

## Agribusiness Competitiveness of Smallholder Agriculture for Structural Transformation in South Asia

### Summary

Agribusiness competitiveness is the enduring and intertwining issue to transform subsistence agriculture into modern and competitive with structural transformation. This policy brief on agribusiness competitiveness has been developed to analyze and unleash the constraints, challenges and opportunities of agribusiness and suggest some major policy interventions to improve the competitive agribusiness of the smallholder agriculture for structural

transformation in the South Asian region using secondary information and literature review. Agribusiness competitiveness can be improved by creating enabling policy environment; technical skill and entrepreneurship development; easing access to inputs including improved seeds and financial resources; adoption of innovative technologies; mechanization; efficient & inclusive value chain development; product-market linkage; and competitiveness of the agribusiness products in terms of price, quality, quantity, and stability.

### Policy Messages

- ✚ Enabling environment through– policy, legislation and socio-political dimensions for promoting competitive agribusiness.
- ✚ Develop technical skills and entrepreneurship in analyzing- financial viability, technical suitability, environment friendly, socially acceptable and markets driven projects.
- ✚ Access to inputs– improved seeds, fertilizers and machineries to the smallholder farmers.
- ✚ Innovative technology– to be available to the smallholders that is cost effective, climate resilient, and market driven.
- ✚ Access to financial resources with reasonable interest rate in the value chains of the country's prioritized commodities/ areas.
- ✚ Mechanization in promoting competitive agribusiness along the value chains.
- ✚ Inclusive, efficient and sustainable value chain development through private sectors engagement focusing on youth and women.
- ✚ Enhance commercialization, competitiveness, access to markets and regional trade harmonization.
- ✚ Quality standardization, certification, hygiene, and food safety of the agribusiness products.
- ✚ Institutional, regulatory and policy reform to attract, retain and empower youth and women in competitive agribusiness.

### 1. Introduction

The South Asia region consists of eight countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka)– covers around 3% of the world's landmass and represents about 24% of the world's population. Around 65% of the total population are residing in rural areas, 67% are smallholders having less than one hectare of land adopting integrated farming system consisting of crops, horticulture, livestock and

fisheries (Shrestha & Pradhan Shrestha, 2020). Agriculture employs about 60% of the poor and rural workforce in the region of which 35% are women, and over 80% of the world's small and marginal farmers belong to this region (IFC, 2014). The proportion of youth population in South Asia is very high where it has highest youth engagement in agriculture (47%) as compared to East and South-East Asia (ILO, 2015). Agribusiness accounts for almost one third of South Asia's GDP and has the potential to almost double over

the next fifteen years (reaching US\$ 1.5 trillion by 2030) and will be increased with the population growth, urbanization, and economic transformation (Chodavarapu et al., 2016). However, the pace of transformation of subsistence agriculture into modern innovative agribusiness has been often slow in South Asia due to lack of adequate policy environment. The smallholder farmers that dominate the region are often handicapped by– limited access to inputs including improved seeds, financial resources, advanced technology, weak innovations, higher risk of climate change, low productivity and reduced economies of scale in production and marketing that increase the cost of doing business and eventually reduce the agribusiness competitiveness.

