



# PAEPARD



## THE RED DIAMOND

### The extensive livestock value chain



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**Smallholder farmers manage** over eighty percent of the world's estimated five hundred million small farms. They provide over eighty percent of the food consumed in a large part of the developing world contributing significantly to poverty reduction and food security. They lack access to applicable technologies adapted to their needs to increase food production, they need stable markets, access to training, finances and information services for development.

**The Eastern Africa Farmers Federation (EAFF)** represents approximately a total of 20 million farmers in the region. It is mandated by its membership to champion the concerns and interests of farmers in Eastern Africa by addressing issues related to markets, productivity, capacity, information and regional integration. EAFF's strategic thrusts of 2012-2020 focuses on economic value chains namely potato, livestock, cassava, rice and maize. EAFF takes a leadership role within WP

Partnership on behalf of PAFO (Pan Africa Farmers Organization) within the PAEPARD project that commenced since 2009.

**Implementing the PAEPARD project** has brought about a lot of networks toward the federation. There has been lots of transformation in terms of shifting mindsets within farmer organizations especially towards research. We know that farmers are already innovating within their farms and hence know missing technologies gaps. With this background, farmer organizations are taking the fore front in leading developmental programs consisting of both researchers and private sector from Africa and European regions.

**The main highlight of the project** is the users led process (ULP), which is interesting for EAFF since it focuses on livestock which is one of the value chain crops within the strategic plan. Within the ULP-EAFF has conducted several activities and developed at least

10 proposals for funding. EAFF has further explored issues on aflatoxin contamination in food and feed affecting the livestock sector and has made a breakthrough in partnering with a German institution, the Max Rubner Institute, as an associate partner on the same. EAFF has also lobbied in the EU roundtable discussions in January 2016 on aflatoxin control and proposed a communication angle through the e-granary platform promoted by EAFF. Currently, interests on partnership to develop a bigger developmental program in collaboration with CIRAD is underway to present to the European Commission Directorates General for development and cooperation (DG-Devco), health (DG-Sanco), agriculture (DG-Agri), and research (DG-Research). Support for agriculture remains a concern with limited and in some cases reducing available funding for agricultural research; but PAEPARD has made considerable stride efforts to bridging this gap.


Rain water harvest for cattle in Tanzania.



## Background and definition of the problem

The livestock sector is one of the best growing parts of the agricultural economy, driven by income growth and supported technological and structural change (SA Gov., 2011). It contributes 40% of the global value of agricultural output and supports the livelihoods and food security of almost a billion people (FAO, 2009). About 4-5 billion people in the world are deficient in iron, which is essential especially for the health of pregnant and lactating women and for the physical and cognitive development of young children (SCN, 2004). Products from livestock provide essential micro-nutrients that are not easily obtained from plant based foods (Thyagarajan et al., 2009).

Trade is vitally important for sub-Saharan Africa's small economies, with total exports and imports of goods and non-factor services accounting, respectively, for 29% and 34% of GDP on average (Hinkle and Newfarmer, 2005). Efforts are also underway in East Africa to increase what is seen as disturbingly low levels of intra-regional trade and to develop exports for overseas markets, particularly from Kenya. Despite rising global demand, beef production has remained fairly stagnant in the face of rising input costs (from feed costs to fuel costs), creating a tight market situation<sup>1</sup>. Kenya is the leading exporter of cattle meat within the EAC countries and its registered exports were valued at \$2.1 million, followed by Uganda \$0.3 million, Rwanda \$0.03 million and Burundi \$0.03 million. Tanzania did not export any cattle (Wafula and Kommen, 2013). Data from the Kenyan Ministry of agriculture indicate

 About 4-5 billion people in the world are deficient in iron

<sup>1</sup> CTA 2013: [http://publications.cta.int/media/publications/downloads/BEEF\\_Executive\\_Brief\\_EN.pdf](http://publications.cta.int/media/publications/downloads/BEEF_Executive_Brief_EN.pdf)

that annually red meat production was 430,000 t against a domestic consumption of 330,000 t in 2010 and white meat production was 40,000 t against a consumption of 36,600 t. With global beef prices projected to remain high throughout the next decade<sup>1</sup>, sustained efforts are under way to open up new export markets for Kenyan meat products.

