What is your idea?

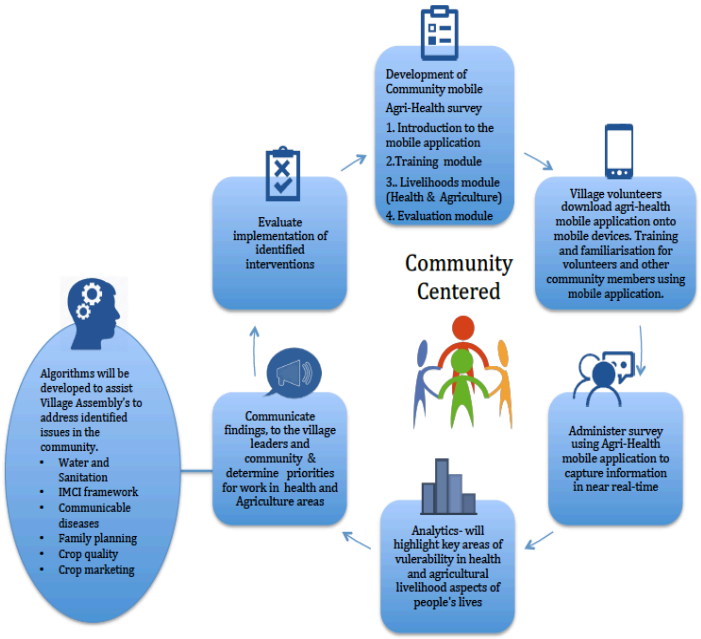
We address the challenge of weak infrastructure in rural areas of developing countries by up-ending the traditional way of thinking about supply chains, and start with communities to develop a smartphone-based Livelihood Tool that enables them to identify their own needs and set priorities to improve their livelihoods. Our current partnership, involving ICRAF and The University of Sydney in an AIC-funded investigation of constraints to increasing the productivity of cocoa farming in Indonesia, has shown that conventional approaches to health service delivery have little impact on smallholder farmers who reside in traditional rural communities that commonly experience lack of services, poor sanitation, problems with stock management and disengaged citizens. We will develop a Livelihood Tool in collaboration with communities- this will involve identifying the main health problems and, using algorithms, identify and target local activities, strategies and services most in need. Empowering communities with information and evidence to identify and solve their own problems will help local and district health services to prioritise the supply chain according to real need rather than perceptions imposed by remote government offices, external experts or NGOs. Creating a supply chain that is sustainable begins with the communities most in need of the benefits; not inadequate and ill-equipped community health centres or remote government offices in the capital cities. When communities own and take responsibility for identifying their own health problems the opportunities for corruption, disengagement and waste diminish.

We hypothesise that the supply chain for achieving public health goals will be improved when rural communities engage in developing simple technologies such as a Livelihood Tool. The tool will enable communities to access using android phones to identify concerns, become advocates for services and supplies as well as find solutions; thus removing reliance on systems far removed from them.

How will you pilot it?

Implementation: The Livelihood Tool will include the following applications:

1. ***Awareness raising***: providing underpinning knowledge about the interaction between small holder farming, nutrition and health in eleven villages we already have worked with around Polewali-Madar and Mapilli;
2. ***How to conduct a community survey*** using an android mobile phone;
3. ***Guidance on conducting the survey***; 4. ***Simple analytic (results) tools***;
5. ***Algorithms for assessing human, livestock and crop diseases*** and ***steps to ameliorate the problem***;
6. ***How to develop a case for improved***



***services*;**
7. *Using the tools on a continuous basis*.

Schedule: *Development:* Convert our electronic survey develop applications listed above (1-7; plus algorithms) (6 months). *Field Test:* Community members in selected villages in Sulawesi will use the Tool (1 month). *Implementation*: Using the Tool, identify the concerns for solving and, using algorithms, undertake change management program (3 months) *Results:* households resurveyed *Reporting:* Data will be collected from the targeted villages (2 months).

BUDGET	Travel	Accommodation	Personnel	Equipment	Total
Development of mobile data tools	NA	NA	NA	NA	$48,710
Village assembly Field testers	NA	NA	10 days at $20 a day for 11 field testers ($2000)	11 Alcatel android smart phones @$190 ($2090)	$4090
Travel (ICRAF and USYD)	Airfares to Makassar for 4 people x2 $3,200x4 for 2 visits) ($25,600)	10 days for 5 people @ $450 ($18,000) (full board) (team +driver)	NA	Car hire with driver@$300 per day for 12 days $3600	$47200
TOTAL	$27,200	$18,000	$2000	$5690	$100,000

Data: Several types of livelihood and health data will be collected. If the survey results show fever and diarrhoea in children the Tool will link to the Integrated Management of Childhood Illness (IMCI) framework. Similarly, if the community is receiving little income from their crop then the algorithm will provide a diagnostic process to examine crop management, pests and diseases, quality and market access. The success of the Livelihood Tool will be evaluated by the villagers themselves when they re-survey (application 2) to establish whether the concerns first identified by the survey have been addressed. If not, this will enable a review of the steps taken to solve these concerns. The results may depend on a number of factors – improvements in local services, village-initiated improvements (clean water / sanitation / use of nets). Participatory citizens make subtle changes to supply chains – knowing the questions to ask and identifying problems in themselves can change societies.

Next steps: The use of the Livelihood Tool and the information about community health and welfare has the potential in the long term to feed data to governments to better direct aid efforts, and manage and contain infectious disease outbreaks in ways that will enable heuristically targeted interventions. The tool will guide planning for subsequent capacity building and innovation development to address the challenges identified so that healthy farmers can join the value chain by producing quality commodities.