Annex 2a. Extract from report "Dairy Value Chain in West Amhara" by Paulos Desalegn (Aug 2018) The study was commissioned by AgroBIG in July 2018.

Executive summary

Background and Objectives: Agro-Business Induced Growth programme is a bilateral agribusiness development program of the Ethiopian and Finish governments, which mainly operating in Amhara regional state. The programme first phase was implemented in Fogera and Mecha Woredas, that ended in 2017, the second phase is running for four and a half years until 2021. The second phase covers North Achefer, South Achefer, North Mecha, South Mecha, Bahir Dar Zuria, Dera, Fogera and Libo Kemkem Woredas. From livestock value chains, dairy, small ruminant fattening and poultry added and the project intended to address bottlenecks hindering producers, traders, processors, retailers and consumers to get the best value from their participation using the Value Chain Development Approach. The study conducted to assist the VC actors in dairy to identify their business opportunities and competitive advantages, and to address the shortcomings that pose a risk for their business initiatives to prosper.

Methodology: The study used both primary and secondary data sources using Participatory Value Chain Analysis with Gender, Green and Governance Lens (PVCA+G3). For the primary data collection two sample Woredas (Bahir Dar Zuria and Fogera Woreda) taken mainly for the upstream actors. Conducted interviews and group discussions with actors at different segment of the value chain that includes small-scale dairy producers, dairy and multipurpose cooperatives and unions, processors, supermarkets, hotels, different sector offices and experts from Kebele to national level. To assess the overall existing situation, Ethiopia and other countries trends and benchmarks thoroughly reviewed.

Value Chain Situation: Ethiopia is the second-most populous nation of Africa following Nigeria, with 102 million population as per 2016 World Bank's estimate. As per IMF projection, the Ethiopian economy is expected to remain robust until 2019 at 7.6% that implies increasing number of emerging middle class in the country. Accordingly, population of the study area and surroundings, i.e. South Gondar and West Gojam, has exceeded over 5 million as per the 2017 CSA projection. The total cattle population for the country estimated to be about 59.5 million. Out of this total cattle population, the female cattle constitute about 55.5 percent (CSA 2017). The total volume of milk produced in Ethiopia increased over the last 15 years from less than 1 billion liters to 3.13 billion liters in 2016/17. However, such increasing milk production emanating from the rural dairy system, which contributes 98% of total production. Ethiopians' fresh milk consumption is only about 29.5kg per capita, on average, for the whole income group that is very low in comparison with even the neighboring African countries despite expected increase in connection with population and income increase.

Value chain constraints and interventions: The main constraints in the value chains exhibited in all segments of the value chain. The constraints include feed supply and distribution, low quality and reliability of AI service, shortage of medical supplies and weak health service provision, limited financial supply for dairy producer, collectors and processors, ineffective market linkage, low consumption habit, and weak coordination among value chain actors. In order to address the constraints of the VC, improving the feed supply with different interventions like promotion of nearby suppliers (youth groups or cooperatives), Quality Feed Suppliers — Dairy Processors — Dairy Farmers business linkage development and enhancing feed production efficiency of feed mills proposed. Capacitating public AI technicians and promotion of private AI providers, improving animal health service delivery, facilitate financial service, functionalizing dairy collection points and strengthening dairy cooperatives, developing dairy products and distribution system, and creating sustainable market linkage and related interventions proposed.

10. Interventions/Recommendation

Table 1. Main Constraints and Short, Medium and Long-Term Interventions Matrix

Segment	Constraints	JM AND LONG-TERM INTERVENTIONS Short Term	Long and Medium Term	Potential Partner/Lead
Segment	Constraints		_	-
Feed supply	Limited commercial feed supply and distribution; Feed price increase, farmers willingness to pay, working capital shortage and awareness/risk sensitivity; Feed quality; Limited feed plantation	Solutions/Interventions Business linkage development for credit based feed supply and quality assurance (Quality Feed Suppliers – Dairy Processors – Dairy Farmers business linkage) Feed suppliers quality feed production capacity and distribution system development with business model refinement and facilitation of investment expansion Enhance production efficiency of feed mills by improving technical and business management, increasing scale of feed production through increased bulk contracting, increasing bulk purchasing by cooperatives and farmers organizations and by increasing purchases of by products by feed manufacturers	Lobby for better incentives from government in the feed industry and promote the business venture to potential investors Promotion of nearby suppliers (youth groups or cooperatives) Expansion of feed forage plantation demonstrated in different villages with facilitation of access to improved forage seeds Improve the utilization of crop by-products with different nutrient and digestibility improvement treatments Train and demonstrate optimum use of feed and improved management systems	Organizations Merkebe Union; Dairy Processing Companies – Agere Wotete/Embete/Tsege; Trade, Industry and Market Development Office Livestock Office Cooperatives and youth groups
Breed improvement	Low quality and reliability of AI service Limited bull service Limited known heifer supply and price increase	 Enhance public AI technicians capacity and motivations Assure supply of timely quality semen and other required inputs Promote quality private AI service 	 Encourage private cross breed heifer production with joint venture and other business arrangements Support Fogera breed improvement initiatives and commercial heifer suppliers development 	 Livestock office Dairy Processing Companies Other Projects – AGP/USAID- FtF-Fintrac

