

ON LIVESTOCK, LIVESTOCK PRODUCTS AND ALTERNATIVE LIVELIHOODS IN THE CROSS-BORDER AREA BETWEEN KENYA, ETHIOPIA AND SOMALIA

EXECUTIVE SUMMARY



Figures

Figure 1: Summary of activities around the camel milk enterprises

Figure 2: Summary of an intervention framework for the camel milk value chain

Figure 3: Hides and skins value chain map

Figure 4: The proposed honey enterprise model

Figure 5: Value chain map for live animals and red meat

Figure 6: An intervention framework for riverine farming and production of

horticultural crops

Tables

Table 1: Skills needed to implement the proposed interventions

Introduction

This executive summary summarizes the findings of a study on a value chain analysis (VCA) on livestock, livestock products and alternative livelihoods assessment in the cross border area between Kenya, Ethiopia and Somalia.

The study was commissioned by the Building Opportunities for Resilience in the Horn of Africa (BORESHA) project with funding support from the European Union Trust Fund for Africa. The overall objective of the BORESHA project is to promote economic development and greater resilience, particularly among vulnerable groups. The BORESHA project targets communities in Mandera County in Kenya, Dolo Ado region in Ethiopia, and Gedo region in Somalia.

The main purpose of the study was to provide WYG and BORESHA consortium partners with proper understanding of the livestock and livestock products value chains as well as alternative sources of agriculture-based livelihoods in order to inform strategy for building self-reliant and resilient pastoral communities in the project area. The key value chain stages analysed were production, transportation, value addition and marketing.

The VCA study was carried out between March and April 2018 in a cross border region between Kenya, Ethiopia and Somalia (specifically Gedo region in Somalia, Mandera County in Kenya, Liben and Afder zones in Ethiopia). The study was executed by SPARD Africa Consulting Ltd. with support from WYG staff. Data was collected from primary and secondary sources, employing both qualitative and quantitative approaches.

The value chains and alternative livelihoods that were found promising with respect to employment opportunities, product expansion, market and linkage opportunities, and quality improvement include camel milk value chain, hides and skins, live animals, honey, riverine farming and irrigation, construction industry, agricultural drug stores and Savings and Credit schemes.

The study further sheds light on the status and viability of existing and potential markets, identifies opportunities for vulnerable groups (youth, women, and displaced people) and recommends strategies for their inclusion.

Background to the Value Chain Analysis Studies

The BORESHA project is part of the European Union (EU) programme for Collaboration in the Cross-Border Areas of the Horn of Africa, providing over 60 million Euros of investment to prevent and mitigate the impact of local conflict and to promote economic development and greater resilience in four different sites in cross border regions.

With a total budget of 14 million Euros, the BORESHA project aims to reach communities in Mandera County in Kenya, Dolo Ado region in Ethiopia, and Gedo region in Somalia. A consortium of partners who include Danish Refugee Council as the lead, WYG, CARE and World Vision are implementing the project from November 2017 to November 2020.

The study region constitutes an integrated cross border economy with the towns of Mandera (Kenya), Bulahawa (Somalia), Dolow (Somalia) and Dolo Ado (Ethiopia) being the critical set of corridors for commerce and livestock sales for the entire region. A lot of cross border interactions occur here mainly because of trade, opportunities for shared resources, services and kinships.

The resources and infrastructure shared across the region include livestock markets, schools, health services, airstrips, River Daua for irrigation, mobile phone networks and currencies, among others. The main livelihood systems in the triangle include - though with no clear-cut distinctions - pastoralism, agro-pastoralism, formal and informal employment, and trading mainly in the urban centres. There are also internally displaced persons (IDPs) in Somalia and Somali refugees hosted in Dolo Ado, Ethiopia, who largely depend on relief food.

Each country has its comparative advantage which influences the direction of flow of goods and services across the three borders. The challenges that affect the cross border trade include insecurity, closure of the international border points, unfavourable government policies and infrastructural challenges.

