



Dr Rosa Costa (program leader) and team at the project coordination meeting in Nampula

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Mozambique "Village Chicken"
project

Nkuku4U in Tanzania and
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The Happy Chicken Project

The Story of Australian
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Mozambique “Village Chicken” project contributing to Sustainable Development Goals (SDGs)

The Food and Agriculture Organisation (FAO) has provided funds to KYEEMA for a program in Nampula and Sofala Provinces in Mozambique, which specifically targets the SDG goal of reducing hunger (#2). The aim is to expand the number of households vaccinating chickens against Newcastle disease, to produce healthier and larger flocks and thus encourage more households to consume and sell their chickens and eggs.

This program also contributes to SDG goals of decent work and economic growth (#8) and gender equality (#5) through:

- training more vaccinators (including striving for a balanced number of females and males);
- aiming to increase vaccinator client base (number of households paying to vaccinate their chickens);

- increasing the efficiency of service that vaccinators provide (number of chickens vaccinated and reduced vaccine wastage); and,
- increasing the amount of money vaccinators earn per vaccination campaign.



KYEEMA's Veterinary trainer, Ana Zandamela (right), with the vaccinator Amelia Andre at farmer Joaquina Ali Trigo's house. Photo credit: Rosa Costa

With greater household chicken consumption, there is usually also increased chicken sales by the household, which demonstrates the positive effect of vaccination not just on food security, but also on household income. Monitoring and evaluation of outcome indicators conducted in the final vaccination campaign (March 2017) for this project show promising results.

The program has largely exceeded its target number of household beneficiaries and chickens vaccinated in both Provinces. Some challenges have been experienced in Sofala Province with reaching the target number of beneficiaries though. This was in part due to political instability in the region and in part due to late delivery of campaign bicycles which meant that vaccinators could not cover large distances in a day to visit households. Despite this, the target number of chickens vaccinated has been exceeded at 106% (144,149 chickens of the 135,000 planned).

Investigating the contribution of chickens to food and nutrition security: Nkuku4U in Tanzania and Zambia enters its 4th year

KYEEMA supports the Australian Centre for International Agricultural Research-funded program in Tanzania and Zambia which is implemented by the University of Sydney and aims to strengthen food and nutrition security through family poultry and crop integration.

KYEEMA Board director and founding member, Associate Professor Robyn Alders AO, is the project leader. The 7th project coordination committee meeting was held in May in Dar es Salaam, Tanzania. Project staff are committed, relationships are solidly grounded, activities implemented have ongoing and considerable dedication from the leadership at all levels and initial results from the field are promising. This has been achieved, despite the challenges in projects of this nature, as collaborator Professor Richard Kock from the Royal Veterinary College explains:

“Projects of this nature in Africa are notoriously difficult to go beyond rhetoric to real impact. Seemingly, the bigger the project the more diluted the effect. This is not surprising given the very real problems project staff and communities face, particularly women.”

The project continues to show how important chickens for many rural African households, and how sustainable and simple village poultry systems are – with a low ecological footprint and with the potential for low-cost interventions, like Newcastle disease vaccination, to improve production.



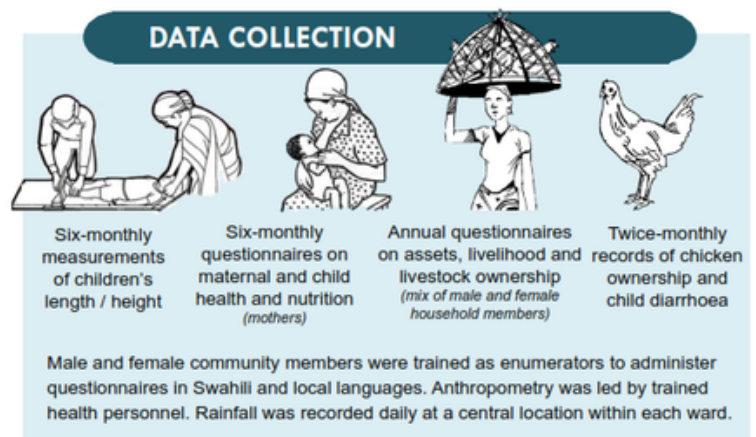
Participants at the first of two project coordinating committee meetings for 2017, with representatives from across sectors and countries. Photo credit: University of Sydney.

There has been a genuine concern amongst some research groups that contact with poultry manure may contribute to diarrhoea, enteropathy and restricted growth in children – common problems in many rural communities. Investigations on this project suggest otherwise. Veterinarian and PhD candidate Dr Julia de Bruyn from the University of Sydney explains her research findings to date:

“Current findings suggest a positive association between chicken ownership and improved growth, even when poultry are kept within human dwellings, and no increased risk of diarrhoea amongst children. Ongoing research is exploring the contributions of chickens in times of rainfall variability.”

