## APPLYING SYSTEM MAPPING TECHNIQUES TO RESILIENCE CASE STUDY: RESILIENCE IN KARAMOJA, UGANDA

## **OVERVIEW**

The Karamoja Household Resilience Systems Map was developed from a need to better understand the factors that enable a household to be resilient, specifically the interplay between humanitarian support and access to livelihoods and markets. The previous map created by the MSM team, the Uganda Agricultural Market System Map, captured a rough overview of household resilience as part of the broader agriculture market system. However, when it came to activities placing their interventions on the map and identifying important areas, the "Household Resilience" subsystem quickly became overwhelmed. Evidently, household resilience is a key part of the broader system, and merits a finer understanding.

The creation of the Resilience Map coincided roughly with the creation of the Karamoja Resilience Cluster in USAID. Thus, the Resilience Map would focus on Karamoja households, and would attempt to capture the unique aspects of Karamoja livelihoods. This work is a key step in merging the development and humanitarian fields in USAID. Both Feed the Future and Food for Peace activities operate in Karamoja, and the resilience map is a useful tool they can use for collaboration.

## **Basic Methodology**

The construction of the map was necessarily iterative. Typically, we expanded out the map in a general way to capture all potential requirements, then pruned back down to make it more specific to Karamoja. For example, water, food, and shelter were initially listed as requirements for physical well-being on the map. These are general requirements for human life. However, after conversations with various partners, we removed shelter because access to shelter isn't an issue in Karamoja. Although it certainly is needed for human life, in Karamoja it is basically given that shelter is available, so it doesn't need to occupy any space on the map. Conversely, we listed remittances as an enabler to adequate financial resources. Discussion with partners was mixed – some said remittances were significant, some said they weren't. Thus, we kept remittances in.

The main sources for the map were discussions with USAID partners, USAID activity results chains, literature focusing on household resilience in general, and literature focusing on various aspects of Karamoja.

To make mapping accessible, we use Kumu (kumu.io). It is a free, online tool that is easy to learn.

## CREATING THE MAP

## Engaging Activities: What is important for resilience?

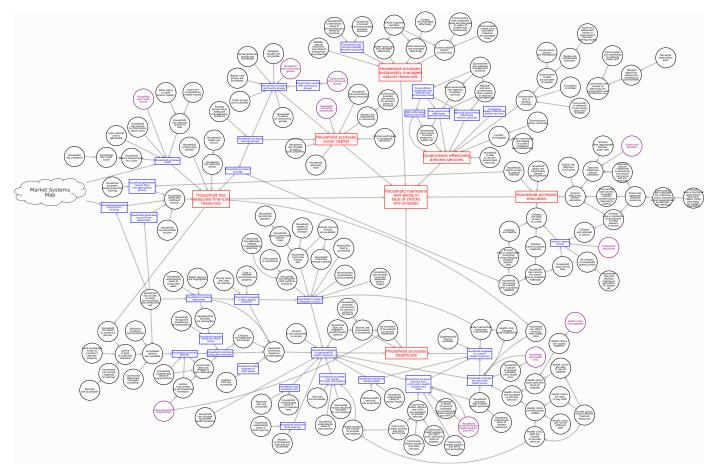
The first version of the map was created from an initial meeting with USAID activities. An in-depth knowledge of systems mapping isn't required by everyone to contribute meaningfully, provided a meeting facilitator is able to digest recommendations so they fit with the mapping methodology. This initial meeting created a basic structure to the map, capturing education, health, social capital, government, natural resources, and finances as being key outcomes required for resilience.







After the meeting, the activities further expanded the subsystems. We also incorporated literature about household resilience, and guidance from USAID documents. All these inputs were digested to fit with our mapping methodology to create a first version of the map in Kumu.