Study Methodology

The study applied a value chain approach, targeting and mapping all actors in the livestock value chains. These actors included crop producers, transporters, traders, non-governmental organizations (NGOs), government agencies, private sector, consumers, livestock producers, honey producers, aggregators, hides and skins producers, village-based collectors (agents), local artisans making leather products, milk producers, bulkers, traders and regulatory authorities.

This approach provided a broader framework that helped the study team identify the principal constraints along the value chains as well as the environment in which the actors operate.

Data collection entailed a number of methods including: i) a desktop review for secondary data; ii) participant observation and interviews for primary data; iii) quantitative data surveys utilizing structured questionnaires targeting especially producers and traders; and iii) direct observations, focus group discussions (FGDs) and semi-structured key informant interviews (KII) for qualitative data. A total of 384 value chain actors were interviewed, of which 309 respondents were surveyed through questionnaires and another 75 were reached through the FGDs and KII.

Data collected from the value chain actors was thereafter analysed to determine the key characteristics of the value chains, systemic constraints and the opportunities to promote economic, private sector development, and greater resilience in the livestock value chains. The analysis also recommended the most viable options to focus on within the BORESHA project.

Challenges during the Study

Among the challenges experienced by the study team were:

Floods: the region was experiencing an abnormally high rainfall which led to the flooding of River Daua and rendering many roads impassable during the study period.

Security: there were frequent security threats by Al Shabaab militia just before the month of Ramadhan. This limited the consultants from traveling to the project areas beyond Mandera town.

Respondents' apathy: Some of the respondents were reluctant to be interviewed, with some households expecting hand-outs.

Ramadhan period: The study coincided with the month of Ramadhan. Most of the respondents were not willing to participate in interviews especially after mid-day.

MAIN FINDINGS

The main findings of the study are presented in the following section which covers the situation analysis of each value chain, systemic constraints, opportunities, illustrations of value chain models and frameworks, and recommendations for strategic interventions for enhancing the value chains.



Camel Milk Value Chain

SITUATION ANALYSIS

- Camel milk is an important product in the pastoral areas from the perspectives of resilience, food security, income generation and inclusive business.
- The value of the total milk produced per day is approximately KES 940, 1,178.9 and 166.7 in the dry season for Ethiopia, Kenya and Somalia respectively; and 1,088, 6,340.0 and 333.3 per day in the wet season in Ethiopia, Kenya and Somalia respectively.
- The average income earned by households that manage to sell camel milk is approxi mately KES 660 in the dry season for Ethiopia, KES 825 for Kenya and KES 433 for Somalia. In the wet season, the total daily incomes are about KES 512.0 for Ethiopia, KES 1,656.8 for Kenya and KES 250 for Somalia.
- The value chain is affected by high seasonal fluctuations in Kenya and Somalia.
- Households are able to sell for 5.63 months in Kenya, Ethiopia 4.20 months and Somalia 4.33, implying that milk enterprises are rarely operational all year round.
- The bulking and retail business is dominated by women, who operate at different levels of bulking and distribution.
- No significant difference was found between the price of camel milk between Kenya and Ethiopia; Ethiopia and Somalia; but a signifi cant difference exists between Kenya and Somalia.
- Daily incomes per trader per day during wet and dry seasons respectively were found to be KES 374 and 444 (Somalia); KES 324 and 334 (Kenya); and 248 and 656 (Ethiopia). Income per trader is lower than for producers because the bulking business is dominated by many actors.

KEY CONSTRAINTS

The key systemic constraints facing the camel milk value chain are:

- A fragmented bulking and retail system
- The value chain is mainly dominated by primary bulking and retailing of raw camel milk which limits the focus to a small segment of local consumers.
- Poor hygienic practices in milk handling along the entire value chain leading to high levels of milk spoilage.
- Lack of effective systems to collect, bulk and transport milk from far flung areas.
- Poor road network which sometimes becomes impassable during the rainy season.
- High seasonal fluctuations in the supply of milk to the market

SHORT TERM RECOMMENDATIONS

- Support existing actors in bulking and retail to invest in milk enterprises or milk outlets owned by individuals, groups or cooperatives. These enterprises and outlets are a combination of both milk bars and retail outlets which offer quality milk to a wide market including the quality-sensitive segments.
- Increase the supply of milk to markets through establishment of effective collection and bulking systems in the far flung areas, and increase production and productivity of the pastoralists' herds.
- Enhance clean milk production and supply by promoting the use of appropriate equipment for carrying and storing clean milk along the value chain in order to reduce losses due to spoilage.

