

**FWC BENEFICIARIES 2013 - LOT 1: Rural Development and Food Security - EuropeAid/132633/C/SER/multi**

## **Final Evaluation Report**

**IMPROVING AND INTEGRATING ANIMAL HEALTH SERVICES IN  
THE LIVESTOCK VALUE CHAIN**

**THROUGH PUBLIC PRIVATE DIALOGUE IN ETHIOPIA (LVC-PPD)**

**Project Ref: ET/FED/2009/021-388**

### **Section 1**

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**Addis Ababa 8/12/2014**





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## 1. Introduction

Ethiopia is a country with significant animal resources including cattle (rangeland, draught and dairy), small ruminants, camels, equines and poultry. Livestock not only provides a contribution to national food security through the provision of meat, milk and eggs, supports national income through export of live animals and meat, hides and skins trade, but also contributes to crop production through provision of draught power, transport of inputs and manure. Livestock is estimated to contribute 45% of agricultural Gross Domestic Product GDP and 31% of agricultural employment. However, with an increasing demand for animal products, the Ethiopian livestock sector is poised to increase productivity in the future.

In full recognition of this significant contribution of the livestock sector, and by implication the veterinary services, to economic growth and poverty reduction, the GoE and the European Union (EU) signed on 08 May 2010 a Financing Agreement (FA) to launch a new livestock programme for Ethiopia. The programme, "Improving and Integrating Animal Health Services in the Livestock Value Chain through Public Private Dialogue in Ethiopia" (LVC-PPD), responds to the GoE endeavour to restructure veterinary services through innovative approaches to improve animal health services delivery. Its implementation strategy hinges on public-private policy dialogue, an approach that is increasingly recognized as having the potential to stimulate economic development and to support demand-driven livestock services.

The LVC-PPD project has been implemented by the Government of Ethiopia, Ministry of Finance and Economic Development, National Authorising Officer (NAO) of the European Development Fund (EDF), through a direct decentralized operation housed within the Veterinary Service Directorate (DVS) of the MoA. A Joint Steering Committee, to be chaired by a representative of Ministry of Finance and Economic Development (MoFED) (Deputy NAO), was planned to oversee and validate the overall direction and policy of the project, but was not convened.

The Overall Objective of the project is to "contribute to alleviate poverty among the livestock rearing communities through measures accompanying the current reform in the livestock sector", while the Project Purpose will "add value to livestock commodity production chains by integrating strengthened animal health, advisory and regulatory services, supported by effective dialogue between and mutually agreed action by stakeholders in the public and private sectors".

This will be achieved through three Expected Results: Capacities of public and private stakeholders are developed to plan, manage and evaluate services and inputs needed by livestock commodity chains; Animal health, advisory and regulatory services for livestock commodity value chains are developed and strengthened; A knowledge base that meets the needs of public-private dialogue in the context of livestock value chains is developed and established.

The presence of epidemic and economically important endemic diseases deter many farmers from upgrading their stock to higher productive genotypes or even from keeping livestock altogether. The major justification used to set up priorities for interventions in animal health services are therefore the economic losses incurred to the nation and the farming communities. The main economic losses are due to mortality, reduced production of meat, milk, eggs, decreased draught power output, lowered quality of animal products and by-products, risk of zoonoses with possible effect on human health, and implications of trade bans imposed by importing countries.

In response to this situation, the major thrust of the LVC-PPD project was to strengthen the delivery of animal health services in the upstream component of livestock value chains. It is widely recognised that the current state of public veterinary field services' delivery is poor, being very under-resourced and in need of improved direction and motivation. The service concentrates upon delivery of clinical services, which, due to the resource constraints referenced above, allows some 30-40% of demand to be satisfied. Implementation of public sector core functions such as regulation, inspection, control of priority diseases, and safeguarding public health is compromised. Thus under the current system delivery of both public and private goods is unsatisfactory. The project's focus was therefore to create a favourable framework for public-private partnership, enforcing legislations, establishing registration and licensing bodies and promoting private veterinary practice which are viewed as central to establishing an efficient veterinary system.

Due to unforeseen circumstances, the planned external Result Oriented Monitoring and external project evaluations at project mid-term were not conducted. In light of this and the forthcoming 11<sup>th</sup> European Development Fund (EDF) programming exercise, the EU Delegation decided to execute an Overall Project Evaluation towards the end of the LVC-PPD implementation period that will provide policy-relevant, actionable and evidence based lessons and recommendations that will guide the identification of a follow-on project and inform its formulation.

The project evaluation team (ET) held discussions concerning the project performance with over 100 livestock sector stakeholders inclusive of private sector actors, non government organizations (NGOs), private and public technical experts, veterinary schools, Tufts University, International Livestock Research Institute (ILRI), (Food and Agriculture Organisation) FAO, DVS case teams, donor agencies (USAID, DfID, EU), senior staff from the Ministry of Agriculture (DVS, ATA and State Ministry of Livestock Sector Development) and the MoFED.

A range of qualitative and quantitative information was reviewed and collected during the evaluation period. An evaluation matrix of key questions was designed and questions allocated to each member of the evaluation team. Checklists were developed for interviews. Information gained in interviews was compared to information in documents such as project reports, short term experts (STE) reports and training reports. The principal tools and methodologies used included:

- Reading and review of background documents prepared by the project including; draft legislations; STE technical reports; training / workshop reports and participant lists, Technical Assistance Team (TAT) and project reports, financial reports,
- Documents not prepared by the project including material prepared by ILRI, FAO and Tufts University.
- Semi-structured interviews with key DVS and Ethiopian Veterinary Association (EVA) staff and principle stakeholders.
- Field investigations with community visits in and around Addis Ababa and three regions of Ethiopia (Tigray, Afar and Oromia), including focus-groups discussions, informal community and beneficiary interviews and a training beneficiary questionnaire. All qualitative and quantitative information was disaggregated by gender where relevant, as well as by other vulnerability groupings. However, as no gender disaggregated data was collected from trainings and workshops, it was very difficult to assess gender balance in activities.
- Individual informal interviews were held with producers and processors and service providers, and other market actors following a check list based on the stakeholder analysis matrix. Participants included Government Animal health clinic operators; private veterinary pharmacy operators, University animal hospital/clinic operators, Livestock traders, producers and Livestock value chain technocrats/experts and LVC project implementers).
- A stakeholder workshop was held to present findings and gain feedback from participants who had been involved in the project.
- About 100 training and workshop participants were sent a structured survey questionnaire by email to which 25 replies were received

**Limitations of the fieldwork methods and how they were addressed:** The fact that no previous evaluations or external monitoring had been carried out meant that the project had only internal views of implementation. While the TAT provided all documents necessary to the evaluation team, other project's staff seemed unaware of the needs of the team for documentation and did not provide them at the start of the evaluation. This was coupled with poor access to key DVS informants due to their busy schedules - particularly the over burdened project coordinator/IA and frequently absent case teams leaders. The PE2 quarterly reports were not made available to the evaluation team despite being requested on several occasions. Phone conversations, interviews, emails and requests through the project office administrative officer, the project accountant and imprest administrator, TAT team leader and the deputy team leader were used as alternate approaches to sourcing the required information. Equally it took quite a while to arrange with the State Minister for Livestock Sector Development for a meeting with the ET. For the above reasons, the presentation of evaluation findings and recommendations were delayed until after the field trip.

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### **Sectoion 2**

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## 2. Answered questions/ Findings

### 2.1 Relevance

***i. The extent to which the project has been consistent with, and supportive of, the policy and programme framework within which the project is placed, in particular the EC's Country Strategy Paper and National Indicative Programme and regional and continental sector programmes, as well as Partner Government development policy and sector policies and strategies, mentioned above;***

The LVC-PPD project is in line with the European Community's (EC) Country Strategy Paper and National Indicative Programme (2011 to 2014) by providing support for private sector-based trade in inputs and the marketing of agricultural produce, as well as support for livestock development and strengthening marketing arrangements in both highlands and pastoral areas. The Project is in line with GoE development policy and sector policies and strategies – including the Growth and Transformation Plan (GTP) 2010 – 2015, a successor to PASDEP, stimulating increased agricultural productivity through investments in value addition and the Policy Investment Framework (PIF) 2010 – 2020, Ethiopia's "Agricultural Sector Ten-Year Policy Investment Framework providing the strategic framework for the prioritization and planning of investments to drive agricultural growth and development in the country more broadly. The LVC-PPD should contribute to the overall projected growth in GTP I and the follow on GTP II which has a much more explicit livestock component being closely aligned to the Livestock Master Plan (LMP). The project is consistent with national, regional and continental livestock policy that recognises the need to enhance private sector role in rural development and food safety as embodied in the Veterinary Services Directorate (DVS) "Rationalisation of Veterinary Services", "Animal Health Strategy" and the MoA "Livestock Master Plan"; Intergovernmental Authority on Development (IGAD) "Livestock Policy Initiative"; and Africa Union\_ Inter-African Bureau for Animal Resources (AU-IBAR) Veterinary Governance (VETGOV) project and policy document "Mainstreaming Livestock in the CAADP framework". Increasing market access for livestock and livestock products reinforces the contribution that livestock can make in addressing vulnerability to food insecurity and poverty reduction.

***ii. The quality of the analyses of lessons learnt from past experience, and of sustainability issues;***

The design of the project was influenced by an independent evaluation of a previous EDF which identified the need for more focus and selectivity; the need to integrate technical interventions – specifically integrating animal health interventions with marketing and policy; the need to build capacity of the livestock owners to realise a more sustainable impact on animal health and production; and the need to mobilise private sector stakeholders for the delivery of services traditionally considered the exclusive province of the public sector .

Many of these lessons from past experiences were well applied in the design of the LVC-PPD project. However the design was overly ambitious for the available time and staff, with too many activities included (initially 24 with 90 sub-activities), instead of concentrating on a smaller number of core activities. Strengthening the capacities of public and private sector animal health personnel to deliver integrated quality animal health services, as now envisaged within the veterinary rationalisation framework, should have been the key focus of the project. In addition significant lessons were missed – the understanding that a slow start-up period wastes valuable time and a project that needs to change opinions and policies needs an extended time frame, taking into account the reality of how long any change process takes in Ethiopia.

***iii. The project's coherence with current/ongoing initiatives at national and regional level;***

Excellent level of coherence being targeted through the production of a number of critically needed legislative frameworks, the establishment of close links and complementarity with the USAID funded Livestock Market Development (LMD) and Pastoralist Resilience PRIME projects and active engagement with the Rural Economic Development and Food Security (RED&FS) Livestock Coordinating Forum. This forum provides the opportunity for ensuring coherence with other donor supported themes and projects as currently in operation and as listed in Annex 8.5. The project is aligned with the IGAD region Standards, Methods and Procedures in Animal Health (SMP AH) and with VETGOV and PAN-SPSO II the Continental flagship programmes of AU-IBAR.

**iv. The quality of the problem analysis and the project's intervention logic and logical framework matrix, appropriateness of the objectively verifiable indicators of achievement;**

The Project Estimate (PE)1 log frame was considered by the Monitoring and Evaluation (M&E) STE consultant, and the evaluation consultants to be too focused on process and to have too few impact Objectively Verifiable Indicators (OVIs) that could be verified and attributed to the project. Most indicators referred to direct project outputs rather than the impact of the outputs.

At the conclusion of PE1, a new log frame was developed and approved but the M&E STE, on his second mission, felt that there were too many activities for the available staff and that some of the OVIs were not measurable e.g. “*reduction in disease prevalence*”. In addition the TAT log-frames and the Programme Estimates (PE) log-frames were not synchronised. A workshop was held in September 2013 to review the PE 2 log frame, ensure that the workload was appropriate to the staffing, that the OVIs were realistic and could be measured and that there was better coherence between the TAT contract and PE2 so that a single monitoring tool could be used. The following bullet points show the previous and present numbers of sub-activities and indicate that the project has been simplified and with fewer and more coherent activities:

The PE1 had 24 activities and 90 sub-activities. The initial PE2 had 20 activities and 58 sub-activities. The revised PE2 has 17 activities and 50 sub-activities. The activities have been rearranged more logically and redundancy removed. The EVA grant award document has 5 results and 16 activities. The TAT Work Plan 2012-2014 has 24 activities and 81 sub-activities. The TAT Work Plan 7/6/2012-6/12/2013 has 16 activities and 67 sub-activities.

The reviewed PE2 logframe was approved and is used by the project..The purpose-level OVIs of the revised log frame are: Accepted regulatory framework in place; Pilot actions implemented together with the stakeholders; Live animal exports issued directly to importing countries with ETH export certificates; Expansion of meat export markets. An analysis of the PE2 log frame OVI's is given in Annex 8.1. The Consultants felt that the OVIs were relevant to the project purpose and measurable.

The EVA addendum took 12 months to approve so work actually started in May 2014 and the activities reported only cover 6 months. The EVA component will end in November 2015. The reasons for the delay are not completely clear but were due to protracted negotiations over the activities under EVA and the addendum sat for 5-6 month with the NAO and a similar time with the European Union Delegation (EUD). By the time the activities started, the position of the Workshop and Training Coordinator had been cancelled and there was no-one to introduce the concept of adult training skills to the EVA. The sanitary mandates activity was delayed both by the late hiring of a Sanitary Mandate consultant and the late start of the EU- Supporting Horn of Africa Resilience (SHARE) project, planned to facilitate the DVS to link with the private sector to undertake peste des petits ruminants (PPR) vaccinations, control the disease, improve understanding of the epidemiology of PPR and inform an eradication programme. However, the LVC-PPD project was able to support EVA while waiting for the addendum approval and EVA has carried out several consultative workshops, Annual Conferences and trainings (See Annex 8.2) and a study tour for 50 veterinary professional. Several studies are in process and due to be completed soon. EVA faced delays in hiring staff and consultants, even though an allegedly attractive market rate of Euros 100 per day was offered. The EVA should undertake a review to determine the rate for competitive motivation in recruitment of consultancy services for the livestock sector in Ethiopia

The EVA logframe does not link seamlessly with the LVC-PPD logframe and it is not always easy to see where the EVA activities fit into the overall logframe. The activities in Result 2: *The institutional framework, networking and awareness for Community Animal Health (CAH) delivery system strengthened*” are more aligned with the needs of para-professionals than CAHWs. This alignment was necessary because the CAHWs are only permitted to work in the lowlands. The focus needs to be clarified from the point of view of the LVC-PPD. Analysis of the EVA logframe is shown in Annex 9, with only 6 months of activity for the EVA component, it is too early to assess impact.

**v. The extent to which stated objectives correctly address the identified problems and social needs, clarity and internal consistency of the stated objectives;**



The stated overall objective of the project is to contribute to poverty alleviation among livestock keepers through measures in line with the then Government Plan for “Accelerated and Sustained Development (PASDEP). The project purpose is to add value to commodity production chains by integrating strengthened animal health advisory and regulatory services, supported by effective dialogue and mutually agreed actions by stakeholders in the public and private sectors. These objectives correctly address the identified problems and social needs of the livestock keeping community to access improved delivery of demand-driven animal health, informed advisory and supportive regulatory services. Veterinary Services(VS) in Ethiopia have, to date, been largely in the domain of the public sector with limited and questionable quality of participation by the private sector. The project, through public-private dialogue (PPD), has created a pathway towards establishing a rationalised VS with clearly defined and integrated roles for public and private sector participants within an overall quality controlled framework. Furthermore a strengthening of PPD is seen as a key strategy in promoting and creating an enabling environment to encourage and improve private sector participation and investment in the sector, as well as promoting a more efficient and effective public sector.

***vi. The extent to which the nature of the problems originally identified have changed;***

The problems as originally identified included: inadequate capacity of public and private stakeholders to plan, manage and evaluate services and inputs needed by livestock commodity chains; weak/under-developed animal health advisory and regulatory services for livestock commodity value chains; and a lack of a knowledge base that meets the needs of PPD in the context of the livestock value chain. These problems have remained relevant during the life of the project and are addressed by the project activities as described below.

***vii. The extent to which objectives have been updated in order to adapt to changes in the context;***

There has been no updating of objectives nor has there been any change in context requiring any such updating.

***viii. The degree of flexibility and adaptability to facilitate rapid responses to changes in circumstances and in terms of sustainability:-***

Not applicable as circumstances have remained largely unchanged. It can be given, as a general statement, that the change environment for the livestock sector in Ethiopia remains very challenging and conservative, constraining the pace of change and adoption of new approaches. This is paradoxical as the sector has been identified as having considerable potential to making a far greater contribution to GDP.

## **2.2 Effectiveness**

***i. Whether the planned benefits have been delivered and received, as perceived by all key stakeholders (including women, men and specific vulnerable groups).***

One consequence of the implementation delays is that there has been insufficient time for benefits to flow to the beneficiaries. The cancellation of the NSA component restricted project access and benefit flow to stakeholders, particularly women, at the production level of the value chain. This resulted in a skewing of the project towards the export market value chain. This gap, to an extent, has been covered by other projects and by the EVA in taking a larger role in the Sanitary Mandate pilot. It should be noted that Result 2 of the EVA log frame is to support Community Animal Health, but the activities have had to be more focused on the para-veterinarians and not CAHWs, due to the policy that CAHWs can only work in the lowlands

There were only a small number of women participating in workshops and trainings. While it is difficult to include women in technical meetings and trainings, the project should have had more gender awareness and taken a greater effort to recruit women – despite the challenge of the very wide range of activities and limited resources and this not being a physically stated project objective. By taking a passive attitude, the project has reinforced cultural norms rather than challenging them. An analysis of training attendance sheets indicates that out of 445 trainees, only 32 were women (7%). Although EVA has a policy to include 30% women in its activities, they have not been able to realise this level of female participation.

The Financing Agreement notes that the project will work with livestock corridors which could have been linked with a project by the International Land Coalition planned to look at traditional livestock corridors. As the start of this project was delayed it was not possible for it to work with LVC-PPD but this may be possible in phase 2.

