For livestock in many developing countries, reduction of the impact of infectious disease by improved control is a pivotal need. The preferred method of control for most infectious disease is vaccination if effective vaccines are available and can be used efficaciously.

Global Alliance for Livestock Veterinary Medicines (GALVmed) is supporting the development and efficacious use of vaccines against diseases such as East Coast Fever, Rift Valley Fever, Newcastle Disease and Porcine Cysticercosis. However, vaccine development continues to be very difficult for many important diseases and chemotherapy has a major role to play in disease control and food production. Furthermore, chemotherapy has generally been adopted by large proportion of livestock keepers, especially for diseases that have been difficult to control. For many diseases, best practice requires an integrated control approach using the available, partially effective primary control tools including vaccines (e.g. contagious bovine pleuro-pneumonia [CBPP]) and vector control (e.g. animal African trypanosomosis [AAT]) in combination with antimicrobial chemotherapeutics. CBPP and AAT are two of the major constraints to cattle production in Africa.

Resistance development is well described for antimicrobials and the importance of its minimisation is well-illustrated in AAT where trypanocide-resistance is increasingly important and risks undermining sustainability of communities. Many factors contribute to the development of resistance. In developing countries especially, the lack of enforced medicines control and inadequate quality control of medicines result in a market with a predominance of fake and low potency products, which not only favours resistance development but also reduces the value of chemotherapeutic markets contributing to lack of investment to find new chemotherapeutics.

For farmers and field veterinarians, a lack of knowledge and limited diagnostic facilities contribute greatly to over-use of trypanocides and therefore increased risk of resistance development. GALVmed has a large programme to address some of these needs including development of new trypanocides and animal-side rapid diagnostics, enhanced capacity of medicines Quality control laboratories and training programmes for regulatory agencies in Africa.

For CPBB, in addition to facilitation efforts for the availability of better vaccines, GALVmed is supporting activities aimed at assessing the value and relevance of using new generation antimicrobial treatments, which could contribute to reducing the current often uncontrolled use of antibiotics in many CBPP enzootic countries.