MEDIUM TO LONG TERM RECOMMENDATIONS

- Value addition by investing in production of other products such as cheese and voghurt.
- Strengthen cooperation among the traders by organizing them into cooperatives to run milk enterprises with enhanced institutional capacity building.
- Brand, promote and enhance marketing of camel milk in order to raise consumer awareness and increase came milk consumption.
- Undertake knowledge, attitude and practice (KAP) surveys to assess training needs for camel milk producers and carry out milk quality assessment
- Train milk bulking groups to become market-oriented cooperatives.

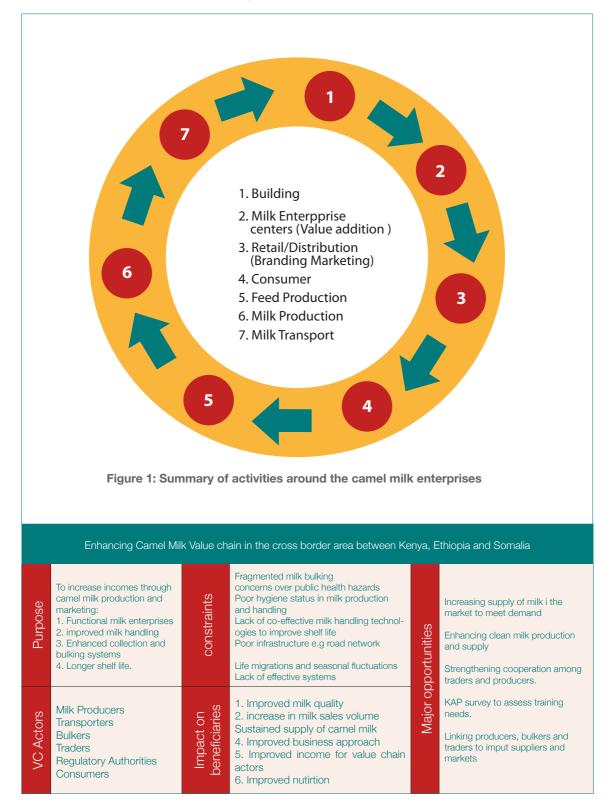
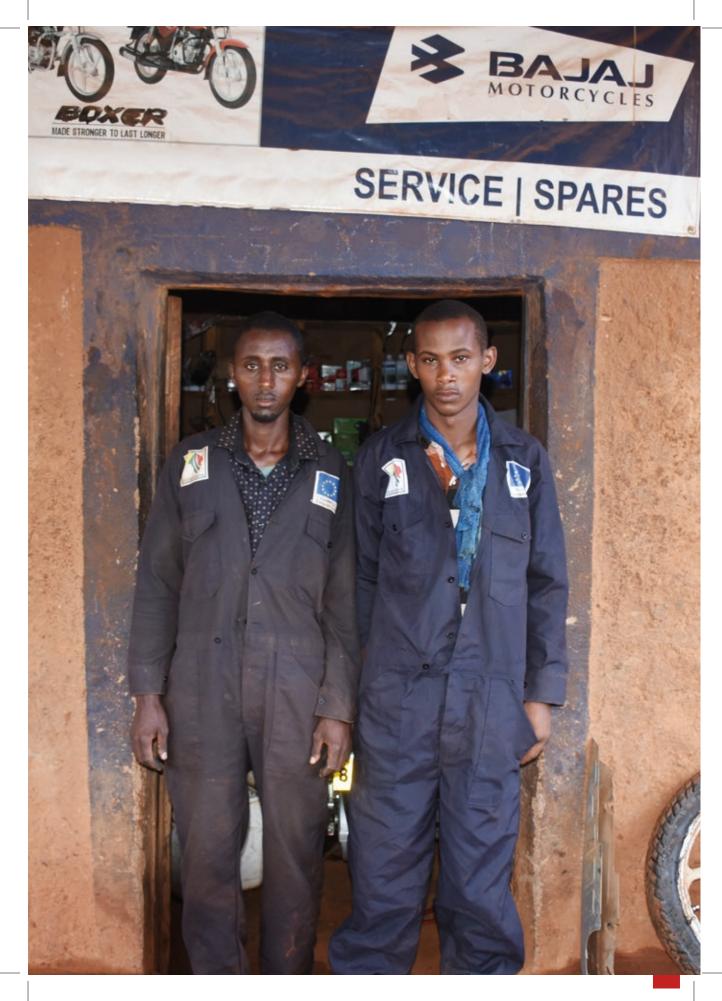


