“Nepal Trade Integration Strategy 2023 and its Implications on Trade Competitiveness of Tea in Nepal”

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Executive Summary

Nepal Trade Integration Strategy is one of the prominent steps taken by Government of Nepal to identify and increase the export base of products having comparative advantage. Although tea was identified in every version of NTIS, the performance of the sector was dismal. This study was designed to understand the weaknesses of NTIS 2010 and NTIS 2016 and provide suggestions on how to implement NTIS 2023. Descriptive and Explanatory Mixed Method research design was used for the purpose of this study. An in-depth interview with large tea producers and informal interview with government agencies and stakeholders was taken. A lack of coherency between government and private sector, incomplete budget allocation, and lack of proper strategic plan for long term competitive advantage were found as some major obstacles in implementing NTIS in this study.

Keywords: Nepal Trade Integration Strategy, Tea, Trade, Competitive Advantage, Export

Introduction

In 2010, Nepal implemented the Nepal Trade Integration Strategy (NTIS) as a modernized version of the Nepal Trade and Competitiveness Study (2004). Since then, the government of Nepal introduced NTIS 2016 and NTIS 2023. The major objective of both NTIS is to enhance the trade sector's contribution to GDP through trade centered growth and overcoming challenges and constraints. This is done by identifying priority products and focusing on development and strengthening supply side capacity, institutional capacity, trade negotiation, coordination, and by building trade related infrastructures. NTIS identified priority goods and services that have comparative advantage in the context of Nepal and achieve economic growth through promotion of exports of these identified priority goods and services. Since its inception, although NTIS has been focusing to enhance trade capacity of Nepal through export promotion and development of infrastructures to help businesses grow, the reality at present is quite different. The trade deficit of Nepal in 2010 AD was USD $4.29 billion (26.82% of GDP) (Macrotrends, 2023). Even though the exports of Nepal have increased over 220% from 2010 to 2022 AD, imports have also increased over 400% during the same period (NRB,2010 and 2023). This had led to gradual increase in the trade deficit balance of Nepal. Nepal reported a trade deficit of USD $14.65 billion which is more than 35% of Nepal's GDP (Macrotrends, 2023).

The rising trade deficits balance shows the alarming situation of trade balance in Nepal. Tea has been listed as a priority good since the initial implementation of NTIS. But still, the export growth of tea is in decreasing trend. The tea export increased by 71% from the period of 2000 to 2010 AD. However, for the period between 2010 -2016, the exports have fallen by 63% which has further fallen by 35% between the period of 2016 AD to 2022 AD (NTCDB, 2023). These numbers demonstrate that despite the initiative taken by NTIS 2010 and 2016 to promote tea export, the achievement in real sense were bare minimum. So, our research is based on understanding why such disparity has occurred. Although there is lots of literature on various priority sector goods and services and their trend of trade, we were unable to find the literature related to NTIS and tea export. Therefore, in this research, we will first explore how NTIS has evolved in recent past and what were the initiatives taken by government of Nepal for its implementation. We are trying to study why NTIS 2010 and 2016 failed and what can be the possible implementation strategy and policy intervention to successfully achieve the objectives of NTIS 2023.

Tea Industry in South Asia

Tea is the most widely consumed drink after water (Awasom, 2011; Ghosh et al., 2023). Millions of poor families in developing countries rely heavily on the tea sector as a source of income and employment, and it makes a significant contribution to rural development, poverty reduction and food security. Among 6.4 million tons of tea produced worldwide, south Asian countries account for almost one third of production (FAO, 2022).

South Asian region has a total population of 1.94 billion (one-fourth of the world population) and is regarded as one of the most densely populated regions of the world. The region consists of eight nations – Nepal, India, Sri Lanka, Bhutan, Maldives, Pakistan, and Afghanistan. These countries have similar social-cultural backgrounds mainly coming from the Indus Valley civilization. Most businesses in the region are Micro-Small and Medium-sized enterprises accounting for 99.6% of total business, 76.6% of the total workforce, and 33.9% of GDP (Asian Development Bank, 2020).