Other researchers on the project, from Tanzania and the UK, are looking into the prevalence of the poultry-associated bacteria *Salmonella* and *Campylobacter* which are common causes of diarrhoea in humans globally, but about which little is known in rural extensive poultry systems. Findings to date suggest the bacteria are present but at a low prevalence, suggesting the risk from family poultry may be low compared to imported poultry products. The next stage is to link the source to disease incidence. Qualitative research into rural nutrition on the project has found the potential for wild foods to complement the small-scale poultry system, with similar low levels of agricultural input and technology. KYEEMA’s social anthropology consultant, Dr Brigitte Bagnol explains the value of qualitative methods within the project’s mixed methods approach:

“Qualitative methods are flexible and allow participants to share information on a wide range of topics and to understand the ‘why, when, where, with whom’ etc. They also allow complex ideas relating to a specific topic to be more quickly grasped. They enable in-depth information about people’s practices, attitudes and knowledge to be gathered.”



A snapshot of Dr de Bruyn’s research poster, presented at the inaugural Planetary Health / GeoHealth Annual Meeting in April 2017, which explains her data collection methods.

We look forward to supporting this project until its completion in December 2018 and sharing information about impact for communities in Tanzania and Zambia.

For more information on the project [click here](#).

Or to read papers from our KYEEMA associated on the project [click here](#).

Did you know?

The rates of childhood stunting in the population is still estimated to be 42% and 45% in Tanzania and Zambia respectively.

The Palladium Group Supports the "Happy Chicken Project" in Fiji

In February 2017 the Palladium Group provided funds to KYEEMA to support the “Happy Chicken” program at the Sustainable Livelihoods Farm in Fiji. The project is being implemented by the NGO “Sustainable Environmental Livelihoods for the Future (SELF)” with support from KYEEMA in Brisbane. Poultry ranks second to seafood as the most important protein source for South Pacific Nations. However, the industry is dominated by commercial factory-type farms completely reliant on New Zealand breeding farms for broiler and layer chicks. The imported chickens are poorly suited to village conditions, require expensive imported feeds to ensure productivity, and do not breed well in local conditions, which maintains dependence. Localizing the industry, at least to meet rural community demand, will increase both food security and prosperity. The project aims to meet the increased demand for climate-adapted chickens for cyclone rehabilitation and food security in South Pacific communities. Village farmers have well-adapted local breeds, but they are not very productive. Flocks are small and chicks are almost never available for sale. SELF has succeeded in crossing imported layers with local roosters to produce chickens that are both productive and well adapted to village-level and free range conditions; able to thrive by foraging on locally available foods. Continued breeding work will further improve the productivity of these local breeds.



Austin Bowden-Kerby, the founder of SELF, with workshop participants from the far interior of Naitasiri Province in Fiji.

An upgraded hatchery will be established for SELF's new breeding facility to increase production to meet the immense and urgent needs across a wide regional area. SELF has hatched and distributed over 20,000 chicks to poor rural people across Fiji since 2013. With the additional funding, SELF hopes to increase production to 10,000 chicks per year. SELF also intends to build capacity for breeding climate-adapted chickens at community level, in order to build self-sufficiency and longer term food security. The project will hold training workshops to stress the importance of flock diversity and a long term strategy of self-sufficiency through the careful selection of second generation roosters. Communities will also be trained in improved poultry husbandry including protection of chicks from predators, proper housing for the adults (getting them out of the trees), and a proper high-protein diet using locally available feeds, including moringa, leucaena, coconut, and composted garden waste.

The SELF Sustainable Livelihoods farm is well established and already serves as a regional training centre for the conservation and development of climate-adapted indigenous chickens. The farm can house up to 30 students for workshops, targeting NGO and aid personnel from Fiji and the region, as well as community trainees, with demonstrations of free-range poultry systems for chickens, ducks, and geese, farm-based poultry feed production systems, duck/fish pond systems, and diverse farming and permaculture methods.



His recent TED talk on preservation of coral shows he is also a man of many talents. [Click here to view it.](#) The Palladium funds will also support the testing required to get biosecurity certification. This will ensure that chicks supplied both regionally and locally are disease-free. Thus far biosecurity tests have indicated that the SELF flocks are free of all communicable poultry diseases.

SELF also supports rural women, who are mostly responsible for managing the household chickens. Inclusion of disadvantaged peoples is also ongoing in the Sigatoka valley, with SELF targeting poor landless families near the Sustainable Livelihoods Farm.

