

# LOOKING HORTICULTURE FROM EXPORT-IMPORT PERSPECTIVE

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## **ABSTRACT**

*Trade of horticulture products in the world is growing every year because of the increasing demand to feed the growing population and the also change in the food habit of the people. Nepal being situated in between the two giant nations of the world China and India. It has ample opportunity to produce any horticulture products produced in the world in having the similar topography and climatic zones in the globe. It has made an ample opportunity in export trade of the horticulture products. However, still country not been able to harness this opportunity because of the low level of production and less ability in compliance to the emerging quality concerns of the neighbouring countries and world markets. It has been observed from the current growth pattern and the endeavours made by the government and the private sector in Nepal. There still needs to put more efforts in increase in production and trading capacity. The capacity in production at larger scale and enhance the capacity of the farming community and the agro enterprises in the country is still in low pace. It requires further efforts to enhance the capacity of the farming community to be involved in the commercial scale production of the horticulture products and at the same time attract more private sector investment in agriculture by revisiting the laws and regulations and attract Foreign Direct Investment in agro processing business is required to grab the opportunities in horticulture trade. There still lacks implementation of developed Agribusiness Promotion Policy and Agriculture Policy in Nepal to facilitate much needed growth of agriculture business in Nepal.*

## **INTRODUCTION**

Horticultural products include all products, raw or processed that arise from the horticultural industry (International Society for Horticulture Science). To simplify in the understanding of horticulture for the general purpose, we define the horticulture as growing and producing plant based produced except staple food for human and animal consumption.

More specifically to the prospects of its commercialization and income generation, we narrow down to the cultivation, production, processing and marketing of plant based products for human use. In this paper, we are more confined to the fruit and vegetable products produce, produced and traded in Nepal, which includes export and import too. The emerging questions of population growth and food supply have long been of central concern to economists. The World Food Economy seeks to examine the lessons of the past for wealthy nations, where agricultural output has steadily risen for decades, as well as for developing nations where the advances of the “Green Revolution” in the 1960s have introduced new problems in addition to solutions.

## AREA AND PRODUCTION OF FRUITS AND VEGETABLES

Production of fruits and vegetables to meet the growing food demand during the twenty-first century as consumers and producers in every part of the world—rich and poor alike—feel the effects of expanded global commodity trade, food aid, and national legislation in response to globalization and its implications in the national context of Nepal. Area and production of horticultural crops in Nepal is presented in Table 1.

**Table 1: Area and production of horticultural crops Area: '000 ha, Production: '000 mt**

Commodity	2009/10		2010/11		2011/12		2012/13		2013/14	
	Area	Prod	Area	Prod	Area	Prod	Area	Prod	Area	Prod
<u>Fruits</u>										
Temperate	22.5	107.6	24.1	111.9	26.4	130.8	24.7	122.4	25.2	113.7
Citrus	33.9	259.2	35.6	263.7	37.6	240.8	37.0	216.2	39.0	224.4
Tropical	50.9	340.2	58.3	318.6	75.3	658.2	76.1	600.1	84.0	627.0
Fruit total	107.3	707.0	117.9	794.2	130.3	1,029.8	137.8	938.7	148.2	965.0
<u>Vegetable</u>	235.1	3,003.8	244.1	3,203.6	245.0	3,298.8	246.4	3,301.7	254.9	3,421.0

Source: Statistical agricultural information, 2013/14, MOAD.

The horticulture components continued to pose incremental trends toward areas and productivities. Provided condition for every Nepalese consuming 100 g and 300 g of Fruits and Vegetables daily, Nepal's main horticulture produce remains covered.

Cereal crops like rice export potential remained in historic event in Nepal. After realization of export prospective of horticultural produce for faster economic growth, Nepal initiated sectoral policy for the development of specific benefited crops. Cardamom, Zinger, Potato, Tea and Coffee are some of the qualified example contributing national economy.

Nepal country been entered into global market, Nepal has widened and diversified its agricultural produce so as to maximize benefits from international niches. Now, staple food crop production became substantial, some of the country's export potential crops do not qualify the global standard and remains uncompetitive. Also, the bilateral or multilateral agreements are not very supportive to Nepal enter into global marketing. In such circumstances, Nepal needs to assess and explore the additional efforts in term of increase production and productivity, product quality assurance and export potentiality.