In Uganda Beef production by 2008 stood at 200,743 Mt, an 8% increment from 147,552 Mt in 2004 (MAAIF, 2009). Beef production in Uganda uses predominantly indigenous breeds (INFOTRADE, 2011) while improved cattle breeds are kept under intensive management, mostly on small scale and medium sized dairy farms and zero grazing unit.



The indigenous breeds are mainly kept under extensive system (FAO, 2013). The production of goat meat/mutton, pork and poultry meat stood at 39,900, 22,509, 25,066 Mt, respectively (MAAIF, 2009). According to the article from the East African<sup>2</sup> the national per capita consumption of meat is estimated at 6 kg while the annual meat consumption deficit is estimated at 80,000 Mt. Industry players say that demand is growing ahead of supply; in 2014 -2015, a total of 220,000 to 230,000 t of beef was produced, a jump from 191,280 t in 2012, and from 107,000 t in 2008. Supply is severely constrained by the current beef production system - largely subsistence and primarily of slow maturing indigenous breeds, with a very slow transition to commercial production. Opportunities for large scale meat production and processing exist to step up the current production levels which only meet half of the national demand.

**Small holder agriculture should be the starting point for development not the end point**

In many parts of the world, the transformation of the livestock sector is occurring in the absence of strong governance, resulting in market failures related to natural resource use and public health. While the livestock sector is not alone in this regard, institutional and policy failures have led to opportunities by growth in the livestock sector being missed. Appropriate policy responses in this situation involve measures to ease the transition out of the sector, including the provision of social safety nets and broader rural development policies, such as investments in education, infrastructure and growth oriented institutional reforms. The livestock sector requires renewed attention and investments from the agricultural research and development community for robust institutional and governance mechanisms that reflect the diversity within the sector. Small holder agriculture should be the starting point for development not the end point (FAO, 2009).

## Implementation of the users led process (ULP)

### 1. Partnership creation and the definition of the federating theme

A questionnaire survey was sent out to partners and membership within EAFF to assess research needs, capacity needs and strengths targeting farmer organizations, research institutions and private sector organizations. Survey analysis indicated mutual dependence on stakeholder players for product

Traditional mixed cattle breeds met in Eastern Africa, here in North Tanzania.



**Three broad priority areas were selected: food security, knowledge management and, institutional development**

development. The aim of this consultation was to zero in to at least one theme and explore a particular value chain. EAFF therefore organized an internal multi-stakeholder consultation meeting to discuss and prioritize research topics. Three broad priority areas were selected: food security, knowledge management and, institutional development. Food security was prioritized and specifically the livestock value chain was selected. This is how livestock value chain formed part of the 5 focus crops of EAFF within its new strategic plan focusing on commercialization. EAFF thereafter organized a meeting on the African multi-stakeholder partnership where findings from the regional multi-stakeholder workshops from PAFO (EAFF, PROPAC, ROPPA) and European partners were presented.

From this meeting it was agreed that there was need to further explore the themes identified during the internal consultations. The proposed approach was, in relation with agricultural innovation facilitators (AIFs), to help identify and facilitate proposal writing towards the EU-FP7 calls that had been floated. After the identification of the calls for proposals, partnership inception workshops were supposed to take place and thereafter, a writeshop should respond to the terms of reference (TOR) of the call for drafting full proposals.

In the meantime, TOR for AIF were developed and AIF were identified and linked to the relevant members of PAEPARD. However, this didn't work out very well since they had to be remunerated and in the initial proposal there was no budgetary allocation for the same. EAFF thereby proposed to the use of internal AIFs

<sup>1</sup> Agritrade article 'Beef sector trends in the EU and globally' on 9 September 2012.

<sup>2</sup> <http://www.theeastafrican.co.ke/business/Uganda-eyes-local-export-beef-market-with-11m-investment/-/2560/2928806/-/4opr9jz/-/index.html>



from our membership and 2 AIFs from Kenya and Uganda were selected. They underwent training on how to be a good facilitator with the help of RUFORUM and ICRA.

