GALVmed

Protecting Livestock – Saving Human Life

newsletter

April 2012

GALVmed is a not-for-profit global alliance of public, private and government partners. By making livestock vaccines, diagnostics and medicines accessible and affordable to the millions for whom livestock is a lifeline, GALVmed is *protecting livestock and saving human life*. It is currently funded by the Bill & Melinda Gates Foundation and the UK Government's Department for International Development (DFID).

In this issue:

Gates Foundation and DFID award GALVmed additional US$ 51 million:
In Rome on 23 February 2012 Bill Gates announced further support to GALVmed. The Foundation has awarded a further US$ 41 million grant to support the alliance's work. At the same time DFID announced further support through a US$10 million grant. The two grants together will enable GALVmed to implement phase two of its *Protecting livestock, saving human life* project.

GALVmed's business plans and funding explained:
GALVmed's objectives, aspirations and plans are set out in its business plan. The organisation has just come to the end of its current 5-year business plan and is about to embark on a new one that runs until 2017.

Augmenting the livestock evidence-base:
The GALVmed Impetus Strategy Paper and four papers on livestock economics will augment the livestock evidence base and should inform future policy setting.

CBPP experts meet in Nairobi to discuss antimicrobial treatment:
GALVmed organised a meeting in January 2012 at which experts discussed the advantages and disadvantages of treating CBPP cases with antimicrobial drugs. Although this approach is controversial and not currently permitted under official policies, new developments prompted GALVmed to convene the meeting to review the evidence and plan a way forward.

Experts agree strategic stock of Rift Valley fever vaccine is feasible:
In December 2011, 15 experts from a range of public and private sector organisations assembled in Pretoria at the invitation of GALVmed to discuss the technical feasibility of a strategic stock of Rift Valley fever (RVF) vaccine.

ECF vaccine approved for use in Kenyan dairy cattle:
Kenyan dairy farmers received a boost recently with the announcement from the Director of Veterinary Services that the East Coast fever (Muguga cocktail) vaccine is now approved for use in the nation's dairy cattle. The Muguga cocktail is a live vaccine produced from three different stocks of ECF parasites which were originally isolated in three different parts of East Africa.

Regional ECF Infection and Treatment Method Task Force fulfils its purpose and is dissolved:
In view of the 'incredible success' achieved on registration and commercialisation of production and distribution of the ECF (Muguga cocktail) vaccine, the regional task force was formally dissolved at its 5th and final meeting in Malawi in December 2011.

99% of Kenya dairy farmers want new ECF vaccine:
The recent news that the ECF Muguga cocktail vaccine has been cleared for use in Kenya's dairy sector prompted GALVmed to commission an opinion poll. High levels of mobile phone ownership amongst farmers in Kenya meant that GALVmed was able to collect information on attitudes and behaviour very quickly.

Award-winning researchers aim to develop new tryps drugs and diagnostics:
GALVmed has recently signed two new research agreements under its DFID-funded trypanosomosis project. The agreements, with the Drug Discovery Unit, College of Life Sciences, University of Dundee, Scotland cover research to develop new drugs for the treatment and possible prevention of animal African trypanosomosis in cattle, and also a pen-side diagnostic tool.

Harmonisation of vaccine registration:
Harmonisation of veterinary vaccine registration came a step closer as a result of two recent workshops held in East and West Africa. Both were facilitated by GALVmed working closely with partners the World Organisation for Animal Health (OIE) and the African Union-Pan African Veterinary Vaccine Centre (AU-PANVAC).

The *Re:Search* initiative opens up new leads for the GALVmed:
GALVmed is the first animal health organisation to be accepted as member of the *Re:Search* consortium. This will help GALVmed exploit advances in medical science for neglected animal diseases.

GALVmed celebrates International Women's Day with an inspiring story of a livelihood transformed. Babita Danwar from Nepal used to break rocks to earn her living; now, thanks to improved survival of her chickens due to vaccination against Newcastle disease, she is beginning to earn a living from her poultry and has ambitious plans to expand her poultry enterprise. Her rock breaking days are over.

High level meetings in India and Nepal help cement GALVmed's South Asia strategy:
GALVmed's Narayan Hegde and Hameed Nuru recently met the Indian animal husbandry commissioner and the Nepalese minister of agriculture and cooperatives. Feedback from these high-level government officials supplemented other information obtained from the ground and through the South Asia regional advisory committee.

GALVmed meets the veterinary sector in India:
Hameed Nuru also attended a workshop in Delhi on strengthening the veterinary profession in India. This gave GALVmed an insight into the way that the veterinary profession is developing in India, especially the roles of vets and paravets.

Newsletter circulation exceeds 2,000 subscribers:
The number of people receiving the GALVmed newsletter each month reached 2,013 subscribers in February 2012.

Team changes:
GALVmed is delighted to announce two new appointments: Simiyu Gaitano, the new monitoring and evaluation manager, and Mame Nahe Diouf, who is joining the animal African trypanosomosis team. GALVmed says goodbye to Randip Basra and Charlotte Nkuna.

The GALVmed team under the microscope:
Simiyu Gaitano and Mame Nahe Diouf talk about their roles in the organisations and tell us a little about themselves.

Last Word...
Interim CEO Peter Wells talks about his role at this time of change, how the private sector is essential for sustainable delivery and the need for increased focus and prioritisation.

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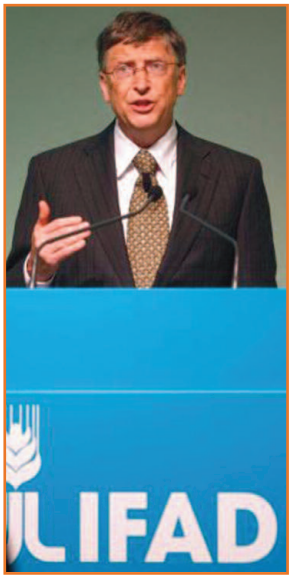
Gates Foundation and DFID award GALVmed additional US$ 51 million



GALVmed has been awarded additional funding of over £31.2million ($51million) from the Bill & Melinda Gates Foundation and the Department for International Development (DFID).

The 5-year funding announcement was made on 23 February 2012 by Bill Gates (left) at the 35th session of the International Fund for Agricultural Development (IFAD)'s Governing Council in Rome, Italy

In Rome on 23 February 2012 Bill Gates announced further support to GALVmed. The Bill & Melinda Gates Foundation has awarded a further US$ 41 million grant to support the alliances work. At the same time DFID announced further support through a US$10 million grant. The two grants together will enable GALVmed to implement phase two of its Protecting livestock, saving human life project.

"If you care about the poorest, you care about agriculture," said Mr Gates, co-chair of the Bill & Melinda Gates Foundation. *"Investments in agriculture are the best weapons against hunger and poverty, and they have made life better for billions of people."*

The UK international development secretary, Andrew Mitchell, added: *"GALVmed has pioneered work to identify vaccines, medicine and early diagnostic solutions to tackle some of the most devastating livestock diseases that affect poor farmers in the developing world – but that work is of no use if these solutions just sit on the shelf. This new funding from the British taxpayer and from the Bill and Melinda Gates Foundation will ensure that these innovative solutions are produced at scale and that they can get to those who need them most, at an affordable price."*

These grants will enable GALVmed to start work on phase two of its *Protecting Livestock – Saving Human Life* project.

GALVmed's Interim CEO, Peter Wells commented: *"We are delighted that this funding from the Bill and Melinda Gates Foundation and DFID will enable the GALVmed alliance to work with partners to scale-up access to livestock vaccines, medicines and diagnostics for resource-poor people."*

The diseases focus will be Newcastle disease, Rift Valley fever, contagious bovine pleuropneumonia, East Coast fever and contagious caprine pleuropneumonia. Further work on porcine cysticercosis has been funded exclusively by DFID.

The grant awarded to GALVmed was one of several totalling nearly US$ 200 million that was announced in Rome. A press release issued by the Bill & Melinda Gates Foundation explained this included grants such as that made to GALVmed's which were re-investment in "projects that are already producing great results for farmers" in addition to a number of new grants. This brings the foundation's investment to benefit smallholder farmers to more than US$2 billion since its agriculture program began in 2006.

GALVmed's business plans and funding explained

GALVmed's objectives, aspirations and plans are set out in its business plan. The organisation has just come to the end of its current 5-year business plan and is about to embark on a new one that runs until 2017.