## **OPPORTUNITIES AND CHALLENGES**

Nepal still posses the ample opportunities in the horticultural products from production to Marketing. As being the neighbour of the two giant countries in Asia, India and China, this country enjoys ample unused market and demand and also faces challenges of low cost in production and trade of the products in the neighbouring countries. Because of Nepal is lagging behind technically and government support in agribusiness development, its opportunities have been descended from ensuing the prospect.

The emerging challenges are Non-Tariff Barriers specially the quality concerns at larger extent for Nepal has created more challenges in international marketing. Pertinent quality concerns and the requirement in general in the global food and consumer market influencing horticulture market are presented in Table 2.

## **HARNESSING THE OPPORTUNITIES**

### **Efforts made from government of Nepal.**

Nepal being an agro based economy country, the government has given high priority in the agriculture and agribusiness development for the economic upliftment of the people. From the initial planning process in 1955 AD (2013 BS) the first Five year plan. Agriculture has been given first priority and still has been duly considered in the priority program of the government. Some policy reforms were started since the formulation of Agriculture Policy 2061 B.S followed by the Agribusiness Promotion Policy 2063 B.S. Then Agriculture Perspective Plan a long term development plan for 15 years was implemented till the year 2014 AD and now we are in the threshold of another long term development plans strategies as “Agriculture Development Strategy (ADS).

In addition, government of Nepal has taken series of initiatives to promote trade by enabling business friendly environment to achieve overarching national goal of sustainable and inclusive economic growth, poverty reduction and improving the living standard of people. The country formulated Nepal Trade Integration Strategy (NTIS) was adopted in 2010 to provide directional measures for export promotion. NTIS 2010 charted out actions and intervention in cross-cutting areas and priority export potential sectors. It had identified 19 products which has greater potential of exports. Among them major exportable horticulture products including Tea, Cardamom, Ginger and Lentils were included.

Despite these efforts, anticipated results on trade performance could not be achieved over the past decade, resulting to widening trade deficit. Poor performance of Nepalese horticulture trade is mainly attributed to supply side constraints, low investment, and inadequate trade infrastructure and trade facilitation measures, among others. Hence, it is crucial for Nepal to adopt intervening policies and strategies to address the challenges related to value chain development of priority export potentials (goods and services), improve trade facilitation, and export promotion in existing and potential markets. Nepalese exports. However, Nepal’s export related problems are largely domestic in nature.

## **MAJOR CHALLENGES IN HORTICULTURE BUSINESS DEVELOPMENT IN NEPAL**

In the present context, five key issues have been experienced the major issues in the promotion of agriculture trade and enhancing competitiveness of agriculture sector:

- Supply side constraints, inadequate infrastructure for efficient production and transportation of goods; lack of human capital endowed with education and skills to process exportable; limited access to credit due to conventional/conservative banking practices that rely more on collateral than on the feasibility of business ventures; limited use of technology in the production processes.
- High transport and transit costs, being landlocked country and inadequate domestic transport network, the cost of transit and transport is high. The tariff faced by Nepalese agriculture products is about 5 times higher than the tariffs for non-agriculture products.
- Market access barriers, in addition to high tariffs in export markets, human, health, environment and technical standards and requirements for agricultural products have become more frequent and stringent in export markets.
- Low support measures, from the government in input supply and market access development and lack of private sector investment friendly regulatory frameworks.
- Unfavorable provisions in Nepal-India trade treaty and exchange regime. Nepal-India trade treaty which provides reciprocal duty free market access on selected agriculture and primary products has resulted in displacement of agricultural products in domestic market as evident from the increasing trend of the share of imports of food items in the food consumption.
- Lack of implementation of Government policies for promoting commercialization and attracting the private sector investment.

Additional challenge is also increasing because of the emergence of Non-Tariff Barriers in Trade: Nepal being an LDC avails low tariffs and SandDT preference in the international market, tariffs not being the major barrier to trade. However, China still need to provide LDC's

privilege to Nepal.