Families are trained, given chicks and starter feed, and lent a rearing cage. The Happy Chickens project is a strategic intervention at a critically important time, due to the impact of climate change and increased frequency of extreme cyclones. The project builds self-sufficient, sustainable and resilient communities, and is based on sharing knowledge and best practice.

The project is based on an innovative strategy and is the leading edge in localisation of a major import-dependent industry in Fiji and the South Pacific, presently dominated by corporate farming and completely reliant on imported feeds and imported chicks.

The KYEEMA connection in Malawi: the story of Australian veterinarian Pat Boland

Dr Pat Boland is the founder of the Rural Poultry Centre (RPC) in Malawi, and a recent addition to the KYEEMA Board of Directors. Originally a government veterinarian in Australia, he worked for the Malawi government in the early 1990s, raising his three children there, and then returned in recent times as a volunteer for the Small Scale Livestock and Livelihood Program (SSLLP). He saw the need to focus efforts on supporting village poultry farmers, particularly through control of Newcastle disease (ND). So in 2013, he continued the volunteer experience by setting up the RPC. The RPC has a Board of Trustees comprising people from the Malawi government, universities and NGOs, and is managed by a small working team of Pat as interim Director, and Mr Luka Tumbwe - a poultry expert now retired after a long career with the Malawi government.



Mr Tumbwe - the jovial other half of the RPC team. Their office at the Central Veterinary Laboratory (CVL) in Lilongwe is hosted by the Malawian government, which is a huge support to the organisation. In return, RPC offers support to staff at the CVL who produce the I-2 ND vaccine. RPC also collaborates with a variety of organisations including SSLLP, InterAide, Land O-Lakes, Concern Worldwide and Peace Corps, who are all working with small scale farmers. RPC's first significant work was in Ntichisi district, funded with generous support from GRM (now Palladium). The project trained village vaccinators in acquiring and distributing the vaccine as a business, as well as training them in improved poultry husbandry so they can disseminate this knowledge to farmers as a value-added service. To date, RPC has trained over 60 community based vaccinators, resulting in the vaccination of over 100,000 birds. They are now looking to expand their activities to Mchinji district and are investigating running an ethical tourism fundraising venture which would allow Australians to go on safari in Malawi and meet the program beneficiaries at the same time. On a recent trip to Malawi, I had the pleasure of finally meeting Pat. He quickly became "Uncle Pat" to my 2yr old daughter. With a gentle and laid back, yet conscientious and no-nonsense nature, Pat is well respected here. I think this is a result of his unique personality and is helped by the fact that he speaks Chichewa fluently and shares the distinctive Malawian sense of humour. He is active in the community and in the Malawi Veterinary Association as well as the Government's Animal Health Committee. His attitude towards the work of RPC is that 1) everything that they do must be done with the goal of setting local people up to continue on the work after the support is no longer there; and 2) relationships and advocacy are critical.

KYEEMA is honoured to have Pat on our Board, pushing our vision and mission forward in Malawi – he certainly is a man that lives and breathes our values.

People like Pat, with long term experience in and commitment to communities, are invaluable. And indeed, it is our people that make KYEEMA stand out from the crowd.



Pat shakes hands with a local chicken farmer outside his khola (chicken house). The owner is explaining rather poetically the impact of a growing flock on his livelihood and nutrition - "money (from poultry) is dancing business". In this photo they share a laugh about the fact that although the community vaccinator (lady in red hat) has encouraged him to use chicken manure for improving his crop production, he is too lazy to utilize it in this way.



Pat in the laboratory with Mr Precious Dzimbiri, chief technician for the I-2 ND vaccine production unit at Central Veterinary Laboratory (CVL) in Lilongwe



Pat and Luka get ready at the RPC office to meet and follow up with village vaccinators and distribute vaccine;

Pat is the brains behind our latest #chickens4Africa photography competition campaign which has raised over AUD 4,000 for Malawi farmers and village animal health workers. It has also helped advocate for the work of Kyeema Foundation to a broader Australian backyard chicken-keeping audience.



Pat and Luka in a follow up meeting village vaccinators from Kalira EPA – each vaccinator gives an update on their activities and any challenges they have experienced

Field report and photos by Eliza Smith, Communications Manager at KYEEMA.

Get up to date on what's happening at the RPC Malawi by [clicking here](#)

Did you know?

At least 2,400 rural families covering an estimated 15,000 rural poultry are benefiting from KYEEMA's project in Malawi.

61 community based poultry technicians and 8 field coordinators from 27 village groups throughout the Ntchisi district in Malawi, have been trained in vaccination delivery and poultry production.

[Click here to read more](#)