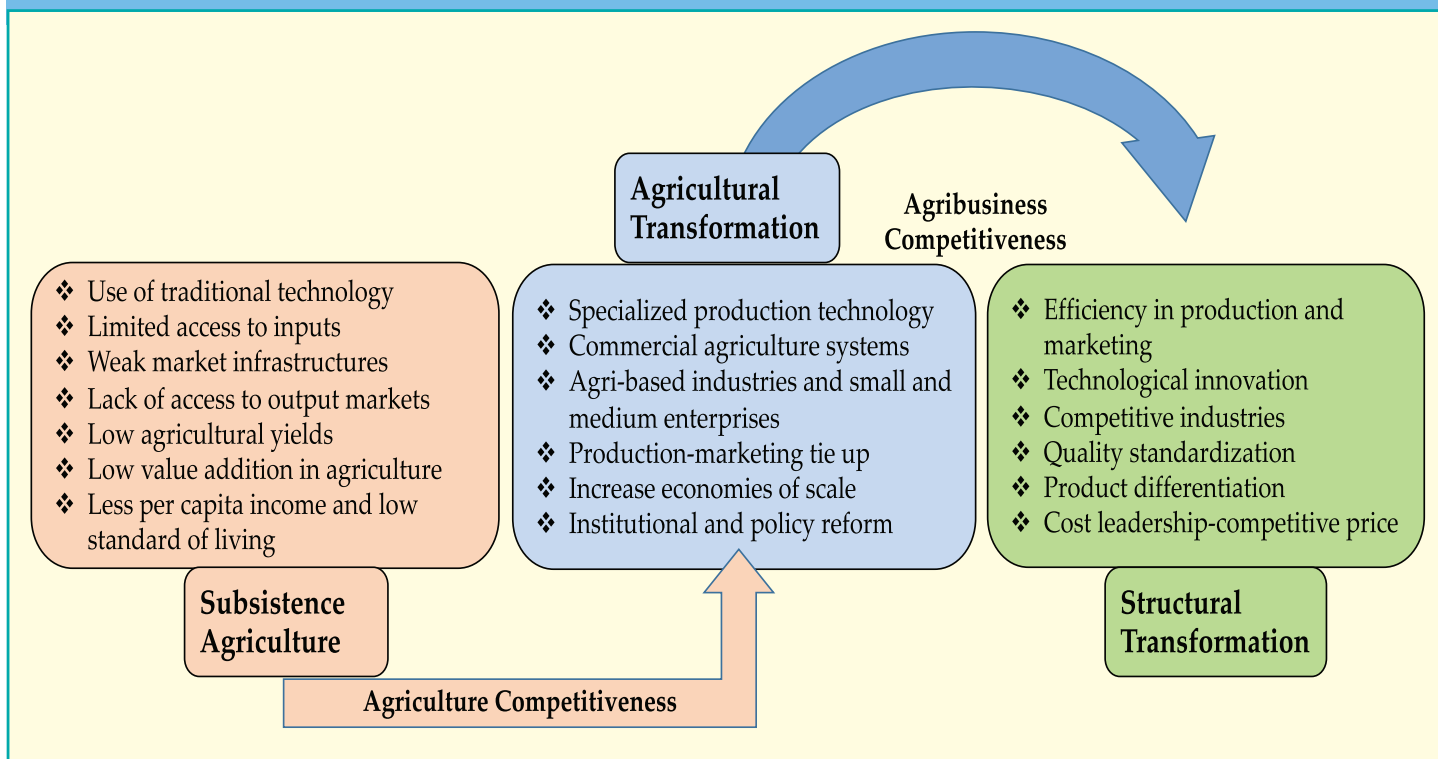
South Asian economy is based on agriculture and the national agricultural policies are mainly focused on ending poverty and hunger, improve food and nutrition security, and transform subsistence agriculture into commercialization and competitiveness. Several scholars have defined agribusiness in different ways. The pioneers of the field of agribusiness at the Harvard Business School, Davis and Goldberg (1957) defined agribusiness as the sum total of all operations involved in the manufacture and distribution of farm supplies; production operations on the farm; and the storage, processing, and distribution of the resulting farm commodities and items. Indeed, agribusiness is a novel and the innovative way of moving from the subsistence agriculture towards agriculture commercialization, where farmers would have business or profit making motives. Agribusiness hence is the process of making business along the value chain of agriculture, which require complex, counterfactual and multi-faceted policy initiatives and incentives. However, agribusiness promotion and agro-enterprise (Small and Medium Enterprise– SME) development in entire value chain in the South Asian countries is very weak, while it is the major basis for agricultural transformation towards paving path of the structural transformation. The underdevelopment of agribusiness discourage the economically active population– youth, women farmers and educated professionals towards enforced outmigration for seeking better opportunities resulting in what, we called it brain drain situation– would have long-term effects for the sustainable development of the country.

In realization to promote agribusiness in agriculture value chain, the Fourth Meeting of the SAARC Agriculture Ministers (SAARC, 2019) declared to “strengthen competitive agricultural value chains; agricultural engineering including primary processing, value addition and storage facilities; share the best practices on post-harvest processing for fruits and

vegetables; implement the SAARC Good Agricultural Practices (SAARC GAP); and encourage private sectors’ investment in developing markets and marketing, value chains and agro-processing” in the region. The level of agribusiness commercialization and competitiveness depends on the capacity of technology development and adoption, socio-economic advancement, and risk bearing capacity of the country. In fact, the economic development and shared prosperity of the country can be achieved with the agribusiness competitiveness and inclusive value chains in the South Asia region. This policy paper therefore has been prepared to unleash the constraints and challenges, opportunities and policy suggestions for promoting agribusiness competitiveness for structural transformation in the South Asia region. However, agribusiness differs by crops/ commodities, seasons, stages of value chain, locations and socio-economic dynamics. This policy brief derives the general policy recommendations for promoting agribusiness of the smallholder agriculture, which may require similar policy approach in the region.

