes in the seasonality of certain events, such as changes in peak streamflow, or changes in extreme events, such as heat, precipitation, or flooding, are also important questions when projecting changes in climate.

Climate change

Climate change is a large-scale, long-term shift in the planet’s weather patterns or average temperatures. Climate change refers to a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period [typically decades or longer]. Climate change may be due to natural internal processes or external factors such as persistent changes to the atmosphere or changes in land use.

Article 1 of the the United Nations Framework Convention on Climate Change (UNFCCC) defines “climate change” as, “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”. The UNFCCC thus makes a distinction between “climate change” attributable to human activities altering the atmospheric composition, and “climate variability” attributable to natural causes.

Climate Hazard

Climate hazards may be defined in terms of absolute values or departures from the mean of variables such as rainfall, temperature, wind speed, or water level, perhaps combined with factors such as speed of onset, duration and spatial extent. Hazards are also referred to as climate events.

Climate Risk Management (CRM)

Closely related to disaster risk reduction, climate risk management refers to processes and strategies to manage the risks posed by the impacts of climate change. Risk management, while often having negative connotations, can also refer to the positive potential offered by some changing environments. As with other terms, measuring the quality of climate risk management is a contested field, heavily dependent on local context.

Various approaches to CRM exist, involving greater or lesser involvement of the private sector, the value of interventions such as microfinance, savings and loans schemes or types of weather-indexed insurance payments.

Coping strategy

Coping strategies are activities by individuals, households, communities etc put in place to manage stresses such as insecurity, climate hazards, restriction of movement or freedoms etc. Such strategies are necessary to ensure basic survival or the maintenance of particular values in the context of interruptions to normal livelihood system functions. They also tend to be short term in nature, being put in place until a hazard has ended or until long-term external support can be found. As such, many coping strategies dependent on use of local resources are not sustainable in the long-term.

Degradation

Degradation refers to the reduction in functionality, productivity or quality of a given resource or environmental system. Degradation may refer to a range of processes including pollution, damage to the O-Zone layer, desertification, or soil erosion. Systems or resources may be degraded if some factor or factors is undermining their ability to function or produce effectively. These factors may be environmental or man-made.

Desertification

The exact definition of desertification is contested. Scientists disagree over the key drivers of desertification and the time scales over which it can be measured. This affects how desertification is measured and therefore addressed by international processes.

United Nations Conference on Environment and Development [UNCED], defines desertification as “land degradation in arid, semi-arid and dry subhumid areas resulting from various factors, including climatic variations and human activities”. Signs of desertification include intensification of desert conditions, reduced biological activity, reduction in quantity of plant biomass, declining potential for carrying livestock and reduced agricultural yields.

Some see this definition as too broad. For example, drought can cause land degradation and desertification – but if rain returns and vegetation grows it would be difficult to classify an area as “desertified”. Stronger definitions introduce time scales – land can be said to be desertified if it not longer supports the same plant growth as it had in the past, and the change is permanent within human life-times.

In some areas, desertification can be a mainly natural phenomenon, with human activities quickening an ongoing process. Elsewhere, the process can be driven significantly by the impacts human activities. The vulnerability to desertification of land is determined by current climate, relief, and the state of the soil and natural vegetation. In areas already vulnerable to desertification, human activities are key triggering factors in the process. Deforestation, over-cultivation, diversion of rivers for irrigation, uncontrolled burning etc. These activities are themselves often driven by poverty and/or lack of development.

Drylands

“Drylands are generally defined in climatic terms as lands with limited rainfall. Drylands are characterized by low [100-600 mm annually], erratic and highly inconsistent rainfall levels. The main characteristic of dryness is the negative balance between annual rainfall and evapotranspiration rates. Rainfall is scarce, unreliable and concentrated during a short rainy season, with the remaining period tending to be relatively dry. High temperatures during the rainy season cause much of the rainfall to be lost in evaporation, and the usual intensity of storms ensures that much of the rainfall runs off in floods. Water is not only meagre in absolute terms, but also scarce for natural and human uses.” [IFAD, 2000 p.2]

Almost 40% of the worlds population lives in dryland environments. Drylands can be diverse in the types of vegetation or biomass they can support, but aridity is the defining feature of all dryland environments. The climate in such environments is characterised by both short and long term seasonal variability, in which drought and occasional floods are to be expected, and rainfall is periodic and often inadequate.

