



ANNEX 1 - UGANDA – THEORY OF CHANGE

Livestock value chain development for enhanced and diversified incomes

1. Introduction & context

Uganda's economy has averaged a growth rate of 5.2% over the past decade (World Bank, 2020), with agricultural contribution to GDP averaging 25% during this period. The growth of the agricultural sector has averaged 2.2% which has been lower than the population growth which is at 3%. The livestock sector in Uganda is significant in importance to the agricultural sector and to the wider economy. It contributes 5% to the National GDP and 18% to agricultural GDP. The sector has also continued to deliver steady growth of 3% per annum even as the total agricultural sector growth has slowed. The agricultural sector plays a central role in Uganda's economy, employing over 70% of the population (2018) and therefore provides immense opportunities for reduction of poverty levels in the country. However, agriculture in Uganda faces several challenges at different stages of the value chains. The sector is dominated by subsistence-oriented smallholder farmers, who are often characterized as poorly organized, having poor access to credit, quality inputs and services, and adopting low levels of technology use, ultimately resulting in low production and productivity. Farmer's organizations or cooperatives often lack the means or structure to efficiently provide benefits for their members and are poorly linked to (external/terminal) markets or service providers such as private vets or breeding technicians. This is exacerbated by the increasing effects of climate change that have caused erratic rainfall, disease outbreaks and natural disasters. Low value addition, weak cooperatives, poor access to finance and sustainable or un-reliable market access has further increased the overall vulnerability of farmers.

In **Karamoja** region, agro-pastoralism is the main livelihood source for most of the population while livestock directly contributes the socio-economic resilience of the households. The sub-region has had a long history of exclusion from the rest of Uganda and has experienced about three and half decades of civil unrest orchestrated by a proliferation of small arms and armies. The region has a civil and administrative vacuum, crippled traditional institutions and intermittent extreme climatic events which have pushed the community's coping and adaptation strategies to the limits. Disease outbreaks are common and local government are often poorly equipped to respond appropriately to surveil, prevent or treat affected animals. Availability of financial services in the region is still limited with less than 5% of the population using banking services which limits the abilities of the communities to diversify livelihoods through entrepreneurship. Due to low accessibility to formal financial institutions the preference for agro-pastoralists is to save in livestock holding. Access to markets or even market information as well as basic services like veterinary care, drugs and water accessibility are also limited. The Covid 19 pandemic has further complicated the situation for pastoralist communities due to livestock market closure and increasing conflict due to diversion of security personnel to law enforcement duties. Despite the above challenges it's worth noting that supply of beef in Uganda is largely reliant on indigenous cattle genotypes raised under extensive management systems with districts along the cattle corridor supplying over 90% of the beef consumed in Uganda, while cattle under ranching management system provide only 2%. With increasing demand for beef Karamoja sub-region has become a key supply market hence the meat supply chain provides immense opportunities for small producers and pastoralists to improve their livelihoods.

Desired situation

The desired situation is an inclusive and sustainable socio-economic development of communities in Karamoja region, strengthened through an efficient livestock value chain. Men, women, and youth

(including vulnerable and extremely vulnerable households) who raise livestock benefit fully from participation in the livestock value chain, resulting in an increased and diversified income and stronger social integration. This 'pro-poor value chain development' approach bears the promise of both economic growth, food security *and* poverty reduction. By holistically facilitating public health improvement, justifiable use of antibiotics, control of zoonotic diseases and environment health the project also envisages integration of one health into the value chains.

Producer groups (livestock farmer associations & cooperatives) of both men and women increase their production of higher value products through improvement of animal husbandry practices, increased access to veterinary services, improved breeding, increased access to finance and markets. Extremely vulnerable households, women and youth are proactively included in the livestock value chain and take sustainable control of their socio-economic development as they can effectively overcome food, agro-climatic, economic and health crises and shocks. The value chain benefits from an institutional, policy and regulatory context that supports the livestock sector, rangeland resources and pastoralist livelihoods. Specifically stimulating conditions are present for rural women & youth employment through integration into the livestock value chain and investment into Income Generating Activities (IGA). An enabling environment ensures that communities and pastoralists animate an inclusive, dynamic, and peaceful management of natural resources.