## 2. Transforming Subsistence Agriculture to Agribusiness Competitiveness and Structural Transformation

Subsistence agriculture needs to be transformed towards commercialization and competitiveness for sustainable development and shared prosperity in the region. Commercialization concerns with the market oriented larger scale of production and processing of products using improved technologies and innovative practices– that meet the demand of the markets. The agribusiness depends on some criteria: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, employing workers, and contracting with the government (WBG, 2020). Considering these criteria, the score of doing business in the South Asian countries are currently ranked very low globally which includes as: India 71, Bhutan 66, Sri Lanka 61.8, Pakistan 61, Maldives 53.3, Nepal 53.3, Bangladesh 45, and Afghanistan 44.1 (WBG, 2020). This result revealed that the South Asian countries need to have greater efforts to improve the agribusiness competitiveness. For this, the government’s role to create enabling environment including access to agribusiness finance, food safety and quality standards, legal and regulatory framework, and innovative private sectors is imperative (FAO, 2013). Competitiveness is “the ability of firms to consistently and profitably produce products that meet the requirements of an open market in terms of price and quality” (Domazet, 2012), along with the long-run profit performance of the firm and higher



**Figure 1. Model of transforming subsistence agriculture to agribusiness competitiveness and structural transformation**

Source: Author's Synthesis (2020) with adaptation from Babu & Shishodia (2017)

return on investment (Yap, 2004). Delgado et al. (2012) argued that three interrelated drivers consisting of social infrastructure; political institutions, monetary and fiscal policy; and the microeconomic environment are essential for promoting competitiveness.

Agribusiness can be transformed towards the high agribusiness competitiveness through three categories of factors: underlying, intermediate, and immediate (Babu & Shishodia, 2017). The underlying factors are long-term, which include country's political economy, governance, consumers' preference, attitude and habits. The intermediate factors are the labor market, input-output market, ease of doing business, infrastructure, supporting industries, exchange rate stability, competence of human resources, tax system, and investment in research and innovation. Similarly, the immediate factors include innovations in competing market, skill development, information flow, access to affordable technology, rule and regulation, and access to finance.

Agricultural transformation is complicated and intertwined challenge in developing economies where agriculture is the major source of economy. In the structural transformation process (Figure 1), three stages of transformation require— subsistence agriculture, agricultural transformation and structural transformation.

The subsistence agriculture is characterized by the use of traditional technology; limited access to inputs; weak

market infrastructures; less access to output markets; low agricultural yields; low value addition; less per capita income and low standard of living. In the agricultural transformation process, the subsistence agriculture is to be transformed towards agriculture competitiveness— where the policies and institutional set up focus on specialized production, processing and its commercialization, development of agri-based industries and SMEs, strong tie up of production with the markets, and increase the economies of scale. In the structural transformation process, the agriculture system transforms towards the agribusiness competitiveness with the use of innovative technologies, efficiency in production & marketing, quality standardization and product differentiation— where the products will be safe, hygienic, and quality standards with cost leadership-competitive price that can compete in the global competitive markets.

### 3. Policies on Competitive Agribusiness in South Asia

The countries in South Asia have been implementing their policies for ensuring sustainable food systems and ending poverty and hunger. In this section, we discuss some major policies implemented in the countries and analyze the policy gaps for promoting competitive agribusiness. The **Government of Afghanistan** developed "Afghanistan Agribusiness Charter"— a long-term (2020-2030) policy that addresses strategic



priorities for agribusiness and agri-industrial development through— access to finance, marketing development, increase productivity, and competitive agricultural value chains (MAIL, 2018). The **Government of Bangladesh** formulated the “National Agriculture Policy 2018” (MoA, 2018) with main objective to achieve safe, profitable and sustainable food and nutrition security through research and development (R&D); technology transfer and agricultural extension; access to agricultural inputs; farm mechanization; knowledge and skill development; natural resource development; safe food production and efficient marketing; youth and women empowerment. The **Government of Bhutan** developed “Food and Nutrition Security Policy of the Kingdom of Bhutan, 2014 (RGoB, 2014) to ensure the fundamental rights of Bhutanese for affordable, adequate, safe, nutritious and culturally acceptable food.

