



Uganda



Making sense of community natural resource governance perceptions

Learning from results of a social survey tool called SenseMaker® in support of natural resource landscape governance in Uganda

The Stabilizing Land Use project

One of the critical challenges of land use management in Africa is often the lack of necessary institutional mechanisms required to facilitate local dialogues to help reconcile competing claims and interests in the landscape. It presents a significant obstacle to the implementation of national policies and programmes that seek to reconcile and unify national development and conservation objectives. Protected areas could offer such an institutional framework. But in many parts of Africa, they often tend to exclude local communities and associated agricultural and livelihood activities. At the same time, locally derived institutional arrangements, which can play a critical role in stabilising land use in specific localities, tend to be overlooked as viable options.

To address these issues, with the support from the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), IUCN implemented the “*Stabilizing Land Use: PA categories V and VI as landscape mechanisms for enhancing biodiversity in agricultural land, ecological connectivity and REDD+ implementation*,” or PLUS project. The focus countries are the Democratic Republic of Congo, Ghana, Tanzania, and Uganda. PLUS aims to demonstrate how conservation and development benefits can be generated through better use of protected area categories supported by a participatory process of land-use governance at the landscape level. In Uganda, this process was aided by a research tool called **SenseMaker®**.

What is SenseMaker®, and why use this tool?

One of the PLUS project's outcomes is to increase the proportion of target stakeholders in project landscapes that actively engage in enhanced participatory landscape governance options. These options aim to effectively conserve bio-cultural heritage, support livelihoods and respect individual and collective rights. Understanding and tracking change in people's opinions about governance mechanisms is a complex issue that requires gathering insight on how different groups relate to each other and their environment, and on the issues that influence their perceptions. There is a growing recognition by the conservation community of the importance of understanding people's perceptions as part of a broader move towards adaptive management and evidence-based conservation. However, given that perceptions are not fixed and often created, modified, and realised through day to day experiences, often the traditional methods to collect information are either inadequate or not replicable.

While traditional analytical tools, such as a semi-structured interviews or multiple-choice surveys are often used to collect information, PLUS selected SenseMaker®. This commercial software package was chosen for three reasons: (1) it works with narratives, (2) the ability for respondents to analyse the narratives, and (3) online visualisation. According to the developer,* SenseMaker® is a data-rich and innovative tool that enables the collection and analysis of fragmented micronarratives (stories) that are unconstrained by preconceived structures, resulting in significantly less bias, more in-depth and richer data.** One of the assumptions behind selecting SenseMaker® over other tools was that it would help the project to rapidly access multiple perspectives of complex situations through the identification of patterns around topics of interest. The tool also allows the respondents to self-verify their stories, thus reducing the risk for others to bias the results – a major asset. Finally, the use of SenseMaker® and the meta-analysis of qualitative data presents an opportunity to bridge the gap between case studies and large-sample survey data.

Selecting the areas and topics to investigate

The SenseMaker® tool was piloted in the landscapes of Mount Elgon and Agoro-Agu in Uganda. The Mount Elgon landscape was chosen to explore why the concept of multiple-use areas was not working as well as in other areas of the country. Here, the tool was used to understand community perceptions around how existing landscape governance approaches meet their expectations on conserving biocultural heritage, supporting livelihoods, and respecting individual and collective rights.