2. Changes and process of change

Realization of the desired situation in Karamoja region shall be done through upgrading and improving the efficiency of the meat value chain, focusing primarily on the enhancement of animal health, livestock productivity and marketing aspects of the value chain. To be sustainable, the project will build on previous achievements while continuing to reconcile three important elements: social justice, environmental protection, and economic efficiency, striving for the ideal balance between environmental, economic, and social concerns within the Livestock Value Chain (LVC). While existing Livestock Marketing Associations (LMA), Livestock Husbandry Groups (LHG) and Village Savings and Loans Associations (VSLA) will continue to be supported, new groups will also be created, and the emphasis will be put on a more holistic approach to ensure all producers are included and thrive within the LVCs both inside and outside their region. VSF-B will consider a three tier system to ensure all layers of society are reached: extremely vulnerable groups, vulnerable groups and intermediate groups. Extremely vulnerable households will be identified based on wealth ranking, poverty profiling and the number of livestock someone owns (with the less livestock owned the more likely someone is to be involved). Community actors and institutions whose capacity has been built under the current DGD program will be pillars of the meat value chain and augment its success. The difference between the current and proposed DGD program is that the proposed program focuses on a market driven approach with holistic involvement of vulnerable producer groups to improve their socio-economic well-being.

The project will promote all producer's participation (men, women, youth, and vulnerable households) in the LVCs through capacity building on animal husbandry, business and entrepreneurial skills and efficient production practices including pasture management and breeding techniques. Actors along the meat value chain will also be sensitized on rational use of antibiotics and trained on meat hygiene and required standards to secure their revenue while ensuring food safety. The project will ensure that all producers have access to reliable information (Early Warning (EW) mechanisms, on drought, food prices, livestock prices, livestock diseases, market information & technical information on livestock husbandry), credit, production inputs and basic agricultural services. With private animal health professionals being limited in the Karamoja region, community animal health workers and public veterinary services will be supported by the project to strengthen both preventive and curative services. Recognition of threats of one health significance, especially those relevant to Uganda's context, will be integrated within the CAHWs training and CAHWs/private vets will be supported to conduct epidemiological surveillance and report to vet authorities who will implement vaccinations and veterinary care services in response to significant diseases incidents. Vet outlets will ensure availability

of proximity vet services especially quality vet drugs to members thus reducing antibiotic abuse by farmers and pastoralists.

Households will put into practice efficient agroecological production techniques, will have equal access to quality veterinary and livestock services, widely accessible always, while being organized into producer groups that have access to finance and appropriate infrastructure, equipment, and tools. The project will emphasize equality in social relations and power relations within the LVCs and ensure that producers groups (groups, associations, or cooperatives) are inclusive with special attention to women and youth and considering the role of various actors within the value chain. The most vulnerable households will be supported through integration into the local micro-credit systems and improved assets ownership (small livestock). Strategic vulnerable households and livestock husbandry groups will be positioned within the beef value chain including through breeding improvement, with beneficiaries assisting other families through the 'passing on the gift' approach. Additionally, to guarantee financial inclusion and access to credit for all producers, VSLA groups will be formed/strengthened and linked to digital tools and banks. Farmer VSLA groups at sub-county level will be assisted to form SACCO's at district/regional level. All these elements will allow the producer groups to become more professional and provide services to all their male and female members (awareness raising, support/advice, training, and information) and become fully integrated into the livestock value chain. As a result, members of the producer groups will be able to produce more products with increased value. The project aims to take full opportunity of increased use and footprint of digital marketing platforms in Uganda to link producer groups to terminal markets or larger cooperatives. Additionally, standardization, aggregation, and quality assurance will be aspects supported by the project for realization of the above.

To meet the increasing needs of extremely vulnerable households, urgent and immediate responses as well as peace building initiatives will be supported by a DGD humanitarian response program, currently in preparation. In collaboration with Belgian NGOs and other actors implementing food systems, Natural Resources Management (NRM) and agro-ecology actions, the project will further develop the research and advocacy capacities of community-based organizations, cooperatives, and local partners to influence policies that consider the interests of small-scale producers (men and women) and agro-pastoralists. Through knowledge transfer and exchange, producer groups and local partner organizations will be able to mobilize and implement regional and national advocacy to influence political decision-makers and MFIs towards policies that support family livestock (including agro-pastoral), the development of local value chains, the environment and climate change adaptation measures. Additionally, existing CAHWs and private vet systems will be used to document threats of one health significance for onward sharing with local vet authorities or for further research with universities. To further enhance environmental protection, VSF-B will also focus directly on agro-pastoral management and development and climate change adaptation measures. In Karamoja, the project will support rangeland management structures who are responsible for sustainably managing natural resources and formulating/enforcing resource sharing agreements for better use of rangelands. Water point rehabilitation actions, hygiene and sanitation and catchment management in Karamoja region, which includes the promotion of sustainable land use will also be targeted and implemented under the project. The actions on NRM will be implemented in synergy with the on-going sustainable integrated management of water resources in the Kapeta basin of Kaabong district project funded by the Flanders province of Belgium. Climate change adaptation also includes livelihood diversification by promoting alternative IGAs especially for people who dropped out of agro-pastoralism and seek income through tree cutting or charcoal burning which have been detrimental to the environment.