Annex 2a. Extract from report "Dairy Value Chain in West Amhara" by Paulos Desalegn (Aug 2018) The study was commissioned by AgroBIG in July 2018.

Segment	Constraints	Short Term Solutions/Interventions	Long and Medium Term Interventions	Potential Partner/Lead Organizations
Health Service	Timely health service provision Shortage of medical supply	 Enhance public animal health service delivery, better service incentive and accountability development Lobby and facilitate timely required critical medical supply Promote recognized private animal health service providers (refreshment training and recognition of service) 	Promotion of private animal health service provision	• Livestock office
Financial services	Limited financial service for dairy producers, collectors and processors (investment and working capital)	Work with financial service providers to refine products for dairy sector (loan and insurance) and implement value chain financing for better financial access to different actors for investment and working capital	Reduce lending risk by developing better and replicable business models with support organizations and improving companies' business management	Credit and Saving Cooperatives; ACSI and Commercial Banks;
Production	Less optimal dairy management practice	 Improve production practice by working with model farmers for better management practice demonstration. Conduct business awareness creation and exposure visits with better performing farmers 	Promote better use of improved breeds, AI, health service and management skill at producers level	Livestock office and dairy processing companies
Collection	Limited collection points and low volume of aggregated milk and market linkage	 Making functional existing dairy collection points and facility in the hands of cooperatives and dairy processing companies Improve technical and management skills of cooperatives Enhance collaboration of collection point construction by different projects (AGP and others) and dairy processing private companies collection strategy 	 Organize collection groups (youth/women) and points for better quality and collection of milk in collaboration with dairy processors and distributors Improve collection centers buying arrangements and outreach to enable more milk to reach formal market Encourage better business linkages between producers and processing companies with additional services like provision of feed and other services 	Dairy processing companies; Livestock office; Trade, Industry and Market Development Office

Annex 2a. Extract from report "Dairy Value Chain in West Amhara" by Paulos Desalegn (Aug 2018) The study was commissioned by AgroBIG in July 2018.

Segment	Constraints	Short Term Solutions/Interventions	Long and Medium Term Interventions	Potential Partner/Lead Organizations
Processing, product development and distribution	Low consumption habit – processed products and fasting season demand reduction	 Traceable and quality assured milk and other dairy products distribution/retailing outlet development (women/youth groups) Market linkage facilitation with local institutional buyers (Hotels, Cafes and others) in big towns (Bahir Dar, Gondar) for different dairy products (milk, cheese, ayib, butter, table butter) 	 Reduce the fluctuation in demand (seasonality, fasting periods) for milk products, by producing and packing products for longer shelf life (cheese, butter and others) Facilitate joint effort of processing companies for better logistics to reduce costs through increased volume and greater supply chain efficiencies (collection and distribution) 	Dairy processing companies
Consumption and product development	Low consumption habit – processed products and fasting season demand reduction	 Promote consumption of milk and milk products with mass- media campaign and other promotions for different consumer groups (children, youth, adult) 	 Encourage different more affordable, better, more diverse packaging and product size Fortified and flavored dairy products development 	Dairy sector stakeholders and chamber of commerce; Trade, Industry and Market Development Office
Sector coordination and enabling environment	Limited coordination of value chain actors		 Promote shared public-private vision among the dairy industry actors in the region Work with sector actors to have effective platforms for public-private dialogue for identified critical issues and facilitate coordination and collaboration between the various value chain actors in dairy value chain 	Dairy sector stakeholders and chamber of commerce