Populations living in drylands have generally developed systems that allow them to use the environment to their advantage. “Rural people living in drylands are arranged roughly into

nomadic, seminomadic, transhumant, and sedentary populations. **Nomadic** people are found in pastoral groups which depend on livestock for subsistence and, whenever possible, farming as a supplement. Following the irregular distribution of rainfall, they migrate in search of pastures and water for their animals. **Seminomadic** people are also found in pastoral groups which depend largely on livestock and practice agricultural cultivation at a base camp, where they return for varying periods of time. Transhumant populations combine farming and livestock production during favorable seasons, but seasonally they might migrate along regular routes when forage for grazing diminishes in the farming area. Sedentary farmers practice rainfed or irrigated agriculture. Land use practices are often a form of agroforestry in structure and function.

Resilience

The term “resilience” has been applied in a number of fields in slightly different ways. With regard to preparation and coping with the impacts of climate change, it normally refers to the ability of ecological systems and/or human populations [i.e. social-ecological systems] to respond to disturbance. “social or livelihood resilience is used to assess the capacity of people and communities to prepare for and withstand shocks and stresses from a range of different hazards, whether environmental, social or economic” [Jones and Tanner, 2015, p.7].

A more formal definition commonly used is, “The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.” – [UNISDR definition, 2007].

The term is contested due to its vague nature and difficulty of application. One debate centres around what recovery from the effects of a hazard mean in given context. Traditional framings of the concept assumed that a resilient system returned to its original core functions or state after withstanding a disturbance. However, more recent conceptions, particularly when applied to human systems [i.e. communities, livelihoods], note resilience may involve fundamental or transformative change of the system, or parts of it. Radical change of some aspects of a community or system may be necessary to preserve other, more fundamental aspects of it [ibid.]

Further debate centres on the relationship between resilience, adaptation strategies, coping strategies, disaster risk reduction and transformation. The terms are often used interchangeably to refer to resilience building processes, but despite their differing meanings, it is not clear how to develop an objective approach to applying them in all possible contexts.

In the context of development interventions with ME&L components, one of the biggest debates centres on how to measure resilience. A large number of frameworks for measuring “objective” resilience have been proposed, focussing on different possible socio-economic and ecological indicators in various combinations, and the different scales for measurement [individual, household, village, national etc.]. These are often “top-down approaches” More recently, measurements of “subjective resilience” have been proposed, using participatory methods and household surveys to assess indicators found important by citizens themselves.

Vulnerability

There are range of definitions of the term “vulnerability” [an extensive list is linked to below]. The authoritative Intergovernmental Panel on Climate Change (IPCC) highlights three components to vulnerability – exposure to climate impacts, sensitivity to climate impacts, and adaptive capacity. A formal definition is “the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes”.

The definition of vulnerability and how to measure it are subjects of considerable debate because they indicate the level of risk posed to populations by climate change. This has numerous practical implications for adaptation interventions, government planning and service delivery.

Some writers therefore differentiate between vulnerability before and after adaptation. This has impacts for how vulnerability is measured, as one relies heavily on adaptive capacity, other more on a systems capacity to respond to stress. It is difficult to separate the concept of vulnerability of a population to a climate hazard from the level of human dependence on the stability of that very climate for livelihoods. For this reason, some differentiate between biophysical and social vulnerability – parsing out environmental factors from others such as marginalisation, poverty, access to government support or housing quality.

Weather

Weather describes the atmospheric conditions at a specific place at a specific point in time. Weather is generally described in short time frames – minutes, hours, days, and weeks. Conditions associated with weather include [but are not limited to] sunshine, rain, cloud cover, winds, hail, snow, sleet, freezing rain, flooding, blizzards, ice storms, and thunderstorms. The Weather is determined by real-time measurements of atmospheric pressure, temperature, wind speed and direction, humidity, precipitation, cloud cover, and other variables.