**Table 1: Expected and actual benefits**

Expected benefits	Actual benefits realised	Reasons for deviation
Enabling regulatory framework with passing of key legislation	Draft legislation prepared by LVC-PPD not yet passed. Ministry of Trade has quickly passed legislation disempowering private livestock traders	Minister is not prioritising the legislation. Yet Ministry of Trade has passed legislation quickly
Stakeholders and the project work together to pilot veterinary service interventions	Project has not yet initiated sanitary mandate interventions. though SM Scheme developed in 4 <sup>th</sup> quarter 2014 is planned to be piloted in 6 woreda's in the first half of 2015. Pilots for private vet pharmacies and clinic not carried out by NGO partners. Innovative approaches seen in Tigray and the project wishes to build on this. Activities with PEPE Communities have not realised actual benefits	PPR vaccination under sanitary mandates will begin in 2015 under EVA.  Cancellation of NSA component
Certification procedures in abattoirs and export feedlot increase exports	Certification procedures in place and used by abattoirs and in live animal export. Abattoirs increasing their compliance.	Progressing well but activities to train most of the private sector will take place in 2015.
Privatisation road map prepared, endorsed by DVS and used to inform privatisation of VS	VSRRM has been drafted but not yet endorsed by the Minister.	Privatisation (rationalisation) road map produced by May 2014 and socialised in Ethiopia through workshops, meetings and conferences
Disease surveillance and reporting improved by using SMS – not in list of acronyms reporting	Mobile application –based surveillance pilot planned and will be operational in 2015. Database designed and operational; Mobile application SMS reporting system designed. Wereda lists and digital maps reconciled. GIS training will take place in 2015. Strictly speaking the system uses SMS only for the alert messages. The notification data packages sent from the field are not SMS but based upon the contents entered on the template (form) installed on the smart phones combined with GPS coordinates and (often) a photograph	Delayed due to the need to select and undertake trials to select appropriate software and undertake extensive preparatory work. System now in place and ready to roll out
Technical capacity of feedlot and abattoir inspectors and managers increased	Inspectors have been well trained but the managers and owners will be trained in 2015. Animal welfare understood by inspectors and a wider audience in Tigray. The training of abattoir and quarantine inspectors has shown clear benefits with two export abattoirs having achieved ISO certification, with two more in process. The abattoirs are using the audit tool, developed by the project, to improve their sanitary and hygiene procedures. Several feed lot managers are also showing improved biosecurity, and have accepted the use of ear tags as they follow the recommendations of the inspectors	Delayed due to delay in approving EVA addendum. Training of managers delayed due to the view that public participants should be trained before the private sector.
Regional and national veterinary labs improve their ability to carry out disease investigation and	Improved ability to carry out risk analysis but vehicle purchase cancelled, equipment and reagent purchase delayed and so labs have not improved. Residue lab fully equipped and staff trained but not	Tendering problems delayed and revised purchase of equipment and reagents. Building of Kaliti residue lab

surveillance	yet operational as no reagents and utilities. The provision of laboratory utilities and reagents is the role of MoA and thus outside the control of the LVC-PPD	has been completed but, at the time of the evaluation field exercise, the electricity had been connected but not the water. Four laboratory technicians had been trained but there were no reagents for them to actually carry out tests. They were planning to keep their skills up to date by working in the Ministry of Health Laboratory Lab expert STE not hired as the installation technician took on the role.
Abattoir and feedlot inspectors and owner/managers improve skills in GMP, HACCP, biosecurity	Skills improved in government inspectors through training. Private sector staff will be trained in 2015	Delay due to delay in approval of EVA addendum and view that public sector should be trained first. No material or plans for training Semi-skilled workers
Veterinary training rationalised by VEF and reviewed curriculum	VEF formed, meeting regularly and reviewing curriculum and training quality	Veterinarians feel that they now have a way to raise concerns about veterinary training to GoE
AI, MC & T system is approved and pilot launched .	This component has been developed and will be taken forward jointly with LMD. LVC is purchasing the ear tags and IT equipment and will carry out training; LMD will hire the expert and purchase equipment including the vehicle.	Recommended by the STE for AI, MC and T.
A communication plan informs the stakeholders of the project and of the delivery of animal health & welfare services.	Plan developed but not carried out due to lack of staff	Communication officer not hired yet by MOA and the plan to use a case team leader is not feasible due to lack of relevant skills and available time
Knowledge management system including a website designed	MOA website links to EVA. EVA website improved but needs more work. This will be carried out in 2015.	Consultant hired by EVA was not able to complete the task due to lack of skills. LVC-PPD IT will complete the job.
Increased availability of animal health & welfare information	Documents are available on websites. Newsletters and bulletins not produced due to lack of available staff.	Consultant proposed to write the bulletins was not approved. Due to no JSC there was no opportunity to discuss.
Increased awareness on new approaches to animal health service delivery	The concept of privatisation is well understood and supported amongst the stakeholders.	

## ***ii. Whether and to what extent intended beneficiaries participated in the intervention;***

The LVC-PPD project and EVA have carried out ten consultative workshops for stakeholders from the animal health and veterinary public sector, universities and educators, federal and regional labs, National Vaccine Institute (NVI) and EVA members (See Annex 8.2). These workshops have canvassed opinions on privatisation, veterinary education and career structure, linkages between projects, discussions on drafts of legislation. There has generally been low participation from the private sector including producers, marketing associations and traders in these meetings, despite the fact that they are a key part of the value chain, although this has been compensated, to a large extent, by the discussions and interactions with private players in the LVC-PPD joint activities with Private Enterprise Programme Ethiopia (PEPE). Much of this, is due to the delay in beginning the training activities, owing to general programme delay and the time it took to agree the EVA addendum, and the top-down view of government that their staff should be trained first and private sector later. There have been exceptions to this, such as the Animal Welfare training in Mekele, where a wide range of participants were invited, and the Mixed Crop-Livestock Task Force (MCLTF) consultative meeting for Regional Economic Development and Food Security (RED&FS). The training of the private sector is planned to take place in the five month extension period. The project could have ensured that the trainings covered a wider range of participants for better ownership of the activity, thus increasing public-private dialogue.

The NSA component of the programme was designed to work closely with communities, producers and traders and was to have been implemented by the NGOs already active in the project areas and with links to the communities. With the cancellation of this activity, communities, producing groups and private service providers did not have a voice in the implementation of the project. The project was challenged to address this gap as the government does not have a strong presence in the isolated pastoralist areas, and they did not have available staff. However, the FAO and the NGOs in the pastoralist areas have continued to support the communities have provided funds for veterinarians and para-professionals to begin to work as private service providers. The SHARE project will also work at the community level. However, the lack of this component has meant that the project has had a little impact on pastoral livestock producing communities. However, the LVC-PPD had many activities in highland MCL system.

## ***iii. If the assumptions and risk assessments at results level turned out to be inadequate or invalid, or unforeseen external factors intervened, how flexibly management has adapted to ensure that the results would still achieve the purpose; and how well has it been supported in this by key stakeholders including Government, Commission (HQ and locally), etc.;***

The key stakeholders (European Union (EU), National Authorising Officer (NAO), project support team, Directorate of Veterinary Services (DVS) all tried to solve problems and create an enabling environment for the project to proceed. The EU was open to find solutions to administrative problems and worked with the project on the addendums to the original financing agreement. However, the body proposed to oversee and troubleshoot problems, the JSC, was not convened which was regrettable as it would have added significant value in providing project oversight and awareness of project activities due to the proposed wide representation from the federal government and the regions. This risk of the lack of JSC meeting was not foreseen in the project design and it has had a significant impact on the success of the LCV-PPD as there has been no joint problem solving.

The following risks and assumptions referring to the speedy endorsement of relevant legislation, pro-market Government policies and an reliable and country-wide internet access have proved to be invalid.

### **(a) A supportive legislative framework is in place:**

Seven policy documents are awaiting approval by government and project activities are delayed as a result. Examples include legislation for the Veterinary Statutory Body (VSB); Control and prevention of animal diseases; Control of veterinary diagnostic laboratories; Animal welfare; Movement control and traceability; Veterinary control of import and export regulations. The lack of the enactment of these policies, whilst frustrating in context, did not actually delay the project implementation as the project activities were able to continue under existing legislation.

**(b) Government policy continues to support private sector service delivery, and (c) Government policies actively implemented to promote private sector development:**

During the project implementation period, government actions and policy implementation activities have proceeded at different rates. The LMP, has been approved by the government and it envisages an increase in privatised veterinary services as a strategy to increase production. While the Government of Ethiopia is positive about development of the private sector, the bureaucracy to support privatisation and enabling policies have not evolved quickly enough. The Veterinary Services Rationalisation Road Map (VSRM) has not been approved and the views of government towards the privatisation of veterinary services appears to be that of cautious progress as they do not have confidence in the private sector to provide quality services. This caution suggests that the public service has not fully understood or grasped the opportunities presented in their role of supporting and regulating the emerging private sector. The Ministry of Trade rapidly passed legislation that prevents the private trading in livestock in favour of cooperatives. Yet, this legislation is not supportive of the aims of the project.

**(c) Reliable long-term internet access can be established country wide:**

Ethiopia has very poor telecommunications compared to the rest of the world. This affects the efficiency and use of a range of information technology (IT) tools and communication systems and is particularly challenging in isolated areas :

Communication between federal, regional and local government offices, laboratories and input suppliers is hampered as many government staff either do not have an internet address or check their emails rarely due to poor service or lack of IT skills. Even SMS and mobile telephone communication is patchy and frustrating.

Market information is not available to all areas of Ethiopia via the internet. However, the SMS-based National Livestock Market Information System (NLMIS) records market information for pilot weredas by SMS and the data can be requested by SMS from an ordinary mobile phone. Improved telecommunications is required for this to be scaled up.

Private pharmacies in isolated areas have problems accessing supplies by phone due to the poor service and the owners often have to travel to centres such as Addis Ababa to purchase drugs, adding to the costs of sourcing drugs and inflating the price to the livestock keeper.

Students, veterinarians, laboratories, processors and producers do not have timely access to technical information or learning materials via the internet.

Internet-based livestock management programmes, such as I-Cow for small-holder dairy managers, are not available to village-based or peri-urban producers.

***iv. Whether the balance of responsibilities between the various stakeholders was appropriate, which accompanying measures have been taken by the partner authorities;***

The administrative stakeholders of the project are the European Union; the Governmental's agencies of Ethiopia including the NAO, MOA, REDS & FS. The project support's team of Agriconsulting Europe SA with OPERA, IZSLR and ABS. The JSC was envisaged to have been a key stakeholder with the purpose of bringing all other stakeholders together to ensure open and transparent management of the project through common understanding of the issues. Without the JSC, some agencies do not always understand the implications of decisions of other agencies and the project, such as cancelling of staff positions. An opportunity for joint management and improving project focus has been missed and the NAO's office took on a higher level of responsibility than was envisaged in the LVC-PPD Financing Agreement.



***v. How unintended results have affected the benefits received positively or negatively and could have been foreseen and managed;***

No unintended results of the project have been recorded.

***vi. Whether any shortcomings were due to a failure to take account of cross-cutting or overarching issues such as gender, environment and poverty during implementation.***

The cross cutting issues such as gender were not part of the project design and were not in the approved OVI. Women are under-represented in professional life in Ethiopia and effort must be made to include them in the project, especially as the majority of implementors are male. However, it is not considered that lack of inclusion of gender affected the project outcome at this stage of implementation.

## **2.3 Efficiency**

***i. Operational work planning and implementation (input delivery, activity management and delivery of outputs) and management of the budget (including cost control and whether an inadequate budget was a factor);***

The project has been largely well managed under the coordination of the Directorate of Veterinary Services (DVS), the Imprest Administrator (IA) and the technical service provider although DVS staff and IA frequently had other duties and demands on their time. There was a significant delay in replacement of the original IA and recruitment of a project accountant, due to the low salary offered for the accountant. The project was without an accountant for the entire PE1 period (24 months), severely hampering financial management and implementation of PE 1 activities. The DVS has seven case teams with the epidemiology case team working closest with the project notably for strengthening of disease surveillance and reporting – requiring substantive field work and the payment of per diems. The other case teams were not given extra remuneration by the project to any great extent and consequently had little motivation to put in time and effort in support of the activities. In addition, as per the PE approach, the ACP state should avail labour thus it was expected that the case teams would be readily available for the project, but they were not as they were assigned many other tasks to complete and spent limited time on the project, some months as low as 20%. A more robust system of reward for effort should be considered where government employees on fixed (often inadequate) salaries are expected to contribute time and effort to the delivery of project outputs

Much of the planning and work for the project was undertaken by the TAT Key Experts (KEs), (STEs), IA, project Accountant and the Administrative Assistant to the project. Whilst the budget was adequate for the activities planned, there were challenges and delays in getting the necessary authorisation for expenditure. The JSC did not meet, despite the selection of member institutions. This had a significant effect on the project implementation as the opportunity to discuss and reach consensus on implementation issues was missed, key decisions were made unilaterally by senior staff without full understanding or consensus as to project needs. This hampered decision making and delayed clearances from the concerned authorities which impacted negatively on the overall operations of the project.

One such negative outcome of the lack of the JSC was on project staffing. Three positions were not filled (Training and Workshop Coordinator, Scientific Writer and MOA Communication Officer) as unilateral decisions were made on the assumption that others could do the work. However, this was impossible due to the already high workloads and, therefore, the activities were not carried out. A functional JSC would have been able to raise concerns as to the loss of these positions on the workload of other staff and implementation of the project.

The recruitment process and the acquisition of the STEs, under the Service Contract, was well coordinated in the project and with the EU. However, in future it could be more appropriate to source people with relevant Ethiopian Africa experience in the next phase of the project. There was a contrasting picture for EVA in hiring consultants as it was found difficult to source consultants and on many occasions the post had to be re-advertised. Factors responsible

for this include: the shortage of local consultants with the relevant skills and experience; putatively, the low consultancy fee offered. (It should be noted that according to the EVA, Euros 100 was not attractive enough a rate through the market tender process, however according to the project the rate was sufficient for local consultants); and the long negotiations the EVA had to undergo before getting changes authorised and service contracts signed.

The Standing Procurement Committee was convened to evaluate all bids and recruitment in the presence of KEs and NAO as observers. All STEs were selected following this approved procedure with the winning Curriculum Vitae sent to Agriconsult to complete the appointment process.

Vehicles and equipment purchase experienced contrasting outcomes. In the case of the 16 pick-ups, whilst there were no delays in the submission of the tender evaluation document to the EU Delegation, time elapsed in the finalization of the tender dossier based on the comments provided by the EUD and then the submitted tender evaluation document was not acceptable by the EU Delegation including issues related to the technical capacity of the selected supplier to deliver on the terms of the tender.. This then extended the process over the “D+3” limit, no derogation on D+3 was requested and the procurement consequently abandoned. In contrast the equipment tender processes initially proceeded extremely quickly with due and timely authentication and clearance by the NAO and EUD. The tender for the purchase of equipment for the residue laboratory, however, did not include reagents as this was outside the responsibility of the LVC-PPD. The tender for equipment and reagents for federal and regional laboratories was delayed due to problems in equipment specifications and pricing. This may have been avoided if the STE for laboratories and purchasing had been hired earlier in the project. Tenders for reagents is being prepared by the Kaliti laboratory manager and NADHIC. The installation of the cold rooms has been overly delayed due to the slowness by the regional authorities in undertaking the necessary ground works and the construction of shading and due to repeated requests for time extension by the supplier. The service provider is waiting on confirmation that all has been completed as per specification before installing the machinery and training staff in its use.

The negotiation of the EVA addendum took 12 months to complete, delaying this component and the majority of their studies and training activities have only taken place in 2014.

The EDF and the European Commission (EC) procedures underpinning the proper use of funds were followed in the implementation of project activities. However, only Ethiopian Birr (ETB) 1,812,052 (5.86%) of the ETB 30,916,914 PE1 budget was spent due to start-up delays and the extended period without a Project Accountant or Imprest Administrator. Some ETB 3,483,253.49 (48.92%) has been spent to date of the ETB 6,819,279 PE2 budget. The Service provider TAT has spent Euro 1,421,510.55 (86 %) of the addendum 3 budget (Euro 1,670,222.00) as at December 2014. With respect to the EVA, most of its activities have only started comparatively recently with an expenditure of 5.2 million ETB, as reported in their 1<sup>st</sup> formal report for the period to the 30th October 2014.

An analysis of expenditure is given in Annexes 8.3 and 8.4. There should and must be a thorough and frank review of the gross underspend in PE1 that, from all accounts as available to the ET, appears have occurred largely from the failure to offer a salary commensurate with the expectations of a sufficiently qualified and experienced accountant.

## ***ii Management of personnel, information, property, etc;***

As mentioned above, recruitment of project staff was hampered by the low salary rates offered which resulted in a prolonged recruitment period for the crucially important post of project accountant, who was central to the implementation of planned PE1 activities of the project. The office of the NAO was of the opinion that the imprest holding staff and KEs of the LVC-PPD did not have sufficient experience or competency in EDF procedures. However, from a review of the qualifications and training of imprest staff there would appear to have been sufficient capacity in EDF procedures and that the KEs were found to have had sufficient experience in EU assignments and their technical expertise was well suited to the task. The project weathered well the resignation, for personal reasons, of the Team Leader, with a period of just 2.5 months from 1 February to 15 April 2015 before a suitable replacement was recruited and in post. The project relied heavily on the case teams to implement activities but they were neither 100% available nor compensated for the extra work. The high workload of the case teams could have been reduced to

some extent if a training cascade had been carried out so that Regional trainers could take on some of the technical training. Future projects should find a way around this problem to ensure full commitment of staff to activities.

***iii. Whether management of risk has been adequate, i.e. whether flexibility has been demonstrated in response to changes in circumstances;***

The project demonstrated good flexibility in response to a change in circumstances as evidenced by the response to the inability to field the NSA component with the EVA being used more actively to represent the non-state sector.