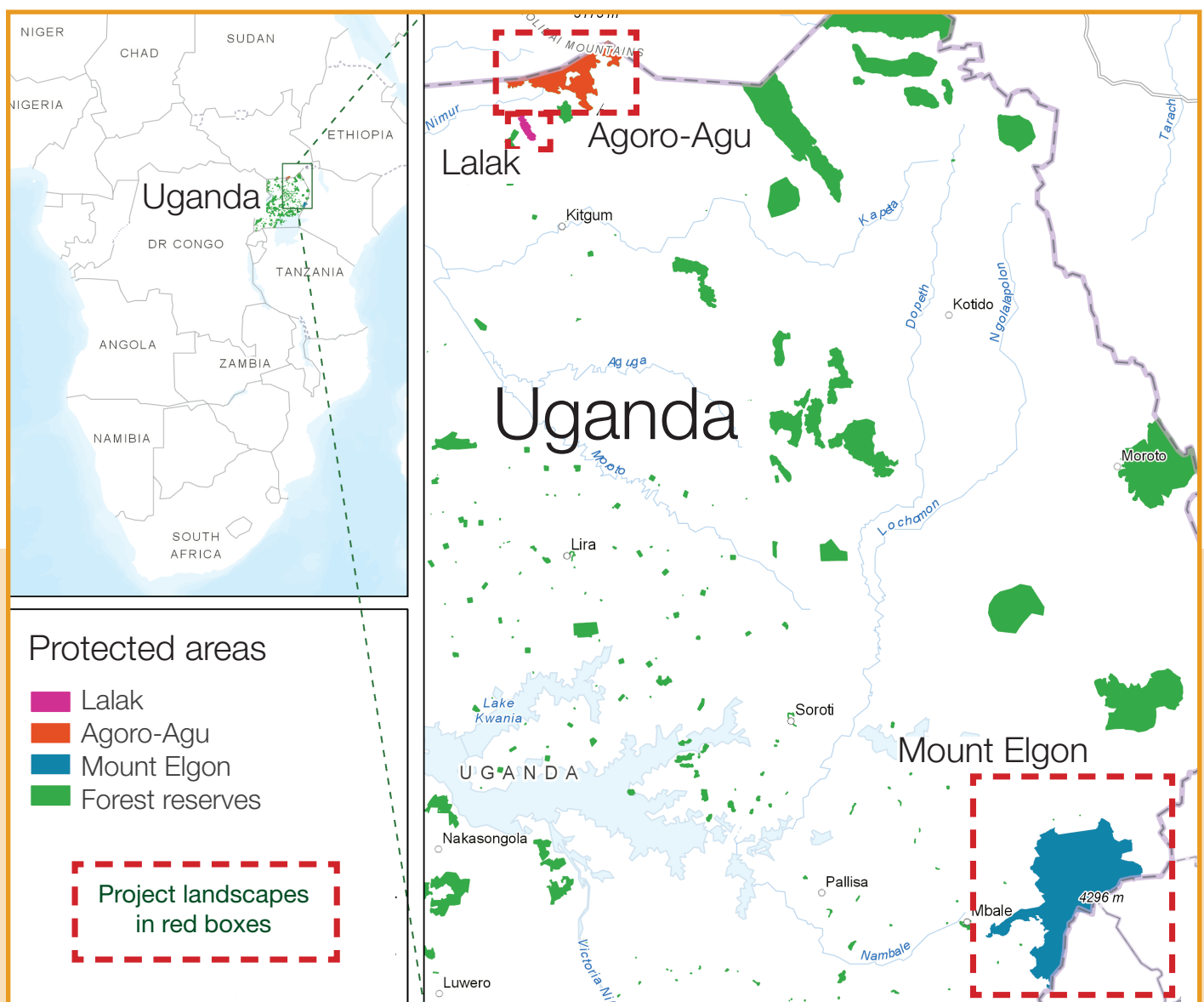
The Agoro-Agu landscape was chosen because the landscape has different categories of forests that are also under different management and governance regimes. These include: (1) central forest reserves managed by the central government through the National Forestry Authority; (2) local forest reserves managed by district local governments and being supervised by the Forest Sector Support Department; (3) community forests and communal hunting grounds on communal lands managed by communal land associations and/or traditional institutions; and (4) planted forests on private lands managed by either individuals or institutions.

The survey respondents were selected using the following criteria, including consideration of the availability of budget and capacity:

- Ability to read and write (although during the survey this was found to be a subjective interpretation depending on how the community members perceived their abilities given the overall low literacy levels in both areas);
- Residents of the sub-counties where the PLUS project was being implemented; and
- With the aim of selecting a similar sample size (300 respondents in Mount Elgon and 300 in Agoro-Agu).

A intentional selection of a total of 600 respondents (300 in Mount Elgon and 300 in Agoro-Agu) from six sub-counties/central forest reserves was made in consultation with the local council chairpersons and chiefs. Further, in each of the six areas, the selection was made to represent a balance of youth, old, male and female respondents.

The survey was aimed at understanding community perspectives of the various management and governance regimes in the different forest types to address governance concerns, improve accountability mechanisms and promote inclusive stakeholder participation in the development of the forestry sector in the landscape. It also sought to address gaps in traditional forest management planning in Uganda that originally targeted protected areas only by opening up the consultation and planning process to incorporate views and concerns of the general public. The ultimate goal was that the results of the survey would contribute to a Landscape Management Plan that creates connectivity between the various forest types, and with one common and shared vision.