Weather predictions involve trying to predict how, when and where certain weather conditions will occur. Predictions have implications for how governments and local people anticipate, prepare for and react to a potential weather event.

Wellbeing

The idea of wellbeing has become an important concept in development debates in recent years, drawing together several strands of development thinking and social science to improve the understanding of the dynamics of poverty. Very simply, it focuses on people’s perceptions of a good life. Wellbeing focusses not just on what people have, but their goals, aspirations and priorities. Understanding these helps practitioners to appreciate the rationale behind livelihoods and their associated choices. Wellbeing is therefore a subjective concept – defined by those living in a given situation, rather than by “experts” on the outside.

Bibliography

1. ACCRA Local Adaptive Capacity Framework. [2012]. 1st ed. [ebook] Africa Climate Change Resilience Alliance. Available at: http://community.eldis.org/.59d669a7/ACCRA%20Local_Adaptive%20Policy_new.pdf [Accessed 9 Feb. 2016].
2. Brooks, N. and Adger, W. [n.d.]. Assessing and Enhancing Adaptive Capacity. In: B. Lim and E. Spanger-Siegfried, ed., *Adaptation Policy Frameworks for Climate Change: Developing Strategies, Policies and Measures*, 1st ed. Cambridge: UNDP- GEF, Cambridge University Press, pp.165-181.
3. Climate Risk Insurance: For Strengthening Climate Resilience of Poor People in Developing Countries. [2015]. 1st ed. [ebook] Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ] GmbH. Available at: https://www.bmz.de/g7/includes/Downloadarchiv/G7-Climate_Risk_Insurance_Initiative_-_Options-Paper-Plus.pdf [Accessed 9 Feb. 2016].
4. Fao.org, [2016]. Sustainable development of drylands and combating desertification. [online] Available at: <http://www.fao.org/docrep/v0265e/v0265e01.htm> [Accessed 9 Feb. 2016].
5. Hammill, A., Matthew, R. and McCarter, E. [2016]. *Microfinance and Climate Change Adaptation*. 1st ed. [ebook] International Institute for Sustainable Development. Available at: http://www.iisd.org/sites/default/files/publications/microfinance_climate.pdf [Accessed 9 Feb. 2016].
6. International Institute for Environment and Development, [2015]. Tracking adaptation and measuring development [TAMD]. [online] Available at: <http://www.iied.org/tracking-adaptation-measuring-development-tamd> [Accessed 9 Feb. 2016].
7. Met Office, [n.d.]. What do we mean by climate?. [online] Available at: <http://www.metoffice.gov.uk/climate-guide/climate> [Accessed 9 Feb. 2016].
8. Overseas Development Institute, [2010]. *Towards a characterisation of adaptive capacity: a framework for analysing adaptive capacity at the local level*. London: ODI.
9. Unesco.org, [2016]. What is desertification. [online] Available at: <http://www.unesco.org/mab/doc/ekocd/chapter1.html> [Accessed 9 Feb. 2016].
10. World Meteorological Organisation,[2016]. CCI FAQs | WMO. [online] Wmo.int. Available at: <http://www.wmo.int/pages/prog/wcp/ccl/faqs.php> [Accessed 9 Feb. 2016].

Annex 6: Note takers tools

Seasonal Calendar note - takers tools

Below is a suggested format for taking notes during the seasonal calendar tool. Some sample text has been provided. The table should help to structure notes and make them comparable with other resilience assessments from a similar areas. **It is not necessary** to complete every box – the table should be seen as more of a guide to methodical questioning and probing for detail.

Be aware that questioning does not need to end after participants have explained “what happens” to each resources. It is important to understand the consequences and “knock-on” effects of seasonal variability on household conditions.