***iv. Relations/coordination with local authorities, institutions, beneficiaries, other donors;***

The project was launched in June, 2012 giving an implementation period to date of some 20 months, and an actual working period with field activities of some 18 months. However, despite this relatively short period of activity and though the project was mainly a policy environment development activity, the ET found, while making field visits, that the project was well known at the regional government level and the general value chain actors understood its work. In the short period of time, the project has succeeded in winning the confidence of the value chain actors, who are appreciative of the fact that the operating environment for veterinary services will be improved by the project's work. Beneficiaries wanted real action by implementation of the strategies and ratification of the draft legislations prepared by the project actions. These beneficiaries were also asking for the project to continue and consolidate the developed strategies. Now that the 5 month extension request, signed and submitted before the cut-off date, has been accepted the project has until June 6<sup>th</sup> 2015, [though the TAT will continue until June 2015], to consolidate these relationships and progress made to remain patent until the follow on phase is launched. One vehicle for this continuum can be the EVA who will remain with LVC-PPD funding until November 2015. Another is the ATA Livestock Unit who can ensure that MoA resources, policy and focus remain supportive of project activities for the duration of the interim period

The LVC-PPD has established working links with a number of other donor funded programmes inclusive of the USAID-funded LMD programme, the Department for International Development UK) (DfID) Private Enterprise Programme Ethiopia (PEPE) project as well as the the EU funded SHARE. The evaluation team has mapped over 40 livestock projects as recently, currently or soon to being implemented in Ethiopia (Annex 8.4). Creating good working links between these projects, inclusive of LVC-PPD, would add considerable value and guard against duplications and gaps. It is suggested that the RED&FS should be more proactive in this respect with the projects aligned to one or more of the working group categories as have been developed.

***v. The quality of information management and reporting and the extent to which key stakeholders have been kept adequately informed of project activities (including beneficiaries/target groups);***

The M&E STE set up quarterly plans and reporting formats that were followed by the technical team, however, only the PEI reporting was seen by the evaluation team. The TAT followed 6 monthly reporting to the EUD, NAO and DVS. All reports were technically complete. High level stakeholders such as donors, UN agencies and government ministries, were informed of the project activities via the RED & FS working group, the veterinary fraternity through the VEF and trainings carried out by EVA.

However, the wider stakeholders, livestock producers and processors were not well informed due to the lack of any communication activities as MOA had not hired a Communication Officer to date. The two STEs for communication developed creative briefs and a communication strategy to inform the wider stakeholders about the project. These briefs included brochures, flip charts, radio programmes and radio discussions. With no communication activities carried out by a Communication Officer, the wider stakeholders remained mostly unaware of the project's key messages although this was countered to some degree by the efforts of individual government staff and EVA through consultative workshops.

***vi. Respect for deadlines;***

Whilst project reports by the TAT and financial returns have been well prepared and required deadlines met, the same cannot be said for the project procurement and activity clearance process. Although clear timelines were laid out the often protracted nature of deliberations between the MoA and NAO concerning clearance for key aspects of programme activity, interspersed by periods of inactivity, resulted in a number of decisions being pending until the 11<sup>th</sup> hour and some not made at all. As a consequence of the practice of delaying or ultimately not granting clearance, project personnel were forced into a number of “management by crisis” scenarios incurring extra time, effort and stress in trying to retrieve and redress a given non-decision to meet a given deadline. In some cases, such as the procurement of the 16 vehicles, the missed deadlines resulted in the irretrievable loss of valuable project resources and reduced project impact.

The EVA grant was delayed due to extended negotiations. They were able to commence activities with the assistance of the project but the delay resulted in an extension of the EVA component to November 2015 while the implemented activities will cease in October 2015.

***vii. Extent to which the costs of the project have been justified by the benefits whether or not expressed in monetary terms in comparison with similar projects or known alternative approaches, taking account of contextual differences and eliminating market distortions;***

The project’s costs can be amply justified by the benefits achieved, specifically in terms of the investment in the broad ranging consultative process that underpinned the production of a first class analysis of the environment required to enable the establishment, by way of a road map, of a rationalised VS. The project undertook a review and production of a National Animal Disease Surveillance System (NADSS) and an Animal Disease Notification and Identification System (ADNIS); the vision and drafting of a number of legislative frameworks; and supported the EVA to commission a number of relevant studies that will provide evidence based argument and direction towards improving the quality of VS being delivered.

The project is working in collaboration with the LMD for the piloting of the LITS programme and enhancing export certification. Community awareness concerning good animal welfare practice was promoted by the project, in the project in three different Regional towns - Hawassa (SNNPR), Diredewa and Haromaya where Haromaya university, Mekele with Mekele university collaborated with the national Animal Welfare working group to review and revise the draft legislation. The project supported the training in residue testing for 4 laboratory technicians at the reference centre in Holland. A key achievement has been the successful piloting of the mobile based disease reporting system - ADNIS, (with support from FAO and LMD) and NADSS, inclusive of the training given and mobiles distributed.

It has been noted that the approach to capacity building has been primarily by way of residential courses involving venue, traveling costs and per diems costing on average some US \$15,000 per event. Whilst such events may be value for money for certain purposes, such as awareness raising and consensus building, there are more cost-effective e-platform tools for skills and knowledge enhancement that can be used either as an alternative or as a complementary approach. These include developing regional technical training skills using standard modules and e-learning accessed online in areas with good internet access and IT such as Mekele University and LIVES Rural Knowledge Centres, and offline on tablets, flash drives and CDs in areas that do not have accessible internet.

***viii. Have contributions from local partners and governments (e.g offices, experts, reports, tax exemption, as set out in the project documents and LogFrame resource schedule) been provided as planned;***

Whilst financial contributions by way of tax exemptions and office space has been provided there has been an important gap in the time devoted to project activities by project officers, seconded to the project by the MoA. These would be expected to devote the majority of their time but in one report it is stated that their availability for project activities has been less than 20%. Further it was expected that a full time deputy Imprest Administrator would be seconded but since early October 2012, this position has remained vacant until a deputy IA was nominated on May 2013

***ix. Quality of monitoring: its existence (or not), accuracy and flexibility, and the use made of it; adequacy of baseline information;***

Technical and financial monitoring of the project has been conducted as a continuous process and used to elaborate the quarterly progress reports. The PE2 log frame was revised by the STE M&E with the help of senior management (DVS, EVA and the TAT) and the new log frame approved and used in the project activities. The Project Estimate reports (PE 1 and 2), prepared by the TAT KEs, provide a detailed account of the activities undertaken and challenges faced. In the absence of meetings of the JSC the PE reports have fulfilled an important function in raising awareness of progress made and future activities planned. Reports by the STE's are to an equivalent high standard in content and presentation, providing as in the case of the "Privatisation" and "Disease Surveillance" reports, important baseline information on which LVC-PPD activities have been planned. The quarterly reports have been prepared by the project against the quarterly plans developed by the STE M&E but the PE2 quarterly reports were not provided to the evaluation team despite requested from the IA. In their absence, the TAT 6 monthly reports were used to review progress.

Financial reports have been produced in a regular and timely manner by the accountant and submitted to the EU through the NAO office. Though the EVA contract has only recently started, the EVA has worked hard, with the help of the LVC-PPD project staff, to put in place a correct accounting system. Government rules and regulation have been followed in the disbursement of payments. This can at times be very challenging and time consuming due to the multiple rules and regulations to be complied with. The accountant had to spend much time to gain familiarity with the required accounting procedures as she was new to the EDF rules, however, she has made significant progress in mastering these. Although there were no JSC meetings were held, as required in the Financing Agreement, the LVC-PPD project and DVS have worked hard to coordinate well with the EUD to ensure progress was made in the implementation of the activities.

The financing agreement made provisions for an external Result Oriented Monitoring planned for November 2012 and an external mid-term project evaluation, planned for 2013. Neither of these was carried out due to technical reasons and so there has been no external evaluation of the project during the implementation period. Had these evaluations been carried out, the project may have been able to solve such issues as the lack of JSC meetings and the delays caused by the tendering problems.

***x. The quality of the technical assistance provided (e.g. did it help to provide appropriate solutions and develop local capacities to produce the intended results);***

Technical assistance has been provided in two ways ; through the two key long term experts and various short term experts. The quality of work carried out by the experts, their interactions with case teams and other partners and reports they have produced have been of a consistently high quality and their value in assisting the DVS in implementing project activities has been widely recognised and endorsed. Local teams had sufficient support from the team of experts available. The case teams have worked with the STEs and the KEs to develop and produce various legislations and draft strategies.

***xi. Did any unplanned outputs arise from the activities so far.***

There have been no unplanned outputs of any notable significance arising from LVC-PPD project activities other than the production of the contemporarily named "Veterinary Services Rationalisation Road Map" (VSRRM). This output is in line with Result 3 to produce a knowledge base meeting the needs of the PPD and was developed by the project and socialised in Ethiopia through workshops and meetings. Concurrently the LMP was being developed by ILRI and the LMP team used the VRRM as a key resource.

## **2.4. Sustainability**

***i. The ownership of objectives and achievements, e.g. how far all stakeholders were consulted on the objectives from the outset, and whether they agreed with them and continue to remain in agreement;***



The main stakeholders and beneficiaries of this project in the livestock sector are:

- Livestock keepers in pastoral and highland areas;
- Traders and processors involved in export of live animals and processed meat;
- Public and private veterinary services personnel;
- Private sector associations involved in the promotion of animal health services.
- Universities and training institution
- Livestock marketing and production associations, traders and processors

During project preparation and implementation, there was an extensive consultation and coordination with institutional stakeholders such as the EVA, Veterinary Universities and training institutes, Federal and Regional laboratories and Animal Health Bureaux, Ministry of Education, USAID funded SHARE, LMD and PRIME programmes, Tufts University, DIFID funded PEPE programme, ILRI livestock initiatives, donors and NGOS. Collaboration has been maintained through the RED & FS working group where the project stakeholders, including private enterprise, can interact as part of the sectoral working groups.

There has been a delay in including the private sector in project activities and the sector is not involved in review of project impact and strategy. The project took a top down, government-centric rather than an inclusive consultative approach to implementation though a number of valuable consultative workshops were held with the private sector. This is reflected in the participant lists for workshops which record that the majority of attendees were from government personnel. The LVC-PPD explained that they planned to train government staff first and private sector later. However, this was a lost opportunity to develop dialogue between the public and private sectors and delayed the private sector's understanding and ownership of the technical aspects of the programme. There have been exceptions to this as per the "Harmonization workshop (Crop-Livestock Task Force Meeting) to align, harmonize and create a functional linkage and partnership with similar actions/projects and programmes" which included Government, donors, the private sector and NGO representatives. Project beneficiaries clearly expressed their commitment to moving forward with expanding the various livestock value chains, including the privatization of veterinary services, but felt a level of frustration with the slow change to create an enabling environment needed to support private sector development.

***ii. Policy support and the responsibility of the beneficiary institutions, e.g. how far donor policy and national policy are corresponding, the potential effects of any policy changes; how far the relevant national, sectoral and budgetary policies and priorities are affecting the project positively or adversely; and the level of support from governmental, public, business and civil society organizations;***

There is good correlation between donor and national policy and good prospects of continuation of that policy beyond the time frame of the project due to the formation and functioning of the RED&FS coordinating structure. This enjoys a Ministerial chair at Technical Committee level, a Directorate chair at Task force level and a Technical chair at Working Group level. There is not as yet a specific livestock policy document for Ethiopia although such a document is currently in preparation. The broader agricultural sector policy statements consistently emphasise the desirability of rationalisation of service delivery with agreed roles for both public and private providers. The project is driving for an enabling environment to encourage private sector participation at different points along the livestock commodity value chain with a particular emphasis on animal health that cuts across all points along the chain. The intention to pilot rationalised service delivery models will provide evidence based argument to embed the approaches into a livestock specific policy framework. Any such good practice examples should be captured and carried forward into the follow on phase.

The project is being held back by the number of outputs by way of legislative frameworks or strategy papers that are still waiting, more than a year after production, for clearance. Received wisdom has it that this road block will stay in place until the forthcoming elections have taken place, though an assurance was given, during the course of a meeting with the State Minister for Livestock Sector Development that all outstanding frameworks and strategy papers will be given the necessary attention and clearance before the election takes place. Despite the lack of a green light endorsing

the legislative frameworks and strategy documents, the project has enjoyed a significant level of support from all stakeholders, the government in particular. The policy enacted by the Ministry of Trade to prevent private actors trading in livestock is puzzling in the light of the stated interest and support for privatised veterinary services.

***iii. Institutional capacity, e.g. of the Government and counterpart institutions; the extent to which the project is embedded in local institutional structures; if it involved creating a new institution, how far good relations with existing institutions have been established; whether the institution appears likely to be capable of continuing the flow of benefits after the project ends (is it well-led, with adequate and trained staff, sufficient budget and equipment?); whether counterparts have been properly prepared for taking over, technically, financially and managerially;***

The GoE has recently formed a Livestock Value Chains unit in the ATA which has shown a keen interest in seeing the important work of the LVC-PPD project sustained and carried forward into the follow-on phase. Discussions have taken place between the ATA and the DVS as to how this might be best achieved. The project is also well represented in the RED&FS coordination structure with the State Minister for Livestock chairing the Livestock Task Force and the Director of DVS chairing the Livestock Technical Committee. A key development that will ensure the work of the LVC-PPD project is carried forward is the drafting of the LMP where the efforts towards creating an enabling environment for a rationalised delivery of VS align exactly with the needs for an enhanced animal health service as envisaged in the VSRRM. The TAT has shown due diligence in the capacity building of the VS staff at federal, regional and wereda levels ensuring the transfer of new skill and knowledge needed for the transition into a rationalised service delivery mode. Although it is evident that the flow of benefits would continue to come from the draft legislations, once enacted, and the several strategies, road maps and frameworks drawn resulting from the project activities, there will be necessarily need for the MoA to commit to providing continuing support for project related activity during the period between the closure of the current project and the start up of the follow on phase. To some extent these activities can be maintained and carried forwards by other projects such as SHARE, PEPE, PRIME and LMD using the RED&FS

***iv. The adequacy of the project budget for its purpose particularly phasing out prospects;***

The PE1 Budget was 94% underspent, due to delays in establishing the project team, especially the accountant and a slow start up of the project (Annex 8.3) Several of the STEs were delayed (STE Standards and Certification, Animal Identification, Movement Control and Traceability (AI, MC & T)) and the STE laboratory purchasing was cancelled as the technical specifications for the tenders had already been completed. Under result 1, the activities showing little expenditure were: literature review and baseline studies; develop and implement the capacity building programme for the public and private sector (due to delay in EVA grant); the activities on providing advice and training on Good Agricultural Practices (GAP), Good Hygiene Practices (GHP), & Good Management Practices (GMP) and Hazard Assessment and Critical Control Points (HACCP) and developing the AI, MC & T were not implemented and were moved to PE2. Under result 2, the following activities did not incur any expenditure and were moved to PE2; Support for the veterinary regulatory framework, development of national disease reporting framework, inspection and certification services (STE postponed to PE2), Strengthen/develop diagnostic laboratories network, improve the vaccine distribution network. Under result 3 there was no expenditure and all activities were moved to PE2. These underspends have resulted in serious inefficiency in the project and Ethiopia has missed the benefit of the full impact of the project expenditure for PE2 is ongoing and the most recent figures show that some 50 % of the budget has been expended (Annex 8.4) with sufficient funds remaining to cover planned activities for the remaining period of the project in May 2015. EVA expenditure will run until November 2015 and activities will run until October 2015.

***v. Financial sustainability, e.g. whether the products or services being provided are economically viable for the providers and affordable for the intended beneficiaries and are likely to remain so after funding will end; whether enough funds are available to cover all costs (including recurrent costs), and continued to do so after funding will end; and economic sustainability, i.e. how well do the benefits (returns) compare to those on similar undertakings once market distortions are eliminated;***

Largely the project is working to provide and facilitate an enabling environment for the provision of quality animal health services to ensure that livestock value chains operate with acceptable quality standards, meet market demands and can merit higher value product prices. If and when the value chains attain optimal operational levels, the market place can be expected to generate sufficient income to support the cost of the rationalized services. A key component in this will be the enhanced prices realised by better quality and healthier animals produced as a consequence of a better informed and improved quality of animal health services delivered.

The benefits to feedlot and abattoir owners and managers should manifest as increased economic viability and sustainability. The advantages of complying with the biosecurity, GMP, HACCP and abattoir audit tools should be access to higher value export markets and overall increased demand for certified products.

***vi. Integration of an exit strategy in the project design and has its implementation been managed accordingly.***

Three actions need to be taken to ensure that an effective exit strategy is adopted to carry forward key project achievements after the termination of the project – firstly to cement good working relations with the ATA and secure the LVC units support to see remaining road blocks cleared, inclusive of ratification of drafted legal frameworks and the endorsement of the VSRRM; secondly to ensure that key members of the RED&FS forum are well briefed on project activities and the expectations concerning partner actions to continue specified project activities; and finally to embed as many project lessons learnt and good practice developed into the action plans for the LMP to ensure they are carried forward and that no VS wheels have to be re-invented when the LMP is ultimately funded and rolled out.

FWC BENEFICIARIES 2013 - LOT 1: Rural Development and Food Security - EuropeAid/132633/C/SER/multi

## **Final Evaluation Report**

**IMPROVING AND INTEGRATING ANIMAL HEALTH SERVICES IN  
THE LIVESTOCK VALUE CHAIN**

**THROUGH PUBLIC PRIVATE DIALOGUE IN ETHIOPIA (LVC-PPD)**

**Project Ref: ET/FED/2009/021-388**

### **Section 3**

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**Addis Ababa 8/12/2014**



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### 3. Overall Assessment

#### 3.1 Financial and Administrative Management of the Project

The focus of financial analysis was on the financial discipline maintained by LVC-PPD project and EVA as an implementing partner. More attention was given, during the field visit and working at the LVC-PPD office, in reviewing the transactions as per generally accepted accounting principles, mechanisms to approve the fund, documentation for payment, approval of transactions by an authorized person as per delegated authority from the NAO. The IA (Dr. Samuel) at the project and an alternate Dr. Elias from the DVS are the appointed signatories (from the LVC-PPD and DVS respectively) and the second was the IA at the MoA as delegated by the NAO.

