*A brief report: The creative-thinking workshops to develop a forward thinking, evidence-based, resilient and inclusive **Strategic Investment Plan (SIP)** for Coffee and Dairy value chains.*

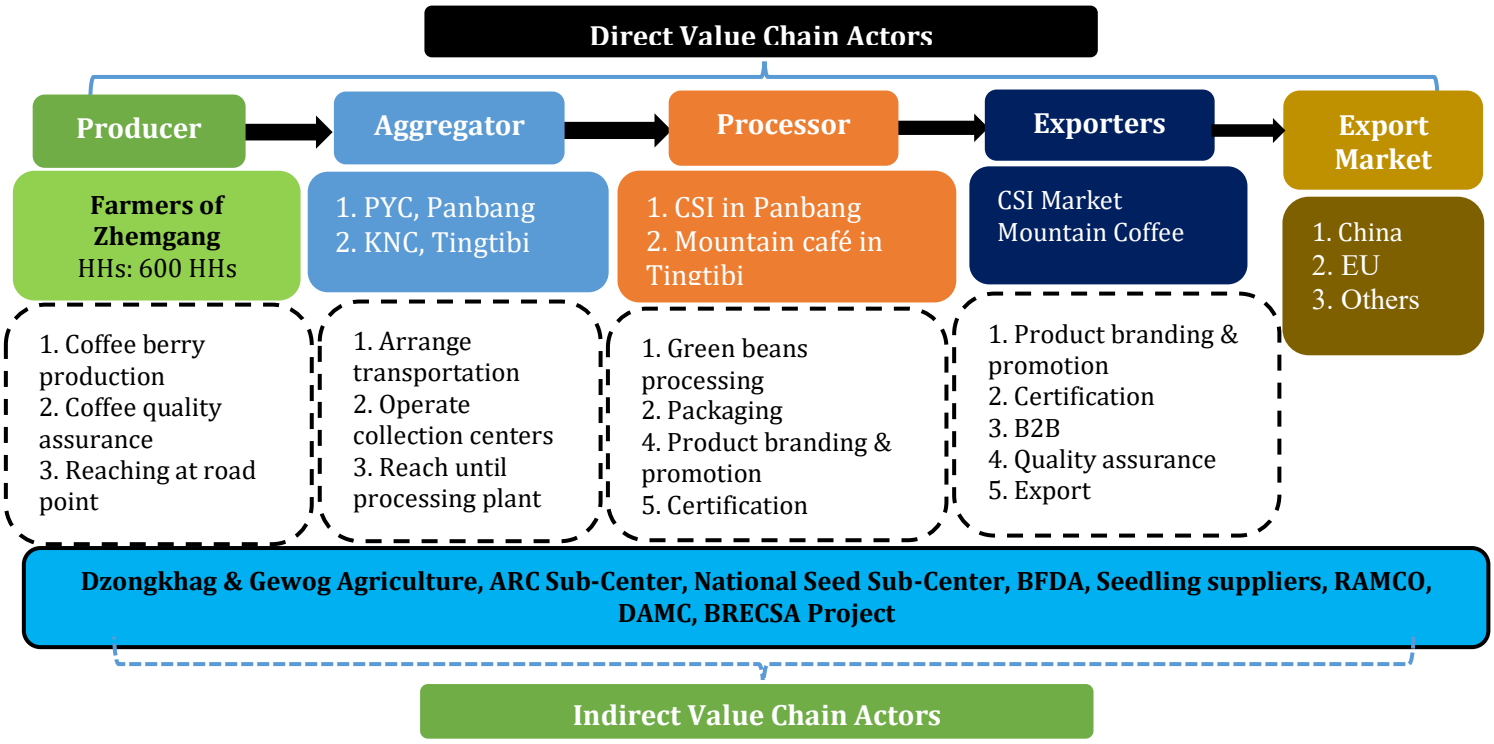
A Strategic Investment Plan (SIP) is a comprehensive, forward-looking document that outlines priority investment areas, funding needs, and implementation strategies to achieve long-term impact of the project. It serves as both a policy guide and a resource mobilization tool. It is in pursuit of development goal of BRECSA i.e catalyze a 30% increase in resilient commercial agricultural production and improve food and nutrition security in the four target districts by 2030. It is also a sincere attempt of the MoAL to transition agriculture from subsistence to commercial to achieve Nu. 50 billion contribution GDP.