The resources needed to implement the business plan are provided through grants from various investors and also some in-kind support. The grants are contracts: GALVmed agrees to aim to achieve a set of objectives, including passing a series of carefully chosen sequential milestones that are designed to show that the organisation is on track to deliver on its promises; in exchange the investors agree to provide the necessary funding.

For the 2006 – 2011 business plan the majority of funding came from two interlinked grants: the Bill & Melinda Gates Foundation and the UK Department for International Development (DFID) together provided grants totalling £16.5 million[1] (the Bill & Melinda Gates Foundation US$22.5 million; DFID £3 million). This funding was to implement a programme called *Protecting Livestock – Saving Human Life*[2] (PLSHL), which started in August 2008 with most activities completed by December 2011.

PLSHL consisted of nine different projects: seven of these were disease-focused and two cross cutting; for each project a set of objectives and milestones were specified. The primary focus of PLSHL was on Rift Valley fever (RVF), East Coast fever (ECF), porcine cysticercosis and Newcastle disease, but it also supported some work on contagious bovine pleuropneumonia (CBPP), contagious caprine pleuropneumonia (CCPP) and peste des petits ruminants (PPR). The additional cross-cutting activities focused on regulatory harmonisation and intellectual property issues.

While PLSHL represented the lion's share of this business plan, it did not account for all of GALVmed's activities during this period. GALVmed also secured two additional grants: €6.9 million for the VACNADA project and £8 million for the *animal African trypanosomosis project* (the tryps project for short). GALVmed had also previously received start-up grants from DFID totalling £2.9 million.

1 To avoid the introduction of errors associated with exchange rate fluctuations, all grants are expressed in the currency in which they were originally denominated.

2 *Protecting Livestock – Saving Human Life* has also been adopted by GALVmed as its overall vision statement.

The VACNADA (*Vaccines for Control of Neglected Animal Diseases in Africa*) project, the implementation phase of which ran from the beginning of 2010 to the end of 2011, was funded by the European Commission through AU-IBAR. It focused on capacity building of national vaccine producing labs in eight African countries tackling four priority diseases: RVF, CBPP, CCPP and Newcastle disease. The February 2012 GALVmed newsletter reviewed the impact of this grant.

The tryps project was funded by DFID – the first major investment by DFID in this disease for over a decade. The grant was designed to enable GALVmed to make a start on an ambitious programme of work which eventually aims to develop new drugs, diagnostics and perhaps even a vaccine for animal African trypanosomosis. The initial DFID grant was about 40% of the total amount needed; an important activity was, and remains, to mobilise the balance of the funds.

In addition to funding activities that specifically relate to the objectives laid out in the grant agreements, other functions within GALVmed need to be financed, such as management, communication and the range of expenses which are incurred in running any organisation, such as paying rent and utility bills. The proportion of grants that can be allocated to overheads varies between the various awarding bodies.

Peter Wells, interim CEO, explains: *"An important component of our new business plan is PLSHL-2, once again funded by the Bill & Melinda Gates Foundation and DFID. The main disease targets are again RVF, ECF, CCPP, CBPP and Newcastle disease. The Gates Foundation no longer funds work on pigs and so the porcine cysticercosis work is being funded from the DFID grant.*

The Bill & Melinda Gates Foundation and DFID grant to GALVmed for PLSHL-2 is for US$ 51 million over 5 years.

PLSHL-2 makes up around 60% of the new GALVmed business plan. Our fund raising team is therefore busy securing the additional funding needed to implement the full plan".

Peter goes on to explain the difference in focus of the new and previous business plans: *"The 2006 – 2011 business plan addressed the establishment of the organisation, recruitment of staff and partners, initiating the various activities, working towards proof-of-concept and generally getting the GALVmed show on the road. The focus of the new business plan shifts to delivery at scale. This is graphically illustrated in the targets that we have been set for PLSHL-2 which include to:*

- *vaccinate 150,000 animals against Rift Valley fever*
- *vaccinate at least 2.5 million cattle against ECF*
- *deliver 15 million doses of Newcastle disease vaccine*

To date GALVmed has secured grants totalling approximately US$ 100 million to realize our vision: Protecting Livestock – Saving Human Life. I am very grateful to all our funders, partners and other supporters who have made this possible."

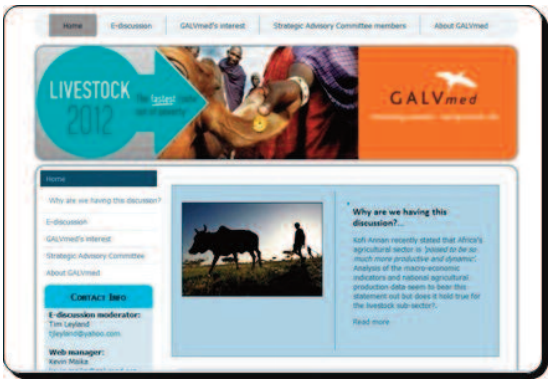
Augmenting the livestock evidence-base

GALVmed's approach to advocacy is based on making available evidence which others can then use to guide their decision making processes. In keeping with this philosophy, GALVmed has commissioned a number of papers which are intended to augment the African livestock evidence-base. These include:

- a major new review written by Tim Leyland, a livestock and animal health specialist, titled *A Path to Prosperity: New Directions for African Livestock. The Impetus Strategy Paper.*
- a series of four economics paper being written by a team (led by Jonathan Rushton) from the Royal Veterinary College, London together with colleagues from the International Livestock Research Institute, Nairobi (led by Tom Randolph) designed to address the question: Africa, economics, and poverty – what do livestock add and how can this contribution be improved? The 4 papers are:
  - Paper 1: Is Africa different? Economics of the livestock sector
  - Paper 2: Role of livestock
  - Paper 3: Economics of the poor
  - Paper 4: Livestock as a fast route out of poverty

The Impetus Strategy Paper, which currently exists as an advanced draft, has been written by Tim Leyland with input from many organisations and individuals. To enable the paper to be further strengthened an e-discussion is being run between early March and early May 2012, which is being moderated by Tim.

Tim explains: *"Kofi Annan recently stated that Africa's agricultural sector is 'poised to be so much more productive and dynamic'. Analysis of the macro-economic indicators and national agricultural production data seem to bear this statement out but does it hold true for the livestock sub-sector? The Impetus Strategy Paper explores the state of Africa's livestock sector and tries to identify initiatives or areas that need investment in terms of research, funding, new policies and regulations, if the livestock sector is to increase the prosperity of the majority of livestock farmers in sub-Saharan Africa.*



GALVmed's consultation website for the Impetus Strategy Paper

The objective of the e-discussion is to broaden the debate and gather opinion and ideas on how the Impetus Strategy paper can be improved. Constructive criticism, suggestions and supporting statements will be valued and contribution of new evidence and case studies will be encouraged."

To make the e-discussion easier for participants, the full paper has been broken down into four key topics, each of which is being considered in turn. Each discussion topic has been summarised and a series of questions have been posed to stimulate discussion.

To take part in the e-discussion, please register at **www.livestock2012.com**

Registration will allow participating individuals to post comments, share documents and case studies and to see the comments and posting of others.

The timetable and key topics for the e-discussion are as follows:

- 14 – 27 March: The state of Africa's livestock sector
- 28 March – 14 April: Improving animal health services for the rural farmers
- 15 – 28 April: Feeding Africa's ruminants for food security and prosperity
- 29 April – 16 May: Small livestock farmers increasing their income – trade and market access.

CBPP experts meet in Nairobi to discuss antimicrobial treatment

In January 2012, GALVmed brought together a group of 27 experts from academia, research organisations, regional and international bodies, governments and the pharmaceutical industry in Africa and beyond to discuss a controversial subject – the use of antimicrobials to treat the cattle disease contagious bovine pleuropneumonia (CBPP).

CBPP causes significant economic losses in Africa and its control is challenging (see box). Currently the use of use of antibiotics to treat CBPP is not supported by official policies which prescribe vaccination, quarantine and movement restrictions. However, reliance on these methods has proven ineffective over recent decades: lack of enforcement of movement controls of potentially infected cattle has, since 1990, seen the disease spread from historic foci in Kenya; now most countries in East and Central Africa are affected. Also, many cattle keepers use antibiotics anyway, but with the lack of proper understanding and guidelines, the problem might be worsened.