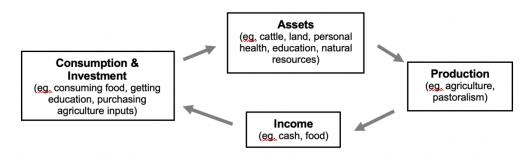




## Refining the Map: How do the elements fit together?

With the initial version, we were able to capture the important areas for household resilience. The focus now moved to presenting everything in a logical way. We investigated how various outcomes actually contribute to resilience. For example, does having access to sustainably managed natural resources contribute directly to resilience, or is it merely instrumental in enabling livelihoods?

Considering livelihoods was key at this stage. We used the livelihoods cycle as a framework to consider ways to rearrange the map. Consultation with livelihoods expert Dan Maxwell was key in identifying key areas to focus on and expand.



This resulted in a map with only requirements for resilience – the household needs material well-being, and bodily/mental well-being. All other requirements are merely instrumental to these. Provided a household has adequate financial resources and good enough health to utilize them, the household is resilient. However, further consultation with USAID partners brought a level of nuance. Access to information and education was not merely for income generation, but also for directly responding to shocks and stresses. This added a third requirement for resilience – the household needs to knowledge and skills to respond to shocks and stresses.

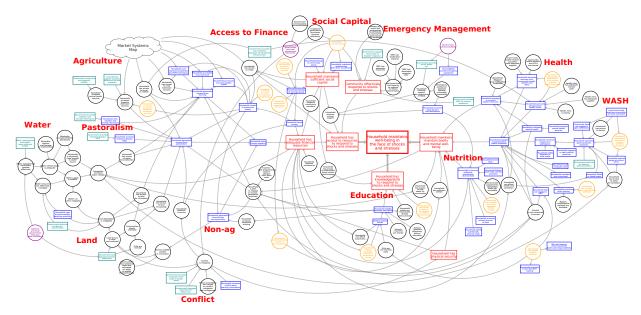
In addition to thinking about what enables income generation and investment, the livelihoods cycle helped us consider household decisions. True, a household may be able to do many things, but these things will only happen if it chooses to do so. This is important in livelihoods – production and investment decisions – but also in other aspects of life. This led us to creating a "Household Mindset" element. For example, for a household to practice birth spacing, modern contraceptives need to be available, but the household also needs to have the mindset to use them.

Consultation with partners also highlighted the importance of government behaviors. Indeed, government policies influence every aspect of resilience. To bring more attention to this, we created a new element – Government Behavior. This helps show how widely important the government's actions are in enabling household resilience.

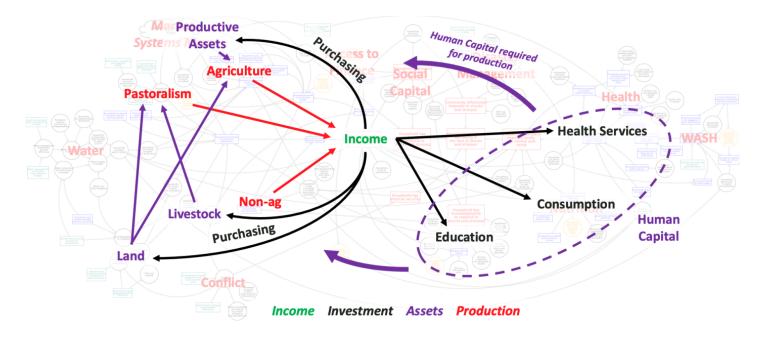




This work resulting in a map that captures livelihoods on the left, health on the right, and information/education on the bottom.



The livelihoods cycle can also be overlaid onto the map.