The SIP(s) is being developed based on the principles of value chain application where benefit, costs, and a competitive advantage are analyzed. The SIP will guide investment decision, attract co-funding, and enhance resilience, productivity and competitiveness. Project Management Unit (PMU) of BRECSA with technical support from RAMCO and WFP, TA conducted SIP development workshops.

1. SIP for coffee industry in Zhemgang

A three-day workshop was convened on 14th May 2025 at Panbang, Zhemgang to brainstorm and conceive SIP for coffee industry. Twenty-five people (7 female, 18 male) participated in the workshop including agriculture officials, Sonam Jabchorpas, representatives from PYC, Russian Café, CSI market and LG members. The linkages between value chain actors identified during Multi-Stakeholders Platform (MSP) conducted last year is further strengthened.

It is assumed that farmers would cultivate 20% of *Robusta* and 80% of *Arabica* as per the requirement of international markets. As agreed during the MSP, CSI market will establish processing plant at



Panbang while Bhutan Mountain Coffee will establish processing plant at Tingtibi. KNC and PYC will play roles of aggregators linking with farmers of upper and lower Kheng respectively.

To get clear pictures of profitability, cost of production (COP) and margin, analysis is done separately based on value chain actors.

Value Chain Actor	COP (Nu.)	Value/Cost Addition	Margin (Nu./Kg)	Selling Price (Nu.)	Total Margin (Nu.M)	Gross Income (Nu.M)
Producers	119.80	0.00	29.95	149.75	5.99	29.95
Aggregators	149.75	6.77	1.69	158.21	0.34	1.69
Processors	268.54	110.33	67.14	335.68	13.42	13.42
Exporters	569.81	234.13	58.53	628.34	11.71	11.71
Importer/Wholesaler	628.34	****** Analysis is done for production, processing and marketing of 200MT of coffee by 2029***				

The actual COP at the producers' level is coming to Nu. 119.8 per kg when analyzed for an acre of coffee plantation as shown in the table above. The total capital cost required for planation of an acre of coffee is Nu. 0.684 M while operational cost is Nu. 0.163 M. NPV is calculated Nu. 2.013 M (+) and return on investment (ROI) is 76%.

Similarly, for processing 200MT of fresh coffee beans the total capital investment required in Nu. 18.10 M, which may have to co-finance by private and Government/donor on cost-sharing basis. The NPV is recorded Nu. 95.17 M (+), ROI is 38% and benefit-cost ratio is Nu. 1.4.

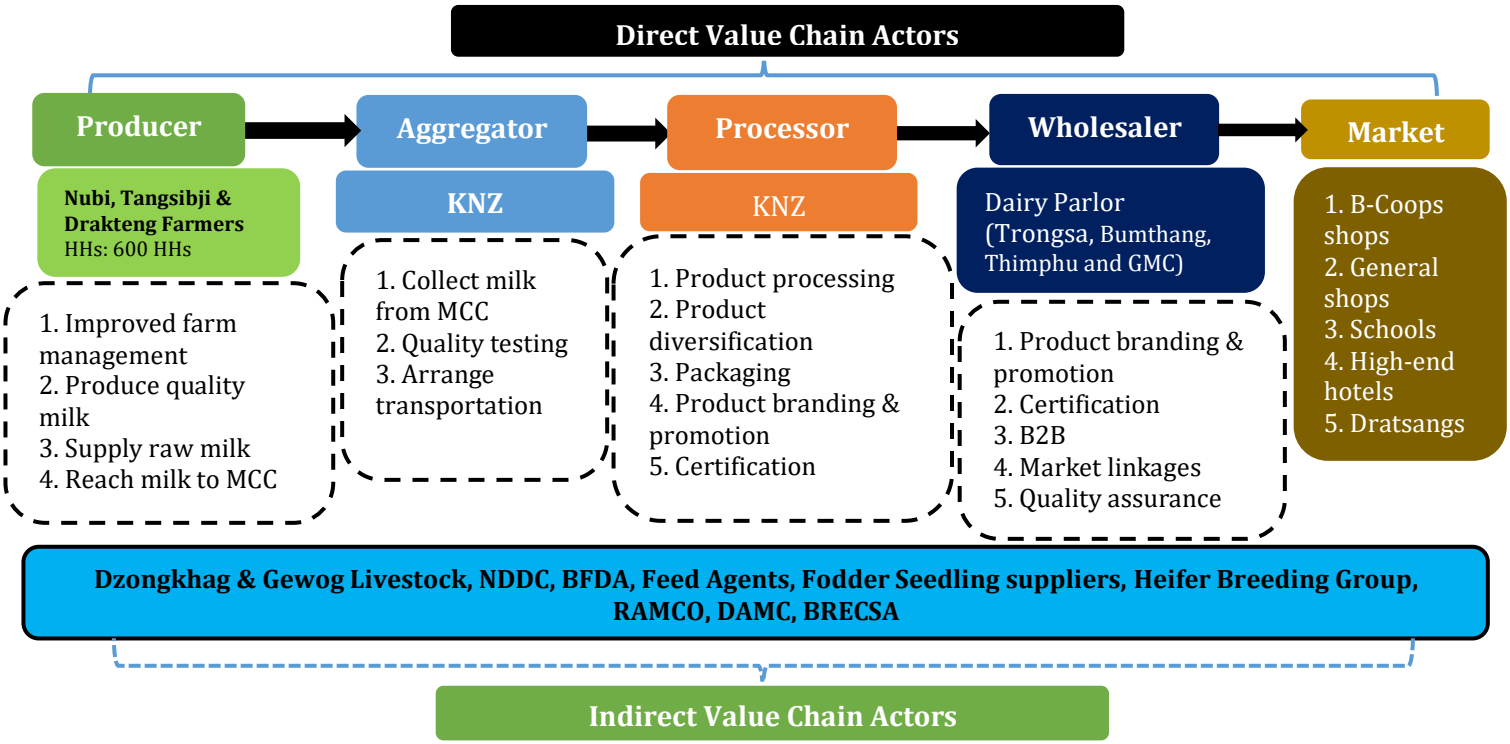
Besides, gross income from coffee beans production, the coffee processing and marketing will add gross income of Nu. 95.72M.