Use of antibiotics has been discouraged because of the belief that it might promote the carrier state; that is cattle which continue to shed the CBPP organism after they have recovered, thereby contributing to the spread of the disease. Official policies have, however, been challenged recently; for example in a strategic review published by FAO in 2007[1]. And one of the principal conclusions of a meeting on CBPP, supported by GALVmed and convened by the Milken Institute, a think-tank, in 2010 was that *"... research on the suitability of antibiotic treatment for CBPP should be encouraged".*

The objectives of the recent meeting in Nairobi were to clarify current concerns regarding antimicrobial use in CBPP, identify gaps in knowledge which need to be filled, and to define a path that would lead to first, a change in official policy to support use of antimicrobials under defined conditions and appropriate controls and, secondly, an agreed regulatory development programme that would lead to the marketing of antimicrobial products specifically approved for use in CBPP.

Tim Rowan, who organised the meeting on behalf of GALVmed, explained why the meeting was needed now: *"The decision to call the meeting was influenced by recent scientific developments that suggest that a paradigm change in CBPP control programmes is now possible. These include the recent entry into the market of novel antimicrobial products with the clear potential for much greater efficacy against CBPP than previously observed. Also, work by ILRI, CIRAD and other colleagues has revealed the potential benefits to overall CBPP control of using antimicrobial treatment in combination with vaccination programmes. And recent pharmacokinetic and pharmacodynamic analyses by researchers at the Royal Veterinary College, London of the organism that causes CBPP supports the potential for successful use of some of these new products, which are already approved in the EU and US for use against a range of bovine respiratory pathogens.*

Given the strong potential for positive change, GALVmed decided the time was right to call a meeting of regional and international opinion leaders and experts to define a clear progression strategy".

At the end of the Nairobi meeting the expert group made a series of recommendations. These included:

- A combination of controlled and field studies should be carried out to evaluate efficacy and safety of third generation macrolides (a class of antibiotic), in comparison with other antimicrobials, in the treatment and control of CBPP.
- Research should be supported for the development of new, more effective vaccines.
- Emphasis should be given to safety, including antimicrobial resistance in both human and animal pathogens. A formal risk-assessment should be undertaken using Africa-specific variables.
- There was a need to support quality assurance of medicinal products, as well as education and training in appropriate use of antimicrobials.
- Medium to long-term strategic requirements, in particular the analysis of implications to service delivery in Africa, should be determined.

It was agreed that GALVmed, in conjunction with FAO, OIE and AU-IBAR, and the animal health industry, will vigorously follow-up these recommendations. The initial goal is to commence proof-of-concept studies for macrolide efficacy by June 2012.

1 CBPP control: Antibiotics to the rescue? FAO-OIE-AU/IBAR-IAEA Consultative Group Meeting on CBPP in Africa. Rome, 6-8 November 2006. Food and Agriculture Organization of the United Nations, Rome, 2007

What is CBPP?

CBPP is a highly contagious disease caused by a class of bacterium, the *Mycoplasmas*, that affects cattle and buffalo, principally in Africa. Previously it was more widespread but was successfully eradicated from Australia, North America and Europe by slaughtering infected herds in the 1960s.

The disease is currently endemic in eastern Africa and parts of western, central and southern Africa. Over recent decades it has spread within Africa and its incidence also appears to be increasing in endemic areas. Reasons for this include the failure to impose quarantine and movement control, and the phasing out of vaccination against rinderpest as that disease approached eradication. In many countries in West Africa, and in Ethiopia, mass vaccination campaigns against rinderpest utilized a bivalent vaccine that also protected against CBPP.

The disease can take a variety of courses, ranging from acute to chronic: acute cases can lead to death within one week of onset of symptoms and mortality rates can reach 70%, but the other cases can be sub-clinical carriers, showing no symptoms. In acute and sub-acute cases the main symptoms include depression, laboured breathing and coughing.

Mycoplasma are spread via airborne droplets produced when infected cattle cough: the droplets can travel through the air for 20 metres or more. Cattle are at risk of infection during close contact and when they mix with other cattle, such as at water-holes, cattle markets and in night corrals, or when herds combine to migrate in search of water and pasture. Transfer of animals between herds, for example for payment of dowry in traditional pastoralist societies, has been implicated as an important factor in the spread of the disease.

Infected animals which survive, known as 'lungers', can become long-term asymptomatic carriers of the disease: such animals in nomadic pastoralists' herds can spread the disease over long distances.

CBPP impacts at both the household and national levels, and its importance is recognized by cattle keepers and state veterinary authorities alike. Besides causing death in some cases, CBPP affects productivity of infected animals by decreasing milk production, fertility, growth rates and capacity to work in the case of draught animals. Presence of CBPP in a district, region or country limits opportunities for livestock trade.

Estimates of the economic impact of CBPP vary widely. In 1998 the cost of cattle deaths alone attributable to the disease was estimated at US$ 2 billion per year. More recently a 2006 modelling study considered the direct (morbidity and mortality) and indirect (cost of treatment and vaccination) losses associated with the disease in 12 African countries. The study concluded that total losses in the 12 countries totalled US$ 61.6 million per year, with two-thirds of the economic cost due to losses arising from morbidity and mortality and the remainder due to the cost of disease control. The study showed that the greatest losses were incurred by Ethiopia, Tanzania, Kenya, Chad and Mali. A 1998 study of the impact of an outbreak CBPP in Botswana, which resulted in loss of access to the European Union market, estimated the total cost to the Botswana economy as US$ 350 million.

Experts agree strategic stock of Rift Valley fever vaccine is feasible

In December 2011, 15 experts from a range of public and private sector organisations assembled in Pretoria at the invitation of GALVmed to discuss the technical feasibility of a strategic stock of Rift Valley fever (RVF) vaccine.

A strategic stock for a vaccine may consist of bulk pre-formulated vaccine antigen or bottled vaccine, depending on the most practical approach, which is stocked as part of contingency and emergency preparedness for outbreaks of devastating diseases.

In RVF-prone parts of the Horn of Africa, outbreaks of RVF occur periodically when heavier than usual rainfall leads to widespread and persistent flooding, which creates ideal conditions for huge swarms of mosquitoes (which transmit the RVF virus between animals) to develop. Such outbreaks have in the past occurred at intervals of around 10 years. The episodic nature of the disease makes it difficult for national veterinary authorities to maintain adequate stocks of vaccine 'just in case'. A regional strategic vaccine stock is one approach to overcome this problem.

At the end of the Pretoria meeting the group came out with a series of recommendations and a plan of action to go forward.

The experts agreed that it was feasible to consider a strategic reserve based on the RVF Clone 13 vaccine (RVF C13), which is made by Onderstepoort Biological Products (OBP), South Africa (see box), at least for use in RVF-endemic areas.

Such a strategic stock of RVF vaccine might consist of 50 million doses, with the capacity to rapidly produce a further 20 million doses during a confirmed outbreak. More actions and engagements will be required to improve the accuracy in determining the size of the strategic stock. Initially the focus would be on Southern and East Africa.

Some of the points covered by the experts were around the practicality of considering alternative storage sites, where the bulk antigen, already quality controlled by the producer, i.e. OBP, could be stored at ultra-low temperature, and be ready for rapid bottling, freeze-drying and despatch when required. One such storage point will be the Kenya Veterinary Vaccine Production Institute (KEVEVAPI). KEVEVAPI has recently benefited from a significant investment in human and physical capacity through the VACNADA project which was implemented by GALVmed (see VACNADA Special newsletter, February 2012).

OIE guidelines for setting up and operating vaccine banks would be used as a template.

There are a number of research issues that need to be addressed in connection with these proposals. These include storage stability of the vaccine and bulk antigen, formulation of the bulk antigen and validation of shipping and reformulating the antigen in other vaccine manufacturing laboratories (such as KEVEVAPI). It was agreed that a sub-group made up of representatives from OBP, AU-PANVAC and GALVmed would begin to prioritise and draw up plans for the research and development activities.

In addition it was considered desirable for other countries to follow Kenya's lead and carry out risk mapping exercises to estimate demand more precisely. To explore options for risk mapping a research consortium was formed made up of key scientists from the region including government epidemiologists. The consortium held its first meeting in February 2012 in Dar es Salaam.