Figure 2: Summary of an intervention framework for the camel milk value chain





Hides and Skins Value Chain

SITUATION ANALYSIS

- Over 90% of the hides and skins marketed in the Mandera triangle are collected from slaughter houses.
- There are no incentives for producers to sell hides and skins owing to factors such as:
- Low annual livestock slaughters estimated at one to two for cattle and camels, and five to seven for sheep and goats.
- Low prices per piece, currently at KES 50 (Kenya) and 100 (Somalia and Ethiopa).
- No systems in place for the few products to reach the markets.
- Utilization of hides and skins from dead animals not encouraged based on religious heliefs
- The value chain is relatively short, involving primary and secondary bulking for traders who take produce to external markets.
- There are artisans who are using their indiginous knowledge and skills to make leather products like handbags, wallets, belts and prayer mats for sale.
- There are two routes through which the hides and skins from the Triangle leave for the end markets i.e. (i) Mogadishu route for sun dried hides and skins from Somalia, Ethiopia and Kenya; and (ii) Nairobi route for wet salted hides and skins from the three countries.

KEY CONSTRAINTS

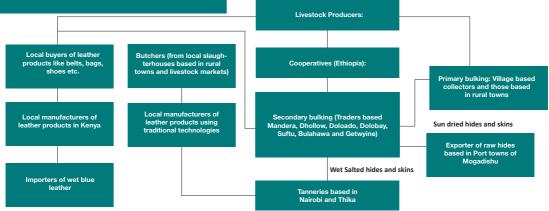
The key systemic constraints facing the hides and skins value chain are:

- Limited systems for bulking and transportation of hides and skins from households.
- High levels of rejection and downgrading of hides and skins owing to defects.
- Subjective and exploitative grading procedures at the tangeries
- Low prices in the wet blue market in Kenya, attributed to the existing monopoly.
- Limited access to external markets by local traders occassioned by control of markets by big actors who operate like cartels.
- Lack of equipment, infrastructure and efficient production technologies for upcoming local designers.
- Inadequate supply, arising from lack of systems to collect from producers.
- Insecurity along the trading routes, especially for the traders from Kenya who transport hides and skins to Mogadishu.
- Lack of access to capital needed by traders to increase the volumes traded

SHORT TERM RECOMMENDATIONS

- Strengthen the aggregation, transportation and storage systems to meet the demand for hides and skins at the end markets.
- Support artisans in accessing appropriate tanning and leather making technologies.

Figure 3: Hides and Skins Value Chain Map





Honey Value Chain

SITUATION ANALYSIS

- · Production is localized in areas with adequate flowers, mainly riverine areas.
- The presence of perennial rivers Daua and Juba in this ecosystem provides a huge potential for apiculture.
- Despite the potential, honey production has not been commercialized. This was largely attributed to poorly developed marketing systems as well as use of traditional bee keeping technologies and equipment.
- Value chain functions after harvesting is limited to packaging crude honey or semi-processed honey in plastic jerrycans. The value chain lacks pricing and quality management standards.
- Honey marketing is mainly a retail business involving individual traders, out of which 80% are also the producers.