Season	Seasonal Characteristics	Pillar	What happens?
Rainy season	Beginning of the rains – rainfall is distributed widely across time and space	Pastoral Resources <ul style="list-style-type: none"> Pastures Water Minerals [salt] 	<ul style="list-style-type: none"> Previous years biomass is largely consumed First rains destroy previous years remaining biomass Pockets of new pastures arise over time and space Puddles of water which dry up quickly Quality of water is ...?
		Economy <ul style="list-style-type: none"> The Herd 	<ul style="list-style-type: none"> Livestock [particularly older females] are weak and must be physically lifted each morning Camels and goats are also weak but in better condition than cattle The herd remains mobile despite weakness – is able to search for pasture Milk production is low?
		Society <ul style="list-style-type: none"> Family, clans, households Traditional leaders 	<ul style="list-style-type: none"> Children and older women are weak Infants may be malnourished
	Middle – Rain falls regularly and in higher quantities	Pastoral Resources	
		Economy	
		Society	
	The end – rainfall is weak and widely disbursed across time and space	Pastoral Resources	
		Economy	
		Society	
Cold Season	Beginning – Description	Pastoral Resources	
		Economy	
		Society	

Continued on the next page

Continued from the previous page

	Middle – Description	Pastoral Resources	
		Economy	
		Society	
	End Description	Pastoral Resources	
		Economy	
		Society	
Dry Season	Beginning - Description	Pastoral Resources	
		Economy	
		Society	
	Middle – Description
Etc.....			

Seasons Variability			
Seasons	Key strategies	How undermined	Knock-on effects
Rainy season	<ul style="list-style-type: none"> · Herd split: few lactating cows & calves left to feed family around homestead; high mobility for rest of herd to access nutritious pasture. · Herds moved frequently to access fresh pastures to maximise weight gain. · Veterinary inputs (deworming, vaccinations) to ensure animals benefit from improved nutrition & avoid fatalities. · Selective breeding to plan next year's calving. · Sell animals in best condition to maximise income but minimise off-take. 	<ul style="list-style-type: none"> · Mobility constrained due to: · Unplanned settlements fragmenting rangelands; · Limited labour as youth abandoning pastoralism. · Education system-school curriculum is not pro pastoral and delivery system is not adapted to mobility 	<ul style="list-style-type: none"> · Over-stocking in some areas; risk of over-grazing, conflict. · Loss of pastoral knowledge & skills further undermines pastoral institutions and thus system.
Cold dry season			
Hot dry season			
Extreme Events			
Drought	<ul style="list-style-type: none"> · Move livestock to drought reserves · Sell weak animals unlikely to survive drought; slaughter calves in extreme cases to lessen stress on lactating cows 	<ul style="list-style-type: none"> · Mobility constrained especially cross-border · lack of facilities. · Collapse of market prices 	
Flood	<ul style="list-style-type: none"> · Move livestock to higher ground · Return after floods to benefit from pastures 	<ul style="list-style-type: none"> · Insufficient early warning 	

Annex 7: Household Interviews – Brief Guide

Resilience Assessment- Household Interview Guide

1. Respondent name/age/clan? Number of wives?
No. of people in the household[s]? [This refers to their direct dependents- not their sons who have their own family]. We are trying to understand how many people/children depend on them exclusively for their food.
2. Income generating activities [comprehensive list including e.g. occasional paid labour, selling miraa, taking the animals of others to market etc.]
3. Food sources [comprehensive list including e.g. relief food [how much/any missed months?], livestock loaning, opportunistic cultivation [how many harvests last 5 years?]
4. Going through the list of recent droughts can you ask the respondent to give the story of how each drought affected them, how they managed their livestock [migration? where? herd splitting? ...], and the effects on livestock numbers.
5. How do floods affect their livelihoods?
6. What are the major constraints that they face in terms of effectively managing the droughts and floods? Of all the issues they raise rank them in order of importance.
7. What makes one family more able to resist the drought than another?
8. How are pure pastoralists/ labourers/ farmers affected differently by the drought [and then flood]?
9. In what ways are richer pastoralists better able to resist the drought?

Explain the Climate Adaptation Fund and how it will function. Explain Public Good Type activities. Of these types of activities, which would most support their resilience? Ask the respondent to rank these activities [refer back to constraints highlighted in question 8].

10. Have they received KMD forecast? How did they hear + what action have they taken [specifics]?
11. Community radio- informs them of the plans. What content would they be interested in?