RVF C13 vaccine: **safe and effective**

The meeting focused on the use of a vaccine based on a clone of RVF virus which was characterised by researchers at the Institut Pasteur, Paris called clone 13. Subsequently OBP developed a vaccine for livestock based on RVF clone 13, which has since been registered and marketed in South Africa in late 2010. GALVmed is currently supporting field trials of the vaccine in Kenya and Senegal.

RVF Clone 13 derives from a naturally attenuated and avirulent virus (i.e. one less able to cause disease) isolated from a non-fatal human case of RVF in the Central African Republic. Safety trials of the RVF C13 vaccine undertaken in sheep and cattle have shown that it can be used in pregnant animals without causing abortion. This represents a significant advance; the live RVF vaccine that was previously available can cause abortion and birth defects while the currently available inactivated vaccine provides insufficient protection and requires repeat vaccination.

ECF vaccine approved for use in Kenyan dairy cattle

Kenyan dairy farmers received a boost recently with the announcement from the Director of Veterinary Services (DVS) that the ECF (Muguga cocktail – see box) vaccine is now approved for use in the nation's dairy cattle.

What is the Muguga cocktail?

No – it's not the latest drink to be served with a cherry and an umbrella!

The Muguga cocktail is the name given to the combination of the three stocks of *Theileria parva* (the parasite that causes East Cast fever) which make up the live vaccine used in the infection and treatment method (ITM). The three stocks are known as Muguga, Kiambu 5 and Serengeti transformed.

The ITM regimen consists of the simultaneous administration to cattle of live parasites and oxytetracycline, an antimicrobial drug.

The cocktail is named after the Kenya Agricultural Research Institute's research station, located just north of Nairobi, where the original research and development work for the vaccine was carried out.

The ECF vaccine is already registered for use in Tanzania and Malawi, and was previously authorised for use in some pastoralist areas of Kenya. This very welcome announcement now extends the use of this important vaccine to Kenya's 1.6 million dairy farmers.

In a letter to stakeholders dated 28 November 2011 the DVS, Dr Peter Ithondeka, writes: *"A national roll out of ECF vaccine (Muguga cocktail) was approved on 19th June 2005 for specific areas of the country based on scientific information that was available at that time. Specifically, the vaccine was approved for use in the Maasai ecosystems of Narok, Kajiado and Transmara districts. It was recommended then that a pilot study be undertaken to address issues of safety in the dairy sector..."*

The pilot study, which was carried out by VETAID, an NGO, with funding provided by FAO, involved the vaccine being administered to some 3,000 dairy cattle in Kenya. A report on the trial was submitted to the DVS in October 2011.

Dr Ithondeka continued: *"The report concluded that the ECF cocktail vaccine is safe and protects cattle against ECF in small holder dairy production systems. Based on the foregoing, I hereby inform all stakeholders the national roll out of the ECF immunization using the Muguga cocktail vaccine is further extended to all ECF endemic areas and livestock production systems."*

This means that the vaccine can be used in cattle throughout Kenya with the exception of Mandera, Wajir, Garissa, Marsabit and Turkana counties, which are currently free of the disease.

GALVmed are now considering how they can work with partners, including the DVS, to increase awareness about the benefits of the ECF vaccine amongst the countries dairy farmers, ranchers and pastoralists.

By 2017, GALVmed aims to have worked with partners to enable vaccination of 2.5 million cattle in East and Central Africa with the ECF vaccine.

Commenting on the announcement, Hameed Nuru, GALVmed senior director policy and external affairs said: *"This is indeed a very positive and bold step taken forward in our collective fight against this dreaded disease. The commitment and support from not only the DVS but also from the minister for livestock, Hon Mohammed Kuti, shows the technical and political will to address the long suffering of millions of cattle farmers in Kenya.*

This announcement opens previously locked doors, which will soon be open for engaging distributors and the private sector involvement, under government/regulatory guidance.

GALVmed, which has ECF as a primary disease focus, commend the efforts made by the government of Kenya and our partners, and will continue to support the strengthening of delivery and commercialization of the vaccine so that farmers benefit in a sustainable and positive way."

Regional ECF Infection and Treatment Method Task Force fulfils its purpose and is dissolved

The Regional ECF Infection and Treatment Method Task Force held its fifth and final meeting in Malawi in December 2011.

The task force is chaired by the director AU-IBAR and brings together national representatives from Kenya, Malawi, Tanzania and Uganda in addition to regional and international partners from the African Union-Pan African Veterinary Vaccine Centre (AU-PANVAC), the Centre for Ticks & Tick Borne Diseases (CTTBD), the International Livestock Research Institute (ILRI) and GALVmed.

At the meeting, the members concluded that having carried out its mandate successfully the task force was no longer needed. The task force was therefore officially dissolved by Dr Dickens Chibeu, acting for the director of AU-IBAR. Instead, the individual countries and organisations will pursue ECF activities according to their own mandates.

In his summing up at the end of the meeting, task force member Dr KarimTounkara, who is director of AU-PANVAC, said that the task force had achieved incredible success across all areas of its mandate, which included registration and commercialisation of production and distribution of the ECF (Muguga cocktail) vaccine.

On registration of the ECF vaccine, this had been done in Kenya, Malawi and Tanzania, and the process was ongoing in Uganda with 'a fair chance of success'.

On manufacturing, one batch of vaccine has already been produced by ILRI and the process has now been transferred to CTTBD. Approximately £1.8 million (US$ 2.8m) has been spent on upgrading CTTBD. It was noted that the sustainability of production now depends on the different countries supporting the product.

On distribution, although the individual countries recognised that there had been progress, more work still had to be done.

The task force members learned that, as of December 2011, there was a stock of more than 800,000 doses of the vaccine at ILRI. Annual vaccine uptake throughout the region was estimated to be 480,000 doses.

Before disbanding, the task force made a number of recommendations to ensure the continuing success and sustainability of the ECF vaccine in the future. Amongst these was the need to document and showcase the regional task force's achievements, successes and lessons learnt to all stakeholders – a task which was delegated to GALVmed.

Hameed Nuru, GALVmed senior director for policy and external affairs, noted: *"GALVmed would like to take this opportunity to thank the chairman and partners involved for the opportunity to serve on the task force. We still look towards partnering in sustainable distribution as we look towards the future."*

99% of Kenya dairy farmers want new ECF vaccine

The recent news that the East Coast fever (ECF) Muguga cocktail vaccine has been cleared for use in Kenya's dairy sector prompted GALVmed to commission an opinion poll. High levels of mobile phone ownership amongst farmers in Kenya meant that GALVmed was able to collect information on attitudes and behavior very quickly.

In brief, the telephone survey showed:

- 99% of farmers were interested in buying the new ECF vaccine
- Most farmers only vaccinate on specific government advice
- There was some confusion about the difference between injections (for treatment) and vaccinations (for immunization)

GALVmed commissioned i-Cow, a Kenya-based company that provides information and advice to dairy farmers via text messaging, to undertake the survey.

Stuart Brown, communications manager at GALVmed, explains the thinking behind the survey: *"It is fantastic news that the director of veterinary services for Kenya has approved the use of the ECF vaccine. But experience tells us that a campaign of information sharing and awareness-raising will be needed to inform farmers that the vaccine is available and of the benefits it brings. Before planning this campaign we needed to get a better understanding of existing knowledge, attitudes and behaviour.*

We choose to work with i-Cow as our research partner because they are trusted by farmers: they are experts in dairy farming and have a good database of contacts. Using mobile phones they could work fast. In fact we had our results in just 24 hours.

Nearly a third of farmers had firsthand experience of ECF and some very sad stories emerged. One of the woman farmers lost her first cow immediately after buying it for US$ 544. This exemplifies the real cost of ECF."

