

M4D Impact GSMA mAgri

What do Tanzanian farmers need?



In March 2014, two M4D researchers went to a village in Bagamoyo district of Tanzania. Using techniques from human centred design, we wanted to find out what Tanzanian farmers want from an Agri-VAS service.

This would require two translators, some quick thinking and a lot of post-its.

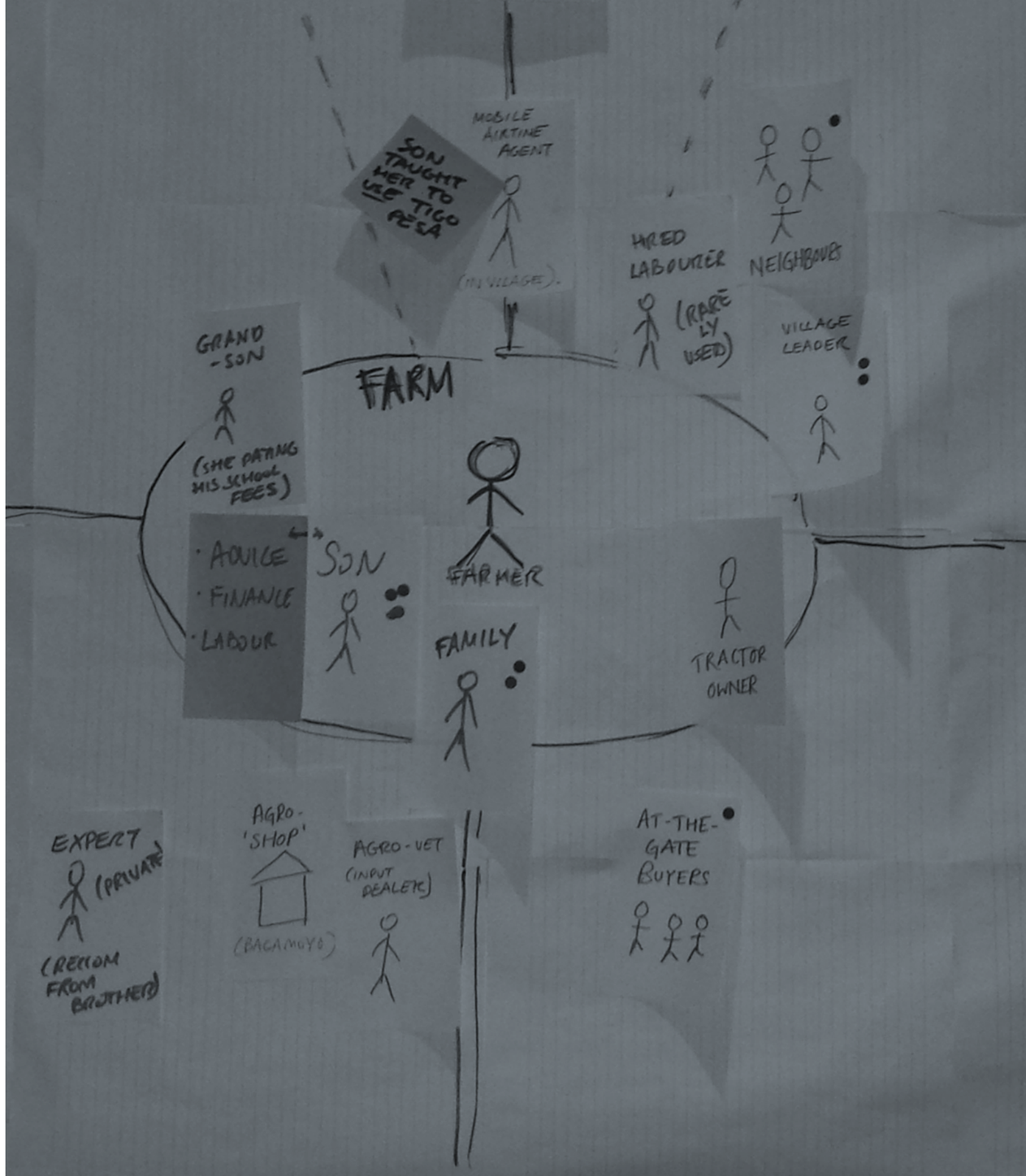
Here are some of the highlights of our findings.