In year 3 of the project, each sub region was asked to define federating themes of focus, (this was from the selected value chain during the internal stakeholder consultation), the criteria was that these theme will focus in at least 2-3 countries with one AIF per country. EAFF therefore, sent out emails to membership and recapped on the IMSC (2010) and also gave a report from the AMSC (2011) and discussed what in livestock was going to be explored and where. From these deliberations, based on trade within the livestock sector<sup>1</sup> we selected the Extensive livestock value chain mainly (beef cattle, sheep, goats, and pigs) with focus on post handling.

The countries of focus selected were Kenya and Uganda, because of the trade level happening in the two countries and the AIF selected were from the National Farmers' Federation members in the two countries KENAFF and UNFFE, respectively. The main aim of selecting these AIFs was for them to conduct the desk study on post handling extensive livestock value chain in Kenya and Uganda. However, by these times the AIFs lacked enough capacity to conduct the study and EAFF outsourced the services of a consultant.



## 2. Desk review

The Eastern Africa Farmers Federation EAFF was expected to develop the terms of reference (TOR) for the study and we sought expertise from RUFORUM and ICRA to help finalize the TOR. It was then sent out in March 2012 with expected report to be by April 2012. From pre-selection process, in May 2012, EAFF contracted the Agency for inter-regional development (AFID) to carry out a consultancy study to develop a livestock strategy for Eastern Africa led by Pr. Jean Ndikumana (ASARECA) was pre-selected to conduct the study. The study from the TOR was more of post handling of extensive livestock value chain but, EAFF thought it wise to incorporate even the production aspect of the value chain.

The name of the federating theme thus changed to extensive livestock value chain (ELVC) in Eastern Africa. Findings from the study showed implemented approaches need to be around:

- Value chain development and innovation system approach,
- System and enterprise integration,
- Mainstreaming indigenous knowledge,
- Responding to emerging issues,
- Streamlining capacity building of value chain actors,
- Market orientation and enterprise development,
- Economic/enterprise diversification for farmers and
- Gender responsiveness and mainstreaming.

The stakeholder approaches required to ensure that these findings are addressed showed that there was need to: i) Prioritize the research and policy-related issues; ii) Come out with plausible



intervention approaches and, iii) Harmonize terminologies and operational terms. With these findings and recommendations in mind EAFF thereby further engaged the consultant to ensure that he develops an Extensive Livestock Strategy for EAFF and policy recommendations.

## 3. Induction workshop

The induction workshop was held in November 2012, by this time EAFF had already finalized the desk review study of the federating theme of focus. The objective was to familiarize AIFs with their roles as facilitators of the user led process for establishing balanced African-European multi-stakeholder partnerships within the PAEPARD project. AIFs were pre-selected by EAFF from KENAFF and UNFFE from Kenya and Uganda, respectively.

The main areas covered during the workshop was especially the introduction to PAEPARD, the ULP process, use of PAEPARD communication tools, website development for each region, facilitating the multi stakeholder research question workshop and reflection workshop. The major role of the AIF was to review the desk study, which they effectively did and made numerous corrections before finally accepting it as a study outcome. They also had to play a role in terms of populating the database on the PAEPARD intranet on the African Partnerships especially from Eastern Africa. This was not effectively done, but they tried especially during meetings. The AIFs played a huge role especially during the core group meeting in terms of facilitation (but during these time they had not got skills to facilitate a writeshop) so EAFF hired someone to do this. However, they helped facilitate the workshop on research development workshop. The role of AIFs was short lived due to lack of budgetary allocation for remuneration but an important one.

 **The facilitators played a huge role during the core group meeting**

<sup>1</sup> Background and the definition of the problem

#### 4. Multi-stakeholder research question workshop

EAFF held a workshop from 10th-12th December 2012 with an intention of developing research questions within the extensive livestock value chain that could further be developed into concept notes by a steering group dubbed «core team» comprising of technical personnel who will help in the development of full research proposals that will aim to push the agenda for agricultural research for development forward. The programs/projects that will be developed will comprise of various multi-stakeholders in the value chain from farmer organizations, research institutions, academia, private sector institutions, NGOs/CSOs and donor organizations both from African and European descent.