For the survey i-Cow contacted 100 farmers in just two working days. Half the sample was registered with i-Cow and a second group was made up of farmers who had visited farming exhibitions and signed i-Cow's visitors' book. Combining results from the two groups, the following findings emerged:

Demographics: 19% of respondents were women

Cow ownership: the sample included three larger scale farmers who owned 168 cattle between them. The remaining 97 farmers had on average 5 cattle each

Staffing: 10% of respondents lived 'off farm' and many others relied on unskilled labour to keep their cows

Vaccination: 89% of the farmers reported their cattle had been 'vaccinated' at some point, usually in relation to a government campaign rather than a proactive disease management approach

ECF: 30% of farmers reported their cattle had been affected by ECF at some time in the past. Of these 17% of cases died before treatment and 29% died after treatment. The average cost of treatment was US$ 53 per animal – about five times the estimated cost of vaccination

Current ECF prevention strategies: 99% carried out regular dipping or spraying, (92% weekly and 7% less frequently as they felt zero grazing meant the cows were less susceptible to ticks; one person thought his areas was "too cold for ticks")

5% thought they had vaccinated against ECF (although only one appeared to have been in the recent official trial that provided the evidence that the ECF vaccine was safe for use in dairy cattle)

4% thought that their newly purchased cattle would come ready vaccinated

Stuart Brown concluded: *"This survey has helped to clarify some of the issues we need to address as we start to disseminate information about the ECF vaccine to the dairy sector in Kenya. It is encouraging that there is such strong interest in the ECF vaccine and the survey showed that it has the potential to meet a real need."*

What is i-Cow?

iCow®™ is an awarding winning phone app/internet service designed to assist small-scale farmers track their cows' development and maximize their returns by addressing the following throughout their cows' lifecycle. The application, which took first place in the recently conducted Apps4Africa competition, has been described as *'an innovation that will revolutionize our interaction with small-scale farmers.'* **www.icow.co.ke**

Award-winning researchers aim to develop new tryps drugs and diagnostics

GALVmed has recently signed two new research agreements under its DFID-funded trypanosomosis project with one of Europe's top-ranked universities for life science research. The agreements are with the Drug Discovery Unit, part of the College of Life Sciences at Dundee University, Scotland.

In 2011, the College was awarded a prestigious *Excellence in Impact* award by the UK Secretary of State for Universities and Science and is committed to translational research, including in the area of neglected tropical diseases of man and cattle.

The first of these agreements covers research in the university's Drug Discovery Unit which aims to develop new drugs for the treatment and possible prevention of animal African trypanosomosis (AAT) in cattle.

The novel drug discovery and development research is being led by Kevin Read, who is head of drug metabolism and pharmacokinetics at the Unit. This research builds on promising leads developed during work undertaken on the closely related disease human African trypanosomosis (HAT) – also known as sleeping sickness.

To be effective for treatment of HAT, drugs need to be able to pass through the blood-brain barrier, but this is not necessary for AAT. A number of drug candidates that were rejected from Dundee's HAT programme are therefore now being re-evaluated as potential drugs for cattle.

Work in Dundee began in January 2012 and is scheduled for completion by August 2013. By then it is hoped that at least one candidate drug will have been identified which has activity against the three parasites that cause AAT (*Trypanosoma congolense, T.vivax* and *T.brucei brucei*) and also has good potential for development as a veterinary product for treatment of cattle.

The other new agreement with the University of Dundee covers work led by Professor Mike Ferguson, who heads a team working on trypanosome biochemistry, including the development of appropriate low-cost, high-quality diagnostics.

This group aims to develop a test that can be used by livestock owners and veterinarians in remote areas to detect disease causing trypanosomes in cattle and be able to distinguish active from past infections.

The plan is to develop a prototype lateral flow test together with BBInternational, a specialist diagnostic company which has development and manufacturing facilities in Dundee.

Mike Ferguson, head of the diagnostic project and also dean of research for the College of Life Sciences at Dundee said: *"I am delighted that the University of Dundee has established these excellent partnerships with GALVmed, for both drug discovery, led by my colleague Kevin Read, and for diagnostic development.*

Dundee University has a reputation for quality science and for translating our science into tangible benefits for society – this is what we mean by 'impact'. Both projects will access very advanced technologies and bring them to bear on these neglected animal diseases that cause so much hardship in sub-Saharan Africa. We are proud to work with GALVmed towards these goals."

Support for harmonisation of vaccine registration continues

Workshop delegates in Nairobi

Workshop delegates in Burkina Faso

Harmonisation of veterinary vaccine registration came a step closer as a result of two recent workshops held in East and West Africa. Both were facilitated by GALVmed working closely with partners the World Organisation for Animal Health (OIE) and the African Union-Pan African Veterinary Vaccine Centre (AU-PANVAC).

First, participants from East Africa – Burundi, Djibouti, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda – assembled in Nairobi in November 2011. The delegates gave their unanimous support for efforts towards harmonisation of veterinary vaccines registration and for the implementation of a mutual recognition system. This built on recommendations made at the OIE conference on veterinary medical products in Africa held in Dakar in 2008, the first-ever Africa-wide workshop on the future of vaccine harmonisation held in November 2010 (see GALVmed newsletter February 2011) and on processes initiated by the East African Community.

Actions agreed during the Nairobi meeting included:

Representatives from GALVmed and PANVAC visiting each country in the region, and also the East African Community secretariat, to carry out briefings on the harmonisation initiative. By the time of the visits, which were scheduled to take place before March 2012, each country will have drawn up their requirements to implement a mutual recognition system, including resources needed and guidelines.

Draft forms for vaccine registration, a summary of product characteristics and a format and content for a registration dossier were reviewed by delegates: volunteers from Uganda, Kenya and Djibouti, respectively, undertook to draft revised versions and circulate for comment.

With support from AU-PANVAC and Djibouti, Tanzania agreed to collate all the existing guidelines with a view to determining whether there was a need for greater harmonisation and further guidance. It was noted that additional information is needed in some cases for field studies, stability and batch consistency.

The delegates recognised the need for vaccine assessors to have a high level of technical competence and that there was a need for further training, greater trust and transparency, and peer review. They suggested that twinning should be considered as a mentoring approach with both countries in Africa and beyond. OIE might consider supporting this process.

The workshop concluded by noting that frequent dialogue was needed between industry and regulatory authorities.

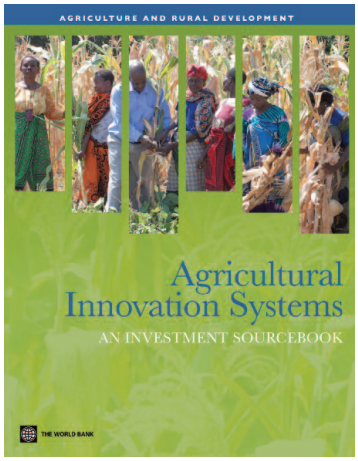
Hot on the heels of the Nairobi workshop, GALVmed organised a second workshop in Burkina Faso in December 2011. It brought together the regulators from the **West African** Economic and Monetary Union (UEMOA – Union économique et monétaire ouest-africaine) with the region's vaccine manufacturers.

Baptiste Dungu, GALVmed senior director of R&D, explained: *"The workshop was the first time these two groups were coming together. It provided an opportunity for manufacturers to learn about regulatory requirements and enabled both parties to initiate a dialogue. Both parties found it extremely useful and were grateful for the opportunity. The UEMOA has agreed to drive forward interactions between AU-PANVAC, the vaccine producers and regulatory authorities. Future meetings are likely to evaluate data on one or two selected vaccines."*

The meeting was very timely given the harmonisation activity happening in West Africa under the auspices of UEMOA. Briefly this involved:

- A directive to all manufacturers to submit registration dossiers for their veterinary vaccines by December 2012. This applied to all vaccines already circulating in the region, irrespective of whether or not they are manufactured by UEMOA country-members. This date had been postponed several times and UEMOA was not prepared for further change. However, support is being given to local producers of vaccines in this process of regulatory compliance, where this involves significant changes in how they operate.
- A framework agreement is being developed between the AU-PANVAC and UEMOA to formalize ways to support local producers in the UEMOA zone: AU-PANVAC has undertaken to help the veterinary vaccine producers in the region in their efforts to improve their production and production systems. Some of the actions will be in the form of training and supply of raw materials, including vaccine strains, cells etc.
- Each vaccine producing laboratory has to ensure that its production of vaccines is in compliance with the requirements and standards set by the UEMOA. Production systems as well as all documentation in vaccine production should also be in compliance with regulatory requirements.

Banking on GALVmed for intellectual property case study



A case study detailing GALVmed's intellectual property management strategy was published in the World Bank's sourcebook[1]. Josef Geoola, intellectual property and legal officer at GALVmed, teamed up with Sara Boettiger from the University of California, Berkeley to produce one of the sourcebook's innovation activity profiles.