Developing of a relevant signification framework

Using SenseMaker® implies developing a signification framework that is made of a prompting question and four types of signifier or modifier questions. The prompting question is a specific question that prompts people to share a compelling story about a specific topic of interest. As such, the following question was decided by the project team: “Reflecting on (name of protected area, e.g. Mount Elgon National Park OR Agoro-Agu Central Forest Reserve), can you share a positive or negative experience that you (your family or your community) had in/with this area. Please describe what happened?”

The signifiers and modifiers are a predefined series of questions in the form of triads, dyads, stones and multiple-choice that help address the specific topic under investigation (governance). The triad and the dyad questions directly relate to the stories that enable the respondents to interpret them and add meaning. The multiple-choice and stone questions are not necessarily directly related to the narrative, and were instead used to elicit socio-demographic characteristics and other information of interest.

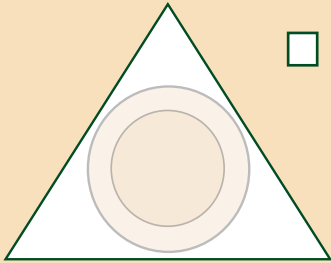
Dyad 1. In the context of my story, the decisions made by the management of the Mount Elgon National Park are:

Fair

Unfair

Triad 1. In my story, people's actions were driven by...

Traditions of the past



☐ **N/A**

Today's issues
Opportunities for future generations

Multiple choice 1. Who was involved in the story? (max. 3 answers)

- ☐ Me and/or my family
- ☐ Other community members
- ☐ Uganda Wildlife Authority
- ☐ National Forestry Authority
- ☐ Local government
- ☐ Not for profit organisation

Examples of dyad, triad and multiple choice questions.