The overall project management was to be coordinated under a sector-based JSC, composed of 15 members under the chair of the National Authorising Officer's office, with the leadership of the deputy NAO. Despite the fact that the JSC was agreed in the Financing Agreement, this institution, though nominated, was not called upon to meet throughout the project implementation period. According to the Office of the NAO, it was not necessary to have a Joint Steering Committee for a project with a single sector implementation approach. It was deemed only necessary if the project had components that were cross-cutting with multiple sectors. However, on review of the events as revealed during the evaluation, it was evident that the JSC could have been useful in guiding and assisting the operations of the project and attainment of activities. It would have had the mandate to question and resolve any bottlenecks in the operations of the project

The designated members of the JSC were; Directors of Amhara, Tigray, Southern Nations, Nationalities and People's Region and Oromia Regional Bureaus of Agriculture; MoA, State Minister for Livestock Sector Development, the DVS), LVC-PPD imprest administrator, the two key experts from the service contract; the president of the EVA and finally the EU project manager and the NAO or his appointee. In the absence of the joint steering committee, project activity authorization and decision making became more centred at the NAO office resulting in a narrowed focus and unilateral decision making process.

#### **Lessons Learnt:**

- Active engagement of a JSC is a necessary internal monitoring and facilitation mechanism that would serve to solve problems and fast-track solutions.
- Involvement of the sector and value chain stakeholders in strategic coordination mechanism enhances operational success of existing initiatives at federal, regional and local levels. Dynamic private public partnerships can increase demand for livestock products and stimulate increases in productivity, and drive innovations in the livestock value chain and stakeholder-focused approaches.

#### **Recommendations:**

In line with the new ATA regional service institutions and the DVS regional livestock operations support units, the project should form mechanisms to take on the role of the JSC to continuously analyse and facilitate corrective actions for LVC-PPD.

#### 3.2 Project coherence /synergy with other livestock development projects in Ethiopia / Region / Continent

LVC-PPD has received a positive endorsement from all interviewees for the important contribution it is making to the rationalisation of veterinary services in Ethiopia, with key actions in terms of capacity building, drafting of legislative frameworks, strengthening disease surveillance, improving laboratory capacity and promoting a positive dialogue towards developing consensus for a privatisation road map. These activities, aimed at strengthening livestock services for the upper reaches of the market chain, integrate well with those of the USAID funded LMD actions in strengthening services and infrastructure for the middle to terminal points of the market chain.

The project has the potential to provide a lead for other countries in the region and continents, seeking to strengthen the quality and relevance of their veterinary services delivered in support of the market chain, particularly in terms of

the approaches proposed for the rationalisation of the VS with defined roles and responsibilities of state and private sector livestock service providers.

The project has been advantaged in ensuring good coherence and collaboration with other livestock initiatives in Ethiopia by the formation of the Livestock Technical Committee (LTC) under the RED & FS Sector Working Group. The LTC has two Task Forces (Mixed Crop/Livestock and Pastoral) with 6 Working Groups were formed under the mixed crop and livestock task force (Dairy; Meat; Poultry; Apiculture; Hides and skins; Fisheries/Aquaculture; Crosscutting working groups; Animal feed/forage; and Animal Health)

### **Lessons Learnt:**

Currently there are over 40 livestock-related projects in Ethiopia and the chances of overlap and duplication in activities is, therefore, high. Technical Committees, Task Forces and Working Groups, under the RED&FS Forum, have played a key role in oversight of livestock projects and liaison between donors and key stakeholders in agricultural development. The Crop and Livestock Production Systems Task Force (CLPS TF) and associated Working Groups, could play a wider role in ensuring that synergies are created between projects, guarding against duplication and identifying gaps. It will be important that there is a sustained and effective effort to ensure the engagement of all market chain players in the relevant working groups and that their voices are heard at TF and TC levels and vice versa

### **Recommendations:**

Under the umbrella of the Livestock Task Force of RED&FS Forum, the MCLPS TF and working groups should map livestock projects and the implementers to strengthen links between projects and research programmes with shared interests and goals.

Working with the RED & FS structures, the LVC-PPD should take a lead role in coordinating animal health programmes to ensure synergy, eliminate duplication and identify and address gaps

### **3.3. Studies-**(See Table in Annex 8.2)

***i. Technical Studies:*** The project has carried out a series of studies to provide technical support to underpin the project activities. All consultants were selected by the Procurement Team in Addis Ababa and hired by the Service Provider. The majority of the consultants were international; of the 14 consultants hired, only three were female.

The standard of the studies was extremely high, providing manuals and standard operating procedures (SOPs) for technical procedures and materials usable for training and discussion. They are not only valuable now, but will form the basis of a technical knowledge base into the future. The material can be and should be updated as knowledge of the subject increases.

The baseline studies have informed the project on opinions on privatisation and the challenges to ensure both private supplies of quality drugs and also sufficient veterinary practitioners to give required levels of veterinary support to the livestock sector. While the recommendations of the majority of studies have been taken into account in the project implementation, these are mostly the technical studies that include Risk Analysis, Standards and Certification, sanitary and phytosanitary (SPS), AI, MC&T. The two exceptions are the studies on “softer” subjects; the recommendations of the Communication study has yet to be implemented and the recommendation of the Human Resource Development on training and needs assessment (TNA) have regrettably not been followed.

The STE positions for Residue Testing Training and Laboratory Supplies were not hired by LVC-PPD The former because the equipment installation expert carried out initial training of the laboratory staff and the final training was carried out in The Netherlands. The latter because it was decided that the tenders had been raised internally and the position was redundant. However, problems with the technical capacity of the tender for laboratory equipment may have been avoided if the laboratory supplies STE had been able to support the tender process.

The HR recommendations on developing the participatory training skills and using a TNA to determine training content would have been taken up by the Training Coordinator, who was envisaged to manage the training agenda, curricula and quality. The role of training coordination then fell to the IA who just did not have the time to implement the recommendations. The EVA took on much of the training responsibilities but they have not been exposed to adult training methods – which would have enhanced the impact and learning value of the capacity building training delivered. The implementation of the communication strategy was intended to be undertaken by a Communications Officer hired by the MOA. To date this officer has not been hired although the procedure is now in process. The task was added to the other tasks of the veterinary privatisation case team leader, who has no communication training and so it has not moved forward. Both of these examples illustrate the problems that have occurred due to the lack of the JSC; positions were cancelled or delayed, based on the opinion of a single stakeholder, without the holistic view of the programme and the understanding of the implications of these decisions. As there was no avenue for discussion or raising awareness over staffing levels, the LVC-PPD just had to make the most of the situation by devolving the work load to already overworked officers.

**ii. Pilot Studies:** The pilot study on sanitary mandates for peste des petits ruminants (PPR) vaccination has not yet started as this activity is linked to the SHARE project that has itself been delayed. At the time of the evaluation, the STE was nearing the end of her second consultancy and was preparing contracts and procedures. Seven Weredas have been selected and private veterinarians in the area have been identified with the process of their selection to commence soon. The procedure is very complicated with quite detailed draft contracts in comparison to the simple contracts used by the Regional Agricultural Bureau (RAB) in Mekele to contract veterinary groups to carry out contracted animal health activities such as rabies vaccination and abattoir management.

Pilots to be carried out by NGOs in the NSA component to pilot trial privatisation approaches with the community were not undertaken due to the cancellation of the component. The disease surveillance pilot NADSS using mobile application reporting of disease syndromes is in process. The system and database have been designed, mobile phones purchased and 280 participants trained. The pilot will take place in the final extension in 2015 with the National Animal Health Disease Identification Centre (NAHDIC).

The AI, MC& T pilot will now be carried out jointly by the LMD project and LVC-PPD, following the recommendations of the STE. The cancellations and delays have diluted the impact of these pilots within the time span of LVC-PPD, resulting in a lessening of the benefits felt by stakeholders and restricting the number of important lessons that could have been generated to inform the subsequent phase.

### **Lessons Learnt:**

The quality of studies was high and the technical material had been used within the LVC-PPD, with the exception of the studies on Communication and Human Resources Development. The outputs of all studies should be considered essential for the project implementation.

The pilot studies started late in the project lifetime and could not be assessed during the evaluation. However, care has been taken to ensure that other projects, such as LMD, will take the pilots forward after the project finishes.

### **Recommendations:**

Project management should ensure that all technical studies are given equal weight in project implementation. In projects where the pilots begin so late in the implementation period, the sustainability of pilot studies should be ensured by future projects or by devolving them to linked and on-going projects.

### 3.4 Capacity Building /Training: See Table in Annex 8.2:

**i. Public and Private Sectors:** Nine of the thirteen universities in Ethiopia have established new Veterinary Faculties in the past nine years. These Universities are Mekelle, Gondar, Semera, Jijiga, Haramaya, Hawassa, Jimma, Wollega and Dessie. Approximately 600 veterinary graduates entered the workforce in 2014 and only a small number (approximately 130) of these will find employment in the public service. Animal Health Assistants (AHAs) are trained at the Alage Agricultural Technical & Vocational Education Training College, Ziway. The College accepts school leavers at Standard 10 and provides a three year course leading to a Diploma in Animal Health. There are currently 5,000 students enrolled on this course with an average of 1,030 students graduating each year. No follow on survey of graduated students has been conducted so it is not known what proportion finds gainful employment in the animal health field or, for those that do, the usefulness and relevance of the training received.

The fast growth of veterinary training in Ethiopia has raised questions on the quality of training, as in many cases new graduates, with limited accumulated working experience, are hired as lecturers. With limited opportunity for employment in the public sector, it is envisaged, as outlined in the VSRRM, that new graduates will enter the private sector, for which they will need for training in business skills and marketing. In Kenya, the Sidai franchising programme lists the following skills that are needed to equip a franchisee to run a veterinary drug shop.

- Business planning and management
- Record keeping and basic business analysis (cash-flow, profit and loss, stock and margin analysis etc)
- Inventory management
- Stock and cash controls
- Customer service
- Marketing skills
- Farmer training
- Diagnostics
- Technical aspects relevant to their customer needs such as: dairy management, poultry production, camel health and diagnostics.

#### Models that work: Romadi Group

The Romadi group is composed of 12 young veterinarians who graduated from Mekele Veterinary School in 2012. As undergraduates, they realized that they would face challenges finding employment in the public service and they took advantage of courses in business skills and entrepreneurship, offered by the University. While they had few funds and minimal access to finance, they pooled their resources and worked as a group using their skills to create work in the private sector. They started with a private clinic to support small-holder dairy production and were able to expand their activities as they learnt how to write proposals, seek opportunities and several members took courses in accounting. Currently they are involved in livestock fattening and sales, a veterinary clinic and pharmacy, contract poultry vaccinations for a commercial farm; they have been able to take advantage of small contracts to carry out sanitary mandates such as door to door vaccination of dogs against rabies and have been given space and ‘moral’ support by the RAB. There is another similar group of new graduate vets also doing such contracted work, to manage a public abattoir in Ma’kelle town.

In some areas, NGOs and other organisation supporting private veterinary pharmacies have trained the staff managing such shops in business skills, however, there is a need to standardise this training and perhaps offer it at University level to equip new graduates to enter the private sector. The veterinary school in Mekelle University has recognised the need to expose their undergraduates to the skills required in the private sector. The result of this training has been the establishment of veterinary groups, such as Romadi, who have taken on private sector activities

There are other groups in Mekele who are following the Romadi Group example and the Regional Agricultural Bureau (RAB) is keen to expand the contracted animal health activities to other activities. They are interested to contract

certified Artificial Insemination practitioners but wish to use groups other than Romadi to do this to encourage wider participation. All the groups find access to finance and land difficult and would like the government to relax the rules on the size of private clinics as the costs are high for new veterinarians.

The EVA has carried out many workshops for the public and private sector (Annex 8.2). Approximately 1,700 participants have attended workshops and trainings, the majority of whom are veterinarians and para-veterinarians in the public sector. The capacity of the EVA to carry out trainings and workshops and consult with the wider veterinary body has been improved as their understanding of the technical issues improves. However, most training followed a standard Power Point presentation, often with over 40 slides, and without using adult education techniques which are based on participation and self-discovery.

The EVA has carried out consultation across the veterinary profession on the establishment of the Veterinary Education Forum (VEF), the VSB, veterinary career structure, animal welfare and veterinary services rationalisation. This has been very much appreciated by the veterinary sector and this method of consultation should be considered good practice and a lesson learnt to be used in the future. In addition, a study tour was undertaken by 15 representatives of veterinary schools, federal and regional veterinary services, regional laboratories and related institutions, with the aim of exposing the beneficiaries to veterinary education, research and selected private sector service delivery initiatives.

An e-survey of participants to workshops and trainings was sent to approximately 100 participants, whose emails had been taken from the available participant's lists of trainings and workshops, of which 25 responded. Many of the questions only received a few responses but the study tour, and workshops on veterinary privatisation and the veterinary career structure were considered to have changed thinking and behaviour in the participants.

### **Lessons learned:**

The fast growth in the number of professional and para-professional veterinary graduates (over 1,600 annually) has raised questions about the quality of graduates. The VEF has proved to be a robust body, able to represent the views of veterinarians and training institutions to Government on the quality of veterinary graduates. Some universities have been proactive in preparing graduates for opportunities in the private sector.

While only two universities were visited during the evaluation study, Mekele and Afar, the difference in available funding, infrastructure and learning opportunities between the two was noticeable. It would appear improbable that both universities could produce graduates of equal quality and experience, as required by the standard curriculum. The VEF is able to look into quality issues.

### **Recommendations:**

The VEF should continue to be supported as an interlocutor between the Ministry of Education and the veterinary education profession.

The requirement for a standard curriculum should be reviewed in the light of the inability of poorly funded veterinary schools to achieve OIE Day One Competencies, and the concept of regional specialisation should be considered. In this way, each university could provide specialised training, linked to the ecology and economy of the specific area; such specialisation would include feedlots, poultry, dairy, camel medicine and pastoralism.

The VEF should critically review the ability of all veterinary schools to produce graduates of consistent quality and discuss support for weaker universities with the Ministry of Education.

### **ii. Training of GHP, GMP and HACCP**

The EVA has developed and delivered Animal Welfare training to veterinarians, para-veterinarians, feedlot personnel and quarantine inspectors. The training follows OIE guidelines on GHP and the OIE Terrestrial Animal Health Code



for animal care, transport, loading and unloading, in feedlot management, slaughter and euthanasia. These topics were new for many animal health practitioners as well as the private sector. As the training linked GHP to requirements in the live animal and meat export chain (carcass and hide quality), their importance was clear to the participants of the training.

The STE for Standards and Certification, case team leaders responsible for public health, quarantine and feedlot management, and abattoir management have developed guidelines and training material on GMP for livestock raising and handling. These practices are linked to animal welfare and standards of handling, feedlot and abattoir biosecurity, feeding practices and maintaining the health status of the flock or herd. Training in GMP principles have been extended to 200 veterinarians, para-veterinarians, abattoir and quarantine inspectors in sessions that included; “Abattoir/meat inspectors on implementation of Food Safety Management Systems”; “Feedlot quarantine facilities, procedures & practices”, “OIE Animal Health, Welfare, and Public Health Standards and Guidelines” and “Livestock and Livestock products trade partner's requirements”.

HACCP has been developed as part of the abattoir standards and is used in the export abattoir audit tool to highlight and control problems in export abattoirs (see below). Approximately 100 veterinarian and para-veterinarians have been trained in HACCP.

### **Lessons learned:**

Animal welfare training was appreciated by participants and changed the view of many government veterinarians on their responsibilities to ensure that animals do not suffer in transport, feedlots and slaughter. However there is still a long way to go before this understanding is embedded in both the public and private sector.

The industry has benefitted from standardised tools to improve compliance to standards as the tools can be carried out on a regular basis, by DVS and/or management staff, and improvement can be tracked.

### **Recommendations:**

Animal welfare training material needs to be developed for semi-skilled workers such as loaders and drivers for livestock transport and staff of abattoirs and feedlots. The training material should make an economic link between welfare and carcass quality and, therefore, income.

The abattoir audit tool should be modified and rolled out to municipal abattoirs for use by local managers.

### **iii. Inspection and Certification service:**

For Ethiopia to participate in international trade of live animals and meat, reliable sanitary certificates must be issued to prove that Ethiopia follows legal requirements for SPS. If the certificates are not 100% reliable Ethiopia's export industry will not develop as envisaged in the LMP. STEs were employed to develop SPS and certification procedures for export abattoirs and live animal export. The STE on Standards and Certification (S&C) developed a manual covering: rights and responsibilities of inspectors, overall hygiene, production safety and quality assurance, sample collection and an audit tool.

Health certificates need to address the requirements of the particular importing country and ensure that the exporting establishment, be it an abattoir or a live animal export facility is in compliance with the requirements. Requirements differ from country to country and over time and may include halal slaughter, animal health issues, quarantine and inspection, meat safety, the structure of the abattoirs and cold chain systems, the meat inspection procedure, etc. The LVC-PPD has developed a training programme, based on the STE S&C recommendations, to ensure that the correct procedure is followed in the issuing of reliable certificates for exporting meat and livestock by Government abattoir and feedlot inspectors.

The STE for S&C and the LVC-PPD team leader produced SOPs, procedure manuals and an abattoir audit tool kit for use in upgrading and maintaining standards in export abattoirs. This material has formed the basis for the

“Abattoir/meat inspectors on implementation of Food Safety Management Systems” training given to abattoir and meat inspectors and for abattoir owners and managers.

The manual covers hygiene and food safety (GAP, GHP, GMP), HACCP, abattoir structures, staff safety, quality assurance, sampling, audits and deals with minor and major issues of non-compliance (warning, suspension and stoppage). The manual is clear and written in a precise language and inspectors are able to use the manual in their work with abattoirs and meat inspection. However, at 50 pages it may be too large for ready reference in the abattoir and many staff may not have the English skills to make use of it. Parts of the manual could be turned into memory aids in the form of cartoons or pictures. If a communication expert had been on staff during the project period, he/she could have assisted with this.