Baptiste Dungu, GALVmed senior director of R&D, commented: *"It is a great accolade for GALVmed that the World Bank has published a case study based on our approach to intellectual property in their innovation sourcebook. This case study does a great job in explaining our approach. Effective intellectual property management is critical to the success of GALVmed in getting new drugs, medicines and diagnostics into the hands of poor farmers."*

The case study explains that GALVmed has always applied the utmost diligence to the management of intellectual assets and that this has led to increased capacity within the organization. GALVmed manages an ever-growing number of technologies within its research, development and deployment pipeline and uses a combination of both internal and external expertise to manage intellectual assets and intellectual property.

The case study sets out GALVmed's four-stage process:

- **Stage 1: Conducting technology landscaping** to scout for preexisting and emerging technologies looking at both the technology and any intellectual property risks (for example patent disputes surrounding technologies of interest). Identifying technologies that exhibit scientific merit and withstand intellectual property review leads to more resource-efficient commercialization processes.
- **Stage 2: Due diligence** where an intensive in-depth search of the patent landscape surrounding each technology is conducted. This can include a freedom-to-operate assessment which looks to identify potential intellectual property infringement issues. A review of rights and obligations of relevant existing legal agreements is also conducted at this stage. This step of GALVmed's intellectual property management model permits decisions to be made reducing short and long-term risks and safeguarding the donor's investment.
- **Stage 3: Project-specific intellectual property management strategies** are produced, integrating the results of stage 2, to create a bespoke intellectual assets management strategy to guide GALVmed activities for a specific disease-control technology.

  These strategies map the flow of technology from providers to development partners, manufacturers and so on and allow GALVmed to identify the contractual arrangements needed. The strategy also addresses critical issues such as ownership, rights allocations and ensuring global access.
- **Stage 4: Contracting** and negotiations are among the most challenging and resource-consuming activities that GALVmed undertakes, and which need to be completed in a timely and efficient manner.

1 World Bank 2012. Agricultural Innovation Systems: An Investment Sourcebook. Washington DC: World Bank

GALVmed engages multiple parties, often playing the role of an intermediary, and must structure contracts to ensure that there is a potential to leverage GALVmed's pro-poor, global access goals and the obligations of project partners without sidestepping the partner's organizational mission. While GALVmed's facilitation in the development of a vaccine is purely humanitarian, partners may have different ambitions and these must also be considered in order to build successful partnerships.

GALVmed is working toward a new approach that employs significantly simplified contracts utilizing fit-for-purpose, simplified language. The intention is to decrease the time between drafting and signing contracts, while still effectively integrating the necessary rights, obligations, and insurances one would expect from a contract. Additionally, simplified legal contracts benefit developing country partners with limited access to legal expertise.

The World Bank case study concludes: *"GALVmed provides an example of how nonprofits engaged in research, development, and deployment of technologies for the poor can benefit from systematic Intellectual Property (IP) management. IP management plays a key role in reducing risks and improving the organization's capacity to deliver on its mission. Most nonprofits do not have sufficient in-house capacity, and this profile illustrates how the balance of outsourced services and internal capacity can change as an organization grows. Lastly, GALVmed's experience indicates the importance of integrating capacity building in IP management; even where a nonprofit is challenged itself in IP management capacity, there are opportunities to share knowledge and continue to foster improvements in a partner's IP management skills."*

The *Re:Search* initiative opens up new leads for GALVmed

The *Re:Search* consortium was established by the World Intellectual Property Organisation in collaboration with the BIO Ventures for Global Health and leading pharmaceutical companies to exploit the advances in medical science for neglected human health diseases, particularly in the context of developing countries.

GALVmed is the first animal health organisation to be accepted as member of the consortium. Although the consortium focuses on positively impacting global health through development of human health products there is profound interconnectivity between the fields of human health and animal health. Moreover, the animal African trypanosomosis project undertaken by GALVmed has highlighted technologies resulting from human health research can be effectively incorporated into animal health products for neglected animal diseases.

GALVmed's work on porcine cysticercosis illustrates the relationship between human and animal neglected diseases. Effective control of cysticercosis in humans requires the disease to be addressed in both humans and pigs in order to break the infectious cycle. Making animal health products available, affordable and accessible often delivers human health benefits as a bonus.

Josef Geoola, GALVmed intellectual property and legal officer, explains: *"GALVmed is keen to exploit existing research to make inroads into neglected animal diseases. One good source of research is human health research. Whilst products of such research may not have been suitable for use in human health scenarios, they may work well in relation to animal health.*

Becoming part of the Re:Search consortium means we have access to new partners committed to seeing existing research exploited for the benefit of people in resource poor areas. It provides GALVmed with a collaborative platform, where product development partnerships are encouraged, and licensing agreements are pre-negotiated, creating a climate where some of the major time lags typically associated to the product development process are overcome."

Healthy chickens enable Babita to stop breaking rocks for a living...

To celebrate International Women's Day GALVmed shared the story of one of the women who has benefited from a poultry project supported by the alliance in Nepal.

From breaking rocks for a living, Babita Danwar is now building her livelihood based on poultry

Over the next five years GALVmed's partners aim to vaccinate a chicken against Newcastle disease every 10 seconds. By 2017, over 15 million chickens belonging to 2 million families will have been vaccinated against Newcastle disease.

The choice of which livestock diseases to prioritise has a huge impact on gender. In many cultures the backyard poultry sector is seen as the women's domain. Poultry reach maturity and can be marketed much quickly than larger animals, such as pigs, goats or cattle. So, improvements to survival rate of chickens soon impacts on the income and food security of the whole family.

GALVmed: Protecting Livestock – Saving Human Lives...

GALVmed meets ...Babita Danwar

For the past seven years Babita has been rearing poultry but has not been able to earn any money from them. Last year she lost 30 birds when Newcastle disease hit her village, as it had every year before.

This year, however, she has three surviving cocks, two hens and seven chicks. The GALVmed supported programme, which provided vaccination and deworming, has proved to be successful. This year, for the first time, she hopes to earn money from her birds.

While her husband is away working as a cook in India, Babita makes incense sticks for a nearby factory. Like many other villagers, she used to break stones to earn money. But after her last pregnancy she had to stop doing hard labour and so the income from the stone crushing stopped.

With three sons aged 17, 14 and 3 to look after, she still has her hands full. She hopes that the birds can bring in the extra money required to educate her sons and expand her incense stick endeavour.

Babita is very happy with the vaccinations and deworming that was conducted. *"All the years before this, the birds died. But today my birds are alive and nothing has happened to them. I will wait for them to grow some more and then sell them. Whatever money I will get, I'll invest in increasing my flock"*, she says with determination.

The helplessness that she felt when her birds used to get sick is something she is happy to forget. She explains: *"When the birds got ill, no one knew what was wrong with them. I used to go to the medical shop and whatever tablets the shopkeeper gave me, I took them. Despite the medication, the birds died. Even the community animal health workers could not help us".*

This year the training that she received on poultry from GALVmed has made her more confident and informed. She says: *"After the training we know on our own what is wrong with the birds and what we need to do."*

Her basic training has also made her realise the value of nutrition for the birds. In the past, she used to let her birds go and scavenge for food. Now she feeds them corn and rice three times a day.

When asked why she keeps poultry, even though she has bigger animals including a pig and three goats, her answer is simple and practical: *"When the birds weigh a kilo or so, I can sell them and get money directly. When I started rearing poultry, it was just for the occasional religious festival or ritual. Now I know I can earn some good money off the birds. Also I don't have to think about the feed too much as the birds are smaller compared to other animals so rearing them is much easier."*

It seems Babita has a new hope and confidence in the birds. *"I have faith in the hens. There is a surety that some income will be generated because of them. Earlier I didn't trust the birds, but now I am confident I want to rear more of them."*

Babita smiles as she tells us that she wants to expand her poultry flock as much as she possibly can. The birds have given her hope and this year she plans to earn a comfortable bonus through them.

Best practice in gender mainstreaming

Currently many organisations working in the livestock sector are grappling with the problem of trying to better understand and integrate gender into their projects and programmes. One of the recommendations of the GALVmed gender strategy workshop, held in Nairobi in October 2011, was that GALVmed should join forces with FAO and ILRI to share ideas and explore emerging best practice.

As a result the three organizations have just set up a think tank to explore the establishment of a network or platform focused on issues and challenges related to gender and livestock as tools to combat poverty and enhance food security. The first meeting is scheduled to take place in March 2012.