As such, the intervention strategy of VSF-B is in line with the strategic policy note of the Belgian Development Cooperation regarding agriculture and food security. The intervention is equally in line with the D4D strategic policy note of the Belgian Development Cooperation. VSF-B will integrate digital applications in agricultural and financial inclusion interventions to ensure better use of (big) data in saving and producer groups. Aggregation of data from saving groups through digital apps allows for real time performance of the groups and provides specific information on the kind of IGAs implemented,

loan performance, etc. Big data also allows for a breakthrough in linkage of MFIs and banks to VSLAs by increased confidence by the MFIs and reduces costs and time required for laborious profiling of the VSLA groups. Because of this, the project can implement corrective actions, including resilience actions in terms of stress. Digital tools will also lower the threshold for vulnerable households, women, and youth to have equal access to information, to participate in public life, and to be financially and economically included in society through linkages to micro-credit including banks. Lastly, the use of digital platforms under the project will allow for inclusive and sustainable economic growth through early warning systems, market information, increased market access, reduced logistical costs (for market access) and increased incomes.

3. Hypothesis

The project hypothesis is if men and women producer groups and vulnerable households increase and diversify their livestock production, have access to finance and markets and adopt environmentally and socially sustainable practices, then communities will improve their income which will lead to more inclusive and sustainable socio-economic development. Through successful value chain optimization, small- and medium scale livestock keepers (men, women, and youth) and vulnerable households will become more dynamic actors in the value chain and benefit from higher income levels, more stable income streams throughout the year and greater resilience to shocks induced by weather, disease, or market fluctuation. When operating in an inclusive and functional LVC, all producers will take sustainable control of their socio-economic development regardless of gender or social standing, reducing existing inequalities.

4. SDGs & principles associated with the SDGs (LNOB & Interlinkages)

The project aims to directly contribute towards the principal **SDG 2: 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture'**, and more specifically target 2.3: *'By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment'*. Results 1 focusses on value chain optimization with the emphasis on improving agricultural productivity through productive resources and inputs, knowledge, markets and opportunities for value addition, ultimately resulting in an increased income for small-scale producers and in particular women, family farmers and pastoralists. Result 2 ensures the availability of financial services for small-scale producers, with the aim to integrate them into the LVC. The promotion of IGA's and value addition products further enhances the notion of non-farm employment. Result 3 puts emphasis on the importance of an enabling environment, including WASH/NRM, research and advocacy on issues affecting livestock farmers, particularly women, such as secure and equal access to land.

SDG1: 'End poverty in all its forms everywhere' and more specifically target 1.2: *'By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.'* The project prioritizes the use of the human rights approach firstly for identifications of the most vulnerable and extremely vulnerable groups. Women are often the poorest, alienated from household assets, have difficulty integrating in livestock value chain hence susceptible to vulnerability. For extremely vulnerable groups the project will use the graduation approach through assimilation into the local micro-credit systems and improved assets ownership (livestock) in collaboration with other (humanitarian) NGOs in Karamoja sub-region (for food and cash transfers, while VSF-B focuses on household assets(livestock) and linkage to micro-credit). Ultimately, the project aims to reduce poverty for the vulnerable and diversify livelihoods for a better access to food, housing, health and education.

In line with **SDG5** '*Achieve gender equality and empower all women and girls*', VSF-B works towards the empowerment of women, both individually and collectively, to strengthen their socio-economic position through the GALS (Gender Action Learning System) approach. As such, special attention will be given to enabling their access to resources and means of production, as well as decision making ability for example in producer organizations. VSF-B's efforts are focused on enabling women, on an equal footing with men, to participate in livestock value chain and the accompanying profits. The project will ensure that women (and their groups), as much as men, have access to training, literacy skills and information related to livestock husbandry and the valorization of livestock products as well as credit and savings services in order to achieve changes in the 4 dimensions of women's empowerment: HAVE, KNOW, WILL, WANT. The project therefore strives to achieve at least 60% participation in micro-credit schemes and 40% women participation in the livestock value chain and will provide incentives for women participation in the value chain through grants to women friendly IGAs. In this way, women can make a worthy contribution to food security and inclusive economic growth. In light of the opportunities presented by digital technology, the project will give special attention to SDG 5.b: '*Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women*'. The project will promote digital platforms and information technology which will increase access to information, credit and markets especially for women.