There are over 35 countries globally renowned as top tea producers, with four South Asian nations ranking among the top 20. The tea sector contributes significantly to rural development, poverty reduction, and food security and is a major source of income and employment for millions of poor families in developing countries (FAO, 2022). Among 6.4 million tons of tea produced worldwide, 1.8 million tons (nearly one-third) is produced in South Asia (Atlas Big, 2022; FAO, 2022). The tea industry in the region employs around 1.5 million workers (mostly women) who belong to economically challenged groups (Mishra et al., 2014). South Asian countries such as India, Sri Lanka, Bangladesh, and Nepal are among the highest tea-producing nation in the world (Shrestha Sudhir et al., 2022). As of 2022, their world ranking in the total volume of tea production was 2nd, 4th, 10^{th,} and 19th respectively (Atlas Big, 2022). All these countries produce some high-quality tea. In the past two decades, India and Sri Lanka have emerged to be among the three largest black tea-producing countries whereas Nepal has shown very high potential to supply its tea in the international market (Mishra et al., 2014). Most of the businesses associated with the tea industries are SMEs (Shrestha Sudhir et al., 2022). It is one of the cash crops which have very high export protentional in the international market and attracts a significant amount of foreign exchange earnings for these South Asian countries (Shrestha Sudhir et al., 2022).

Tea plantations in South Asian countries are mainly from *Camellia Sinensis* species (Mishra et al., 2014). The British first introduced tea to India and Ceylon (now named Sri Lanka) using seeds from China (Mishra et al., 2014). The key actors involved in the tea industry are individual tea farmers, small-scale tea processors, brokers, tea estates, bidders, blenders, wholesalers, and retailers (Shrestha Sudhir et al., 2022). Even though the total production and consumption of tea has increased in recent times (per capita tea consumption expanded by 2.5% annually over the last decade (FAO, 2022)), there haven't been any substantial changes in the value received by the upstream actors such as small scale tea producers, farmers, and processors. As presented in the report by LDC watch (Shrestha Sudhir et al., 2022), the average minimum wages (USD 2.5 per day) provided by the tea estates in the South Asian region are much lower than the minimum living wage required (average USD 6.54 per day) to sustain a quality life. In the same report, it is mentioned that between 1981-2018, the Sri Lankan tea industry observed a 72% decline in the regular workforce employed in the tea sector. Also, because of labor shortages, tea estates in India are not focusing on planting new tea businesses but rather are interested in lobbying for granting land rights to establish hotels to promote tea tourism. And in Nepal, the low price paid to farmers for their green tea leaves by large tea estates has encouraged them to seek alternative source of occupation. Therefore, the report concludes that a more inclusive and sustainable business model that could fairly distribute the value from the upstream producer to the downstream retailers should be introduced to replace the existing one (Shrestha Sudhir et al., 2022).

Tea: Status of Production and Trade in Nepal

Nepal shares a substantial tea-producing potential akin to its Asian counterparts like India and Sri Lanka, thanks to its favorable climatic and soil conditions for tea cultivation. The nation boasts distinct bedrock, geology, climate, and hydrology features. Notably, only 20% of Nepal's land, primarily situated in the plains and hills of districts such as Ilam, Taplejung, Panchthar, and Dhankuta, is considered arable. While the eastern hills are often rugged, requiring extensive irrigation and terracing, 10% of this region comprises some of the most fertile, rain-rich, and arable soil in the country (Korean J. Int. Agric., 26(1), 2014).