Raffaele Mattioli, the think-tank's FAO representative, said: *"We hope that by bringing the three organisations together we can help to show the importance we all place on gender. Working together will help us to harmonise policies and talk with a common, authoritative voice. Perhaps we can also explore the feasibility of working together on common projects which integrate gender and livestock keeping."*

Meanwhile in November 2011, Lois Muraguri, GALVmed assistant director policy and external affairs, was invited to Addis Ababa, Ethiopia to attend a training workshop convened by FAO and ILRI. Also invited were IFAD and representative of livestock ministries in Ethiopia, Kenya, Uganda and Tanzania. By the end of the workshop the delegates:

- understood better how to accommodate gender issues in the design, implementation and monitoring of livestock projects
- learned how to select and use appropriate gender analysis tools for different contexts
- understood better the importance of social inclusion as a key factor to strengthen the quality of project design, implementation, monitoring and impact

A major output from the training workshop was a draft gender and livestock checklist. The checklist built on existing literature but participants enriched it with their personal experiences of trying to understand gender and address it in their work to make it more comprehensive.

The workshop participants are currently assessing the gender and livestock checklist to identify any issues they encountered while using the tool in their own work.

Similar workshops are now planned in West Africa and South East Asia to raise awareness and strengthen gender knowledge and skills of FAO staff and relevant partners in the field.

GALVmed meets the veterinary sector in India

GALVmed's Hameed Nuru, senior director of policy and external affairs, and Mamta Dhawan, programme manager South Asia, were recently invited by CABI and Indian Council of Agricultural Research to attend a high level workshop on strengthening the veterinary profession in India.

The event took place in New Delhi, India from the 25–26 November 2011. In addition to key stakeholders from India, international organisations represented included OIE (World Organisation for Animal Health), ILRI (International Livestock Research Institute), WHO (World Health Organization), FAO (Food and Agriculture Organization of the United Nations) and leading veterinary schools from the UK, including the University of Edinburgh.

The overall aim of the workshop was to identify ways to strengthen the Indian veterinary profession's role in improving food security, food safety and public health, and in increasing its impact on the livelihoods of producers. These factors were seen as being of primary importance to India and its future development.

The workshop was designed to support improvements to information support for practicing veterinarians to enable them to base practice on the best available evidence. There was also a focus on having curriculums in Indian veterinary schools based more on practical problem solving. The workshop focused on livestock and dairy veterinary medicine.

Hameed said: *"It was an honour to be invited to this important workshop. It was also invaluable for GALVmed to get an insight into the way that the veterinary profession is developing in India. I was particularly keen to understand the different roles of vets and paravets, and to learn about their training as it relates to livestock product and service delivery downstream.*

The event was also a fantastic opportunity to meet all of the key players in veterinary medicine in India, including the major training universities, the Indian Veterinary Research Institute, pharmaceutical companies and others.

These contacts helped inform GALVmed in the development and delivery of our South Asian strategy."

Newsletter circulation exceeds 2,000 subscribers

The number of people receiving the GALVmed newsletter each issue reached 2,013 subscribers in February 2012. On average a new subscriber signs up every day and, in addition, every day between five and ten people read the newsletter online.

Stuart Brown, GALVmed communications manager, said: *"We are very pleased at the way that our readership has been steadily growing. The communications team will be working with the new monitoring and evaluation manager to see what people think about the contents and what suggestions readers might have for improvements.*

For an organization like GALVmed, with an extensive network of partners and stakeholders, and such a wide portfolio of projects, it is essential that we present information which helps people to see the entirety of what we do. In this way we can help to move ideas and learning around the GALVmed family and take advice from our very knowledgeable readership."

In 2011 GALVmed partnered *Shujaaz* in a livestock advocacy campaign called the Kenyan Dream initiative.

On 1 April 2012 *Shujaaz* was awarded the International Digital Emmy for children and young people's content. Pictured right are Daniel Muli, one of the lead animators, with Bridget Deacon, the *Shujaaz* head of production, who traveled to Cannes, France to receive the award.

Bruce Paisner President & CEO International Academy (which organizes the Emmy's), said: *"These awards are more cutting edge than anything in the industry today. They represent what the media is becoming and where we are going in these exciting, turbulent and really revolutionary times. Tonight we have the best in international digital content."*

GALVmed is delighted to be associated with this award-winning communications project, described by the UK Minister for International Development Alan Duncan as *"a force for good."*

Team changes

M&E and animal African trypanosomosis experts strengthen GALVmed team

GALVmed is delighted to announce the appointment of two new posts: Simiyu Gaitano, the new monitoring and evaluation manager, and Mame Nahe Diouf, who is joining the animal African trypanosomosis team.

Simiyu Gaitano, the new monitoring and evaluation manager, said: *"I am joining GALVmed at an interesting time in terms of monitoring and evaluation. My job is to look at the business plan and to explain in user-friendly ways how the GALVmed team can best deliver results through a functional monitoring and evaluation system.*

Whilst there is some good monitoring and evaluation practice already in GALVmed, it has not been undertaken in a systematic way. As GALVmed's business plan moves from a set-up phase to delivery at scale, it is essential that partners and funders can see the progress we are making towards this goal.

We also have to present our findings in a way that facilitates learning, evidence-based decision making and accountability to our donors and investors. Ten years down the line people need to be able to see what we have been doing and pull out the learning and the policy implications: capturing and disseminating the monitoring and evaluation information is also important.

In GALVmed we have additional challenges over most NGOs. We work in partnership with other NGOs, commercial organisations, academic institutions and government and parastatal organisations. These all have different motivations and think about their performance in very different ways. I am looking forward to reviewing how we can find monitoring and evaluation frameworks and practices that respond to this particular challenge."

See page 14 for Simiyu's biography.

Mame Diouf is the newly appointed senior programme officer: animal African trypanosomosis.

She will be reporting to programme manager Grant Napier and work closely with Tim Rowan, GALVmed's scientific advisor and a member of the tryps project steering committee.

Mame is a veterinarian from Senegal. After vet school in Dakar she obtained an MSc and PhD in animal reproduction at the University of Montreal, Canada where she was also a post-doc. Mame has been working on trypanosomosis genetics at ISRA in Senegal before joining GALVmed. She will be responsible for assisting in the design, conduct and reporting of clinical studies within Africa.

Mame said: *"I am really excited by the work that I will be doing at GALVmed, particularly as it builds on the challenges I was trying to address in the work for my masters degree.*

Tryps is a neglected disease where the same drugs and approaches have been used for many years. Working on clinical trials to test new and potentially more holistic approaches is really exciting.

My first priority is to update our literature review on what has been attempted elsewhere ahead of helping to set up new trials."

GALVmed will say goodbye to two members of staff over the next month: **Randip Basra**, head of international fundraising, and **Charlotte Nkuna**, assistant director of global access, are both moving on to new challenges outside the organisation.

Peter Wells, acting CEO said: *"In this newsletter I started by announcing a major investment in GALVmed from DFID and the Bill and Melinda Gates Foundation. I would like to thank Randip for all of her hard work to help make this a reality and wish her well in her new role."*

Charlotte Nkuna said: *"I am sad to be leaving GALVmed at this exciting time. However, I have been given the post of director of the newly formed Poultry Disease Management Agency, a division of the South African Poultry Association.*

My role will include creating links between the poultry industry, government, laboratories, universities and private veterinarians on matters concerning the poultry diseases monitoring, surveillance and management, particularly the controlled diseases to protect the national flock.

I have enjoyed my time at GALVmed and I take away with me the great experiences and learning, which I will apply in my new role. Most of all I will miss all the good friends and colleagues I have had the fortune of working with over the past couple of years. I look forward to seeing GALVmed move from strength to strength."

Hameed Nuru said: *"Charlotte has been an assistant director of GALVmed during a period of considerable change and development. She has helped to lay the foundations for wider access to GALVmed products and I would like to thank her for all her efforts."*

The GALVmed team under the microscope

Here members of the GALVmed team talk about their role in the organization and also tell us a little about themselves. This may help break the ice when first meeting them. A set of the team's biographies is also available at www.galvmed.org

Simiyu Gaitano

Job title: Monitoring and evaluation manager

Role in GALVmed: Simiyu is responsible for establishing and implementing a functional performance monitoring, evaluation and reporting system, ensuring compliance and review of the organisation's strategic and operational plans, and supporting programme design and implementation.