KEY CONSTRAINTS

SHORT TERM RECOMMENDATIONS

- Increase production of honey to achieve commercial scale by supporting the current producers to scale up production through improved production methods and use of modern equipment.
- Support an entrepreneur from project sites in each of the countries (Banisa in Kenya, Bulahawa Beled Xaawo in Somalia and Dolo Ado in Ethiopia) to invest in honey processing.
- Support the establishment of collection and aggregation systems from the producers to the processor.
- Facilitate linkages to external markets for processed honey and other hive products

The presence of perennial rivers Daua and Juba in this ecosystem provides a huge potential for apiculture. Honey marketing is mainly a retail business involving individual traders, out of which 80% are also the producers.



Live Animal and Meat Value Chain

SITUATION ANALYSIS

- Factors such as the multiple roles of livestock and vulnerability to external forces tend to affect the offtake and replacement decisions.
- Owing to limited access to animal health services, the majority of producers buy drugs and treat sick animals themselves. This is true of 61 % of the respondents from Ethiopia, 75.7% in Kenya and 35.5% in Somalia.
- Livestock trade is dominated by many market intermediaries, who bulk and trade live animals from the interior markets to the end markets. As a result, the livestock prices nearly double from the producers to end markets. The price of cattle, shoats and camels increases by 75%, 54% and 63% respectively.
- An assessment of whether any country has a comparative advantage on animal trade revealed that:
 - The price of a shoat in Ethiopia is almost similar to the average price of a shoat in the three countries, hence traders are able to sell to Kenya and Somalia.
 - The average price of a shoat in Somalia was significantly higher by KES 1,019.231 compared to the mean of the sampled population. This is attributed to availability of export markets. Somalia hence becomes a market for the livestock from the two countries
 - There is no significant difference in the price of shoats in Kenya from the sampled population mean, which allows equal flow of shoats between Kenya and Somalia, depending on demand.
 - The price of a mature cow/bull in Ethiopia is the same as the average price of a mature cow/bull in the three countries. Ethiopia is a supplier to Kenya and Somalia markets.
 - The price of a mature cow in Somalia is higher than the average price of a cow in the three countries, hence Somalia remains the main terminal market for the high valued livestock destined for the export markets.
 - The price of a mature cow in Kenya is slightly lower than the average price of a mature cow in the three countries, hence Kenya becomes the main market for low valued livestock from Ethiopia and Somalia.
 - The price of a camel in Ethiopia and Kenya is slightly lower than the sampled average price of a camel in the three countries, hence Ethiopia and Kenya are able to sell to the export markets through Somalia.
 - The price of a camel in Somalia is significantly higher than the sampled average price of a camel in the three countries.

KEY CONSTRAINTS

The key systemic constraints facing the animals and red meat value chain are:

- Frequent droughts leading to loss of livelihoods for pastoralists, traders and all actors involved in the value chain
- Poor disease control systems across the region.
- High cost of doing business along the value chain because of the involvement of many middlemen, taxation (both formal and informal) and high transport costs.
- Limited value chain financing, leading to smal scale of operations.
- Seasonal fluctuations in the number and quality of animals supplied to the market, with numbers reducing to almost half in the dry season.
- Limited skills among the livestock traders contribute to high cost of doing business.

SHORTTERM RECOMMENDATIONS

- Support entrepreneurs and cooperatives to engage in livestock fattening at scale, building on the existing practices. The rivers Daua and Juba offeropportunities for irrigated fodder and to supplement other feed resources.
- Facilitate access to market information by livestock producers and traders operating in the primary markets.
- Facilitate business to business dialogues between the traders in the end markets (Nairobi, Mombasa, Mogadishu, Kismayu) and the primary market traders.
- Support the establishment of an agro input and livestock service centre in Mandera and link the centre to a network of community animal health workers in Somalia and Ethiopia.