Training on Food Management Safety was carried out for 25 meat and abattoir inspectors in 2013 and for 78 participants in 2014 but there has been no follow up to see how they are using the skills. A training for abattoir owners and managers is planned for the near future so to date the main beneficiaries of the training has been government staff. These trainings have been carried out in collaboration with the Veterinary Public Health and Export Abattoirs Inspection and certification teams and the LVC-PPD project of the DVS as well as with the Safe Food-Fair Food project of the ILRI. As no training skills or module development was covered in the training, they cannot really be considered training of trainers as no clear guidance was given for training of peers, the private sector and semi-skilled workers in the industry. The managers and workers in abattoirs will need a different method of training, with more participation based on problem solving and using experience. The topics covered during the training included:

Slaughterhouse design and bio-security in abattoirs

Animal Handling and welfare issues in abattoirs

- Principles of ante and post mortem inspection procedures
- PRPs and ISO 22000 FSMS
- Drug and pesticide residues in meat
- Food/Meat Borne diseases and their impact
- Ruminant value/supply chain
- International Organizations involved in animal and animal products trade (WTO, OIE, CAC)
- Risk based meat inspection
- Current status and role of EMPEA in assuring SPS requirements
- Gap analysis and audit tool checklist in abattoirs

Four export abattoirs (Hashim Nuru, Modjo Modern, Lunar and Organic) have been certified ISO 22000 and Modjo, Hashim and Organic have had annual audits using the export abattoir audit tool, carried out by DVS and management and developed by TAT and the STE for Standards and Certification. The audit tool identifies gaps in GAP, GHP, GMP, HACCP by looking at infrastructure, food handling and hygiene, and staff safety. Improvement was noted over the three years in compliance: between 2012 and 2013 the overall compliance score increased from 60% to 67%. A further audit of export abattoirs was carried out in September 2014, anecdotally there has been improvement but the scores have still to be analysed. The audit tool is now a proven method for improving and maintaining quality across a range of components and has the chance to be a sustainable activity initiated by the LVC-PPD.

Four more export abattoirs (Halal, Abyssinia, D/Z ELFORA, and Abergelle) are in different stages of implementing the certification process with the help of case teams. So real impacts are seen from the training and support from the project in the use of an audit tool. Feedlot owners had been previously trained under a USAID- funded project SPS-LMM by the Ethiopian Meat and Dairy Training Institute (EMDTI) in 2010. Building on this, training for feedlot inspectors commenced in 2014 by LVC-PPD through training 47 feedlot inspectors on “Feedlot quarantine facilities, procedures & practices”. The training was carried out by the case team leaders and EVA, and was based on OIE manuals; participants were taken to the field to assess common problems found in the feedlots. Subjects covered were as follows:

- Animal Welfare

- Risk mitigation provisions in the OIE Terrestrial Animal Health Code for the import of animals and animal products
- Feedlot biosecurity
- Animal Handling during animal transport on land and by sea
- Standard Methods and Procedures in Animal Health in IGAD Region
- Communication with livestock traders, owners, and others
- Major Trans-boundary Animal Diseases(TADS)in the region and diseases of quarantine importance
- Anti-parasite treatment and vaccinations
- Livestock Identification & Traceability system in Ethiopia

Training for feedlot owners and managers is planned for the near future. The training participants have reported that feedlot biosecurity has improved for feed lots following the training and there is now increased acceptance on the use of eartags so that the eartag can be linked to vaccinations and individual feedlot management. It is still too early for the training in feedlot inspection to have a noticeable impact. However, the LVC-PPD training reinforced messages of the earlier training carried out by SPS-LMM.

### **Lessons learnt:**

The audit tool for inspection of export abattoirs has been shown to be a useful method of identifying problems and suggested improvements in abattoirs. It is currently carried out by DVS staff but can eventually be used by management alone.

### **Recommendations:**

The audit tool concept can be modified for use in feedlots.

Future programmes should consider joint training of government and non-government participants together to bring the private sector into the programme and develop public-private dialogue as early as possible.

### **v. Analysis of residues**

Equipment, including a HPLC (High Pressure Liquid chromatograph) and gas chromatograph, was purchased and training on its use was given when it was installed. However, reports of the training were not available. A new laboratory was built at Kaliti for residue testing. The laboratory was recently connected to the power and the water supply was expected soon. Once established it will employ 48 professional and 62 support staff and will be able to analyse chemical residues in livestock products including honey, hormones in livestock products, and will analyse livestock feeds and active ingredients in veterinary drugs. Equipment was purchased, including a high performing liquid chromatography and a mass spectrometer, and delivered in March 2014. There were significant delays in the tendering due to a too detailed tender document prepared by the NAHDIC.

Four technicians (3 male, 1 female) were identified and given initial training by the installation technician and have just returned from The University of Wageningen where they spent seven days being trained on laboratory safety, analysis and use of the machines, care and maintenance of the machines. They will have ongoing support from the training Institute (RIKILT) via email. However, as the training was seven instead of the planned ten days, they did not receive training in detecting pesticides and this must be redressed in the future. Initially an STE on residue testing was planned to train the laboratory technicians but this was cancelled and part of the task of the expert was taken by the installation expert; it was then decided to send the trainees overseas for training rather than using an STE in country.

While the machines have been installed and calibrated, there are no reagents currently available to use in sample analysis. The tender process is underway by the laboratory and it is estimated that the tender and supply will take under 5 months. The original equipment tender was developed by NAHDIC and the previous team leader, Dr Woodford, and it was scrutinised by a laboratory specialist and the EU. The tender was rewritten following a series of questions from the EU. It appears that the ordering of reagents was not considered as part of the tender. As no-one has been recruited for the residue lab at the time of tendering, the laboratory had no input into the tender, further

complicated by the decision not to hire an STE for laboratory purchasing. The position was considered redundant as the tendering process was completed by the time the STE was due to be hired.

There is a water purification plant at Kaliti (not supplied by LVC-PPD) that has been installed but cannot be used as training in its use needs to be arranged for the laboratory technicians. As the residue laboratory may not be fully operational until the middle of 2015, the trainees have planned to work in the Ministry of Health laboratory on a regular basis to keep up their skills.

### **Lessons learned:**

The impact of investment in the Kaliti residue laboratory is yet to be seen as the laboratory had not become operational at the time of the evaluation. As part of this was due to the fact the Kaliti laboratory was being built, this delay should have been foreseen by management and contingency plans made for the trainees to work following their training.

### **Recommendations:**

The laboratory technicians require training in the missing skills including analysis of pesticide residues and training in the use of water purifier machines as soon as possible to ensure that the Kaliti laboratory can carry out the full complement of required tests.

## **vi. Regional Diagnostic labs**

In Ethiopia, there are 15 regional veterinary laboratories in the country, each with the ability to carry out serological tests for FMD and PPR as well as bacteriological and parasitological investigations. These regional laboratories are mandated to perform the following duties:

- i. Provide diagnostic services to the region
- ii. Do applied research in collaboration with universities and other institutions
- iii. Carry out disease surveillance for the following diseases: foot and mouth disease (FMD), contagious bovine pleuro-pneumonia (CBPP), contagious caprine pleuro-pneumonia (CCPP), Newcastle disease (NCD), infectious bursal disease (IBD), African swine fever (ASF) and Rift Valley fever (RVF).

Laboratories are expected to:

- Carry out tests for certifying animals as free from certain trade related diseases such as FMD, PPR, anthrax and brucellosis. Other tests, such as Highly Pathogenic Avian Influenza (HPAI) and rabies, are carried out by NAHDIC, which acts as a reference laboratory for the region and Ethiopia.
- Support private industry in biosecurity on feedlots and abattoirs through collection of samples for testing including brucellosis and anthrax testing.
- Investigate disease outbreaks and reporting them to the federal government
- Confirmatory disease diagnosis
- Carry out disease surveillance

Equipment (two bio-safety cabinets, deionizer, sensitive balance, pH meter, incubator, reagents, microtomes, tissue culture equipment) was provided to NAHDIC and training was carried out at the time of provision by a technician but it was not possible to find the details of the training. As the vehicles to support disease investigation and surveillance were not purchased, the laboratories have not been able to improve their activities as planned. A terms of reference was developed for a laboratory expert but the expert was not hired because the technician who installed the laboratory equipment also provided training in its use and this was considered sufficient for the purposes of the project.

Representatives from all regional laboratories were trained in risk-based surveillance and this training was valued by the participants interviewed. Following the training, the laboratories carried out risk assessments and prioritisation of key livestock diseases from the government perspective. When the evaluation team visited the laboratories, the staff was preparing to collect community perspectives on livestock diseases. However the staff had not been trained in Participatory Rural Appraisal methods for data collection with communities, which is a more participatory method of collecting opinions than a standard questionnaire. With the lack of reagents and vehicles, the participants in the training have not been able to take advantage of their new skills by carrying out risk-based disease surveillance.

### **Lessons learned**

Training can only have impact if the logistical supplies, in this case vehicles and reagents, are available to the trainees to make use of their skills

### **Recommendations**

For future projects that involve procurement of laboratory equipment, provision should be made for the purchase of reagents or the supply of reagents needs to be well coordinated with the MOA. This will ensure that the laboratories are able to carry out the necessary tests to support project impact

### **vii Training skills and facilitation**

The LVC-PPD has carried out workshops and trainings for 816 participants and EVA has carried out workshops and trainings for 1,707 participants, including the two annual EVA conferences (see Annex 8.2 for training and workshops carried out). The DVS case team leaders have developed a high level of technical understanding of the subjects with the assistance of the international STEs. They are proud to be able to pass on the technical training. The participants of the training were very happy to receive more knowledge and information and some expressed the fact that they had not been trained for several years. However, there was no systematic pre and post testing, common training evaluation questionnaire and post training mentoring to assess the impact of the training.

It was only possible to see two training evaluations in English. The first was for “Improving the Skill and Knowledge of Export and Municipal Abattoirs' Meat Inspectors”. The evaluation asked participants to grade the level of the training into three categories (“easy”, “OK”, “hard”) and the amount of material (“too little”, “OK”, “too much”) for each subject. For all subjects, between 67% and 80% of participants selected “OK” and so it seemed that the evaluation questions did not really tease out opinions. The evaluation questions did not probe for absorption or opinions on each session. The second evaluation focused more on opinions on the venue than on the training material. The comments from participants were positive and indicated that more regional and district staff should also attend and that there should be pre and post testing. However as no pre- or post-training tests were carried out, it was not possible to gauge how much the participants had actually learnt.

In PE1, a Human Resources consultant developed a TNA methodology to assist with the development of training materials. However, it appears that no TNA was carried out and the source of training material was OIE documents, procedure manuals developed by STEs, and other technical sources. Therefore, the training power points were in English yet the training was in Amharic. Trainings on abattoir and feedlots had a practical session, such as taking the participants to feedlots where they could put their learning into practice. The material was not prioritised for need and attempts were made to try to cover all subjects rather than develop a curriculum based on needs; for instance, shipping of live animals by sea was covered when this information is of little use in Ethiopia.

The human resources STE also recommended that the trainers in ) DVS and EVA be given training in adult learning and training skills especially participatory training methods. This recommendation was also echoed by the S&C STE, yet this training was not carried out (see 3.3.i).

The initial trainings on certification, meat inspection, GAP, GHP. GMP, HACCP, quarantine, feedlot practice and animal welfare were for Government veterinarians and para veterinarians. Despite the fact that no training skills were



given during the training, these were viewed as Training of Trainers: participants were given CD-ROMS of material and expected to train their peers back in their work station and pass information on to the private sector. This is unlikely to be a successful method of passing technical information without training skills and a different set of training material for different groups and no training budget a regional level. There was no follow up on the trainees to see if they have been able to train others. Regional Government's staff reportedly carries out ad hoc training for feedlot and abattoir workers but without standardised material, there will be no consistency in the material given. There is a need to repackage the material for non-technical persons who may have low education levels.

A large amount of technical training was given by power point and it may be useful to consider problem solving approach to the common problems found in the field. Participants could benefit from being given a set of priorities for dealing with improving hygiene and bio-security issues. As mentioned in earlier chapters, by training Government animal health staff before the private sector, an opportunity was missed to support public – private dialogue and develop linkages and joint problem solving. In general, all training was appreciated by the participants as indicated in the post-training assessments and evaluations reported in English.

### **Lessons learnt:**

While the project had a large and expensive training component, the trainers from EVA and DVS were not given any skills on the principles of adult learning, training methodology, presentation skills or training evaluation. This meant that the training was largely lecturing and focused at those with already high levels of technical understanding. TNAs were not carried out for the training to assess the gaps between the existing knowledge of the participants and the information that they needed to acquire to carry out required tasks. TNAs would have allowed the development of curricula for the specific needs of certain groups and avoid overloading the trainees with too much material. Currently OIE and other manuals are used as the basis of training rather than using a specific curriculum based on need. While participants appreciated being involved in training, standardised pre- and post- training tests should be used to measure absorption of key information to identify areas that the participants found difficult.

### **Recommendations**

The impact of training could be improved by the following:

All trainers would benefit from skills in developing training curricula, module writing, facilitation skills, principles and methods of adult learning, problem-based learning. This would lead to more dynamic training where the participants solve problems using the relevant technical material provided.

While post-training evaluations were sometimes carried out, they did not follow a consistent format between the EVA and trainings. A standard format is required to quantify the learning from pre- and post-training tests, to highlight areas of difficulty and to assess how the trainees will use the material.

The majority of trainings carried out to date were of a high technical level and designed for veterinarians. This training will have to be modified to be suitable for owners and managers of feedlots and abattoirs and also for the semi-skilled workers. Simple Information, Education and Communication material should be designed as memory aids that can be displayed.

Record keeping and use and business skills training should be included in all trainings of the private sector. Follow up of the impact of training should be carried out for all training and the results used to assess the curricula and modifications made if necessary.

Trainees receive a DVD of the power points and other training material to assist them with their activities and any follow-on training. However, while the material is technically good, the material is in English so would not be of use for semi-skilled workers and power points do not convey the message as well as specifically designed memory aids. If the communication officer is hired in time, he/she could assist to distil the technical material into more simple memory aids.

### 3.5 Rationalisation of the Delivery of VS

The GoE is embarking on a programme to rationalise the way in which VS are being delivered in the country. The LVC-PPD, in support of this approach, is facilitating dialogue with all stakeholders to create an enabling framework for the participation of the private sector in VS delivery. A key output has been the creation of pathways towards privatised service delivery in areas / activities previously the domain of the government VS. Stakeholders have been consulted through the medium of workshops (see table in annex 8.2), meetings and interviews culminating in the preparation of a “Veterinary Services Rationalisation Road Map” that is now fully owned by the DVS and supported by the State Minister. The importance of this process has been recently highlighted by the emphasis placed on the involvement of the private sector in realising the challenging targets as expected of the various livestock value chains detailed in the LMP). .

Evidence of moves towards the rationalisation of livestock services in Ethiopia include:-

- The proposed, but as yet to launch, piloting of sanitary mandates in a series of EVA managed trials in six selected Weredas in each of three Regions – Tigray, Afar and Oromia (Borana).
- Export abattoirs and feedlots are all privatized and public private partnerships are being addressed for the management and operation of quarantine facilities.
- PPP for management and inspection of municipal abattoirs being promoted by DVS. Currently these are the responsibility of Municipal Authorities, and the standards are very poor. (The Ministry of Health is responsible for products of animal origin after they leave the abattoir).
- Import, distribution and sale of veterinary drugs was fully liberalized in the late 1990s, however the regional government still imports large amounts of cheap veterinary drugs which flood the markets and offer little choice
- The DVS and State Minister for Livestock Sector Development are actively working to bring a “Sidai” type model for quality branded veterinary products and services into Ethiopia. Meetings held recently with Dr Christie Peacock of Sidai and also a senior programme officer from the Bill and Melinda Gates Foundation.
- Community Animal Health Workers (CAHWs) are accepted in the pastoralist areas and work with NGOs and FAO to extend coverage of veterinary services to remote communities (See box below). A successful model is a network of CAHWs linked to a private pharmacy that is run by a veterinarian or AHA.

Specific LVC-PPD Actions and outputs in support of rationalisation include: Production of a Veterinary Privatisation Road Map that has undergone stakeholder review and is accepted by the decision makers in the livestock sector of the MoA and for which the process of engagement with external stakeholders has begun; Development of a user-friendly Privatisation Database with the component parameters having been reviewed and agreed through stakeholder consultation; Preparations for pilot activities to test a model for private service delivery far advanced in close collaboration with PEPE; A franchising model as used by SIDAI in Kenya has been studied as a possible model for Ethiopia and is currently being considered for piloting by the DFID funded PEPE project; and the Delivery of private animal health service will be tested in trials in close collaboration with the EVA and PEPE, USAID LMD-Agricultural Growth Project (AGP) and EU-SHARE programs during the 5 months project extension.

## Community Animal Health Workers

CAHWs were first trained in Africa in the 1980s, as a response to reducing investment of governments in veterinary services and a desire of NGOs to work more closely with communities. The strength of the CAHW system was the fact that the CAHWs were drawn from the community and so had their trust. Non-governmental organizations started scaling up the system and CAHWs were key in the eradication of rinderpest in delivery of emergency programmes in Sudan and Ethiopia. The OIE and AU-IBAR recognised the value of CAHWs but most countries of the Greater Horn of Africa have not developed clear policies or enacted supportive legislation to define the roles and responsibilities of CAHWs. In Ethiopia, NGOs including VSF Suisse and Germany, FARM-Africa, SCF have trained and managed CAHWs to deliver limited animal health services for pastoralist livestock owners. In 2009 FAO developed a training manual of 11 lessons based over 15 days on the minimum standards and guidelines for the design and establishment of CAHWs of the Ministry of Agriculture and Rural Development.

An evaluation of CAHWs in Ethiopia, Kenya and Sudan in 2013 by Tufts University indicated that Ethiopian CAHWs were technically sound, if trained following the guidelines, and were valued by their communities. As the training of CAHWs is limited in time and scope, their abilities and limitations must be recognised in their deployment. They need to be supervised, mentored and monitored by qualified private or NGO veterinarians [See Annex 8.8] and some organisations are linking private veterinarians to networks of CAHWs to develop a sustainable funding methodology for the system. Three clear systems exist in Ethiopia: (1) CAHWs linked to government clinics or health posts and utilizing revolving funds, (2) CAHWs linked to private veterinary pharmacies (3) Cooperatives of CAHWs. The most sustainable model appeared to be the linkages to a private veterinary pharmacy. Threats to the success of a privatised CAHW network include distribution of free services during emergencies and competition with subsidised government drugs at health posts.