SDG8: '*Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all*', and SDG target 8.2: '*Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors*'. The project's objective is to increase incomes through boosting the production of livestock farmers who are participating in a sustainable and inclusive LVC. These higher levels of productivity will be realized by enhancing the main elements formulated in SDG target 8.2. Diversification will be a focus of the project with emphasis on value added products and IGA's. Technological innovations such as digital tools for access to information, finance and markets will be equally central to achieve the goal of the project.

Finally, the project also considers the human rights-based approach to identify the most vulnerable and extremely vulnerable groups to **ensure no one is left behind**. In Uganda where regional inequalities exist, marginalized regions like Karamoja sub-region are largely excluded from the economic gains in the country. The human rights-based approach implies that underdevelopment is acknowledged as being a problem of unbalanced power relations, in a context of right holders and duty bearers. In this sense, the project will focus primarily on fostering the empowerment of right holders such as agro-pastoral and pastoral groups as well as vulnerable groups, women and girls who are typically further alienated from ownership of assets like farms, land, livestock etc.

5. The actors

Strengthening of community institutions is pertinent to the sustainability of the change processes. In Karamoja region, local authorities, CAHWs associations and private vets will be supported to contribute towards disease surveillance, disease diagnosis, livestock treatment, disease prevention and increasing accessibility to vet drugs. VSLA groups will enhance community savings, lend credit to groups members, and increase the number of IGAs implemented by community members, increase empowerment of women and increase resilience of communities. Livestock husbandry groups will be supported with breed improvement and trained on animal husbandry and efficient productivity practices, ultimately improving the quantity and quality of available meat. Livestock marketing associations will provide avenues for communities to sell their livestock, increase sales of livestock products and increase community liquidity through external sales of livestock to terminal markets. Water source and sanitation committees and Rangeland Management committees will be essential in creating an enabling environmental and security context through governance of natural resources and the environment.

6. Contribution of VSF-B and partners

In accordance with its partnership strategy, VSF-B establishes partnerships with local partners in the implementation of interventions. This is consistent with its strategic axis of capacity building of local actors and contributes to strengthen the appropriation and sustainability of interventions. For this purpose, a partnership was established with Matheniko Development Forum (MADEFO) in 2007 and with Dodoth Agro-pastoralist Development Organisation (DADO) in 2010. Both organizations are based in Karamoja and have been heavily involved in the implementation of the ongoing DGD funded KLEP program and will contribute and directly implement activities towards realization of the beef LVC optimization (result 1) and financial inclusion (result 2) in the new program. Above mentioned local partners, as well as Karamoja Development Fund (KDF) will also be involved in parts of the realization of result 3, specifically regarding WASH/NRM rangeland management, conflict mitigation and research and advocacy on issues affecting the pastoralists. They bring added dimensions of grass root structures and knowledge of local cultures and social dynamics into the project. DADO and MADEFO have extensive expertise in working with producer groups, VSLA groups and rangeland management structures which, combined with grass root mobilization competencies, makes them suited for implementation and realization of parts of the program's objectives.

VSF-B will work with livestock producers' groups to increase the member's (men, women and vulnerable households) participation in the livestock value chain and regional and national markets, strengthen their knowledge and influence on national policy, support research and innovation and link them with other actors such as private sector, governments and knowledge institutions. In order to achieve these goals, the project will facilitate the development of digital tools for EW, extension, access to credit and marketing.

In the Karamoja region, vulnerable households, VSLA groups, CAHWs associations, livestock husbandry groups, livestock marketing associations, water source and sanitation committees and rangeland management structures will have their capabilities and skills improved through appropriate training and linkages to digital tools. The ability of farmers to invest in the meat value chain will also be enhanced by improving access to micro-credit. CAHWs will be strengthened and the actions of MAAIF will be augmented through linkage with CAHWs networks that will be instrumental in implementation of vaccinations campaigns and other disease control actions in conjunction with district veterinary office.