MEDIUM TO LONG TERM RECOMMENDATIONS

Lobbying for a regional approach to control of livestock diseases through partnerships with existing programmes such as the Food and Agriculture Organization (FAO), Regional Centre for Trans Boundary Diseases and the Regional Resilience Project which covers Inter-Governmental Authority on Development (IGAD) member states, currently covering Ethiopia and Kenya, among other IGAD member states.



Alternative Livelihoods

The following alternative livelihoods are recommended for the communities of the cross border region:

Riverine Farming and Processing of Horticultural Produce

SITUATION ANALYSIS

- Consultations with stakeholders in the three countries indicate that the major crops with potential for commercialization are tomatoes, watermelons, mangoes, onions and pawpaws.
- The main challenges facing commercialization of such produce and the potential for employment and income generation along the value chains are lack of inputs, technical know-how and market linkages. These challenges cause significant losses during periods of alut.
- The potential for irrigation along the two rivers in the cross border area between Kenya, Ethiopia and Somalia is largely under-exploited.

SHORT TERM RECOMMENDATIONS

- The long distances between the cross border area between Kenya, Ethiopia and Somalia and the markets that can sustainably absorb the horticultural produce and their high perishability require that a semi-processing function be created in the region.
- Support the producers to increase production and productivity of quality and safe produce through capacity building on agronomical practices and food safety, improvement of irrigation systems, facilitating access to quality inputs, and formation of groups and linkages with the processors.

Opportunities in the Construction Sector

- The construction industry is experiencing a lot of growth, as many buildings are coming up to house the growing urban population as well as business establishments.
- Stakeholders indicate that the construction industry is quite promising in the creation of employment, including in the construction work itself, and associated services like electrical wiring and hardware shops.

SHORT TERM RECOMMENDATIONS

The following are some of the business opportunities in the construction industry that the project can promote:

- Encourage entrepreneurs to get involved in the production of building materials such as brick making.
- Establish businesses that provide inputs in the construction industry. This could include organizing groups of youth to set up hardware shops in the major towns of Mandera, Bulo Hawa, Dolow and Dolo Ado
- Provide services in the construction sector that include skills development.



The main challenges facing commercialization of such produce and the potential for employment and income generation along the value chains are lack of inputs, technical know-how and market linkages. These challenges cause significant losses during periods of glut.

Savings and credit mobilization

Situation analysis

- The findings of this study indicate that only a minority of producers and other value chain actors (0-10%) borrow credit from any form of institution.
- At least 70% of the respondents indicated that the reason for not borrowing is lack of information on the available products in the market; 20% indicated that they are not aware of any interest free loans, compliant with their religious beliefs, and the remaining indicated that they are not aware of credit providers.
- Although commercial banks are available, the respondents indicated that they use them for banking services and not for borrowing.
- The most common source of credit for financing individual businesses in the region is borrowing from relatives and friends.
- A gap therefore exists as far as business and value chain financing is concerned, which was echoed by a majority of the respondents.

Short term recommendations

- · Mainstream savings and credit mobilization in each of the value chains that the project will be supporting.
- Educate entrepreneurs and create awareness on availabile sharia compliant products in the
- Facilitate linkages between the individual or institutional enterprises supported by the project with financial service providers.
- Form partnerships with financial institutions such as banks, and savings and credit cooperatives (SACCOs) to assess the needs of the entrepreneurs so that appropriate products can be provided.
- Establish a project to explore a guaranteed credit scheme with banks, as a way of buying in the risks for the banks.

Petty Trade and Merchandising

Situation analysis

Challenges facing petty trading

Short term recommendations



At least 70% of the respondents indicated that the reason for not borrowing is lack of information on the available products in the market; 20% indicated that they are not aware of any interest free loans, compliant with their religious beliefs, and the remaining indicated that they are not aware of credit providers.