Annex 8: Resilience Assessment Report Template

The following is a suggested template for the final resilience assessment report. The report will be used to advise colleagues, NGO's, government officials and other external readers of the findings of the assessment, and is therefore a very useful document. Please note that this is a guideline only that will support presentation of the minimum required information. Please feel free to expand on this template to present information effectively or in ways you feel most appropriate.

The tables and guides below have been numbered to correspond to the numbered tools in the resilience toolkit.

introduction

The introduction introduces the context of the assessment – when it took place, why it was done and who facilitated it.

It is very useful to include the following information in the introduction, if it is available:

- *A map of the ward/village/county*
- *Population census data*
- *Land area, including known area of grazing, farming, arable and unused land*
- *Geographical features (fertility of soil, mountains or highlands, mines and natural resources)*
- *Known livestock numbers*
- *Rainfall quantities and temperature information*
- *Key climate hazards that may be affecting participants responses*
- *Security situation*

Number of Participants	Men	Women
	<i>Insert Number of men</i>	<i>Insert Number of women</i>
Wards/Villages represented at assessment	<i>Write the names of the wards or villages represented here</i>	
Location of the RA workshop	<i>Write the location that the workshop took place</i>	

1 A) Wellbeing Analysis

Local Language Word for Wellbeing	Write the local language word here
	<i>Factor and explanation</i>
Factors contributing to wellbeing (i.e. assets, personal qualities, characteristics, household qualities etc.)	1. Write each factor and an explanation of how and why it contributes to wellbeing in these boxes
	2.
	3.
	4.
	5.
	... [continue for all contributors to wellbeing]
	...

Stages 2 and 4: Qualifying Wellbeing

Wellbeing Groups / Categories			
Village Name			
Category Name	English Translation	% of community	Characteristics
Name of wellbeing category in Swahili	English translation	Using the evidence from the proportionate piling exercise, enter the % value here	Describe the characteristics of this wellbeing group in terms of the contributors to wellbeing described above
Extra details	Enter any other relevant details here. This may include particular details, exceptions to these groups, interactions with other groups that affect wellbeing, etc.		

Stages 3: Dynamics of Social/Wellbeing mobility

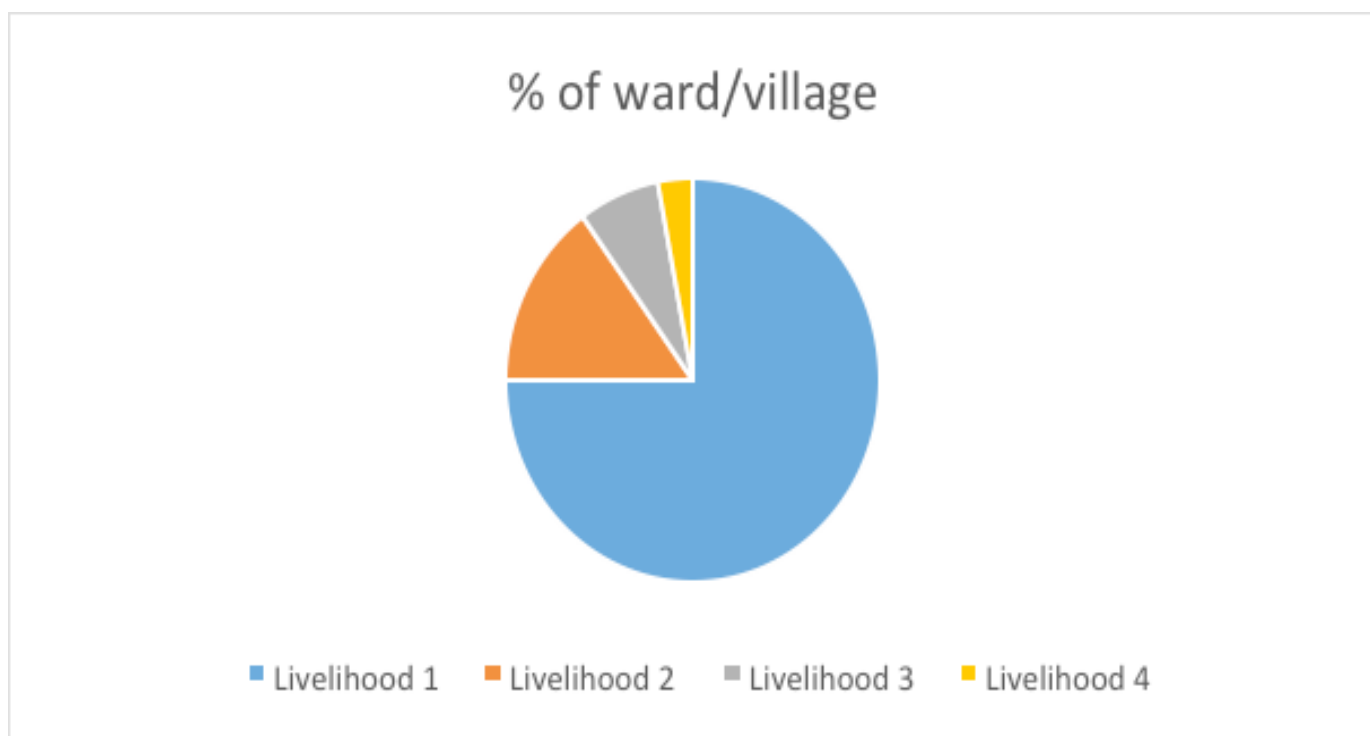
How do households move up from one group to another?	Enter participants responses here...
How do households move down from one group to another?	
How have groups changed over time, and why?	