First activity

Stakeholder mapping

We asked 10 farmers

- what sources of information do they draw on when making farming decisions?
- which sources are most trusted?
- which sources are most relevant?



Less able/uninterested traditionalists

like Subira*:

- trust their **close families and neighbours** to help them with farming decisions
- relatively **low levels of access to information**
- relies on **traditional methods**
- **not able to implement new methods**, through lack of will or lack of capital
- **use mobile to contact friends and family**, but not for business



* Participants' names have been changed

Able/receptive traditionalists

like Jengo:

- is an **experienced** farmer who has been managing his own farm for years
- talks to **respected farmers** about farming decisions.
- tries new methods when he sees are working e.g. **growing certain cash crops**
- **uses mobile to contact friends and family** and occasionally for business and entertainment



Village innovators

like Mr. Lomo

- a **respected farmer** with close links to the village hierarchy
- uses **modern methods** to farm cash crops
- calls the **government extension office** for advice on farming methods
- **uses mobile as a tool for business** to gain information (through making calls) and sell crops



Village innovators are a good target for Agri-VAS

although they are likely to be the smallest segment in the village

Influence over others	HIGH
Ability to try new methods	HIGH
Paucity of information	MEDIUM
Familiarity with mobile technology	MEDIUM

- This segment are **teachers, highly influential** over other farmers – trickle down effect of service use and impact
- Excited and **able to try new things**
- **Information seekers**
- Likely to **persist** with difficult service if they see the benefit
- **Invests profits** back into farm – possibly including mobile agriculture service

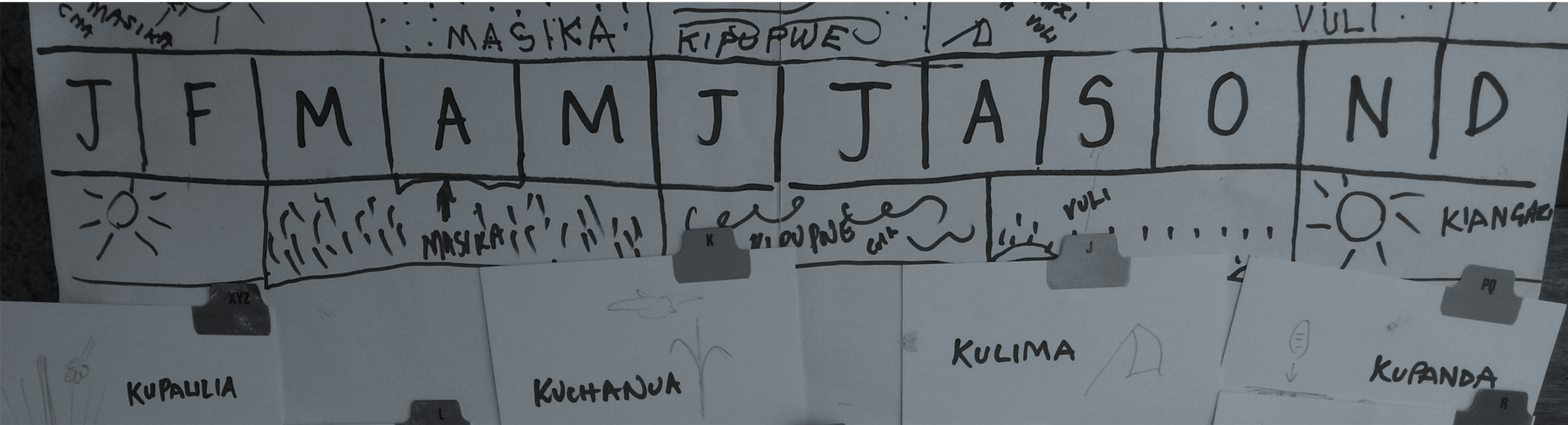
Second activity

Crop calendar mapping

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We asked 10 farmers

- what do you grow?
- what would be the most relevant information at what time?