Tea cultivation in Nepal was initiated in 1863 after establishment of Ilam tea estate in the eastern hilly region of Nepal. Nepal grows particularly three types of tea plants, i.e., Camellia Asamica and C. Asamica SPP Lasiocalyx for Crush, Tear and Curl (CTC) tea and Camellia Sinesis for orthodox tea. Jhapa district is responsible for producing CTC tea in Nepal. In fact, the district produced 18902800 kg of CTC tea in 2022/23 AD. Several hilly districts of Nepal produce Orthodox tea. About 83% of total orthodox tea produced in Nepal comes from Ilam district. Similarly, Panchthar, Terathum, Dhankuta and Jhapa districts also produce a significant amount of orthodox tea. (National Tea and Coffee Development Board, 2023).

In Nepal, current production of CTC tea is above 70% which is primarily used for domestic consumption. However, there is low consumption of orthodox tea because of its higher cost relative to CTC. Therefore, it is exported outside Nepal. Nepal's export of tea is highly concentrated as around 95% of tea export from Nepal goes to India (MoICS, 2022). Mohan S. (2018) stated that Nepali tea is often mixed with Darjeeling Tea and sold at auction at a lucrative price under the Darjeeling label and re-exported overseas. This theme resonates with the idea presented by Falkowitz M. (2019) in an article from The New York Times.

The overall trade of tea in Nepal is in increasing trend from 2007/08 to 2021/22. The total value of exports increased from Rs. 900 thousand in 2007/08 to Rs. 3.4 million in 2021/22. During the same period, the value of imports also rose from Rs. 13 thousand to Rs. 83 thousand. Even though total production of tea has increased in recent years, per capita tea consumption has only expanded by 2.5% annually over the last decade (FAO, 2022).

Most of the businesses associated with tea plantation, processing and exports are SMEs. It is one of the cash crops that has very high export potential in the international markets and attracts a significant amount of foreign exchange earnings for south Asian countries (Shrestha Sudhir et al., 2022). Smallholder farmers account for 41% of total production of tea in Nepal (Mohan, 2013). In the last two decades, India and Sri Lanka have emerged to be the three largest producing countries of black tea whereas Nepal has shown very high potential to supply its tea in the international market (Mishra et. al, 2014).

Nepal Trade Integration Strategy (NTIS)

NTIS 2023 is Nepal's fourth-generation trade integration strategy. The strategy's vision is to boost economic growth, generate employment opportunities, and build a strong source for foreign currency through establishing a competitive base of exports. The strategy aims to achieve 55% in trade to GDP ratio and 20% in exports to GDP ratio in the duration of five years from 48.1% and 6.3% respectively in base fiscal year 2022/23 AD. Furthermore, the strategy will support Nepal's graduation to middle income generating country from Least Developed Countries (LDCs) in 2026 and diversify the export market of Nepal.

Nepal stands to gain substantial benefits from the Nepal Trade Integration Strategy (NTIS) due to a synergy of government policies and foreign-aided projects. These initiatives promote diverse horticultural crops, engage youth in commercial horticulture, expand orchards such as citrus, emphasize food and nutrition security through the Agriculture Development Strategy (ADS), and enable targeted promotion through the Prime Minister Agriculture Modernization Project (PMAMP). The combined efforts foster economic growth, create employment opportunities, and develop agro-based industries, ultimately enhancing food security, income generation, and export potential, making horticulture a crucial driver of Nepal's agricultural and economic development.

Nepal Trade Integration Strategy 2023 identified 32 different products and services with potential for exports. They are cardamom, ginger, tea, fruits, lentils, jute, vegetables, spices and coffee under agro-based products, medicinal and aromatic plants, handmade lokta paper, fragrant oil, rosin and turpentine, and textiles of long-fiber under forest based products, yarn and ropes, readymade garments, iron and steel, shoes and PPC cement under large scale industry products, carpets, pashmina, pasta, Himalayan spring water, felt, dog chew and jewelries under small and medium scale industry goods, and tourism, IT and internet based services, hydropower, construction services, and skilled and semi-skilled labor (remittance generating) services under potential service categories. In this research, we are planning to study the potential export competitiveness of tea as part of NTIS 2023.