1B: Identifying Local Livelihoods

Stage 1: Identifying Local livelihood systems

Livelihood	Explanation of activities
Enter the type of livelihood	Write the details of the livelihood here
Add more sections to the table as necessary	

Stage 2: Quantifying the Importance of Livelihood System



2) Constructing the System

Write the list of elements necessary for pastoralism here.

Stage 2: Identifying interdependent elements of the system

Essential Elements for Pastoralism
List essential elements of pastoralism here ...

External Factors Affecting the Livelihood System			
	Environment (re-sources)	Economy (Herd)	Social (institutions)
Environment [resources]			
Economy [herd]			
Social [institutions]			

Seasonal Calendar

Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
<p>Divide this section according to the timing of the seasons. Place the names of each season in the appropriate section.</p> <p>In this example, the table has been divided into 4 – but this is not set – participants may perceive more than 4 “seasons” over the course of the year. If this is the case – rearrange the table.</p>											
Seasonal Characteristics Enter Characteristics of each season. Describe the typical weather patterns, rainfall, heat, and any other physical characteristics of the season			Seasonal Characteristics			Seasonal Characteristics			Seasonal Characteristics		
Herd Enter activities, changes or any other relevant processes taking place for livestock. Consider factors such as animal health, requirements, weight, productivity			Herd			Herd			Herd		
Natural Resources Describe what happens to natural resources during this season. Important details include quantity of resources, quality of resources, distribution of resources			Natural Resources			Natural Resources			Natural Resources		

<p>Family/Institutions</p> <p>Describe the implications of the season for the family and other institutions [such as customary decision making groups].</p> <p>How do customary rules and regulations affect livelihoods during each season.</p> <p>In particular, consider the impact on women</p>	Family/Institutions	Family/Institutions	Family/Institutions
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Figure:3 Sample chart showing livelihoods in the ward

Seasonal Variability – Pastoralism (sample)			
Capacity	Factors of Resilience	Strategies Used / Purpose	Constraints
Anticipation			
Absorption			
Adaptation			

4.) The Resilience Spectrum

Stage 1: Define Resilience

Local Language Term for “Resilience”	
Local Language term for “Vulnerability”	

Use the line to identify where wellbeing groups on a scale of vulnerability to resilience, according to responses in the workshop



Stage 2: Identify Factors of Resilience

Name of Wellbeing Group	Resilience / 100	Reasons
Group Name...	Give each group a score out of 100 based on their line position – 100 = complete resilience, 0 = complete vulnerability	Explain the reasons why a particular group occupies a certain position on the spectrum line