Planning, training and testing the signification framework

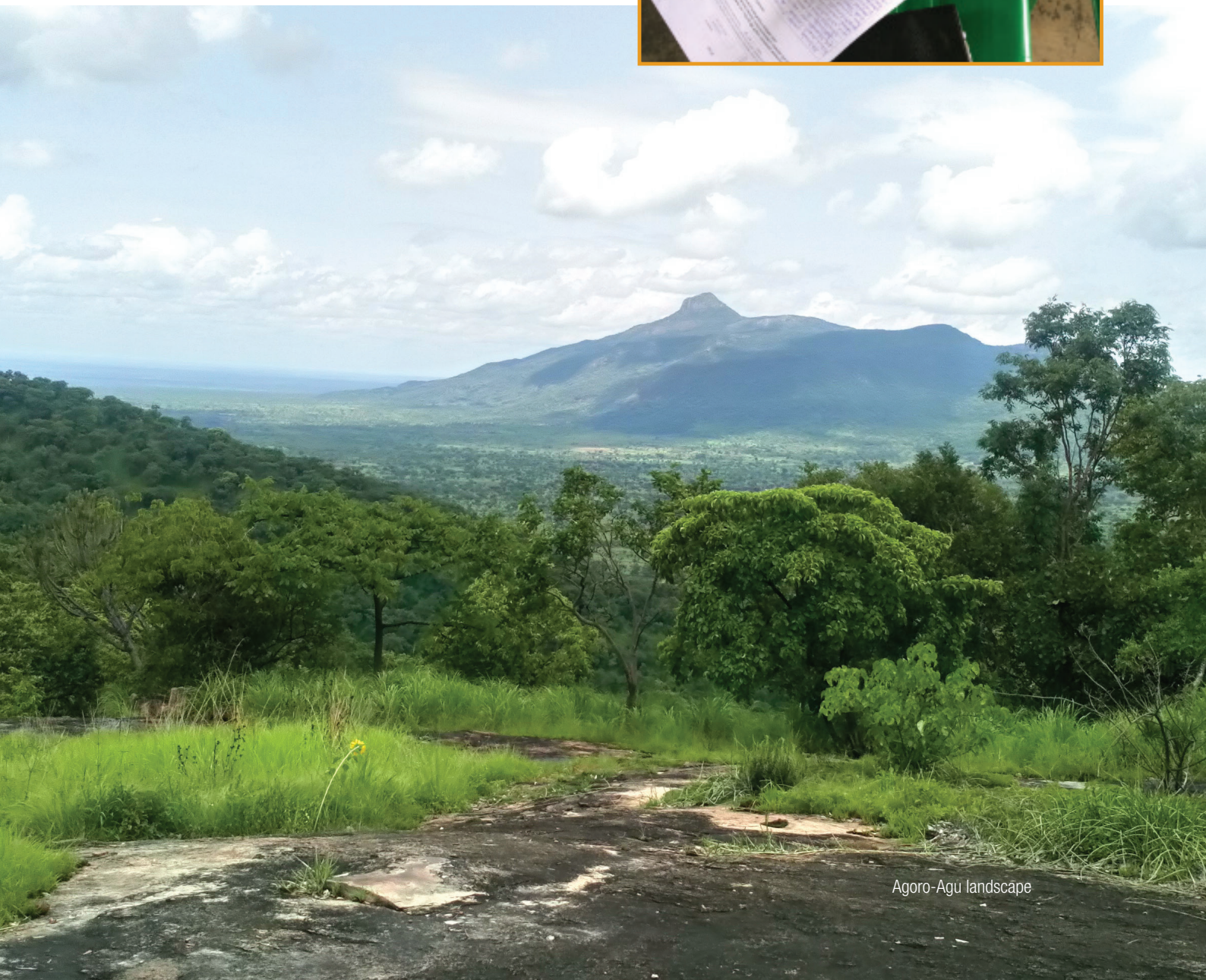
A team of 20 enumerators from Busitema University, and six district local government staff from Lamwo (Agoro-Agu landscape), Bududa and Namisindwa Districts (Mount Elgon landscape) were selected to be trained on SenseMaker®. The criteria for their selection was the interest they showed for the tool, their local language skills, and their knowledge of the area of intervention. Selected candidates were taken through a three-day training on the use of the tool. They adapted the framework to the local languages (Luo/Acholi for Agoro-Agu and Lumasaba for Mount Elgon). Day one of the training focused on the purpose of SenseMaker® within the IUCN Uganda context, exploring difficulties within the framework and the narrative collection process (the logic of the prompting question and the signifiers, and practical illustrations with exercises). The different steps within the data collection process were also explained together with useful facilitation tips. Day two involved a field-testing session during which 22 people were interviewed. The information collected during the field testing process led to the necessary final adjustments in the signification framework for day three of the training.



Rolling out story collection

Over four days in each landscape, the enumerators collected 235 stories in the Mount Elgon area (67 in Bududa District and 168 in Namisindwa District) and 229 in the Agoro-Agu area Lamwo District (158 in Agoro-Agu Central Forest Reserve and 71 in Lalak Central Forest Reserve).

The stories were collected from 196 women and 268 men and aggregated by gender, age, and education level in each of the landscapes.



Agoro-Agu landscape

Overall analysis and making sense of the data

Four general trends and four dimensions of what constitutes ‘good’ governance were explored with the help of the SenseMaker® software during a two-day analysis workshop. The software proposes different tools embedded in a simple graphical user interface to facilitate the identification of patterns or trends emerging from the narratives collected. Distributions of triadic, polarity and multiple-choice questions were analysed separately. In some cases they were used in combination to identify trends and patterns in each of the landscapes. The stories associated with each of the specific characteristics were then examined for a deeper understanding of the situation and to explore some of the key principles of governance.

Key dimension of what constitute ‘good’ governance

- Recognition of the role played by the key management authorities and traditional/cultural institutions;
- Community participation in decision-making;
- Transparency in decision-making; and
- Consultation and information flow.

Providing feedback to the community

The results of the analysis were presented back to the communities from whom the information had been collected. This feedback enabled respondents and key stakeholders to make sense of the patterns that emerged from the data analysis. Participants read and interpreted the stories that were shared, providing feedback based on their day-to-day activities, and bringing new ideas and insights to the stories. This involved in-depth probing and analysis of the stories and discussion with participants – analysing the perceived nature of the commitments of natural resources governance and protected area management institutions. In addition, participants were presented with an analysis of the signifiers. This was followed by an in-depth discussion to analyse patterns of a set of variables including age, gender, district and perceived commitments of institutions by referring to the particular stories associated with each aspect in the triads, dyads or stones.