Similarly, the **Government of India** is in the pace of implementing major policies such as National Agricultural Development Plan 2007; National Food Security Mission 2007; National Innovations on Climate Resilient Agriculture 2011; National Agro-forestry Policy 2014; Mission for Integrated Development of Horticulture 2014; Prime Minister’s Agricultural Irrigation Plan 2015. The **Government of Maldives** developed Agricultural Development Master Plan 2009 (2010-2025) focused on entire value chain development from inputs to production and consumption of major high value crops. The **Government of Nepal** has been implementing policies such as National Agricultural Policy 2004, Agribusiness Promotion Policy 2006, National Seed Policy 1999, National Tea Policy 2000, National Coffee Policy 2003, Agriculture Development Strategy (ADS) 2015, and Dairy Development Policy 2007. The ADS envisaged to accelerate economic growth and contributes to improve livelihoods and food and nutrition security through a self-reliant, sustainable, competitive, and inclusive agriculture through **four strategic components**: commercialization, productivity, competitiveness and governance (MoAD, 2015). The **Islamic Republic of Pakistan** formulated the major policies on: National Agriculture Policy 1980, National Commission on Agriculture 1998, Framework for Economic Growth 2011, and National Food Security and Agriculture Policy 2017. These policies emphasized the inclusive growth through structural reforms, productivity enhancement, and youth engagement. The **Government of Sri Lanka** developed National Agricultural Policy 2007 focuses on— sustainable production and productivity; R&D; food and nutritional security; food safety; vulnerability and resilience; market development; private sector involvement; extension and information systems.

Despite fairly good agricultural policies in South Asia, that were successful in increasing cereal crop production and improving food security, they have not been able to promote the growth of higher value food products and related services. The combination of import protection, restrictions on markets and prices, and extensive passive subsidies have hindered competitive agribusiness activities in South Asia (Chodavarapu et al., 2016). Some scholars have recently suggested some actions and policy imperatives to transform smallholder subsistence agriculture. For instance, Shrestha & Thapa (2019) suggested that the policy and program priorities in the South Asia include: increase investment in R&D; rural revitalization through agribusiness promotion; accessible and affordable inputs; linking products with markets; promote private sector engagement; scaling-up of agricultural technologies; climate resilience to agriculture; and policy harmonization on agricultural regional trade. Furthermore, Shrestha et al. (2019) recommended that— strengthening seed systems for quality seed access to farmers; attracting, retaining and empowering youth and women in agriculture; develop appropriate processing and value addition technologies; safe products in compliance with “Good Agricultural Practices (GAP)”; conservation and promotion of potential indigenous breeds of livestock species; prevent, control and eradicate transboundary and zoonotic disease; promote aquaculture in seasonal water bodies; sustainable management for integration of agro-forestry, forestry and crops; efficient value-chain development; reduce tariff and non-tariff barriers to trade among South Asian countries; trade integrations and competitiveness; and governance for R&D, education, extension and investment in the region.

#### 4. Constraints, Challenges and Opportunities in Agribusiness Competitiveness for Structural Transformation

Agribusiness transformation from subsistence nature of smallholder agriculture is the major challenge, which require appropriate policies, innovative technologies and huge resources. The South Asian countries have been encountering similar natures of constraints and challenges with regard to smallholder agriculture and may have wider opportunities for fostering competitive agribusiness in the region. IFC (2014) & Shrestha et al. (2019) highlighted five major issues in sustainable agribusiness: higher level of post-harvest losses; limited access to markets; lack of quality products; poor implementation of internationally recognized standards and certification systems; and vulnerability to climate

change. Meanwhile, the productivity of the smallholder agriculture is relatively lower, as a result of use of traditional technology, lack of access to inputs and output markets, and shortage of skilled human resources. On the other hand, there is a high agribusiness potentials and competitiveness in South Asia by utilizing very large proportion of region's growing youth and women population, fertile agriculture lands, high growing market demands for agribusiness activities utilizing rich biodiversity, traditional knowledge and innovation in agriculture. Some major constraints, challenges and opportunities are discussed below:

#### **4.1 Constraints and Challenges on Competitive Agribusiness**

##### ***i) Limited Skill and Entrepreneurship Development***

Smallholder farmers have limited capacity to assess the feasibility of the agribusiness project including financial viability, technical suitability, market analysis of the products, and environmental sustainability. Building technical skill, entrepreneurship development, feasibility analysis, and business plan formulation for the particular agribusiness is challenging for successful competitive agribusiness.