Most of the export products including the priority products identified by this Strategy face NTBs related problems; Sanitary and Phyto-Sanitary (SPS) related barriers on agriculture and forest based products. The quality assurance mechanism is not sufficient to meet the standards required by the importing countries. This basically requires adoption of internationally recognized SPS and TBT parameters and development of appropriate quality infrastructure for testing and certifications. Efforts are being made for accreditation of some parameters for some agricultural and industrial products, but the Nepalese laboratories largely remain fall short in getting international accreditation for a large number of export products. As a result, it has caused difficulties to comply with international standards and regulations related to quality assurance and certification. Some of the relevant quality standards requirement in world market of horticulture and food trade is presented in Table-2 below.

**Table 2: Prominent Standards in the horticulture industry**

	Public		Private	
	Mandatory	Voluntary	Individual	Collective
<b>National</b>	<ul style="list-style-type: none"> <li>National legislation (pesticide use, labor regulations, sanitary inspections etc)</li> <li>U.S. Department of Agriculture (USDA) standards</li> </ul>	<ul style="list-style-type: none"> <li>Hazard Analysis Critical Control Point (HACCP)</li> <li>USDA National organic program</li> </ul>	<ul style="list-style-type: none"> <li>Nature's Choice (Tesco)</li> <li>Field-to-Fork (M&amp;S)</li> <li>Terre et Saveur (Casino)</li> <li>Conad Percorso Qualità (Italy)</li> <li>Albert Heijn BV: AH Excellent (Netherlands)</li> </ul>	<ul style="list-style-type: none"> <li>British Retail Consortium (UK)</li> <li>Assured Foods Standards (UK)</li> </ul>
<b>Regional</b>	<ul style="list-style-type: none"> <li>EU Regulations</li> </ul>		<ul style="list-style-type: none"> <li>Filieres Qualite (Carrefour)</li> </ul>	<ul style="list-style-type: none"> <li>EurepGap<sup>11</sup></li> <li>Dutch HACCP</li> <li>Qualitat Sicherhiet (QS – Belgium, Holland, Austria)</li> <li>International Food Standard (German, French, Italian)</li> </ul>
<b>International</b>	<ul style="list-style-type: none"> <li>World Trade Organization SPS Agreement</li> </ul>	<ul style="list-style-type: none"> <li>ISO 9000</li> <li>ISO 22000</li> </ul>	<ul style="list-style-type: none"> <li>SQF 1000/2000/3000 (U.S.)</li> </ul>	<ul style="list-style-type: none"> <li>GlobalGap</li> <li>Global Food Safety Initiative</li> <li>SA 8000</li> <li>International Federation of Organic Agriculture Movements (IFOAM) Standard</li> </ul>

Sources: Gereffi & Lee, 2009; Henson & Humphrey, 2009; Jaffee & Masakure, 2005.

## **POTENTIAL MEASURES TO OVERCOME THE CHALLENGES**

In order to allow Nepali export products to compete in international markets on the one hand while protecting the Nepali consumers from consuming unsafe food products, the following steps have to be taken:

Enact a modern Food Act, prescriptive rather than reactive, that creates an enabling environment conducive to the development of internal trade and export market of agricultural and agro-business products as well as ensures that all foodstuffs sold meet acceptable standards.

The new Food Act should include provisions on the following matters:

- The formation of an independent Food Authority that is affiliated to but not part of structure of ministry with authority to issue standards and enforce these, including food quality standards
- The stipulation that the DFTQS (or the Food Authority once established) is authorized to issue SPS standards for local and exported goods;
- The authority to issue SPS standards by a simplified procedure in case that the SPS standards are internationally accepted standards, such as those of the Codex Alimentarius.
- Formulate, adopt and implement FSQ standards that meet international SPS standards to avoid import restrictions by trading partners for SPS reasons. Set numerical goals for proclamation of new standards
- Adopt legislation on the accreditation of national laboratories for FSQ certification;
- Establish Nepali accreditation body
- Establish recognition of Nepali accreditation body

Institutional measure in the short term include: (i) Strengthen the capacity of the DFTQC under the MOAC, in terms of transforming it to become a pro-active rather than reactive body, with annual plans and targets for the proclamation of FSQ standards, enforcement of FSQ standards and public awareness; and (ii) Implement agreement with India on recognition of DFTQC as certified laboratory by India.

In the mid-term: (i) Form Food Agency under new Food Act with full authority to proclaim FSQ standards and enforcement thereof; and (ii) Establish Nepali accreditation body for laboratory certification.