Initial findings: Main issues and trends observed in both landscapes

The analysis revealed that the gender of respondents was reasonably balanced (57.5% male, 42.5% female), and the majority were aged between 36–55 years old. About 50.8% of stories were marked as either strongly positive or positive, compared to 29.5% that were marked as either strongly negative or negative. The majority of respondents sourced their income from agriculture, used their land for forestry, had lived in the area for 20 years plus, and lived close to a protected area. All of the triads saw a reasonable distribution, but respondents were driven more by the present situation and securing opportunities for the future generations, rather than looking to the traditions of the past.

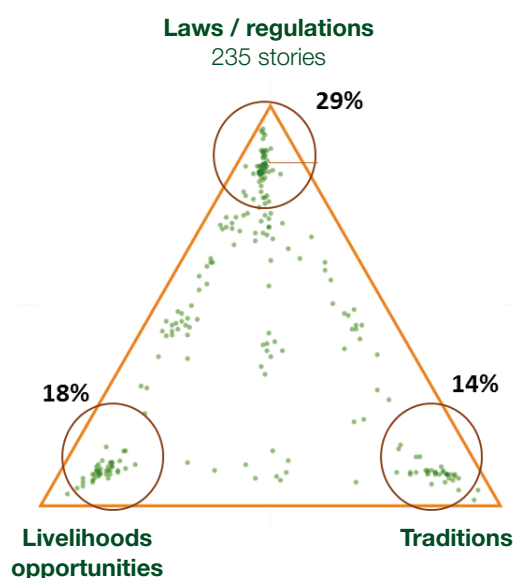
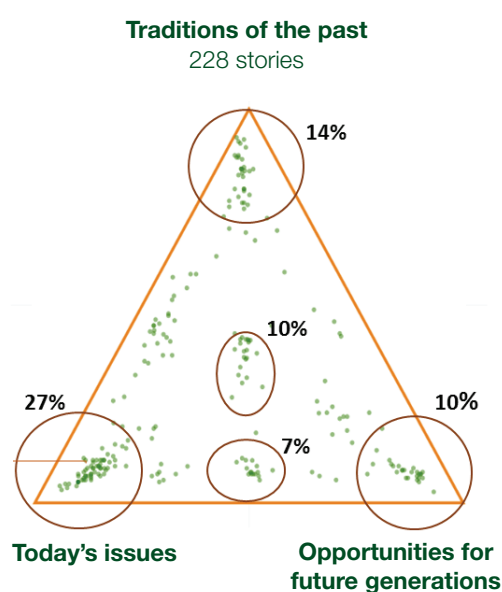
Furthermore, although respondents acknowledged that the protected areas were managed by the authorities, it was often the community that benefited from protected areas, and the community that influenced people’s experiences. Within the responses in the dyads, the mean fell to the centre of the scale. However, more people considered that management decisions

were fair rather than unfair, and more people saw the natural environment as ‘something to be protected’ as opposed to ‘something to be used.’

Looking specifically at each of the landscapes, the results of the analysis showed that actions taken by the respondents from Mount Elgon are driven by today’s issues rather than by the opportunity for the future or the traditions from the past. They mostly feel positive about their stories and are mainly concerned about the usage of natural resources. Most of the respondents think that the authorities and the community not only share the responsibility for the difficulties encountered in their stories, but also share in the benefits that result from the usage of the natural resources.

The results also demonstrate that the majority of the people questioned consider that the government is responsible for managing Mount Elgon National Park, but feel that the current management practices do not work well and that decisions are unfair. They also feel like they are not involved enough in the decision-making processes and that their voice is neglected when decisions are made. The analysis shows that people interviewed in Mount Elgon are concerned about the future of the protected areas in their landscape.

What drives people’s actions in Mount Elgon?



“Our forest is very good. It feeds us. It gives us rain. We do agriculture there and plant bananas, onions. Some time back, the forest was so beneficial to us as we could go there freely, but as I talk now, it is a war zone as the UWA security officials came to the forest, we no longer go there freely. When we go there, we are caned seriously and they take away everything of yours, you have gone with. For example, one day I went for firewood to the forest. The UWA people came to cane me, but I ran and escaped. They took my panga and axe which I have never recovered to date. I was so scared.”