### **i. Sanitary Mandate Contracting Scheme**

A STE has been contracted by the LVC-PPD to design and develop a Sanitary Mandate (SM) contracting scheme for animal disease reporting, outbreak investigation, disease surveillance and TADs prevention and control services. The work, undertaken in collaboration with senior management of DVS and EVA involves two short assignments, firstly to advise and assist in the planning of the EVA pilot sanitary mandate contracting scheme, and in the second assignment to help in resolving any problems, constraints etc. that arise during its implementation.

Work has progressed in designing, implementing and monitoring a pilot sanitary mandate contracting scheme in pastoral areas of Ethiopia for PPR vaccination and the deployment of the pilot studies is scheduled to take place during the coming 5 months extension phase, given that deployment conditions can be agreed and the consequent selection / award process conducted in the time available. The PPR vaccination is under Sanitary Mandates partly because the FAO SHARE project, funded by the EU, has also been delayed and the PPR vaccine will be provided by SHARE.

STE 1<sup>st</sup> Mission developed two documents: Draft model for Agreement; Draft model for tendering procedure. Whilst the Agreement document is in principle good the Tender document for SM is much too complex. The pilot should initially use a simpler format based, as follows, on the stated selection criteria:

- 1. Accessibility of service based on the distance of the veterinary premises from the administrative centre of the local self-government unit issuing the tender*
- 2. Professional experience and education of the veterinarians who will perform the granted activities;*
- 3. Technical and financial ability;*

## **Lessons Learnt:**

Applied training is required to provide the necessary skill sets to deliver enhanced services in support of livestock production and productivity.

The SM scheme had not commenced at the time of the evaluation but there was already some concern that the documentation and selection process was overly complicated. With a wide range of VP and VPP likely to apply for the SM scheme, the administrative procedures should be as simple as possible.

## **Recommendations:**

SMs should purposively select existing veterinary clinics, veterinary groups or CAHW networks linked to a private veterinarian and offer them a SM to perform specified tasks for a specified fee under a specified reporting, supervisory and accounting framework. The project will need to learn what skills and support are required and what training should be incorporated into the activity. Experience in Tigray has shown that simple contracted activities perform well over a range of privatised services and these experiences should be scaled up in other parts of the country.

Launch a VS SM Accreditation Scheme where interested VS Personnel (both private and state) undertake a formal and tested course of training – on par with the USDA “National Veterinary Accreditation Programme” would ensure standard competency in required areas to perform specified sanitary activities. Registration of successful participants of the training could be used as criteria for being awarded SMs;

Award SM according to simply applied selection criteria: distance of animal health service provider to point where service delivery required; Professional experience and education; Technical and financial ability;

A performance record informed by regular audits to be maintained inclusive of proof that relevant and approved CPD is being undertaken (CPD topics should include business skills, animal welfare, community consultation as well as more technical veterinary subjects).

For PPR vaccination SM with the FAO-SHARE projects - the selected veterinarians should have experience with CAHWs, community consultation and participatory approaches and understand the importance of good coverage; these skills are largely lacking in government-run vaccination campaigns. Vaccination programmes should utilise good communication and consultation practice with the community and the CAHWs need to be well supervised. The SM must aim to provide an improved product with better community participation, coverage, vaccine handling and administration protocols inclusive of good hygiene practice.

## **ii. Veterinary Services Rationalisation Road Map.**

The VSRRM has been well publicised across Ethiopia and has generated interest and discussion on the topic. However, the position of Government to adopting the document remains equivocal and there are several challenges to the progress of the proposed privatisation road map. These challenges include:

- Changing the perception of veterinary service provision for a sole public service delivery towards a rationalised strategy with agreed and complimentary roles of public and private sectors:
- Translating the VS delivery strategies, as advocated by the Federal VS, into comparable Regional and Wereda delivery strategies:
- Coherence of policies between the Ministries with a role in the governance of the livestock sector:
- Coordination of the multiplicity of organisations and projects targeted at developing the livestock sector:
- Creating different private sector service delivery models that will be appropriate for and financially viable in different parts of Ethiopia:
- Eliminating moonlighting by government VS personnel where private sector models are to be deployed:
- Creating sanitary mandate selection conditions that are simple to follow and monitor:
- Resolving the issue of not being allowed to operate both a clinic and a pharmacy from the same premise
- Creating truly enabling environments for private practice to take off, develop and become progressively financially viable in the diverse production systems and different regional administrations as found in Ethiopia;

- Finding private practitioners with the requisite skills to serve the needs of the emerging business-minded livestock producers and in line with the targets for increased production and productivity as desired in meeting LMP goals;
- Providing public sector veterinarians with the requisite skills to regulate and quality control privatised animal health services provision and providing them with sufficient remuneration to properly reward and motivate the sector to perform to required standards and outputs;
- Need for clarification on the acceptance of CAHWs and their role in a privatised veterinary service (See Annex 8.8 for model framework)

### **Lessons learnt:**

The importance of consultation with stakeholders at all levels of the livestock sector and at all points along the livestock value chain, to raise awareness and build consensus, has been shown to be a critical requirement for the introduction and acceptance of a change process. The need to formalise training, such as by CPD, to assure that service delivery personnel raise their skill sets to a level needed to enhance livestock production and productivity

### **Recommendations:**

Determine the needs for creating an enabling rationalisation of VS environment, draft a clear policy statement on creating this environment endorsed by the prime minister's office and then develop and deliver an informed strategy to create it

Start pilot studies with veterinary practices and areas already delivering privatised models and then strengthen them by removing constraints, extending credit, providing SMs;

Disseminate lessons already learnt from contracted activities in Tigray to regional governments and veterinary schools.

Put in place a formal CPD programme to provide the required capacity building training needed for both private and public sectors

Endorse and disseminate existing FAO/MoA training materials for CAHWS and issue directive requiring CAHW direction / support by veterinarians and supervision and training by VP and VPP.

### **iii. Veterinary Graduates and Continuing Education**

EVA grant activities included: The establishment of a Veterinary Education Forum (VEF) composed of deans of the veterinary faculties); The need to rationalise the provision of veterinary education in Ethiopia to address the excessive number of faculties / schools (number of Veterinary Faculties/Colleges/Schools in Ethiopia (which have increased from 1 to 13 during the last 15 years); solve the confusion over qualifications (DVM vs BVSc); and the need to meet OIE day-one competencies. The veterinary schools are all required to teach a standard curriculum and only 10% variation in this is allowed. This prevents local specialisation that could attract interested students (such specialisations could include pastoralism and range management in the lowlands and dairy or poultry in the highlands). It also means that poorly funded universities struggle to cover the curriculum adequately.

While OIE day one competencies are not yet reached in any of the veterinary faculties in Ethiopia, there is also no formal structure for CPD. Such a scheme will be crucial for underpinning the enhanced VS skills and knowledge needed for the cross-cutting animal health component of the LMP and to produce veterinarians with specialisations to support the development of the commercial livestock sector. A concept note concerning the establishment of a CPD programme to strengthen and sustain the impact of training in Ethiopia and the description of a "learning by doing" approach is given in Annex 8.9.



## **Lessons Learnt:**

The need for a common curriculum to meet set performance standards, such as provided by the “OIE Day 1 Competencies”, has been identified in order to rationalise the provision of veterinary education in Ethiopia. However, it will be a long process to achieve this across all veterinary training institutions.

There is an appreciation of the need for specialist service providers to support commercially orientated livestock production and productivity.

## **Recommendations:**

VEF should urgently review the quality of all veterinary faculties and determine what is needed to meet “Day One Competency” standards as defined by OIE. Those universities that can achieve this within 12 months should be supported to do so; The VEF should then decide what to do about those that cannot.

VEF should discuss with the Ministry of Education the possibility of more flexibility in the standard curriculum and identify universities that can become specialist veterinary centres of excellence in particular subjects

VEF should hold discussions with the veterinary and para-veterinary fraternity to determine the need and formats for a CPD scheme

## **3.6 Regulatory Framework**

A number of regulatory frameworks have been drafted prior to the LVC-PPD and submitted to the State Minister of Livestock Sector Development but they have yet to receive approval. These include:

Regulations on the Registration of Veterinary Drugs, Biological Products and Premixes and Feed Additives (to support Proclamation 728/2011).

- Regulations on the Prevention of Animal Disease
- Regulations on Livestock Identification and Movement Tracking
- Proclamation on The Import and Export Of Animals and Animal Products
- Regulations on the Import and Export of Animals and Animal Products
- Proclamation on Meat Inspection, Hygiene and Safety
- Regulations on Meat Hygiene and Safety
- Proclamation for the Establishment of the Veterinary Council
- Regulations for The Registration and Authorization Of Veterinary Professionals And Facilities
- Directive on Animal Welfare

The LVC-PPD revised and updated a number of existing legal frameworks to bring them in line with WTO and OIE standards. This work included the translation of some texts into Amharic:

- The establishment of a Veterinary Statutory Body
- Regulatory framework for veterinary services
- Regulatory framework for Veterinary Drugs Vet. Medicines, biologicals and Feed additives.
- Veterinary and Para-Veterinary professions Proclamation Amharic version of the Veterinary and Para-Veterinary professions Proclamation partly agreed upon through stakeholder consultations.
- Animal Health, Welfare and Veterinary Public Health Proclamation - Final version with 6 Regulations translated into Amharic.

The LVC-PPD has drafted the following regulations:

- Animal Identification, Movement control and Traceability Regulation

- Animal Welfare & Control of Stray Animals Regulation
- Control of the Safety and Quality of Primary Animal Products Regulation
- Control of Veterinary Diagnostic & Research Laboratories Regulation
- Prevention and Control of Animal Diseases Regulation
- Veterinary Control of Import & Export Regulation

In a meeting with the State Minister for Livestock Sector Development the assurance was given that any outstanding legislative frameworks, and in particular that for the formation of the Ethiopian Veterinary Council, would receive full attention prior to the forthcoming elections in May 2015.

Lessons Learnt:

Channels exist, as exemplified by the rapid passage of legislative frameworks for the flower industry, which can be used to expedite the ratification of legislative framework for the livestock sector. The animal health sector does not seem to have the profile to attract ministerial interest in the passing of enabling legislation.

Recommendations:

Lobby, through ATA guided channels, for the ratification of all drafted legislative frameworks with particular effort expended for the creation of the Ethiopian Veterinary Council.

Convince government of the potential of the animal health sector to support local food security and export earnings.

### **3.7 National Disease Surveillance System (NADSS) and Livestock Identification and Traceability System**

#### **i. National Disease Surveillance System (NADSS)**

An informed strategy has been developed for significantly improving the NADSS. This has been reviewed by stakeholders, including the SHARE project, through consultative workshops. The establishment of an operational national disease surveillance and reporting network is partially completed and planned to be finalized in the 5 month extension period. This will happen in conjunction with responsibility for NADSS being assumed by the epidemiology unit at NAHDIC. The network of regional vet labs will run the system at field level, each being responsible for some 50 - 60 weredas with diagnostic support, and field studies / surveys. A compliant animal disease surveillance system has been developed with assistance of LVC-PPD though implementation is pending. An up-to-date list of weredas was established with codes that can be used with the selected animal disease database system and the GIS system ArcMap 10 to enable mapping of disease events and other variable by wereda, zone and region. Disease occurrence will also be mapped as points.

A new web-based epidemiology database system -National Animal Disease Information system (NADIS) is in the final stage of development (MySQLdatabase management system specifically developed for Ethiopia). Piloting (300 smart phones) to enable field reporting to NADIS will begin in January with a plan to expand to a distribution of 3,600 phones if the pilot trials prove successful. AHAs, later to include the private sector, will report disease occurrence using a customized smart phone-based template recording date, location, species, clinical signs (syndrome). The system provides a list of diseases that could produce the recorded signs in the given species, numbers of cases and deaths etc. Location using Global Positioning System software is automatically recorded as is the time. A photograph or photographs is / are taken and this data package sent to the central server - currently using dedicated space rented from Amazon. The MoA server will be used once there is a secure back-up (UPS and generator) system and firewall. ADNIS development includes FAO, USAID-LMD and LVC-PPD plus the DVS, NAHDIC and PRIME. A first class example of constructive and effective collaboration between programmes

The Laboratory Information Management System (LIMS) needs to be fine-tuned to accept laboratory generated data according to NAHDIC / Epidemiology Department needs. This is pending because of delayed acquisition of operator's licence and agreement to fund the input of the NAHDIC IT specialist to customise the operating system.

Passive surveillance of livestock diseases in the field is the responsibility of regional animal health services, regional veterinary laboratories and *wereda* animal health personnel. Monthly livestock disease reporting is irregular and less than 30% of weredas are sending reports to the Federal Epidemiology, Disease Prevention and Control Case Team each month. Most disease reports are on clinical grounds without laboratory confirmation.

LVC-PPD recruited the services of a consultant to investigate the causes of the low reporting rate and to propose strategies to address this. Respondents to a questionnaire stated that they did not receive feedback reports and that they lacked per-diem, transport, consumables and basic skills and training for investigating disease outbreaks. The pastoral areas such as Afar and Somali, important sources of meat and live animals for export, are among the low reporting Regions.

There is no national platform that consolidates and analyses all animal diseases information and there are no nationally agreed strategies to prevent and control diseases. The following additional sources of disease information are not currently being reported to federal level though plans are in hand to bring them into the reporting system:

- Laboratory reports of the NAHDIC
- Reports of regional veterinary laboratories
- Reports of municipal and export abattoirs, slaughter slabs including quarantine services
- Private animal health services including co CAHW
- Research centres / higher teaching institutions.
- Reports of NGOs working on animal health in the country

### **Lessons Learnt:**

For more efficient services the DVS needs to take on more of coordination and enabling role delegating selected functions to other competent bodies - such as the management of the NADHSS and NADIS delegated to NAHDIC Epidemiology Unit

### **Recommendations:**

Progress the commissioning of the NADSS and ADNIS with all speed to have both systems operational and managed by NAHDIC before the closure of the project in May 2015

Develop a national disease information platform to collect and analyse disease information from the sources that are currently not being reported to the federal level

### **ii. Livestock Identification and Traceability (LITS)**

The LVC-PPD supported the development of an AI, MC& T system according to international standards through the medium of an STE. This resulted in the production of a "Roadmap for Introducing Animal Identification, Movement Control and Traceability into Ethiopia" tailored to suit Ethiopian conditions. The STE recommendations for a pilot of the system are being undertaken by the USAID – LMD project with support from LVC-PPD.

### **3.8 Laboratories**

#### **i. Development of Analytical Laboratory for residues in Products of Animal Origin (PoAO)**

Overseas training for four Residue Laboratory technicians in the Netherlands has been completed. Unfortunately, on their return they have been limited in their ability to use their skills and the Kaliti laboratory will not be fully operational until reagents for the machines have been supplied.

The award of a contract for the supply of analytical equipment destined for the new Quality Control/Residues Testing Laboratory at Kaliti has been successfully concluded. The equipment to be supplied under the Laboratory supply contract has already been delivered. The supply company requested and received an extension of the delivery period, which caused some delays, however the installation was finalized in the last two weeks of May 2014.

The Terms of Reference for a Residue Monitoring STE were prepared, approved and the Expert identified. It was planned to mobilise the Expert in April / May 2014, following the delivery of the equipment under the above mentioned supply contract. However, as the technician who installed the equipment also provided on-the-job training in the use of the equipment and the fact that the four laboratory technicians were scheduled to follow training at an international residues control reference laboratory in the Netherlands, it was decided to cancel the mission of a Residue Monitoring STE.

#### **ii. Strengthen / develop Laboratory Network.**

Laboratory equipment has been provided to NAHDIC and training has been provided by the equipment installation specialist as part of the contract with the suppliers. The equipment tender had to be drastically changed as the prices were approximately three times that foreseen in the budget. . The NAHDIC will supply laboratory reagents during the five month extension period utilising MOA funds.

The linkages between the regional labs and the Federal system is poor and only 5% of disease outbreaks are reported to the Federal government, and this often is done annually. This poses a threat to the export trade as animals may unwittingly be permitted to move from an infected to a clean area due to lack of information. The project planned to strengthen the diagnostic network through the provision equipment but did not address communication and linkages between the regional labs and NAHDIC and there continues to be no common understanding or harmonised approach to the control of specific diseases across Ethiopia. There is no national platform for sharing epidemiological data and understanding of the federal livestock disease situation.

#### **iii. Vaccine production and distribution**

Three capital items were planned in support of vaccine production and distribution: cold rooms for vaccine storage; two refrigerated trucks for vaccine distribution; and freeze drying equipment for vaccine production. 4 cold rooms are being installed and commissioned at the following locations Debre Zeit (NVI) Sebeta (NAHDIC) Shire and Woldiya. Two refrigerated trucks were successfully procured and are in-service, one for NVI and the other for NAHDIC. The cost of the freeze drying equipment for vaccine production proved far in excess of the budget available and so procurement did not proceed. The equipment remains required and should logically be considered for purchase in the follow on phase

#### **iv. Vaccination strategies.**

The services of a Risk Analysis expert was employed to prepare vaccination strategies that target animal populations on the basis of disease risk and animal movements. This will provide for an evidence-based strategy shift from the current practice of vaccination in the face of outbreaks. Representatives of all regional laboratories (54 participants) attended a workshop on Disease Prioritization, and Risk Assessment and many have already used the disease prioritisation tool to analyse the local diseases and have begun to collect information from communities. A further seven senior laboratory staff have been trained on qualitative risk assessment.

## **Lessons learned**

Project impact was affected by delays due to problems with tendering and the fact that a laboratory specialist was not contracted to assist with the tendering of laboratory equipment. In retrospect, the presence of an STE on laboratory equipment this may have resulted in more efficient tendering of equipment and reagents for the residue laboratory.

The implementation of residue testing, so crucial to the livestock import and export industries was delayed due to the delays in building the new laboratory, training of the laboratory technicians in residue testing skills and the lack of reagents for the equipment.

Provision of equipment and reagents were delayed for regional laboratories through problems in the tendering process. The vehicle tendering process was delayed so long that it was cancelled and no derogation was requested. Lack of experience with the EDF tendering process may have contributed to this.

Delays such as the above have had a significant impact on programme outcomes and have undermined the ability of participants to use the information learned in the many workshops and trainings.

## **Recommendations:**

Reagents need to be supplied urgently to federal, regional and the Kaliti residue laboratory

Future projects should begin the tender process early in the project lifetime, bearing in mind the requirements of the tender process, to ensure that the equipment is supplied in time.

