



ISSUE1: MAY 2017

Interview with Dr Rosa Costa

Interview with Dr Tarni Cooper

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Illuminating a New Partnership for Empowerment: Solar Buddy

Did you know?

Our key program is the IRPC.



KYEEMA transitions in the Chinese year of the rooster

According to the traditional solar calendar, Chinese New Year or 'Start of Spring' starts today. It is set to coincide with the down time just before a new year of farm work begins, as a time of preparation. Chinese traditionally celebrated the start of a new year of farm work, and wished/prayed for a good harvest. This has now evolved into celebrating the start of a new business year and wishing for success in various vocations. That is just what we are doing here at KYEEMA – preparing for launching our 2017 work plan and setting in place what we need to achieve our new mission: supporting local partnerships and use of local resources to improve living standards of vulnerable communities.

It is also the special year of the rooster. Indeed it bodes well for the KYEEMA Foundation. The rooster symbolises hard work, resourcefulness, courage, and talent. That is just how we see ourselves – both stakeholders and staff. We hope this will be the year that our combined qualities shine in aid of improving food security, building socioeconomic safety nets and empowering women in some of the most vulnerable places on the planet.

Watch this space and take the journey with us.

"Use language that builds enthusiasm and support" – Dr Rosa Costa welcomes 2017 as a year of new opportunities and collaborations for KYEEMA

One of our favourite leaders here at KYEEMA Foundation is the prominent Mozambiquan veterinary scientist Dr Rosa Costa – executive director of the board and regional manager for our operations in Southern Africa. She has been with us from the early days of the foundation, and is critical to our ongoing work and relationships with stakeholders in Mozambique. She reflects on how she came to be working in the field of agriculture for nutrition and health and what the challenges and opportunities are for our new vision going forward in 2017 – 'Empowerment of vulnerable communities'. See her latest research paper in the Journal of Veterinary Medicine about Mycoplasma disease prevalence in community poultry flocks



Actually, I did not do the course of veterinary medicine by own option. I wanted to do medicine. But after independence, in 1975, there was a massive exodus of the Portuguese people who left Mozambique resulting in a dearth of capable administrators and skilled labour in almost all sectors from production to service activities. In 1977, all the students who were in the pre-university level were called to be trained in areas predefined by the government as priority, and I was sent to the veterinary course. This generation, was called the 8th March Generation, ensured the continuity of social and economic activity after the National Independence of Mozambique.



Dr Rosa Costa

Did you know?

KYEEMA's activities contribute to 11 of the 17 United Nation's sustainable development goals.

Click here to access our strategic charter!



What do you think is an important skill for women leaders?

In my opinion, especially when dealing with groups of people, skills like team building, building consensus, mediating conflict, planning and monitoring staff activities and identifying problems and their solutions are some of the abilities that women leaders need to have to build the confidence of others. But most of all good communicators. We need to use a language that builds enthusiasm and support.



Veterinary Masters student and young development professional Ana Zandamela is mentored by Dr Costa and supported by the KYEEMA Foundation. She is a co-author on Dr Costa's latest publication and her work focuses on determining disease burden in village flocks.

What do you see the most significant challenge facing communities you work with in 2017?

Mozambique continues to face serious challenges of food insecurity. Nearly 60% of the 24.4 million Mozambicans live in the rural areas, which gather more than 80% of the poor. Mozambique is ranked 184th out of 187 countries in the UNDP Human Development Report, and according to the World Bank, nearly 54% of the population lives under the national poverty line. Main challenges faced by communities we work with relate to low agricultural productivity, and traditional farming methods. They have few alternatives to build their income outside agriculture, which makes them particularly vulnerable in case of scarcity and natural disasters.

What are you looking forward to this year?

I am looking forward to pursuing new funding partnerships to continue engaging with farmers, local authorities and government authorities. In this way, we will increase the health and productivity of village poultry, which will go a long way to securing food production systems here in Mozambique.

"Australia has a lot to give and a lot to learn" - Dr Tarni Cooper hopes that in 2017 the issues of food security become better known.

It's a wonderful pleasure to introduce a new associate member of the Board at KYEEMA Foundation. Dr Tarni Cooper is a veterinarian with experience working in smallholder livestock (Food Security and One Health) research for development (R4D) projects in East Africa and Vietnam. She is currently completing her PhD at the University of Queensland, in collaboration with the International Livestock Research Institute. Tarni is the Chair, Brisbane Chapter of the Communication for Development Global Network and serves both clinically and on the Steering Committee of Pets in the Park Brisbane.