“Long ago we in our forest, we used to have a good boundary and then within our forest we had many wild animals. We had a lot of bamboo mushrooms. We used to grow local herbs in the forest, collect firewood. Students from the past used to come to the forest for teaching purposes. Nowadays people cannot enter the forest anymore, which constrains us in collecting materials such as firewood. They don’t allow us to enter for collecting herbs. Even the bamboo, they don’t allow us to collect. It would be very helpful if they would allow us to enter again.”

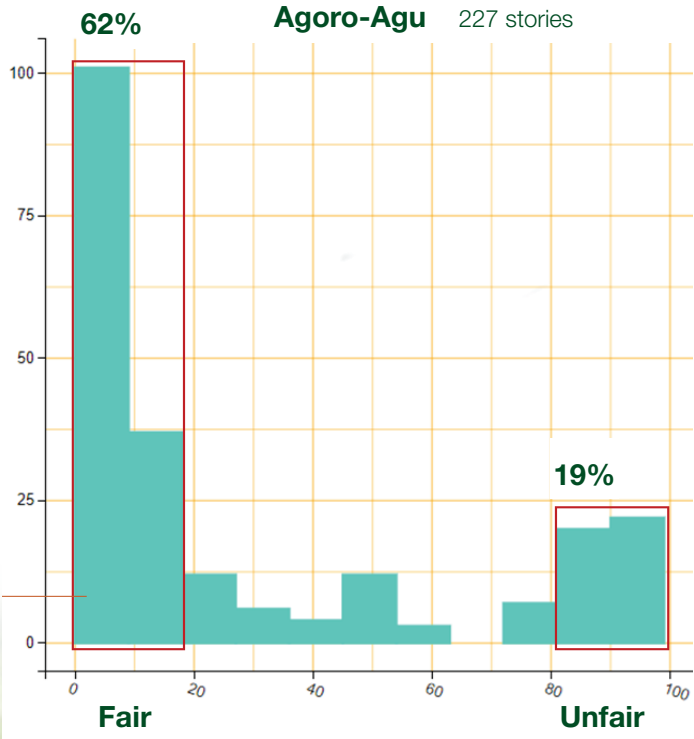
In Agoro-Agu, the analysis reveals that opportunities for future generations drive the majority of people's actions – as opposed to today's issues and traditions from the past. While the main subjects of their stories split across four dominant themes: agriculture, restoration or management of the area, usage of the resources, and participation in decision-making – the majority of respondents associate a positive feeling toward the area. While most think that the government is mainly responsible for the difficulties encountered in their stories, they feel that the benefits resulting from the exploitation of the forest reserves mainly flows to the community, followed by the authorities or directly to their families.

Although the majority of the respondents in Agoro-Agu consider that the communities play an essential role in managing the forest reserves, they agree the authorities play an equal role. Most of them also feel that the decisions made are fair, that they are involved in the decision-making processes, and that their voices are taken into account. In Agoro-Agu, most of the respondents feel hopeful about the future of the protected areas in their landscape.

"What is most important is that when we wanted to construct the school, we had to get timber from the forest in 2014. In 2017, we experienced a lot of fire outbreak as people tend to burn the farms and the fires spread out to the forest. We are able to get water that flows from the rock which has reduced water scarcity problem. We have been restricted flow not to go and cut down the trees from the forest. And I feel it is good that we have been restricted."

"For me, the importance of the central forest reserve I have gotten is that it helps me in cultivation crops such as beans and maize which helps me to pay fees for my children and helps me also to set fire for cooking, and also I get grass from the forest for building my house from the central forest reserve. And can also plant coffee from the central forest reserve freely because the government has allowed us to cultivate in some part of the forest so as to maintain our forest. The reason why we like this forest is because they allow us to grow crops from near which makes us get money to facilitate our day to day needs."