Research Gap

Even though existing literature and research have studied about the tea sector in Nepal, its status and trend, value chain system, we did not find any research connecting National Trade Integration Strategy and Export Competitiveness of Tea sector in Nepal. This provides us with a huge gap to fill with this study.

Research Questions

The field of tea sector is growing. In the study concluded by Mishra et al. (2014), when the tea plantation of Nepal was increased fivefold between 1994/95 to 2011/12, the production of tea increased almost hundred-fold. The export of tea is also found to be almost perfectly correlated with the production of tea in Nepal (Sapkota, 2012). Tea, being one of the most export potential products recognized by NTIS, still faces challenges to maximize its export potential in international market. This has raised several questions for our study purposes.

The research questions for this study are:

a. How has various strategies adopted by NTIS 2010 and 2016 impacted the export of orthodox tea export of Nepal?
b. Reflecting on the past NTIS 2010 and 2016 experiences, what is the best way forward for the implementation of NTIS 2023 to increase the export competitiveness of Nepali tea sector?

Methodology

Sampling Plan

The sampling plan is important to ensure the representation of each key informant and various stakeholders across the entire tea industry of Nepal for the purpose of this study. Our sampling plan will be extended to include a diverse set of experts from different facets of the industry. This will encompass producers, sector organization experts, representatives from government agencies and other relevant stakeholders. In addition to this, we will consider using experts who bring diverse viewpoints and roles within the industry. This will encompass professionals engaged in production and trade, authorities in policy-making level, representatives from umbrella organizations of the industry, professionals from Ministry of Agriculture, and Ministry of Industry, Commerce and Supplies, and other subject matter experts. By incorporating with various experts at different stage of value chain in tea industry of Nepal, we aim to capture a comprehensive perspective for this study.

Data Collection and Analysis

This study is conducted using both qualitative and quantitative data collection and analysis techniques. The collected data is analyzed using descriptive statistics. Explanatory Mixed Method research design is used for the purpose of this study. Various secondary sources are also used to collect the quantitative data whereas in-depth interviews of concerned people with knowledge of the topic of the study are done to collect the qualitative data.

Quantitative Data Collection: Secondary data from the various sources is used to collect quantitative data.

a. Reviews of the reports published by Nepal Rastra Bank, International Trade Center, Ministry of Finance, Ministry of Industry, Commerce and Supplies, etc.
b. Data of production, export and imports of tea, major destination countries from Trade Map, Department of Customs, Census Bureau of Statistics, etc.
c. Other related data from National Tea and Coffee Development Board, Central Tea Cooperative Federation, Nepal Tea Association, etc.

d. Other insights will be drawn from in depth case studies of renowned nations like Sri Lanka and Kenya from comprehensive review of existing literatures pertinent to their respective achievements in broadening their export base of tea industry.

Qualitative Data Collection: An in-depth interview with selected seven to ten experts with good understanding, knowledge, and experience in the tea industry of Nepal from across the various stages of value chain including producers, agents, CTCF, NTA and officials from Minsitry of Agriculture, Custom officers, and Ministry of Industry, Commerce and Supplies was conducted for the purpose of this study. The selected individuals were the key informants of the study to collect their perception regarding present and future of the tea industry in Nepal. Semi-structured questions were asked for the data collection purpose with questions being focused on NTIS 2016, expectations of NTIS 2023, its possible influence on export of tea from Nepal, their perception on how NTIS should be implemented to reach the objectives. The nature of the interview did allow for flexibility, enabling the participants to express their perspective freely while ensuring that key areas of interest are covered.

Qualitative Data Analysis

NTIS 2010 and Tea

NTIS 2010 identified tea as one of the 19 priority export potential products. Based on the export potential and socio-economic impact of these 19 products, tea was regarded as having 'high' export potential, 'low' world market conditions, 'medium' domestic supply condition and overall, all export potential of 'medium'. It was believed to have high socio-economic impact. NTIS 2010 provided four index criteria based on each product.