The workshop was divided into three components to (a) identify/validate the national research issues within the livestock value chain (b) discuss the regional research issues and come up with research questions (c) form a core team to take up the initiative to develop proposals based on the regional research questions formulated.

During the workshop, participants identified at least 69 research issues within the extensive livestock value chain at the national level (in both Kenya and Uganda), these issues were then consolidated into 24 regional research issues and 36 research questions were developed from it (see <http://paepard.org/elvc/wakka.php?wiki=LibrarY>).

The regional research areas of focus were divided into the 3 value chain functions: production, value addition and processing.

Production	Value addition	Marketing
Improving the availability and quality of feed and water	Improvement of shelf life of beef products	Enhancing product standards and policies for improved market access
Preventing and controlling pests and diseases (common and transboundary diseases)	Improving safety management systems quality and standards of beef	Enhancing access to and utilization of market information
Breeding and improving the utilization of indigenous animal genetic resources	Appropriate innovative and traditional technologies for value addition for cottage industries	Market development
	Appropriate technologies for value addition for formal industry	
	Business training, credit services, Insurance breeds consumers tastes/preferences	
	Utilization of beef byproducts - hide, blood, bones etc.	
Cross cutting issues: Gender mainstreaming, market dynamics and building competitiveness in the livestock sector		

Meat shop in Arsuha market, Tanzania.



The participants identified a core group team; this team was put in charge of developing concept notes and identifying missing partners within consortiums. It was led by Dr. Jean Ndikumana from ASARECA who will help in steering the group. Other members of the group were Pr. George Lubega – Makerere University (Uganda), Dr. Joyce Thaiya – GIZ (Germany), Dr. Patrice Grimaud – CIRAD (France), Jackson Mubiru – NAGRIC (Uganda), Stephen Muchiri – EAFF (Kenya) and Pr. Vedasto Muhikambe – Sokoine University (Tanzania).

In conclusion, it was agreed that the TORs for the core team will be developed by the PAEPARD MTM and delivered to the core team. There will be a core team meeting in March 2013. The first core group meeting was held in Jacaranda in a bid to respond to a Competitive Research Fund call floated by the Dutch. From this call, 2 broad proposals were developed one focused on competitiveness and the other one on resilience-climate change related for pastoral and agro-pastoral farmers. The proposal on competitiveness was submitted to the CRF call but it was unsuccessful. Almost immediately after this the core group members “melted away” it was hard to motivate them to stay. There was no funding for the proposals written nor was there any funding for the proposals submitted.

In 2015, EAFF rethought about the program to assess what impact could it have to fulfill the objectives of the program as well as to help EAFF explore the beef value chain effectively. EAFF therefore conducted 2 National livestock dialogue workshops in Kenya and Uganda to further reprioritize the needs of farmers at the national level. There was need to also revitalize the core group and include Rwanda to the consortia. EAFF therefore organized a core group and consortia meeting whereby the terms of reference for the meat platform were developed.

**EAFF**  
reprioritized  
the needs  
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national  
level

## 5. Concept note development

In 2013, EAFF organized a core group meeting in Jacarada Nairobi, 2 broad concept notes were developed one was on “Enhancing livelihoods resilience of pastoral farming systems in Eastern Africa” and the other one was on “Strengthening the East African beef value chain towards improved competitiveness”.

These two concept notes were informed from the research questions that were formulated in the research question development workshop.

The second phase of PAEPARD introduced the competitive research fund of €300,000 and an incentive fund of €40,000. EAFF submitted the proposal on competitiveness, but the concept note did not qualify to develop a full proposal. EAFF in partnership with ASARECA submitted a proposal on “Sustainable and efficient management of agricultural water for improved food security and nutrition in East Africa”, and another one in partnership with Makerere University, the University of Nairobi and a private sector organization, submitted to the CULTIAF call (Cultivate Africa’s Future) from Canadian donors. Again, EAFF did not qualify any of these two proposals.

In partnership with RUFORUM, AAIN, Shalin Finland, we submitted the concept note on “Future agriverture value chains in Uganda” (FAVAC-UG) on sesame, soya bean, shea nut and banana to the EU-H2020 call in 2016, evaluation still in progress. In total EAFF has developed at least 3 concept notes between 2013 and 2016.