'Fairness' of the decisions made by the management of the CFR in Agoro-Agu





Second-level analysis: Participatory feedback

Communities were able to provide deeper insights on the issues that may have either positively or negatively influenced the stories. They shared their views on possible solutions and actions to address these issues with the local authority representatives. Among the critical areas of concern, the following were discussed in **Mount Elgon**:

- Park boundary and land conflicts triggered by uncertain park boundary rights, encroachment on the restoration area through the Taugya System, un-resettled displaced communities, and destruction of crops by park rangers.
- Human wildlife conflict.
- Poor governance of the revenue sharing programme characterised by inadequate revenue sharing, lack of transparency, and funds released to higher district local government instead of sub-counties.
- Poor governance of the multiple-use programme, characterised by noncompliance with memorandums of understanding (MoUs), ineffective monitoring of illegal activities, difficulties in developing MoUs on cultural sites, illegal suspension of resources use MoUs, commercialisation of resource extraction, unsustainable utilisation practices, unfavourable duration and days for resource extraction from the park, and restricted harvesting/use of certain critical resources.
- Misinformation and politicking on protected area governance stimulated by inadequate awareness among the community, misunderstanding of protected area conservation status, poor working relations, and politicisation of park related issues.
- Lack of alternative sources of income, high dependency on the park resource and high expectations.
- Human rights abuses with the torture of the local community by park rangers, child employment, social and sexual abuses.
- Corruption with the collusion of some of the park rangers with local communities, exorbitant fees to take tourists to the park, nontransparent recruitment processes and collusion with those grazing animals in the park.
- Poor natural resources governance due to inadequate participation and involvement of the community and local leaders in protected area management planning and implementation of programmes.
- Criminal trespass as livestock thieves are thought to hide in the park, this precipitates conflict between Uganda Wildlife Authority and the communities.

In **Agoro-Agu**, the discussion between the communities and the government representatives were mainly about:

- Unclear forest boundary generated from the two-decade insurgency.
- Cultivation and settlement in central forest reserves.
- Unregulated forest resource extraction for timber bamboo and charcoal including threats such as commercial pit-sawing, encroachment, settlement, cultivation, charcoal burning and fuelwood collection for commercial purpose.
- Overexploitation of forest resources.
- Unclear or confusing government policies/plans relating to land and forestry characterised by conflicts between the government and communities on the actual community forest reserve location.
- Poor forest management approaches caused by inadequate participation and involvement of the community and local leaders in protected area management planning and programme implementation.
- Inadequate funding of the forestry sector over the past 25 years.
- War in the sub-region resulting in the community still settled in a camp-like setting, where households are located close to one another and far from the farmlands.
- Human and wildlife conflict involving crop-raiding or injury to people.

Advantages and limitations of the tool

The ability for the respondents to interpret their narratives clearly stands out as one of the most interesting and useful features of the tool. By limiting the introduction of outside bias, the tool provided direct access to robust evidence-based data that could then be easily actionable or shared with stakeholders. The ability to move between the quantitative and qualitative elements of the data and easily visualise and examine patterns, enabled deeper data exploration and allowed for better understanding of the respondents' sentiments about the governance mechanisms in place in the two landscapes. It allowed access to perspectives in a complex system by bringing together and making sense of information that is normally fragmented.

Although SenseMaker® is user-friendly, there are some aspects that could be improved. First of all, Sensemaker® is unique in structure and approach, and requires sufficient resources for training. Sensemaker® also requires a financial outlay, so it is essential to ensure that adequate funding is available to source the many steps of the process, and to allow for the participation of all the necessary stakeholders. Without a solid provisioning for the steps included in this brief, implementors risk falling short in delivering the expected outcomes. A minimum of two months is recommended for set up and delivery of the SenseMaker® process, although in this case it was spread over a longer period. A small drawback of the software is that it lacks the functionality that would allow for the export of graphs into an image directly. The analytical software could also be improved. On some occasions, raw data had to be exported and then analysed and organised with the support of external tools. Finally, SenseMaker® does not provide the capability to analyse the narratives themselves. The stories may be searched and examined according to particular questions or topics of interest, but they cannot themselves be analysed.

Lessons learned

From the planning exercise to the on-the-ground implementation of the tool and use of the data, the lessons learned from piloting the SenseMaker® tool in Uganda are as follows.