In order to build surveillance and monitoring capacity for plant pests and diseases, survey-based data gathering and management will be strengthened and diagnostic and analytical services will be improved (through investments in facilities, equipment, supplies and human capacity). Necessary interventions will be targeted at raising the capacity of the Plant Protection Center (PPC) to better carry out pest and disease surveillance activities, including: (i) crop pest surveillance; (ii) diagnostics and taxonomic identification; (iii) post-entry quarantine (PEQ) for seed and other propagative plant materials; and, (iv) response to plant pest and disease outbreaks. There is a need to move from an ad hoc approach to the implementation of a sustained and planned program of surveillance on priority crops, with scheduled completion dates. More robust taxonomic identification of survey specimens will be promoted (with regional support, and access to external support for difficult specimens) to expedite the diagnostics component of the survey. PPC staff will be given on-the-job training. There will be upgrading of current laboratory and equipment.

## **FURTHER EFFORTS REQUIRED IN COMMERCIALIZATION OF AGRICULTURE AND PROMOTION OF HORTICULTURE BUSINESS**

It has been experienced in the past trends and the new trade trends, we can recommend for some more efforts which are required for the larger scale operation of the business in commercialization and trade of horticulture products in Nepal. It can be outlined as below:

- Increase in scale of production : Improved productivity of land and labor is the need of the country to enhance agricultural development and promotion of horticulture business. Agricultural productivity requires the adoption of improved and appropriate technologies and know-how to increase efficiency and sustainability of agricultural production consistent with market demand. The



measures to raise agricultural productivity include those related to: (i) effective agricultural extension and research; (ii) efficient use of agricultural inputs; (iii) efficient and sustainable use of natural resources (land, water, soils); and (iv) increased resilience to climate change and disasters.

- Promote participation of private sector, NGOs, and public sector in agricultural extension and adopt a pro-poor decentralized extension system approach: The approach requires considerable capacity building of service providers to enhance their capacity of responding to the demands and needs of users. iii. Major involvement of private sector, cooperatives, International NGOs, community based organizations (CBOs), individual resource persons, universities and training institutions into various forms of public-private partnership modalities (PPP).
- Establishment and capacity building of a network of village extension workers.
- Introduction of a coupons system that would empower farmers to buy the best available extension and advisory services that meet their demand.
- Promote use of innovative forms of Information and Communication Technology (ICT).

## **FURTHER EFFORTS REQUIRED FOR TRADE OF HORTICULTURE PRODUCTS IN EXPORT MARKET:**

In view of improving the quality assurance of the Nepalese export products, the major areas of intervention would be as follows:

### **Efforts required from the Government of Nepal**

- Improvements in the legislative and institutional framework for the enforcement of quality assurance which includes;
- Strengthening inspection, testing and certification infrastructural facilities along with human resources development;
- Accreditation of national testing and certifying laboratories (authorities).
- Harmonization of Food/Plant and Animal standards as per the international standard requirements.

- Lift restriction on imports of Nepalese agriculture and livestock products in India.
- Validity of Nepalese quality and standard testing certificates.
- Waiver on additional duties like CVD (Counter valuing Duties at par of Indian excise duty).
- Formation of Local Committee as stated in the Article XI of the Nepal India Trade Treaty to solve the local problems in clearance of goods at local customs points.
- Need to establish laboratory or facilitate speed up lab tests for food items including tea, coffee and others as per the Indian Food Safety and Standard Regulations 2011.

**Capacity building and strengthening the government agencies this includes:**

- DFTQC – develop pesticide residue testing mechanism and work on having its certificate accredited internationally, enhance capacity, promote private sector laboratories
- Enhance and strengthen the technical capacity of existing Plant Quarantine Offices of Kakarvitta, Biratnagar, Jaleshowre, Birgunj, Bhairahawa, Rupedia and Gaddachowki and other upcoming check posts
- Issue quality and phyto-sanitary certificates on thorough inspection to adhere with the quality standard of India and other importing countries.

**Compliance issue and its potential remedies**

- Nepalese Govt. Labs needs to be duly comply with international test parameters for issuing test certificate.
- Capacity building of Plant Quarantine program in PRA, PFA and Fumigation procedures.
- Frequent and regular meeting of High level authorities of both India and Nepal to discuss on the issues of SPS and quality concerns e.g PRA, PFA and other analysis requirement for export of Tea, coffee and food items, Cardamom. Ginger and other vegetable products from Nepal.