## 6. Full Proposals

In 2014, a call for proposals was floated by the NWO-WOTRO call, this time, strategy shifted to focus on feeding and feeding systems and also competitiveness. Two new consortia were formed to respond to this call one proposal was submitted i.e. “Developing feed management protocols for dairy farmers in high rainfall areas (HRA) in Kenya”. Good feedback from this proposal was submitted and it underwent two reviews from the reviewers. However, the proposal was not funded.

EAFF submitted a proposal to the CIFSRF-IDRC (Canada) call dubbed “Upscaling restricted acaricide protocol to control beef cattle ecto-parasites in the drylands of Kenya, Rwanda and Uganda”; also not granted. EAFF then partnered with other partners in information and communication technologies (ICT), health and agriculture sector to respond to the EU-HORIZON 2020 call. The proposal dubbed “Developing an innovation ecosystem through open knowledge and challenge driven education and training” was submitted but did not go through. In another consortium formed by the Max Rubner Institute, KALRO, ILRI and EAFF a proposal was developed on “Minimization of aflatoxin contamination in the value chain” and submitted to the Dutch government call (ARF), and the proposal went through! This was a major breakthrough, and from this proposal EAFF developed the “Kenyan aflatoxin platform” that aims to go regional on the same issue. Through these platform activities EAFF has been approached by USAID to deliver a small concept note on aflatoxin in maize and on the effects of the maize lethal necrotic virus, both severe constraints on maize as a major feed for livestock. EAFF has also partnered with AU-IBAR (African Union Interafrican Bureau for Animal Resources) within the VET-GOV project and submitted a proposal on the same. In the spirit of partnership EAFF partnered with CTA, aWhere, eLeaf, EARS, AGRA

 EAFF developed the “Kenyan aflatoxin platform”



and Mercy Corps and developed a proposal dubbed “Market led user owned ICT4Ag information services” and submitted it to the NSO this project was funded. In 2016 a call floated by CTI-PFAN was floated on financing and using the partnership model that is used in PAEPARD we submitted a proposal on “Using an e-Granary to deliver weather and extension services to farmers in East Africa” the proposal was accepted and now we are awaiting a coach to be assigned for pitching. Since 2014 at least seven multi stakeholder proposals have been submitted to donors for funding, two have been funded and wait for launching.

## Challenges and lessons learnt

### 1. Challenges

- Working in multi-stakeholder partnerships is quite challenging especially because it takes the whole unit to ensure that the project goes forward and achieve its objectives.
- It’s a bit difficult to attract European partners in the ULP process but with persistent efforts to get to know them well, they just might approach African partners to secure research funding.

### 2. Lessons

- EAFF had learnt a lot as we implement the PAEPARD project especially in
1. Writing fundable proposals; EAFF can now submit proposals to funding agencies that have been thought through and has good indicators
  2. Partnership incubation; EAFF can now work well within multi-stakeholder partnership set ups
  3. Report writing; from the onset of the project, our project writing has improved tremendously to show results as per the indicators on the log frame.
  4. Call understanding; EAFF can now read a call and know if the call is research led or developmental. This is very important to us so as to avoid frustrations that come from immersing a lot of time towards responding to the wrong thing.

## Conclusion

The ULP process of PAEPARD has been made of good use by the EAFF:

- The extensive livestock strategy document is now a reference for EAFF and its partners to develop projects around livestock in the region,
- At least three proposals have been funded from the floating calls of the last 2 years,
- EAFF has used two incentive funding opportunities offered by PAEPARD to organize writeshops and contribute to convert concept notes into full proposals targeting specific calls,
- EAFF gained better visibility as a strong partner in aflatoxin mitigation and control.

## Recommendations

1. PAEPARD activities should scale up and continue to broker the consortia with good proposals until they get funded,
2. This partnership process helps bridge the gap between Africa and Europe and shall keep on through some ways of sustainability,
3. There is urgent need to lobby for youth in agricultural research and development calls,
4. The aflatoxin menace has raised a lot of interests from both African and European players in ARD and therefore, should continue to be in the list of priorities of the funding agencies.

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