- 1. Pinpoint questions early:** Careful formulation and development of the signification framework is crucial but challenging. It requires a process of formulation, adaptation, and pilot testing that is time and resource consuming. In this pilot case, getting the prompting and probing questions correct proved to be more difficult than expected, and not all the questions ended up being useful in the analysis of the patterns. Being very specific about what you want to learn through SenseMaker® is thus critical before engaging in the process.
- 2. Account for language and literacy:** Experience from the data collection processes in the field demonstrated that the group facilitation as initially suggested by SenseMaker® (interviews in groups of 3 to 5) was impractical given widespread illiteracy in the two landscapes. Illiteracy is a sensitive topic, some of the participants were ashamed of outing themselves and remained within the group facilitation, despite not knowing how to read and/or write sufficiently. Other methodologies, such as one-on-one interviews in small groups of 3 or 4 was, therefore, adjusted to further enhance the quality of the stories collected. The process of translating the framework into local languages was also tedious and required several adjustments until a final version with appropriate wording was agreed upon. Every community has a unique dialect that has to be taken into account during translations. This turned out to be a rather difficult task due to the various dialects and interpretations of the content.



- 3. Analyse, then re-analyse:** Irrespective of the challenges encountered during the data collection and the fact that the questions chosen for the signification framework did not allow exploration for all aspects of governance, the patterns developed during the analysis workshop proved to be very useful. They offer some interesting insights on how people's perceptions differ in the two landscape about governance effectiveness and community involvement in decision-making processes. The analysis of the relationship between the perceived effectiveness of the protected areas management practices and the extent to which people feel that their voice is being taken into account in the decision-making process was particularly enlightening as it strongly suggests the existence of a direct causal relationship. Time lag between when the stories actually happened and when they were told as well as overly linear interpretations of the patterns can, however, lead to erroneous interpretation of the emerging issues. For this reason, it is fundamental to have a second-level analysis planned through an in-person sense-making process that provides an opportunity for further discussions with the community.
- 4. Sharing analysis leads to dialogue:** Pattern discussion and story reading during the feedback process proved to be quite powerful and an effective way of facilitating dialogue between different actors in the landscapes. Participatory analysis and feedback sessions led to the strengthening of partnerships between the local communities and protected area management institutions. Besides a shared appreciation for this kind of partnership, the constructive information collected and insights generated on the partnerships themselves, stakeholders used this opportunity to put forward pro-active and realistic propositions. Long-term engagement strategies of all parties were proposed to overcome hurdles in effective partnerships and in efficient protected area management.
- 5. Key tool for monitoring and evaluation:** SenseMaker® proved to be an innovative data capture and analysis tool to explore and understand the community perceptions of landscape governance effectiveness. In that sense, the SenseMaker® approach turned out to be a valuable addition to IUCN's suite of monitoring, evaluation and learning tools. It is useful to involve voices from the field to support multi-stakeholder discussions on key elements of our programmatic interventions (such as sustainable and inclusive nature-based solutions). This, in turn, helps in developing shared analyses that feed joint action plans to engage all stakeholders. As such, this approach neatly fits into IUCN's purpose of exploring methods and approaches that support the decision-making and learning processes of multi-stakeholder partnerships driving sustainable development results.

How this data was applied to PLUS in Uganda

The application of SenseMaker® in Uganda contributed significantly to facilitating local dialogues to reconcile competing claims and interests in both Mount Elgon and Agoro-Agu landscapes. By capturing perceptions it provided insights into perspectives, attitudes, values, needs and concerns of the communities. It also shed a different light on the historical and cultural issues that influence how decisions are taken and implemented by the communities.

The participatory feedback and sense-making workshops were very powerful mechanisms to encourage collaborative analysis and stimulate debate among landscape actors towards actionable insights. Gathering additional perspectives built on identified trends and stories helped to expand options for stakeholder inclusion in protected area management – including fair and transparent governance and equitable access to protected area goods and services. By helping to gather and include more views in the process of making decisions, the very act of capturing people's perceptions also increased the likelihood of meeting more stakeholder needs and concerns.

Finally, the information generated and interpreted by the stakeholders themselves, through participatory analysis and feedback sessions, led to the strengthening of partnerships between local communities and protected area management institutions. In these processes, stakeholders were given the opportunity to put forward proposals on which long-term engagement strategies for all parties can be built – thereby creating avenues to overcome hurdles in effective partnership building and efficient protected area management.

* Bennett, N.J. (2016) Using perceptions as evidence to improve conservation and environmental management
Conservation Biology, 30, 582-592

** David Snowden, Cognitive Edge, <https://cognitive-edge.com/sensemaker/>

NOTE: The results presented in this brief represent only a small part of a broader analysis.

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