Villagers grow

a wide diversity of crops

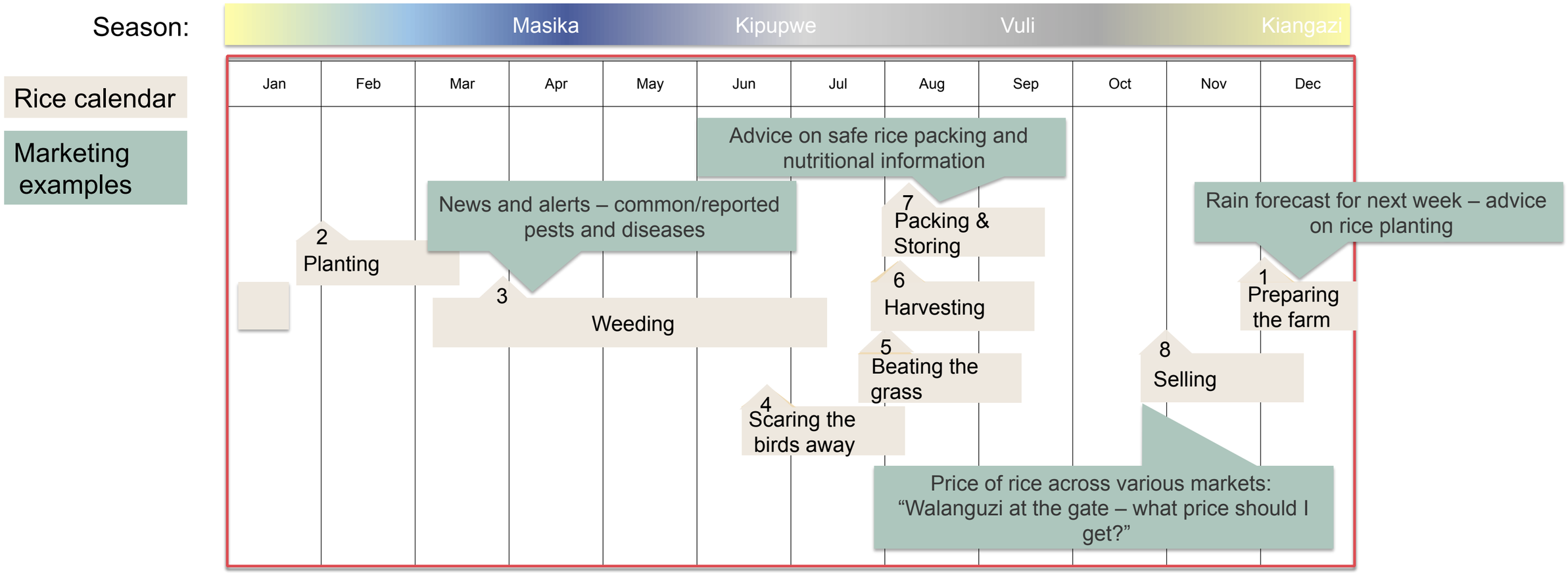
- People traditionally grow **rice, maize** and **cassava** (pictured here) –usually kept for the family or sold at the gate
- Entrepreneurial farmers also grow cash crops like **tomatoes**, **watermelon** and **okra** which require irrigation – usually sold to trusted agents
- Village innovators still grow subsistence crops the traditional way – for the taste



Farmers don’t immediately trust
that MNOs are farming experts

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Base marketing campaigns around the crop calendar to show expertise