## **3.9 Communication and Knowledge Management**

### **(a) Communication strategy**

Two consultancies have been carried out firstly in January 2013 by Ms Elda Sortini for a 20 day contract and followed by Mr Berhanu

Due to the limited time to prepare a comprehensive communication plan, it was decided to concentrate on the following issues:

1. Animal Health service delivery – Regulation of Para-professionals (professional / paraprofessional relationships).
2. Regulation of the distribution, sale and use of prescription only medicines (and vaccines).

The communication plan had the following objectives.

- To inform professional and paraprofessional and stakeholders about the new rules that are in the way to be defined; and accurately inform regarding certification procedures, and good hygiene practices.
- Stimulate the role of the private sector EVA;
- Promote the establishment of a VSB;
- To provide the pastoralists with full information about the new rules, to raise awareness of the importance of quality assurance.
- The messages must also be able to communicate policy changes under the proposed new regulations

The International consultant defined the target audience, key messages and communication tools and then developed methodologies that could guide the national communication consultant to plan and develop a communication campaign for the ) DVS. The international consultant raised the issue of the need for dedicated staff to manage the communication plan and noted that this was a major risk to the effectiveness of the communication strategy. Other major risks were the lack of endorsement of the enabling legislation that underpinned the LVC-PPD and the lack of dedicated budget to develop communication tools.

Target audiences below are varied with different cultures and education levels all requiring different communication approaches..



- a) Policy makers
- b) Members of parliament
- c) Relevant Vet service policy/regulatory agencies at all levels
- d) Veterinarians & their network or association;
- e) Para- veterinarians and their networks or associations;
- f) University Veterinary schools
- g) Vet drug traders (importers, distributors, pharmacists
- h) Agricultural extension agents
- i) Community animal health workers
- j) Ethiopian livestock traders association
- k) Donors and NGOs working with livestock keepers-farmers, pastoralists
- l) Media -Radio/TV/ Newspapers/ journalists
- m) Livestock Keepers, farmers, pastoralists and semi- pastoralists
- n) Pastoralists University Veterinary schools

A matrix linking methods of passing key messages to each group was developed and the national Communication consultant developed a communication plan identifying the methods of passing key messages on the major topics of VSB, privatization of drug delivery, animal identification and traceability and the animal disease surveillance and reporting network.

As a national communication expert was not provided for the LVC-PPD project, instead the plan was for a communication officer in the MOA to take the process forward. However, the hiring of the expert was outside the control of the project as he/she will be MOA staff. This person has not yet been hired but the consultants were advised that interviews will be held shortly. However, it is unlikely that this person, who will also have to work with a wide agenda in MOA, will be able to give full time attention to the project. It would be ideal if the previous national STE could be hired through international hiring and given the task of implementing the communication plan.

It is noted that a presentation on communication for livestock owners and managers is given by AU-IBAR as part of the curriculum for the training for Feedlot inspectors.

### **(b) Knowledge management**

The major form of communication of the project has been through workshops and training. As the trainings focus mainly on groups d, e and f from above, only a small percentage of the target group has been captured. Both the MOA and EVA websites have information, documentation and links and the MOA website now links to EVA. The EVA knowledge base website is attractive and contains technical information, disease reports and legislation and has been partially upgraded but requires to be finalized as it is still out of date. The hits tally shows over 600,000 hits and is known by the veterinary profession. The website contains documents, upcoming events and will eventually host a large e-library. While these websites are useful and will grow in importance, it must be remembered that not all parts of the country have good internet. When trainings and workshops are held for regional participants, only half of them are able to give an email address, indicating that they have little or no internet access.

The project planned to produce a bi-annual bulletin on animal health and production and annual Epidemiology Newsletter. However, the request to hire a local consultant to prepare these was denied by the State Minister who felt that they job should have been done in house. However, the case team leaders have been too busy to take on the task and so it has not been carried out. This is another example of problems caused by the lack of a JSC and hence an holistic view of the issue. This activity is important and the LVC-PPD should look into ways of quickly hiring a consultant to take this forward. It is suggested that this be done through EVA as they have a significant amount of time left in their component of the project. It is also suggested that market price be paid for consultants as experience has shown that the salaries as offered for local consultants did not attract the level of consultant required for the task and caused delays in carrying out the activity.

The EVA has carried out two international conferences. The 27<sup>th</sup> EVA conference “Strengthening the capacities of veterinary services in view of expanding livestock products, trade & enhancement of producers livelihoods and resilience” was for 590 national and international participants in September 2013. The majority of presenters (14) were from Ethiopia with four international presenters. The material presented comprehensively covered different aspects of strengthening the veterinary sector: three international presenters discussed models for privatisation from Kenya and India and the privatisation road map for Ethiopia; there were presentations on disease control and the PVS report on the Ethiopian veterinary service, export trade including quality of hides and skins. The 28<sup>th</sup> EVA conference “Rationalisation of Public Private partnerships in livestock services” was held for 600 national and international participants in September 2014. The presentations were well focused on privatised delivery of veterinary services and covered the privatisation road map, the livestock master plan, the role of the VSB in Kenya, and examples of privatised veterinary initiatives in Ethiopia including private veterinary practitioners and privatised AI delivery. The proceedings of both conferences are being collated and will be posted on the EVA website. The participant’s lists have not been examined by the consultants.

### **Lessons learnt**

The project was unable to pass information to the wider stakeholders about the aims of the project and key animal health messages as there was no officer in DVS or MOA able to carry out the task. Thus information was mostly passed in meetings, workshops and trainings that mostly involved government staff. Recommendations

- The project has many communication objectives to achieve. Even if the MOA communication expert is hired quickly, he/she will be expected to take on other work for MOA and will not be able to give full attention to LVC-PPD. It is recommended that a short term consultant, preferably the previous national STE communication, be found to assist the MOA communication expert to modify and begin the communication strategy.
- As the funds for the communication component will close in June 2015 the information to be passed and the methods used need to be carefully thought through. Much of the planned communication messages involved the role of the VSB but, as the legislation has not been passed, these messages are no longer valid. Key messages should focus on support for legal privatisation of veterinary services (and the dangers of using illegal traders), reporting sick animals immediately to the appropriate authorities, information on upcoming activities in pilot areas for sanitary mandates, SMS-based disease reporting and surveillance and AI, MC & T. The most rapid methods of dissemination would be radio (national and local), local press, internet-based communication systems such as CAHNET and the MOA and EVA websites. The EVA website should be upgraded as soon as possible with up to date information.
- Technical writers should be hired to complete the bi-annual bulletin on animal health and production and annual Epidemiology Newsletter as this will not be done by DVS staff.

**FWC BENEFICIARIES 2013 - LOT 1: Rural Development and Food Security - EuropeAid/132633/C/SER/multi**

## **Final Evaluation Report**

**IMPROVING AND INTEGRATING ANIMAL HEALTH SERVICES IN  
THE LIVESTOCK VALUE CHAIN**

**THROUGH PUBLIC PRIVATE DIALOGUE IN ETHIOPIA (LVC-PPD)**

**Project Ref: ET/FED/2009/021-388**

### **Section 4**

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## 4. Lessons Learnt, Conclusions and Recommendations

### 4.1 Lessons Learnt

Lessons were learnt from the LVC-PPD that can have implications for other projects or subsequent phases of the LVC-PPD.

Significant funds were allocated to technical studies but inadequate investment was made in methods to pass the technical information to the govt and private sector. Absorption of the technical messages by the private sector requires significant behaviour change in managers and semi-skilled staff. This is a long process and should have been accompanied by the development of simple communication messages, memory aids and a monitoring tool. With the lack of communication tools and late entry of the private sector into the project, much information has stayed at the government level. The exception to this has been the use of the export abattoir audit tool that brings both the government and the private sector together to solve problems in abattoir infrastructure and management. The funds allocated to training also could have more impact if EVA and the DVS trainers had been given training in the principles of adult training. The training method used was the lecture method with many PowerPoint slides and no energisers or ice breakers to break up the training day. Future projects should ensure that knowledge management, dissemination, communication and training methods should have equal importance to the technical aspects of such projects as they are both required for project impact.

The EDF funding mechanisms appear to have been difficult to follow and the project found compliance with the different regulations challenging. The tendering process led to many delays in the purchase of laboratory equipment and failure to purchase the vehicles; this occurred despite significant training of LVC-PPD staff in EDF procedures. Annual PE preparation and approval was also time consuming and another cause of delays. As such the EDF regulations seemed to work against the project rather than with it. The project also suffered from administrative delays and DVS staff were neither fully seconded to the project nor compensated for their additional work load. Future projects should clarify the staffing situation at the outset. While it is appreciated that it would not be possible to significantly change the EDF funding modality, perhaps the procedures could be changed to reduce the administrative burden on the project. This may include modification of the PE system to cover a longer period, reporting formats could be more tabular and shorter and further training carried out to ensure smoother tendering processes. The staffing situation could be solved by seconding staff 100% to the project and offering a level of compensation commensurate with the extra tasks and responsibilities involved.

The impact of investment in training for regional, national and residue laboratory staff had not been realised by the end of the project due to the lack of late supply of reagents to enable the trainees to work. Project management should plan purchasing of inputs so that they are in line with training and other project activities that they depend on them. The cancellation of the vehicles, due to delays in the tendering process, and long tendering delays for laboratory equipment would indicate that either more training of project staff, or a simplified approval system, is required. A sustainable platform for the veterinary profession to engage with government institutions has been developed in the VEF. The institution is looking critically at the current and future situation for veterinary professionals in Ethiopia. Over time the VEF will be able to develop into a body that can influence curricula for specialisation and preparing graduates to enter the private sector. The VEF and EVA can also consult with stakeholders in the livestock sector and the livestock value chain on the need for CPD. While some legislation is passed quite rapidly in Ethiopia, the animal health sector has been unable to pass the legislation required to support the LVC-PPD. While the veterinary rationalisation road map has not yet been passed, other legislation contrary to the objectives of the LVC-PPD, such as the legislation enacted by the Ministry of Trade banning private purchasers from livestock trading, was passed quickly. An over-arching body with links to Federal Government, such as RED & FS could have coordinated relevant legislation at the development level to check for internal consistency.

### 4.2 Conclusions



LVC-PPD has paved the way for a paradigm change in the way veterinary services are perceived and implemented in Ethiopia. Although delays, omissions and underspends have occurred, the project has set in place policy and implementation changes that can have a profound impact in the future.

The project received a positive endorsement from all interviewees for the important contribution it is making to the rationalisation of veterinary services in Ethiopia, with key actions in terms of capacity building, drafting of legislative frameworks, strengthening disease surveillance, improving laboratory capacity and promoting a positive dialogue towards developing consensus for a privatisation road map. These activities, aimed at strengthening livestock services for the upper reaches of the market chain, integrate well with those of the USAID funded livestock market development (LMD) actions in strengthening services and infrastructure for the middle to terminal points of the market chain.

The project has been advantaged in ensuring good coherence and collaboration with other livestock initiatives in Ethiopia by the formation of the LTC under the RED & FS Sector Working Group. The LTC has two Task Forces: Mixed Crop/Livestock (MCLTF) and Pastoral (PTF), with 8 Working Groups formed under the MCLTF (Dairy; Meat; Poultry; Apiculture; Hides and Skins; Fisheries/Aquaculture plus two cross-cutting working groups: Animal feed/forage; and Animal Health). These Task Forces link initiatives to the donors and senior levels of government, however there is still the need for ministry and directorate-level coordination of livestock activities to ensure synergy and avoid redundancy.

However, the project has suffered from unacceptable cancellations of activities, implementation delays, lack of personnel and serious underspends. This has seriously diluted the impact of the project, resulting in fewer than expected benefits to stakeholders, especially livestock producers, and restricting the number of important lessons that could have been generated to inform the subsequent phase. Many project delays have been caused by the insistence to pay salaries that are lower than the market rate and so key positions have remained empty for extended periods. These attempts to save hundreds of ETB have caused Ethiopia to lose thousands in unexpended project funds; this money, and the impact it could have had on the livestock economy, has been lost to the livestock industry of Ethiopia forever. This has partly been due to the failure of the JSC to meet, denying the project a trouble shooting and oversight function.

The major beneficiaries of the project have been government staff; they have received the bulk of training to date and have been the major attendees at workshops. The project decided to train them first and the private sector later, missing the opportunity for real PPD. The ultimate losers have been the livestock producing communities, especially vulnerable groups, as they have been missed out of the project.

The tender processes were extremely complicated and resulted in much questioning, rewriting and budgeting changes. The end result was delayed supply of equipment and non-supply of the 16 vehicles for regional laboratories which has hampered disease investigation and surveillance.

The long start up and closure period of the project has led to quite restricted time to implement activities. This is particularly the case for policy change that is a long process requiring patience and advocacy along the way. The fact that all draft policies are waiting to be accepted by government indicates that perhaps the commitment to streamlining the livestock industry and rationalising the provision of services does not have the same weight across government. Indeed several senior government staff indicated that they were not fully supportive of privatised veterinary services. Without full government support, the project is challenged to move forward on the VSPRM, despite some promising innovations as described below.

There are many positive outcomes to report:

The EVA has carried out consultation across the veterinary profession on the establishment of the Veterinary Education Forum (VEF), the VSB, veterinary career structure, animal welfare and veterinary services rationalisation. This has been very much appreciated by the veterinary sector and this method of consultation should be considered good practice and a lesson learnt to be used in the future. In addition a successful study tour was undertaken by 15

representatives of veterinary schools, federal and regional veterinary services, regional laboratories and related institutions, with the aim of exposing the beneficiaries to veterinary education, research and selected private sector service delivery initiatives in countries outside of Ethiopia

Training on Food Management Safety was carried out for 25 meat and abattoir inspectors in 2013 and for 78 participants in 2014 but there has been no structured follow up to see how they are using the skills. A training for abattoir owners and managers is planned for the near future so to date the main beneficiaries of the training has been government staff. These trainings have been carried out in collaboration with the Veterinary Public Health and Export Abattoirs Inspection and certification teams and the LVC-PPD project of the DVS as well as with the Safe Food-Fair Food (SFFF) project of the International Livestock Research institute, ILRI. As no training skills or module development was covered in the training, they cannot really be considered TOT as no clear guidance was given for training of peers, the private sector and semi-skilled workers in the industry. The managers and workers in abattoirs will need a different method of training, with more participation and based on problem solving and using experience. The USAID funded SPS-LMM project trained some feedlot staff in biosecurity before 2010, so the training carried out by this project was able to build on this experience.

It is the audit tool for export abattoirs and check infrastructure and procedure compliance to assist the export abattoirs improve. The tool was developed by the previous Team Leader, modified and rested by the STE on Certification and carried out by the DVS's staff and farm management.

The audit tool for export abattoirs identifies gaps in GAP, GHP, GMP, HACCP by looking at infrastructure, food handling and hygiene, and staff safety and verifies procedure compliance. Improvement was noted over the three years in compliance: between 2012 and 2013 the overall compliance score increased from 60% to 67%. A further audit of export abattoirs was carried out in September 2014 by the DVS staff and abattoir management, anecdotally there has been improvement but the scores have still to be analysed. The audit tool is now a proven method for improving and maintaining quality across a range of components and has the chance to be a sustainable activity initiated by the LVC-PPD. Four more export abattoirs (Halal, Abyssinia, D/Z ELFORA, and Abergelle) are in different stages of implementing the certification process with the help the DVS case teams. So real impacts are seen from the training and support from the project and the use of the sustainable use of an audit tool.

The LVC-PPD has carried out workshops and trainings for 816 participants and EVA has carried out workshops and trainings for 1,707 participants, including the two annual EVA conferences (see Annex 8.2 or training and workshops carried out. The DVScase team leaders have developed a high level of technical understanding of the subjects with the assistance of the international STEs. They are proud to be able to pass on the technical training. The participants of the training were very happy to receive more knowledge and information and some expressed the fact that they had not been trained for several years. However, there was no systematic pre and post testing, common training evaluation questionnaire and post training mentoring to assess the impact of the training.

The GoE is embarking on a programme to rationalise the way in which veterinary services (VS) are being delivered in the country. The LVC-PPD, in support of this approach, is facilitating dialogue with all stakeholders to create an enabling framework for the participation of the private sector in VS delivery. A key output has been the creation of pathways towards privatised service delivery in areas / activities previously the domain of the government VS. Stakeholders have been consulted through the medium of workshops (see table in annex 8.2), meetings and interviews culminating in the preparation of a "Road Map for Rationalisation of Veterinary Services" that is now fully owned by the DVS and supported but not endorsed by the State Minister. The importance of this process has been recently highlighted by the emphasis placed on the involvement of the private sector in realising the challenging targets as expected of the various livestock value chains detailed in the (LMP).

Evidence of moves towards the rationalisation of livestock services in Ethiopia include:-

The proposed, but as yet to launch, piloting of sanitary mandates in a series of EVA managed trials in two selected Woredas in each of three Regions – Tigray, Afar and Oromia (Borana).

In Tigray, simple contracted activities are already being carried out by groups of private veterinarians who have proven skills in contract veterinary work and business acumen. There is a need for the success stories of these models to be widely disseminated to promote a wider understanding and appreciation of privatised veterinary groups.

Export abattoirs and feedlots are all privatized and PPP is now being addressed for the management and operation of quarantine facilities.

PPP for management and inspection of municipal abattoirs as being promoted by the DVS. Currently these are the responsibility of Municipal Authorities, and the standards are very poor. (The Ministry of Health is responsible for products of animal origin after they leave the abattoir).

Import, distribution and sale of veterinary drugs was fully liberalized in the late 1990s, however the Federal Government still imports large amounts of cheap veterinary drugs which flood the markets and offer little choice

The DVS and State Minister are actively working to bring a “Sidai” type model for quality branded veterinary products and services into Ethiopia. Meetings on this approach were held recently with Dr Christie Peacock and a senior programme officer from the Gates Foundation.

Community Animal Health Workers are accepted in the pastoralist areas and work with NGOs and FAO to extend coverage of veterinary services to remote communities. A successful model is a network of CAHWs linked to a private pharmacy that is run by a veterinarian or AHA.