Nationality: Kenyan

Joined GALVmed: January 2012

Relevant career highlights: He worked as the regional director of planning, monitoring and evaluation for the Bill & Melinda Gates Foundation-funded East Africa Dairy Development programme, a Heifer International programme in partnership with TechnoServe, ILRI, ICRAF and Africa Breeders Services Ltd.

Simiyu previously worked for USAID-funded programmes at World Relief International in programme management and quality assurance positions.

Earlier in his nine-year career, prior to GALVmed, he worked in microfinance and learning institutions. He has been involved in various development research/evaluation and academic projects management advisory services in higher learning institutions. His key specializations and experience are in programmes management and monitoring and evaluation.

Education: He holds a Masters in projects planning and management from the University of Nairobi and a Bachelor's degree in economics and mathematics from Kenyatta University, Kenya.

Key publications: He has published articles related to monitoring and evaluation and development in international conferences and academic research.

Interests: He enjoys driving to the countryside, he's a lover of cool old music including country and *'zilizopendwa'*, watching football and playing volleyball. Simiyu is a big fan of Mexican burritos and *Nyamachoma* (roasted meat).

Mame Nahe Diouf

Job title: Senior programme officer: animal African trypanosomosis

Role in GALVmed: Mame will support the design, conduct and reporting of the clinical studies in the animal African Trypanosomosis (AAT) programme.

Nationality: Senegalese

Joined GALVmed: January 2012

Relevant career highlights: Mame was a lecturer at Ecole Inter Etats des Sciences et Medecine Vétérinaires (EISMV) the international veterinary school of Dakar until 1995. She joined Senegalese Institute of Agricultural Research (ISRA) in 1996 as an animal scientist working for many years in semi-arid farming systems and animal production research and development programmes. Latterly she has been working on genetics of trypanotolerant N'dama cattle.

Education: Mame is a veterinarian, trained at EISMV. She obtained an MSc and a PhD in anatomy and physiology of reproduction from University of Montreal (Canada) where she did also a post doc.

Key publications: She published scientific articles in animal reproduction and farming systems.

Interests: Mame has a big scientific curiosity: her motto is *'we learn every time and everywhere!'*
She likes nature, African music and jazz, and cooking yassa (a marinated Senegalese chicken dish with lemons, mustard and chilies).

E-consultation on Africa's livestock sector

GALVmed is initiating an e-consultation on some of key issues facing livestock in 2012. The Impetus Strategy Paper, commissioned by GALVmed, forms the basis of this consultation.

GALVmed invites all stakeholders to express their views on the direction Africa's livestock sector needs to take in order to feed Africa's growing urban populations and to improve the incomes of small farmers. The results of the discussion will be published widely and presented at various livestock events being convened in 2012.

Please join in the discussion:

28 March–14 April: **Improving animal health services for the rural farmers**

15–28 April: **Feeding Africa's ruminants for food security and prosperity**

29 April–16 May: **Small livestock farmers increasing their income – trade and market access**

To register for the discussion or download the paper or the section summaries please visit **www.livestock2012.com**

Last word

Interim chief executive Peter Wells writes...

The announcement of our £31.2million (US$ 51 million) from the Bill & Melinda Gates Foundation and the UK Government's Department for International Development (DFID) is cause for great celebration.

The programme the foundation and DFID have funded is Protecting Livestock – Saving Human Life phase 2. Over the next five years this grant will support us to improve livestock health primarily through development and delivery of vaccines, medicines and diagnostic tools to combat Rift Valley fever, East Coast fever, contagious bovine pleuropneumonia, contagious caprine pleuropneumoia, Newcastle disease and porcine cysticercosis.

In these newsletters we have already announced other financial support for porcine cysticercosis and animal African trypanosomosis programmes. Whilst the *Protecting Livestock – Saving Human Life* phase 2 investment is really important to us, it represents only part of our overall business plan and we will seeking additional investment for other programmes. This has been made considerably easier as a result of have such a secure funding base from the foundation and DFID.

This is a time of significant change: GALVmed is moving from the start-up and exploratory stage to a phase we can characterize as delivery at scale. Our new grant comes with challenging targets for the number of animals and poor farmers in sub-Saharan Africa and South Asia we have to reach.

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Peter Wells, interim CEO of GALVmed, talking with HRH The Princess Royal, with vice-chair Julie Fitzpatrick and senior director R&D Baptiste Dungu looking on. On 28 February 2012 The Princess Royal visited the Moredun Foundation and Research Institute, which shares a site with GALVmed, just outside Edinburgh

My role as interim chief executive has been to keep the ship steady through this period of change and help get us get ready for these new challenges.

The organization will see a series of new appointments to deliver this work programme. First amongst these will be the new permanent chief executive. However, we will also be strengthening the directorate with a part-time director of human resources and a director of market development. These appointments will be critical to enable us to work to the highest professional standards and will add significantly to the considerable expertise we can already call on from the GALVmed team.

Part of my role as interim chief executive has been to take stock of the organization. I have been struck by the passion that the GALVmed team bring to their roles. But I have been concerned too.

The organization has, over the years, produced some highly aspirational business plans. Whilst it is valuable to aspire, (indeed GALVmed and partners could not have achieved all it has in Phase 1 without pro-poor ambition and tenacity) it is essential that we work to challenging but achievable targets. We must enter into a process of taking tough decisions about prioritization and focus within our work which will need to be carried forward by the new chief executive and the senior management. To maximize the output from the additional investment, we have to accept that we need to focus our aspirations on a portfolio that is challenging yet achievable.

Achieving our new targets will mean that, in addition to ensuring we have the best project management systems in place, and these are already being implemented, we also effectively manage our portfolio. I do not underestimate how tough this process will be for our delivery team and our partners, but I believe that our ability to focus and prioritise will be the measure of our role as a leader in the sector.

What will not change is the need to work with private sector partners, which I believe is the only sustainable way of delivering our promise to farmers and herders. A challenge for the new team will include the need to look at product development in a more commercial way.

My commercial background and instinct is that we need to continue to place emphasis on determining what farmers are prepared to pay for vaccines, medicines or other products. This will help us decide which products have the potential to be viable with a commercially sustainable manufacturing and distribution chain to provide continuity of access.

GALVmed has recently completed a programme of capacity building with eight national veterinary vaccine production laboratories in Africa. One of the legacies of this work was that the senior managers of these facilities were exposed to an Open University training module which looked at the true costs of production of a vaccine. This means that the management teams are now able to clearly see how they can maximize the productivity of their plants. This gives the potential for lower cost, and probably higher quality, vaccines for farmers.

In my view, however, this can only work effectively if the plants are run with optimal efficiency. This has an inevitable consequence; production plants in different countries specializing in some of the vaccines and stopping production of others. I know how hard it is to make these decisions from my experience in the rationalisation process at GALVmed I described earlier. But cost is a really important factor in the sustainable development of vaccines and we ignore this at our peril.

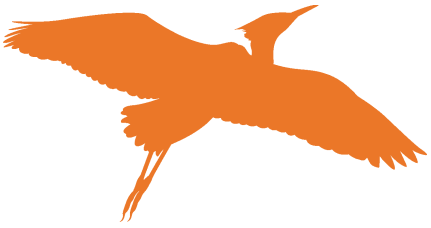
Movement of vaccines between countries will require different policy approaches to support harmonization of product registration. I am pleased therefore that GALVmed has been working on this agenda with our partners in East and West Africa, including events held last November (see page 9).

Technology and the cost of vaccines alone will not change farmers' habits. We need to ensure that we have effective partnerships in place that support sustainable distribution models and that we find the right language and approach to persuade farmers to change. If we think of GALVmed as just a technical organization we will not be the catalyst for change which will result in the delivery at scale we have promised to deliver.

This means that the new CEO will need to harness the extraordinary talent within the GALVmed delivery team and combine it with the skills and knowledge of a wide range of partner organisations from public, private, academic and NGO sectors. Few organisations attempt to build such a wide alliance – but we fully recognise the importance of this. As part of a range of measures to provide continuity at a time of transition, former CEO, Steve Sloan is continuing to do some work with us and other key stakeholders in the animal health sector.

In this newsletter we have also announced our consultation process arising from the Impetus Strategy Paper drafted for us by Tim Leyland and I hope that you will take part in this important exercise.

If you would like further information, or you wish to make any comments, please contact us by email on newsletter@galvmed.org



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