To create a favorable context for LVC optimisation, VSF-B will support peace and conflict mitigation actions through strengthening of rangeland management associations and will increase access to water for pastoralist communities. VSF-B will also support research and advocacy on issues affecting the environment and pastoralists and promote actions that ensure sustainable use of natural resources, watersheds, waste management. Finally, VSF-B will continue improving the capacities of local partner organizations (MADEFO, KDF & DADO) through mentorship during project implementation.

7. Collaboration and synergies

Through the Skills Development Fund of Enabel, VSF-B will support skilling vulnerable youth in Karamoja through LVC and entrepreneurship for increased youth employment, environment conservation and climate change adaptation. Collaborations between Enabel and VSF-Belgium will provide opportunities for the trained youth to further develop their skills and receive post-training assistance through market linkages, internship placements and field mentorship especially on areas of livestock husbandry, micro credit, livestock health, value addition and water development. Under result 2, the project will collaborate with Ensibuuko fintech app to tap into their extensive linkage with banks to bring affordable credit to the producer groups. Ensibuuko will train VSLA groups on the use of their application during workshops and will remain to work in close collaboration with VSF-B throughout the program in case of

any technical support of adjustments. They are also responsible for training and liaising with local community entrepreneurs who will be trained to directly interact with the groups and provide feedback to Ensibuuko and VSF-B.

Research and advocacy action by VSF-B in the agricultural sector shall equally be conducted in collaboration with Broederlijk Delen. Collaboration with Join For Water and their local partner JESE will remain an important aspect in the realization of the project's efforts regarding catchment protection and management, sustainable water management and natural resource protection. Additional exchanges with Join for Water will be organized for knowledge sharing and trainings based on respective expertise.

Local authorities will be supported for extension and disease control and linkage to government programs. Humanitarian NGOs in Karamoja such as Mercy corps or WFP will be consulted to streamline support to extremely vulnerable groups. Lastly, FAO will be engaged for general collaborations on resilience, animal health and disease control.

8. Risks

Insecurity in Karamoja has increased in the last two years with an increasing number of cattle raids, violent incidents, and ethnic violence. This has resulted in loss of human life and a loss of assets. Expected disarmament is expected to calm the situation down in the long run but will also play a destabilizing effect on communities in the short term. Current or future pandemics, such as the covid-19 pandemic, affect social and economic life and have an impact on both project activities and outcomes. Related lockdown and movement restrictions imposed to combat the spread of covid-19 can further complicate the project's implementation and achievements especially when affecting movement and access to livestock markets thereby limiting a significant source of income for the livestock farmers. Recently Uganda held an election that was disputed by the opposition. The uncertain political atmosphere will have risks towards economic stability of the country meaning business and IGAs may not thrive. Climatic risks arising for severe drought affecting livestock and crop production can affect the gains made under the project leading to coping mechanisms that undermine or disrupt the change processes.

9. M&E

The objective of the project is to integrate livestock producers (men, women, and youth) and vulnerable households into livestock value chain for enhanced and diversified incomes. The ToC, through the change processes described therein, will be a guiding tool for measuring the progress towards the achievement of the desired change. Indicators focusing on the average income derived from livestock value chain, empowerment of women through digital tools and poverty probability will be measuring whether this outcome is achieved. While some indicators focus solely on the inclusion of women and vulnerable people, other indicators will be measured separately for men and women. Indicators will be measured on a quarterly or annual basis using digital tools such as Kobotoolbox or GIS technology and according to the RBM methodology. Additionally, documentation of the change process and integrating lessons learnt will be key as to inform the project implementation process. At the end of the third year a midterm evaluation will be conducted to measure progress towards achievement of the impacts and specific objective which also gives an opportunity for the project to reflect on the change processes hypothesized.

Inclusive and sustainable socio-economic development of communities is strengthened through an efficient livestock value

The dynamics and vitality of rural areas create stimulating conditions for rural women & youth employment

Food, agro-climatic, economic and health crises and shocks are effectively anticipated and overcome

Agro-pastoral communities enjoy equitable institutional treatment and support rangeland management activities, allowing for peaceful exploitation of natural resources

The various ecosystems are preserved and enhanced through sustainable management of natural resources

Households of men and women, and their children (including vulnerable and extremely vulnerable households) who raise livestock benefit fully from participation in the livestock value chain resulting in an increased and diversified income and stronger social integration. They prosper in a climate of peace and enjoy social stability and cohesion within their communities and between communities while respecting environmental resources based on One-health approach. Men and women producers and vulnerable households take sustainable control of their socio-economic development in an institutional context that is favourable to them regardless of gender or social standing, reducing existing inequalities