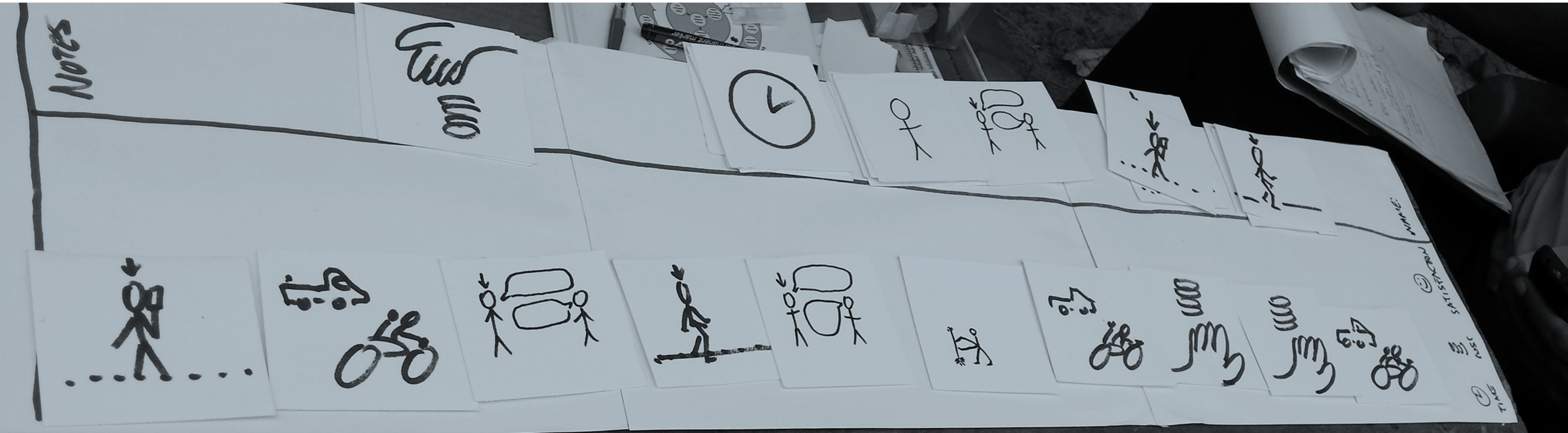
Third activity

Situation games

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We asked 10 farmers

- what are the specific pain points in your farming processes?



Small scale farmers

are often at a disadvantage when selling

- The '**walanguzi**' (middle men) have a powerful position and can offer any price
  - farmers often check with their neighbours to find out what price they got
  - some call contacts to ask them to check market prices in person
- They **see the benefit** in having this information to give them power over the prices they get and to root out dishonest traders
- However, in order to be useful, market price information must be:
  - **Local** – preferably from several local markets
  - **Updated daily**
  - **Specific** - exactly what is being supplied? Wholesale/retail? Dried or fresh?
- Some farmers suggested a service which **connects straight with the buyers** in order to cut out the walanguzi altogether

When it comes to weather

only one thing is really important

- Farmers want to know **when the rainy seasons (vuli and masika) will begin** so that they can plant their seeds: too early and they will bake; too late and they may be washed away
- Some farmers listen to the weather forecasts on the radio, but find them too high level and aren't always near the radio at the right time. They see the **added value** in having this service on their mobile.
- Daily forecasts are not seen as any more useful than looking out of the window
- A great weather service would
  - to talk about **rain** – things like temperature are not seen as so important
  - cover a **relevant area** – national is too big
- This service would be **most important for the BOP farmers** who can't afford irrigation

Agronomy information

should be able to answer specific questions

- At a **time of crisis** (such as a new pest or disease outbreak), farmers would like somewhere to turn where they could solve their problems
- Advice on **cash crops** is not part of traditional knowledge so would be well accepted by the identified target segments
- The wealth of agronomy information available is **like an encyclopaedia**; a USSD menu with a two minute timeout is not the best way to offer this information
- **Tech literate users struggled** with the timeouts on the USSD menus; older users, especially women, struggled
- A **call centre** would be a valuable asset to such a service; users would be willing to pay to have their questions answered

Qualitative techniques

allowed us to gain a richer experience of the target audience and fuller understanding of their needs

Truly understanding these needs could be key to creating an Agri-VAS which really makes an impact for farmers and service providers.