1. SIP for Centralized Dairy Processing at Nubi, Trongsa

Another three-day workshop was convened on 18th May 2025 at Tenral Resort, Trongsa to brainstorm and develop SIP for the dairy industry. Twenty-three people (5 female, 18 male) participated in the workshop including Dzongkhag and NDDC livestock officials, representatives from KNZ, Sonam Jabchorpas and chairperson of existing MPUs. The value chain actors are identified during Multi-Stakeholders Platform (MSP) conducted last year.

As identified during the MSP, more than 600 HHs of Nubi, Tangsibji and Dragteng Gewogs of Trongsa Dzongkhag agreed to engage in commercial dairy farming. The main responsibility of producers is to produce quality milk and reach until milk collection center (MCC) where

chilling plants will be established. KNZ is identified as private sector to operate the centralized processing plant. KNZ is also entrusted to collect milk from chilling centers and bringing to processing plant. KNZ will process four products (Greek Yogurt, butter, cheese



and pasteurized milk)

KNZ will also establish dairy parlors in strategic locals of Thimphu, Bumthang, Paro and Gelephu for both retailing and wholesaling of products of centralized processing plants. Other markets are high-end hotels, schools and Dratsangs.

Value Chain Actor	COP	Value/Cost Addition	Margin/ Kg	Selling Price	Total Margin (Nu.M)	Gross Income (Nu.M)
Farmers	40.97	0.00	8.19	50.00	1.64	9.83
Processor						
Greek yoghurt	50.00	18.21		*35*	19.66	*55.13*
Butter				*500*		*9,.40*
Cheese				*60*		*11.52*
Pasteurized Milk				*70*		*37.17*
Marketing (Wholesaler/ Retailer)						
Greek yoghurt	*35*	*5.00*	*5*	*45.00*	7.88	70.87
Butter	*500*	*30.00*	*20*	*550.00*	0.38	10.49
Cheese	*60*	*5.00*	*5*	*70.00*	0.96	13.44
Pasteurized Milk	*70*	*5.00*	*5*	*80.00*	2.66	42.48

The COP of milk for rearing five milking cow is calculated to Nu. 40.97 per liter without Government subsidies. With 20% margin of the farmers, the selling of price of milk to KNZ is coming to Nu. 50

(round-off). The NPV is Nu. 953,446.36 (+), ROI is 32% and IRR is 33% which actually means there is profitability.

We have assumed that, to start with KNZ will process 3000 liters of milk daily. However, in future the capacity of the processing plant is expected to increase to at least 6000 liters per day. The processing plant will add value of Nu. 18.21 per liter arriving at gross margin of Nu. 19.66 M. The NPV is Nu. 243.86 M (+) and ROI is recorded 54%. The total capital investment for processing plant is calculated to Nu. 19.96 M and KNZ is expected to contribute 50% as equity share.

Besides, gross income from milk production, milk processing and marketing will add gross value of Nu. 127.45 M.