Other Interventions Recommended for Support

The following are other opportunities that can be considered for the medium to long term interventions:

Catering and bakery

The food and catering industry is growing rapidly as a result of increasing urban migration, growing middle class populations and the refugee population in Ethiopia. Development agencies working in these areas often require training and conference facilities. Interventions here will involve careful market segmentation and identification of unmet needs and supporting the entrepreneurs to invest in filling these needs. The most promising livelihood opportunities include:

- Baking bread, biscuits and cakes for local and external markets. These are fast moving
 products that can generate profits if quality is maintained. The project could partner with
 agencies like GIZ to come up with low cost but efficient ovens, in order to reduce the
 costs of baking.
- Providing catering services: Groups of women could be trained in cookery and supported
 to start catering services. The market for catering services is quite large, as it includes
 home parties and functions, office workers and outdoor trainings.

Renewable energy

Access to reliable and affordable energy plays a critical role in the growth of businesses, especially the small and micro enterprises (SMEs). Expensive energy raises the cost of doing businesses which then pushes up commodity prices. An opportunity exists for promotion of renewable energy. Solar power stands out as the most feasible renewable energy source for Somalia because of the readily available solar energy throughout the year. Solar power has been successfully used in countries like Kenya for both commercial and domestic purposes in areas located far from the national grid. Provision of renewable energy is an opportunity for employment creation among the youth and the displaced persons.

Skills Needed to Implement the Proposed Interventions

Based on the recommended models arising from this study, the skills outlined in Table 1 will need to be developed if the interventions discussed in this report are to be realized.

Type of Value Chain	Skills Needed
Camel milk value chain	Milk handling and hygien
Hide and skins value chain	 Flaying Salting Grading Tanning Leather processing Manufacturing leather products Creative designs in leather work
Honey	 Use of modern bee keeping equipment Honey harvesting Extraction of other bee products Setting and operationalization of a semi-processor packaging

Livestock fattening	 Cost effective finishing programs Herd management Grading Low cost feeding techniques
Riverine farming and horticultural processing	 Agronomy Packaging Marketing Setting and operationalization of a semi-processor
Construction	 Masonry Plumbing Electricals Painting Furniture and fittings Welding
Renewable energy	 Solar installations Electricals Identification of the right model/capacities for different uses Repairs Diagnostics on performance of the system

Table 1: Skills needed to implement the proposed interventions



Access to reliable and affordable energy plays a critical role in the growth of businesses, especially the small and micro enterprises (SMEs). Expensive energy raises the cost of doing businesses which then pushes up commodity prices.

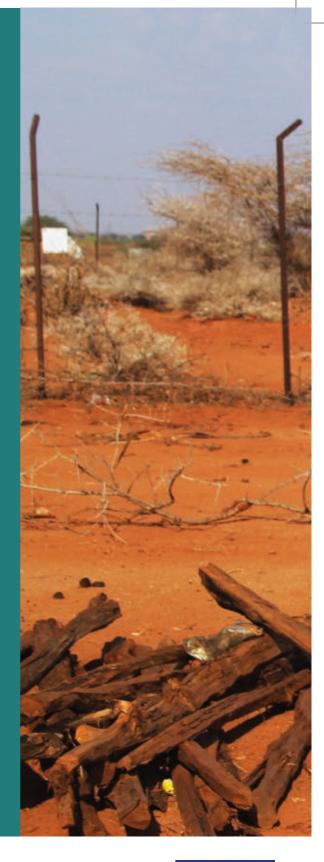
CONCLUSION

The analysis of the livestock value chain and alternative livelihoods in the cross-border region of Kenya, Ethiopia and Somalia has raised key strategic issues for intervention by the various stakeholders in the sector. The key areas for attention are as follows:

Strengthen existing enterprise systems through capacity building and technical skills training. Introduce better business practices and value addition for high quality products and increased income.

Scale up production through improved methods and use of modern equipment. Link entrepreneurs to external markets and traders' cooperatives.

Raise public awareness on sources of financial credit.



BORESHA Consortium

Danish Refugee Council - East Africa and Great Lakes Lower Kabete Road (Ngecha Junction) P.O Box 14762 – 00800 Nairobi, Kenya Office: +254 709867000 Email: KEN-Boresha@drc.ngo Twitter: BORESHA_HoA Website: www.boreshahoa.org







This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of BORESHA Consortium and do not necessarily reflect the views of the European Union



Funded by European Union