In an interview earlier this year, Tarni shared what she is investigating through her research, her experience at the One Health Ecohealth Conference in Melbourne late last year and the vision she has for KYEEMA Foundation and others like ours working for a more equitable and food secure future – both globally and right here in our backyard.



Dr Tarni Cooper and colleagues

So, what is your PhD thesis all about? Give us the 20 second pitch!

Antimicrobial resistance (AMR), which includes an increased ability for microbes such as bacteria to evade antibiotics, is a threat to human, animal and environmental health. AMR has been labelled one of the most pressing global health issues of our time.

My research seeks to understand the dynamics of these interacting challenges, to explore livelihood-positive ways to improve antimicrobial stewardship and resilience in smallholder communities

Overuse and inappropriate use of AMs in humans and animals are the biggest drivers accelerating AMR. AMs have played an important role in improving health and increasing production output of livestock for the last half century.

Deaths attributable to antimicrobial resistance every year by 2050



Source: Review on Antimicrobial Resistance 2014

High income countries have had some success in improving the stewardship of AMs through tougher policies and regulation. In low and middle income countries (LMICs), the situation is much more complex. Policy-makers face more challenges in implementation, as AMs can often be bought over-the-counter and from a plethora of sources. Also, the livelihoods of family farmers in LMICs are heavily contingent on the health and production output of their animals. If policies were successful, the relative cost of reducing AM use could be much larger for these farmers than resource-secure

what about your work are you most looking forward to this year?

In the short term, I am looking forward to receiving the transcribed and translated data from my interviews and focus group discussions and seeing what they reveal. Later in the year I'll be returning to Vietnam to build on those findings, gaining a deeper understanding of the communities and the role AMs play in their lives. Field work is definitely a major highlight of my work; I am so fortunate to spend time learning about rural communities from the people within them.

You recently attended the OHEH 2016 conference. I hear it was a great few days. Can you share with us what work you were presenting?

I presented our International Livestock Research Institute (ILRI) poster on One Health research ethics. We argue that human research ethics has an important role in animal and environmental research We need to be sure that for example, farmers really understand why we are conducting research, what we are going to do and the risks and benefits to them, before they consent to research with their livestock. It is also critical that consent is truly given freely, not under any external influence. The challenges in cross-cultural research ethics are many. ILRI has a human research ethics committee and we outlined several studies where we applied the universal ethical principles of Respect for Persons, Justice and Beneficence in smallholder livestock projects. I thoroughly enjoyed the conversations I had with practitioners from all over the world, regarding challenges and opportunities they've found in working with the humans behind their One Health research.

In your opinion, what was the highlight of the conference?

There were too many highlights to choose one; I spent my time running between sessions, wanting to soak up knowledge from other disciplines, which is what One Health and Ecohealth is all about, building understanding and collaboration. It was great to see my ILRI colleague, Dr Hung Nguyen present a special supplement of the International Journal of Public Health. Dr Nguyen also received an award for significant early career contributions to the field of Ecohealth

As a young member of KYEEMA Foundation's burgeoning team, can you share with us your personal vision for the work we do?

I look forward to the KYEEMA Foundation, along with other groups working on food security being better known in Australia. Internationally we are known as experts in our field of village chicken health and have made a very tangible difference for thousands of people. In Australia, it can be very easy to take our food and nutrition security for granted but we are seeing increased problems, especially in nutritional deficiencies and environmental sustainability. I look forward to KYEEMA's future role in raising awareness around food and nutrition security in Australia. We can share decades of wisdom from farmers in Africa and Asia, about sustainable farming and growing our own food. Australia has a lot to give and to learn.

"When we work with animals and the environment, we need to work with their custodians in an ethical manner."

Farewell to a great champion of international rural poultry development

It is with great sadness that we advise of the passing of Emeritus Professor Peter Spradbrow AM, a founding figure of the KYEEMA Foundation.

Condolences and tributes have come in from people working with village chickens all over the globe, recognising the immense contribution Peter made to improving rural livelihoods, particularly through his work on Newcastle disease.

Peter was a founding member of the KYEEMA Foundation and the International Rural Poultry Centre (IRPC) and remained on the Board of KYEEMA until December last year, when he felt it was time he retired. His contributions to KYEEMA and the IRPC have been invaluable and will be greatly missed.