The support to laboratory improvement in the national, regional and residue testing labs was delayed and limited the ability of the laboratories to carry out surveillance and disease investigation due to lack of equipment, reagents and vehicles. However, the Kaliti residue laboratory, while not operational at the time of the evaluation will have a significant impact in the quality of domestic, import and export animal products and quality control of veterinary drugs. Realising this potential will be dependent on a short term commitments from the GoE to provide an adequate annual budget allocation, qualified and well paid staff, reliable input supply chain, cost-effective management, quality insurance system etc. In the medium to long term a sustainable cost recovery system needs to be put in place based on payment for quality assurance services provided to export and internal market chain traders. These conditions need to be fulfilled in order generate sustained impact and avoid a "white elephant", The laboratory staff will need further training in pesticide residues to complete their skill set.

The pilots for SMS animal disease surveillance, sanitary mandates and AI, MC & T will be carried out in the five month extension period and are outside the scope of the evaluation. These are all key activities that have been supported by the project. The project managed to carry out a significant amount of technical support for the livestock industry of Ethiopia despite many delays and frustrations. This was mostly achieved through the excellent support of the DVS, dedication of all LVC-PPD staff and strategic partnerships with associated projects. However, more impact could have been achieved with a dynamic JSC oversight, more simple funding mechanisms, technical staff fully seconded from DVS to the project, more efficient tendering procedures and passing of enabling legislation as evidence of Government commitment,

While the technical support to the project was excellent, less attention was paid to the “softer” elements of the programme such as including the private sector earlier in trainings and workshops, communication of project objectives and key messages and adult training methodologies and training evaluations. The weakness of these two components reduced the impact of expenditure on technical studies, trainings and workshops.

The RED & FS and its associated task forces and working groups were a key liaison and coordination body to assist the LVC-PPD and other projects.

### 4.3 Recommendations

**i. On-going Phase** The project needs to focus on the completion or embedding the process of realising key activities inclusive of the Rationalised Road Map for the Delivery of VS, Roll out and handover of the NADSS and ADNIS to AHDIC and continued lobbying for the ratification of outstanding legislative frameworks and formation of the VSB.

A further area of activity would be to recruit a short term consultant, preferably the previous national STE communication, be found to assist the MOA communication expert to modify finalise and begin implement the communication strategy

Key messages should focus on support for legal privatisation of veterinary services (and the dangers of using illegal traders), reporting sick animals immediately to the appropriate authorities, and related benefits to be obtained for the farmers and local vets/ CAHWs, information on upcoming activities in pilot areas for sanitary mandates, SMS-based disease reporting and surveillance and AI, MC & C.

As there is little time remaining, the most rapid methods of dissemination would be radio (national and local), local press, internet-based communication systems such as CAHNET and the MOA and EVA websites. The EVA website should be upgraded as soon as possible with up to date information.

Technical writers should be hired to complete the bi-annual bulletin on animal health and production and annual Epidemiology Newsletter as this will not be done by the DSV staff. For sustainability and as exit strategy the consultant TOR should include collaboration with head of Epidemiology case team head and a select team of University dean members on specific topical issues. The DVS and the various university veterinary college deans should, as a mechanism for a continuous learning process, facilitate the development of the newsletter for both the public and the profession.

To consolidate the inclusion of the private sector (producer) the project LVC-PPD should continue its task of establishing links with the private sector and NGOs to ensure that more producers of livestock and livestock products to benefit from the activities of the project.

The technical studies, STE, trainings and workshops accounted for a significant part of the LVC-PPD budget; to make best use of these funds, the information needs to be passed in a clear and easily understood method, ensuring that all material is relevant. By starting each training with a TNA for each target group to ascertain the skills needed by participants and then developing a concise curriculum and training plan, the training content and methodology can be tailored to have maximum impact. Thus all trainers, both in DVS and EVA should be given an adult training of trainers to include skills in developing training curricula, module writing, facilitation skills, principles and methods of adult learning, problem-based learning. This would lead to more dynamic training where the participants solve problems using the relevant technical material provided.

Pre- and post- tests and post-training evaluations are useful to gauge how much material has been absorbed by the trainees and identify areas of difficulty. A standard format is required to quantify the learning from pre- and post-training tests, and post-training evaluations to highlight areas of difficulty and to assess how the trainees will use the material. Follow up of the impact of training should be carried out for all training and the results used to assess the curricula and modifications made if necessary.

As the majority of trainings were of a high technical level and designed for veterinarians, the material will need to be modified to make it suitable for non-technical members of the private sectors and also for the semi-skilled workers. Simple Information, Education and Communication material should be designed as memory aids that can be displayed in feedlots and abattoirs.

Record keeping and use and business skills training should be included in all trainings of the private sector and should be introduced at training institutions.

The laboratory services need to be integrated, with an active information sharing platform across the country to get a real picture of disease status across Ethiopia. With only 5% of outbreaks reported and confirmed by laboratory testing, any future project must improve reporting and outbreak investigation. In the LVC-PPD, this was hampered by lack of vehicles, and late provision of equipment. They should be supplied as a matter of urgency and future projects should act quickly to ensure correct and timely tenders for vehicles and equipment. The residue testing technicians, based in Kaliti, should complete their studies on pesticide testing and use of the water purification machines.

The EU-funded SHARE project will work with the LVC-PPD project to pilot SMs for PPR vaccination. This will be carried out under the EVA component. Hopefully the SHARE project will become operational in time to work with EVA as the PPR vaccine is being provided by SHARE. EVA will need to work closely with FAO on the awarding of SMs and supervising the correct vaccination protocols and community liaison. Current vaccination programmes should be improved by better community participation and consultation, and an understanding of the need for high and even vaccination coverage.

**ii. Exit strategy leading into the follow-on phase.** The five month extension request was signed and submitted before the cut-off date and the project has until May 2015 to consolidate relationships and safeguard progress made to remain patent until the follow on phase is launched. One vehicle for this continuum can be the EVA who will remain with LVC-PPD funding until November 2015. Another is the Livestock Unit of ATA who can ensure that MoA resources, policy and focus remain supportive of project activities for the duration of the interim period. The SHARE PPR as it starts of should be mandated to coordinate with both the DVS (Epidemiology and Disease surveillance case teams) and the EVA to bridge the actions on in results two and three. The ATA, in consultation with the DVS, should be specifically mandated to coordinate actions for progression of the draft strategies and the draft legislations into law.

Three actions need to be taken to ensure that an effective exit strategy is adopted to carry forward key project achievements after the termination of the project – firstly to cement good working relations with the ATA and secure the LVC unit’s support to continue the lobbying for the ratification of drafted legal frameworks and the endorsement of the Veterinary Rationalisation Road Map; secondly to ensure that key members of the RED&FS forum are well briefed on project activities and the expectations concerning partner actions to continue specified project activities; and finally to embed as many project lessons learnt and good practice developed into the action plans for the LMP to ensure they are carried forward and that no VS wheels have to be re-invented when the LMP is ultimately funded and rolled out

**iii. Follow-on Phase** Recognising the livestock production targets as set by the LMP and as embodied in GTP II, there is an urgent need for improved quality animal health services delivered by an informed, resourced and integrated public and private veterinary service operating in an optimally enabled environment applied across all points along the livestock market chain.

Taking the findings of the “OIE PVS” and “Gap Analysis”, the contents of the “DVS Animal Health Strategy” and “Rationalisation of Veterinary Services” documents and the findings of this Evaluation/Identification Mission the following activities for Phase II are proposed:

**1. Creating an Enabling Environment:** Key to the successful and sustainable implementation of a rationalised animal health delivery system is the creation of an enabling environment designed to facilitate the delivery of quality, integrated and complementary public and private sector veterinary services. This important condition can be assisted by:

- Establishment of Veterinary Council of Ethiopia (VSB)
- Ratification of Outstanding Legislative Frameworks – (Some 7 at last count)
- Review, determine and draft additional legislative frameworks as needed
- Establishing a clear technical co-ordination mechanism between Federal and Regional Veterinary Authorities and a clear technical chain of command between Regional and Woreda Veterinary Services
- Establishing a Rationalisation of Veterinary Services (RVS) help and communications desk



- Improved e-management, advocacy, networking and coordination skills expressed in the workplace
- Establishing and maintaining an animal health (AH) sector forum inclusive of all AH service providers
- Clear statement and guidelines supporting the deployment of professionally directed, para-professional supervised CAHW in Pastoral Areas and prohibition of CAHW deployment in high potential high rainfall areas
- Piloting innovative VS delivery approaches for both government and private sector personnel designed to motivate self-improvement in professional clinical practice towards a progressively improving quality of service delivery.
- Exploring approaches for making the required range and quality of veterinary drugs available for sale by selected veterinary drug outlets, inclusive of using NVI for procurement and distribution services
- Developing a credit guarantee scheme for emerging / expanding veterinary practices

**2. Training Skills for Effective and Sustainable Capacity building** It has been noted that the approach to capacity building has been primarily by way of residential courses involving venue, traveling costs and per diems costing on average some US \$15,000 per event. Whilst such events may be value for money for certain purposes such as awareness raising and consensus building – there are more cost-effective e-platform tools for skills and knowledge enhancement – that can be used either on-line or off-line (CDs, Flash Drives, Tablets) as an alternative or as a complementary approach. Trainings could have been improved by the following:

- Training needs assessment before the training to assess the gaps between the existing knowledge of the participants and the information that they need to carry out particular tasks. This would allow tailoring of the training to develop curricula for the specific needs of certain groups and avoid overloading the trainees with too much material. Currently OIE and other manuals are used as the basis of training rather than using a specific curriculum based on need.
- The high workload of the case teams could have been reduced to some extent if a training cascade had been carried out so that Regional trainers could take on some of the technical training. Training skills need to be passed from the case teams to regional experts to ensure that the information is held by a wide range of technical government staff.
- The LVC-PPD was not really testing the absorption of material in the trainings. The questionnaires asked for opinions and the majority of respondents selected the middle option (“OK”) so it was not possible to test the quality of the training. Pre and post training tests, using a standard format, and field mentoring of trainees, are the best way to assess the impact of training. Follow up of the impact of training should be carried out for all training and the results used to assess the curricula and modifications made if necessary.
- All trainers would benefit from a TOT that would give them skills in participatory training, curriculum and module development, facilitation skills, principles and skills of adult learning, problem-based learning. This would lead to more dynamic training where the participants solve problems with the relevant technical material provided.
- The majority of trainings carried out to date were of a high technical level and designed for veterinarians. This training will have to be modified to be suitable for owners and managers of feedlots and abattoirs and again for the semi-skilled workers. Simple Information, Education and Communication material should be designed as memory aids that can be displayed. The skewing of training benefits towards government and veterinary staff should be immediately redressed and training on abattoir and feedlot biosecurity, hygiene and animal welfare be made available to the private section and especially female staff.
- Include record keeping and use and business skills training in all trainings of the private sector.
- Trainees receive a DVD of the power points and other training material to assist them with their activities and any follow-on training. However, while the material is technically good, the is in English so would not be of use for semi-skilled workers and power points do not convey the message as well as specifically designed memory aids.

**3. Sanitary mandates**The current practice of selecting existing veterinary clinics or pharmacies, veterinary groups or CAHW networks linked to a private veterinarian and offering them a SM to perform specified tasks for a specified fee under a specified reporting, supervisory and accounting framework should be continued and strengthened. The project will need to learn what skills and support are required and what training should be incorporated into the activity. Experience in Tigray has shown that simple SMs perform well over a range of privatised services and these experiences should be scaled up in other parts of the country.

- Develop a VS SM Accreditation Scheme where interested VS Personnel (both Private and State) undertake a formal and tested course of training – on par with the USDA “National Veterinary Accreditation Programme” (NVAP) ensuring standard competency in required areas to perform specified sanitary activities. Register successful participants of the training. Use registration as a criteria for being awarded SMs;
- Award SM according to simply applied selection criteria: distance of animal health service provider to point where service delivery required; Professional experience and education; Technical and financial ability;
- A performance record informed by regular audits to be maintained inclusive of proof that relevant and approved CPD is being undertaken. (CPD topics should include business skills, animal welfare, community consultation as well as more technical veterinary subjects.)
- For PPR vaccination SM with the FAO-SHARE projects - the selected veterinarians should have experience with CAHWs, community consultation and participatory approaches. Vaccination programmes should utilise good communication and consultation practice with the community and the CAHWs need to be well supervised. The SM must aim to provide an improved product with better community participation, coverage, vaccine handling and administration protocols inclusive of good hygiene practice.

**4. Using CPD to enhance skills and knowledge for selected Veterinary Personnel.** It is important to ensure that all veterinary personnel, from both public and private sectors, who manage, educate, train, research and/or deliver services, inclusive of Veterinary Professionals (VP), Veterinary Para-professionals (VPP) and Community Based Animal Health workers (CAHW), receive LMP targeted continuing professional development (CPD) capacity building using relevant adult education, “learning by doing”, training and knowledge enhancement techniques. This can be supported by:

- Provide support for Subject Matter Experienced (SME) personnel to meet set performance standards for registration as Subject Matter Specialists (SMS) to provide remunerated mentorship and assessment of colleagues undertaking CPD
- The intention to pilot rationalised service delivery models would provide for ideal “learning by doing” CPD activity providing, as an output, evidence based lessons learnt to inform future livestock specific policy frameworks.
- The standard of the studies carried out by the STEs was extremely high, providing manuals and SOPs for technical procedures and materials usable for training, discussion and CPD. For the latter purpose they are not only valuable now, but will form the basis of a technical knowledge base into the future with the material being updated as knowledge of the subject increases.
- The veterinary and para veterinary profession can be supported through training in business skills, improved veterinary technical skills (applicable to veterinarians, para-veterinarians and CAHWs) through self-assessments, CPD. Sanitary mandates should be piloted using different models and for a range of activities and professionals encouraged to join the private sector. CPD is a crucial step to developed specialised veterinary skills, tailored for both the intensive and extensive systems.

### **5. Animal health (AH) priorities**

The following priority actions are proposed to address given livestock producer animal health concerns:

- Develop, for the highland areas, a strategy (and proposal for delivering that strategy) for the progressive control of PPR / SGP and other important diseases of small ruminants to follow the SHARE programme being implemented in the lowlands

- Develop a strategy leading to a tested and selected extension package, for combating Young Stock Mortality tailored to specific production systems and ecological zones (ideal candidate for the “learning by doing approach”)
- Develop a “One Health” strategy for the control of bovine tuberculosis (BTb) in peri-urban dairy herds and surveillance for other potential zoonotic conditions in such herds inclusive of brucellosis, leptospirosis, Q-Fever, Salmonellosis
- Develop a “One Health” strategy” for the control of zoonotic disease in pastoralist herds as indicated by surveillance for potential conditions inclusive of brucellosis, rabies, cysticercosis, echinococcosis, Q-Fever, anthrax followed by a vet/med collaboration to diagnose, investigate, treat and prevent zoonotic disease found prevalent in pastoralist communities
- Support the national strategy for FMD control

## **6. Disease surveillance, reporting and information management**

The important ground work to enhance disease surveillance, reporting and information management undertaken by the phase I project should be carried forward by the following actions:

- Roll out the National Animal Disease Surveillance System (NADSS) and its sub-component (ADNIS)
- Roll out the use of mobile phone reporting to ADNIS to 3,600 locations
- Link LIMS with NADIS
- Predict and improve preparedness strategies for highly pathogenic emerging diseases (HPED), inclusive of Rift Valley fever (RVF), the HPAI/Newcastle Disease (ND) complex, East Coast fever (ECF), Middle East Respiratory Syndrome of Camels (MERS).
- Develop strategies to redress current low disease reporting rates, inclusive of providing feedback, to encourage continued reporting.
- Incorporate other important disease information sources to inform NADIS eg Laboratories, Abattoirs, Slaughter slabs, Private health services and NGOs
- Strengthen and improve laboratory services /diagnostic capacity at National, Regional, Wareda and Kebele levels along a more holistic and inclusive package that addresses all elements leading causing low performance (hardware, software, HR, management, quality control, budget, cost-effectiveness , procurement and supply chain etc .
- Set minimum IT standard required for all veterinary personnel and encourage the progression to intermediate and advanced IT competency levels

## **7. Targeted Training for Government Personnel**

Federal VS Personnel require support with the necessary training skills and learning resources to capacity build Regional VS to:

- direct and manage a rationalised delivery of veterinary services
- apply principles of risk analysis to the design of sanitary controls
- develop and deliver / regulate disease control strategies appropriate to the production systems and ecology of the different zones in their region
- design and manage a sanitary mandate scheme
- apply a PVS self assessment
- to in-turn deliver such capacity building to Wareda VS

## **8. Staff management and motivation strategy**

The LVC-PPD project was embedded in the Veterinary Services Directorate and the existing staff was expected to work on the project. While the project relied heavily on the case teams to implement activities, they were neither 100% available nor compensated for the extra work A more robust system of reward for effort should be considered

where government employees on fixed (often inadequate) salaries are expected to contribute to the delivery of project outputs and future projects should find a way around this problem to ensure full commitment of staff to activities.

## **9. Coordination of livestock projects**

The evaluation team has mapped some 40+ livestock projects as recently, currently or soon to be implemented in Ethiopia (Annex 8.4). Creating good working links between these projects, inclusive of LVC-PPD, would add considerable value and guard against duplications and gaps. It is suggested that the RED&FS should be more proactive in this respect with the projects' aligned to one or more of the working group categories as have been developed. Collaboration has been maintained through the RED&FS working group where the project stakeholders, including private enterprise, can interact as part of the sectoral working groups. However the MoA should be supported to maintain a more formal platform for coordinating, monitoring and creating networks between livestock activities.

## **10. Implementation Modality**

All activities to be implemented / lead by the Veterinary Services Directorate (DVS) with strategic partnerships as determined appropriate (LMD, PRIME, SHARE, PEPE, VCE, EVA, Tufts, ILRI, VSF's) with technical assistance and back stopping from OIE, FAO and facilitation / oversight by the ATA.

### **Endpiece**

**The project has the potential to provide a lead for other countries in the region and continent, seeking to strengthen the quality and relevance of their veterinary services delivered in support of the market chain, particularly in terms of the approaches proposed for the rationalisation of the VS with defined roles and responsibilities of state and private sector livestock service providers.**