## **Enhance role of Private Sector in boosting production and trade**

The role of private sector in promoting horticulture business is now more concentrated to trade and export. It needs to contribute more on following areas of development to strengthen the supply chain of the horticulture trade to bring the scale of operation at the larger area. Further efforts need to:

- Improved and expanded Supply Chain management( seed, fertilizer, output market and distribution)
- Investment in agribusiness at the larger scale operation including farming and processing business.
- Expand trading capacity including third country export/ import
- Develop and manage horticulture products market by establishing collection and marketing centres in the production pocket areas.
- Make available market information services for the producers and traders.

## **CONCLUSION**

In conclusion their needs more efforts shall be made to increase in production of the horticulture products. It can be more specifically addressing the following current issues.

### **Increase productivity and value addition through commercialization and irrigation investments.**

- Commercialization: This will require action along several fronts, including policy support, meeting quality standards, capacity building and market information for producers, applied research, and investment in the supply chain for high value commodities. For the export trade, strengthening institutions and systems for quality control and certification, and investing in laboratories, accreditation of the existing government labs with international laboratories, investment in testingstations, and human resources is given higher priority in the government programs.
- Irrigation and emphasis on farmer management: Irrigation infrastructure can be improved by: (a) promoting both surface and groundwater irrigation for commercial and industrial crops in the Terai, while encouraging high-value horticulture and cereal

production in the Mountains and Hills, promoting Micro Irrigation Technology (MIT) and plastic tunnel off season vegetable production (b) developing year-round irrigation in perennial flow areas and small storage facilities like cellar storage facilities in other areas (c) investing in mini- and micro-hydro facilities, to facilitate power generation and lift irrigation in the hills. In addition, government should encourage farmer management of irrigation infrastructure, and support matching-grants for demand-driven farm interventions.

### **Improve the functioning of factors of production and marketing.**

To enhance the proper functioning of factor markets in Nepal, reviews should be done based on some cross-country experiences. Reviews of the land redistributive policies for achieving a more accessible legal system and minimize the land disputes and also for identifying the market and non-market mechanisms to improve access to land. Improvement in land administration systems, particularly land title records for providing greater security of ownership and reduce transactions costs, eliminating multi layer local taxation system are some of the areas to be improved. One potential solution would be to initiate Contract Farming System at the earliest. Facilitate marketing by establishing the marketing centres and collection centres in the accessible areas for the farmers' benefit and aggregate production to cater the growing demand of agriculture products.

Also there is a need to work on the rural finance for developing strategies to provide services to people in isolated areas, where the traditional Gramen model is unsuitable.

### **Reach out to the poor and increase investment in the basic infrastructure**

Decentralized approach to empower communities and devolve decision-making power to the local level is needed for better service delivery. For this sake, use of the non-government / private sector agencies is an important vehicle to facilitate access to livelihood opportunities for the rural people and income generating activities involving them in commercial scale farming business. It could be a mix of local, public and

private investments pattern in roads, communication and power which are critical to improve access to assets, integration with markets. The role of local government needs to be enhanced in order to promote the agribusiness investment through the local development fund. This will provide opportunities to involve more local poor in the agribusiness, which ultimately contributes to the production and trade.

### **Insure the supply of fertilizers, seeds and agricultural equipment for all**

Supply of chemical fertilizers needs to be kept open for the private sector to ensure the supply for meeting the current demand and subsidy should be given to the fertilizer and seed instead of present practice.

Bring in action the Agri Business Development Policy by revisiting the land act and other related acts and bringing the new “Agri Business Promotion Act” at the earliest possible.

Effective implementation of “Agri-Mechanization Policy” and its implementation is needed to ensure that the farmers get opportunity to mechanize farming practice and cope with the present labor shortage situation. Furthermore, reforms in the legal environment to promote larger scale agri- business requires to revisit and revise the existing laws and regulations to attract Foreign Direct Investment in Agro-processing business. Also promotion of farming business at larger scale by making incentive provisions in subsidizing the bank interest rates, income tax act, VAT and export incentives

### **REFERENCE**

Agriculture Policy 2061. Government of Nepal , MOAD

Agribusiness Development Policy, 2063.

Agriculture Development Strategy, (ADS) 2014 A.D.

Agriculture Diary, 2072 BS. MOAD