For the best part of his long and outstanding career in the University of Queensland's School of Veterinary Science, Peter led research that resulted in the development of thermotolerant Newcastle disease vaccines. These vaccines, suitable for protecting village chickens where refrigeration is not available, continue to be a highly-valued contribution to Australia's aid and development. With support from the Australian Centre for International Agricultural Research (ACIAR) and the Department of Foreign Affairs and Trade, Peter's work went beyond the vaccines, resulting in a sustainable Newcastle disease control model that has helped to improve village poultry production in countries throughout Asia and Africa. This model continues to alleviate poverty for the most vulnerable people in resource-poor regions and serves as a platform for improving Food Security.

Peter had a vision for the local production of thermotolerant ND vaccines specifically for the village chicken/family poultry sector. With his guidance, this is now a reality in many countries across Asia and Africa. The I-2 Master seed he developed is still held at the University of Queensland and is made available to governments worldwide at no cost in order for developing countries to produce vaccines locally and disseminated through community driven programs.

Peter's work and many contributions have been recognised by numerous awards, including, in 1995, the Clunies Ross Medal for Science and Technology,

Member of the Order of Australia, the AIDAB Award for Excellence in Overseas Aid, the Kesteven Medal of the Australian Veterinary Association and the Australian Poultry Award in 2005.

Peter was an inspiration to many. Students and young veterinary professionals, including those now affiliated with KYEEMA, will be forever grateful for the knowledge and wisdom he was so eager to impart to them. Many who experienced his tutelage and storytelling admire his gentle spirit, great wit and integrity.



From left to right:
Dr Quintino Lobo (Mozambique)
Dr Halifa Msami (Tanzania)
Dr Berhane Demeke (Ethiopia)
Emeritus Prof Peter Spadbrow (Australia)
Prof Philemon Wambura (Tanzania)
Dr Joseph Awuni (Ghana)

As an organisation, we will strive to continue supporting local partnerships and use of local resources to improve the living standards of vulnerable communities with the same compassion and practicality he did.

We mourn his loss and recognise the great contribution he has made to empowering communities. Indeed, because of elders like him, we see the future as bright.

Did you know?

Consuming an egg a day can prevent childhood stunting, as found by researchers in the journal Paediatrics

Illuminating a new partnership for empowerment

We are very pleased to announce a new partnership with Solar Buddy, a Queensland born NGO that aims to end the devastating cycle of energy poverty for marginalised communities across the world. They are achieving this by educating Australian children about energy poverty, renewable energy and global citizenship and providing safe, reliable, effective and innovative solar energy solutions to communities who suffer from the limiting effects of energy poverty. Children in Australia learn the technology behind small solar powered light units and send shipments of the lights to beneficiary schools in developing countries along with personal letters from child to child. In this way, a learning exchange connects communities across the globe, while providing assistance and aid.

In partnership with the Ministry of Education in Ethiopia, KYEEMA will facilitate the delivery and distribution of solar lights to schools in 2017. Battery replacements will also take place when required.

To gain an understanding of the impact of the lights on children's lives, we visited a program at Katuuso Primary and Vocational School in Mpigi District Uganda run through the Australian NGO School for Life Foundation. The students in this community live in mud huts with no access to electricity or running water. At night, they use kerosene lamps to study and do homework, often leading to accidents and burns as well as exposure to toxic fumes. Three months ago, Gib Gate School in NSW sent the first lot of 30 Solar Buddy lights to students in Primary 7 at the school.

Mama Flavia, the head cook at the school and parent of a Primary 7 student explained that her son is using the light at home in the nights to get sufficient homework done and she herself has also found the light useful for doing her own evening activities.

It was also motivating to see the school's commitment to lowering its ecological impact through solar powered units to the whole school, pit latrines built with local materials to minimise water usage, ISSB bricks that reduce deforestation through the process of pressing and drying rather than firing bricks, use of organic and local produce to support the school feeding and animal husbandry programs, as well as biogas digesters to manage and utilize livestock effluent.

As we move forward with our new strategic plan in 2017 we hope to continue to partner with organisations like Solar Buddy to complement our village poultry development work with rural innovations that deliver research, training and impact for improved livelihoods and community empowerment. Indeed, a new bright dawn arises.

Did you know?

One egg contains 315kj of energy and is high in quality protein and vitamins A, B12, K, Choline and minerals