##### ***ii) Limited Access to Improved Inputs***

Smallholder farmers are encountered by lack of timely availability and easy access of inputs, particularly the improved seeds, fertilizers and equipment/ machinery for making successful agribusiness. The inputs should also be the cost effective that enhance the competitiveness of the products.

##### ***iii) Poor Technology Innovation***

Smallholder farmers are using traditional inefficient technologies– characterized by high cost of doing business and low rate of return that discourage the entrepreneurs to start up the business. Farmers need innovative technologies with minimum risk of climate change and any kinds of disasters, higher market demand and higher profit margin. It needs strong supports from the government for the technology development and dissemination and encourage private sectors for leading the agribusiness with effective community participation.

##### ***iv) Brain-Drain– Skilled Labor Shortage***

Economically active population (aged 20-45 years) in the developing economies including South Asian countries have been encountering the trend of high rate of outmigration from rural to urban areas and overseas to seek better opportunities for higher earning.

Paradoxically, it has two inverse implications; the country may receive higher rate of remittance that has significant contribution to the GDP; on the other hand, it loosed the skilled human resources to be involved in competitive agribusiness. Indeed, this trend of outmigration is the brain-drain problem– hindering the skilled labor shortage and eventually would have long-term effects to the sustainable development.

##### ***v) Lack of Financial Access***

Smallholder farmers are constrained by weak access to financial resources and higher rate of interest for the credit program to start-up and develop agribusiness in the South Asian countries. Transaction costs of accessing credit to smallholder farmers is higher. Moreover, as agriculture is basically the weather dependent, perishable, low rate of return and less elasticity to income, the financial institutions are reluctant to invest in agribusiness sector.

##### ***vi) Limited Access to Markets and Weak Value Chain Development***

Smallholder farmers are distressed by lack of access to input and output markets along with high transaction costs and ineffective market information system. Small scale production leads to lack of adequate consignment that increase the transaction cost and consequently reduce the price-competitiveness. Meanwhile, the value chain of such products is weak– that reduce the product competitiveness in terms of quality and quantity of the products. Price volatility of smallholder agriculture is high due to absence of assured output markets, poor market infrastructure facilities (cold chains, safe storage), low value additions and product diversification.

##### ***vii) Climate Change Effects– Higher Risk of Vulnerability***

Smallholder agriculture is adversely affected by climate change effects such as flash floods, landslide, hailstone, hurricane, etc., which reduce the agribusiness productivity, risks and loss of profits of the products– that reduce the agribusiness competitiveness. Presence of agricultural insurance programs are also limited in rural smallholder agriculture to minimize the risk of climate effects and ensure farmers to motivate in innovative agribusiness activities.

##### ***viii) Lower Quality Standard– Less Competitive Agribusiness***

The products from smallholder agriculture are relatively of low quality standards without adopting good agricultural practices (GAPs) system due to unavailability of quality assurance mechanisms,

accredited laboratory facilities and certification systems (e.g. organic, green and eco-friendly) to compete with the competitors in the liberalized market structure. For the competitive agribusiness, the quality standard and certification system should meet the demand of the markets sustainably.

#### 4.2 Opportunities for Fostering Agribusiness Competitiveness

Fostering agribusiness competitiveness in the South Asian countries has greater scope viewing the productive land, wider yield gaps, diverse agroecological dimensions, huge ratio of economically active youth population, and underutilized resources. Specifically, following are the major opportunities for fostering agribusiness competitiveness.

- i) Agricultural land in this region is more fertile, almost half of the land has not been utilized properly. So, there is a huge opportunities to utilize the productive land and increase the land productivity that could contribute to promote agribusiness competitiveness.
- ii) The region has a large proportion of youth and women engaged in agriculture with a growing market demand for agribusiness products. Therefore, youth and women can be properly mobilized, capacitated and empowered to undertake agribusiness activities focusing on SMEs and inclusive value chains.
- iii) Presently, a larger number of economically active youth and women are returning from abroad to the respective countries because of the effects of COVID-19 pandemic. The countries could grasp this opportunity to utilize and retain this productive population into agribusiness competitiveness. For this, the government role could be to create enabling environment for empowering this group of people with better incentive, supportive policies and trade facilitation.
- iv) The effects of COVID-19 pandemic realized and internalized that– promoting agribusiness could be the most reliable source of sustainable development. With this backdrop, agribusiness enterprise development linking with markets could be the best approach for shared prosperity in the South Asian countries.
- v) Globalization and regional/ international trade integration provides opportunities to foster competitive trade of the agricultural commodities– that propels for developing inclusive, efficient and sustainable global value chains.
- vi) The scope of agribusiness can be increased by promoting agrobiodiversity and rich traditional knowledge of smallholder agriculture by improving the nexus of agriculture with dietary diversity, balance diet, nutrition and health.