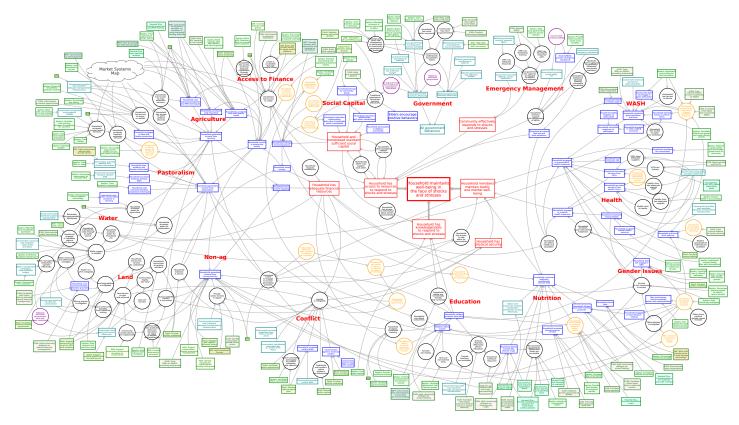


#### Capturing Interventions: What is everyone doing?

With the map structure more or less finalized, we met with every activity in the Karamoja Resilience Cluster to validate the map, and place interventions. Some activities work in relatively specific areas, but some are distributed across the whole map.

For the map to be useful as a collaboration tool, it should capture all interventions by all cluster activities working in the area. Interventions placed on the map were compared against workplans to ensure that the map exhaustively captures an activity's work.

On the map, the interventions appear around the outside of the map in green, each one pointing in at one or more elements.







# USING THE MAP

The map becomes a powerful collaboration tool once all the interventions have been placed. We convened a workshop with the Karamoja Resilience Cluster to bring together all the activities.

#### Learning what others are doing

This workshop was the first chance for each activity to learn what every other activity is doing in Karamoja. The visual nature of the map makes it easy to activities to see conceptually where everyone is working. Previous to the workshop and mapping creation process, most activities were not aware what the others were doing.

Participants noted that it was useful to "see how moving parts work together", and that they "learned of other activities interventions and potential areas of collaboration".

#### Finding collaboration opportunities

Once activities could see where everyone was working relative to them, it became easy to identify opportunities for collaboration. For example, WFP is working on school feeding and wanted to integrate biofortified crops. MENU has experience promoting biofortified crops, thus can provide learning for WFP to integrate them into school feeding. Building further on WFP's school feeding, ICAN can share information about credit access to link schools with intermediaries to buy food.

The workshop was particularly useful for the Inclusive Agricultural Markets Activity (IAM), which was just starting at the time. The IAM leadership was able to identify several areas to build on existing work from other activities. Participants noted that they "could use [the map] to identify potential areas for collaboration with other like-minded IPs".

## Prioritizing areas for future activities

In addition to finding specific, granular areas for collaboration, the workshop highlighted broader, systemic areas for work. This is a key strength of the mapping approach – by seeing how everything is interconnected, problems that span several sectors emerge.

In particular, water access, conflict, and gender issues were discussed as issues that have widespread effects on household resilience. Within these areas, key systemic barriers were identified, such as:

- Poor watershed management affects all water uses maps and plans have been created, but future work should focus on actually implementing them
- Cattle rustling limits the feasibility of pastoralism as a livelihood a role for partners is to strengthen peace committees, which in turn can mitigate conflict





• Alcohol abuse drives a range of issues – community dialogues can be effective to discuss the issue, but donors can also encourage the government to restrict its sale

The map encouraged partners to consider household resilience in a systems way, with participants noting "[the map] helps in better visualization on how different resilience capacities contribute to household well-being", and that "Feed the Future is moving to a system approach".

#### Priotitizing areas for government engagement

With certain issues, government interventions or policies are by far the most effective way to address them. In the workshop we were able to identify the priorities for government engagement – the areas where changes in government behavior would have the most significant impact. Some key areas were:

- Building capacity with the local government to incorporate community needs in planning currently there are insufficient resources and technical capacity to do this
- Advocating for better transportation infrastructure this has broad impacts across the map
- Advocating for support of teachers in the region currently absenteeism among teachers is a key issue in education provision
- Coordinating advocacy internationally to enforce the MOU with the Kenyan government to control crossborder arms flows