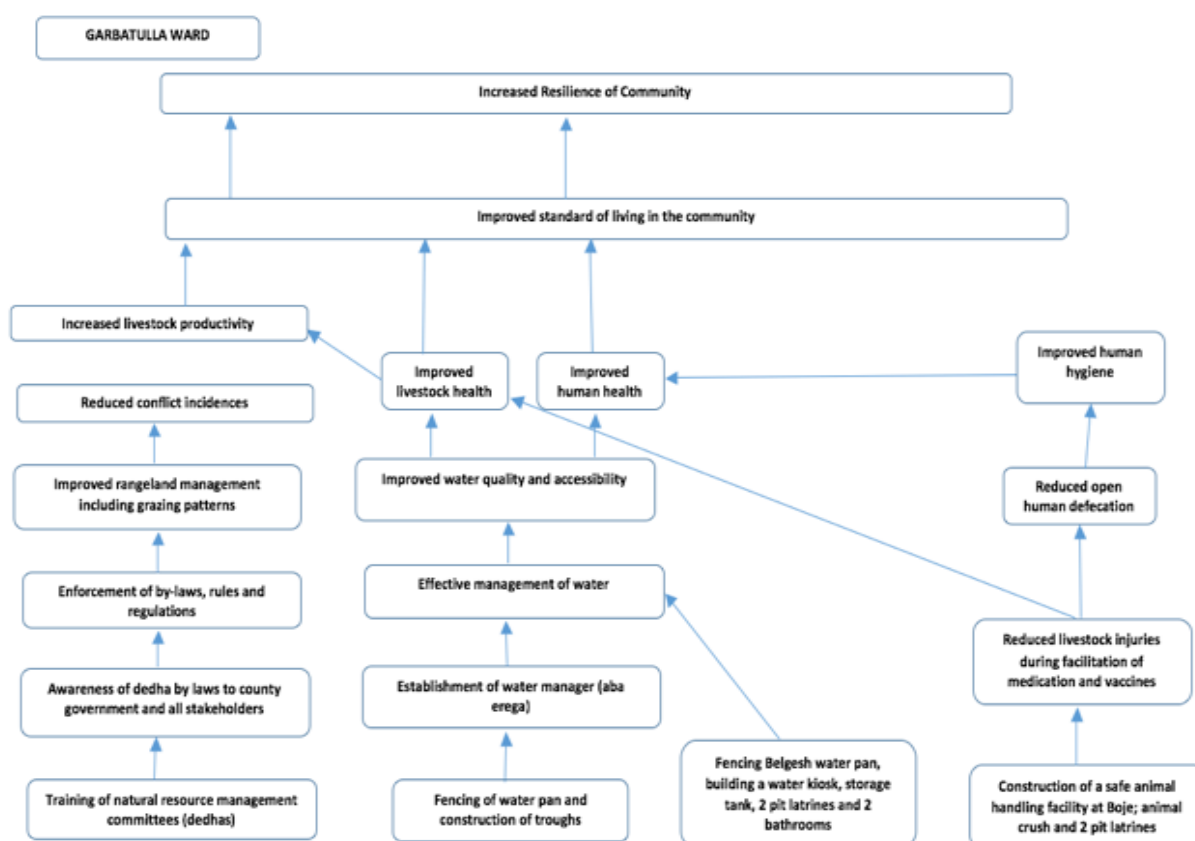
Stage 3: Identify general factors or principles of resilience for the area

Factor of Resilience	Ranked Importance	Details
Summarise the aspects of resilience	Give the rank assigned to it in the workshop	Explain this aspect of resilience in detail
Continue to add new levels to the table as necessary		

5) Theory of Change

Use photographs from the workshop to display the theory of change based on interventions.

Alternatively, you can use text boxes and arrows to create a theory of change within Microsoft Word – however this process is time consuming! The diagram below is an example from Garba Tulla, Isiolo



6) Ranking Interventions

Intervention and Explanation of Purpose	Ranked Importance
Give the intervention and its rank here...	

7) Household Interviews

Household interview notes can be summarized in your own words.

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