### 5. Policy Recommendations for Fostering Agribusiness Competitiveness for Structural Transformation

The agribusiness competitiveness of the smallholder agriculture can be improved through supportive policy incentives, efficiency in legal and administrative procedures and the private sector empowerment. Babu & Shishodia (2017) argued that the major functions of agribusiness covers: i) input supply– manufacturing, procurement, intermediaries, distributors and marketing of fertilizers, fuel, seed, chemicals, machinery, finance, insurance; ii) production process of primary products; and iii) market access– handling, storage, processing, distribution, marketing, trading and transportation. The following recommendations are derived for agribusiness competitiveness and structural transformation.

*ii) Enabling Environment for Promoting Agribusiness and Agro-industries Development*– set of policies, institutions and support services are critical to promote investment, attract capital and improve agribusiness climate in South Asia. Despite fairly good number of policy environment available in the region, they are not implemented effectively for easing the agribusiness finance; food safety, quality standards and infrastructures; legal and regulatory framework; and innovative public and private sectors.

*iii) Technical Skill and Entrepreneurship Development*– capacitate smallholder farmers and entrepreneurs to develop competitive agribusiness and SMEs along the value chain and strengthen them to start up agribusiness with well-developed feasibility analysis– financial viability, technical suitability, environmentally sound, socially acceptable and markets driven projects. Develop business attitudes and culture for formulating business plan before starting up the agribusiness enterprises.

*iv) Access to Inputs*– timely availability and easy access of inputs in affordable prices are cost-effective options and critical for improving agribusiness competitiveness. Mechanism that ease access of inputs, particularly the improved seeds, fertilizers and equipment/ machinery to the smallholder farmers can help to increase the efficiency in production to meet the markets.

*v) Innovative Technology Development*– the policies should prioritize to develop and access to innovative technologies to the smallholder farmers–that should be cost effective, climate resilient, and market driven. North-South, South-South, regional, international and triangulation cooperation and collaboration is crucial for developing innovative competitive agribusiness.



*vi) Access to Financial Resources*– access to adequate amount of financial resources with reasonable interest rate is essential to start-up and develop agribusiness. For this, the government should endorse special policy incentives in the country's prioritized commodities for fostering the particular agribusiness competitiveness.

*vi) Mechanization in Agribusiness*– the policies should be consistent with smallholder agriculture mechanization that focus to youth and women in the entire value chain, particularly for cultivation/production, harvesting, product handling, transportation, and processing to ensure that reduce the cost per unit of the processed products and could compete the international markets.

*vii) Efficient, Inclusive and Sustainable Value Chain Development*– private sector engagement focusing on youth, women and socially disadvantaged groups are emphasized that is well linked with market system approach for the sustainable and inclusive value chain development for fostering competitive agribusiness.

*viii) Commercialization and Competitiveness of Agribusiness and Easy Access to Markets*– the small scale products of the smallholder farmers need to be facilitated for easy access to markets with direct marketing approach or collective marketing system that could increase the economies of scale, reduce the cost of doing business and consequently reduce the price of the products, and eventually that could compete with the competitors. The small scale agribusiness products need to be aligned with regional and international market standards where the products to be competitive in terms of price, quality, quantity, flexibility and stability parameters. For this, improved and modern market structures such as cold chain/ cold storage, modern food safety & product certification system, and branding, labeling & packaging are essential conditions. The policy harmonization could reduce tariff and non-tariff barriers in trade among South Asian countries.

*ix) Quality Standardization, Hygiene, and Food Safety*– the products of the agribusiness and SMEs should adopt the GAPs and certification systems that meet the requirements of regional and international standards such as HACCP (Hazard Analysis Critical Control Point), ISO (International Organization for Standardization), CAC (Codex Alimentarius Commission), OIE (World Organization for Animal Health), INFOSAN (International Food Safety Authorities Network) and requirements of the other trading partners.

*x) Institutional and Policy Reform*– Institutional set up and associated policy and regulatory reform, and mobilization of concerned stakeholder institutions are crucial for promoting agribusiness and SMEs through attracting, retaining and empowering youth and women. It should also compliance with the good governance for R&D, education, extension, digitize agriculture, and investment.

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