		NTIS 2010
Index 1	Export performance	Export performance: the overall export volume has increased from total value of $4,896,000 (2004) to $16,805,000 (2008)
Index 2	World market conditions	With regards to market access condition, Nepal has favorable market access to most market but fewer tariff advantages. With exception to India that applies 100 per cent MFN rate, many major importers such as EU, USA, Oman, and UAE had zero MFN rates for tea. Pakistan one of the largest importers of tea granted a 1000 MT duty-free quota for SAFTA LDCs. Sri Lanka and Kenya were the main competitors in Nepal's current or potential export destinations followed by China and India.

Index 3	Domestic Supply Condition	There were total of 12,200 stallholder farmers, 31 cooperative societies, 134 medium-sized gardens (57 CTC tea estates) and 38 large plantations. There were 40 processing units among which 28 were having both tea estates and processing units and about 20 tea packers, exporters, and importers in the country. The Nepalese tea industry plantation area expanded from 3,502 hectares in 1996/97 to 16594 hectares in 2007/2008. During the same period the output of tea grew from 2,99 MT to 16100 MT. Among them 85 percent were CTC and 15 per cent were orthodox type. Labor costs were reported to be around US$1.50-2 for tea pluckers in 2007 (ITC, 2007d). High costs of electricity and fuel were major problems, as are the transportation facilities used for carrying tea leaf from farm to processing unit were bad, which were negatively affecting the quality of product. With regards to business environment, lack of certification and test reports on the products from accredited laboratories or authorities has made the export costly. Also, lack of an auction system for tea, which should allow international buyers to source tea directly from one source has been one of the major issue identified. he government grants a number of incentives and assistance to the tea industry like exemption of land ceiling; exemption of 75 per cent of land registration fee and land revenue; leasing of public land for up to 50 years for tea cultivation; priority lending; low interest rates for land consolidation; free technical service to small and cooperative tea farming; capital grants for irrigation; establishment of research and training centers in collaboration with the private sector; incentives to ancillary industries, and some export promotion activity support. HIMCOOP has been formed to provide a one-stop agency for tea sales.
Index 4	Socio- Economic impact	This sector seems to be a strong engine for farmers' income generation and poverty reduction orthodox tea gives higher returns compared to other crops. This sector is also likely to have a high impact on total employment compared to other sectors, especially female employment, as estimates suggest that it already accounts for around 100,000 people (ITC, 2007a). Over 30,000 people are directly involved in the industry, with a large percentage being rural women.

These four indexes mentioned above in NTIS 2010 explained about the potential of tea sector in different aspects. However, the document lacks the strategic plan on how to improve the trade competitiveness and way forward for tea sector of Nepal. It only mentions the current situation and provides us the information on the potentiality of the product.

NTIS 2016 and Tea

NTIS 2016 indicates opportunities for expanding cultivation of several potential agro-commodities such as tea, ginger and medicinal plants to new geographical areas. Yet, constraints in the physical infrastructure, including inadequate road connectivity and transportation, are limiting the expansion of cultivation areas. Among 12 export potential products recognized in NTIS 2016, tea is regarded as one with the highest export potential. Two HS code are used for export of Nepali tea in international market 090220 and 090240.

SWOT Analysis of Tea NTIS 2016

	Strength	Weakness	Opportunities	Threats
Tea	Geography and climate suitable for tea cultivation Strong and functional farmer cooperatives Most large tea estates produce organic tea. Strong tea associations and related organizations with capacity to lobby and advocacy Tea and Coffee policy being properly design and effectively implemented	No brand identity in global market Ineffective marketing and publicity Lack of internationally accredited laboratories Limited technical schools, training centres and R&D Lack of transparent mechanism to determine price for green tea. Inconsistent quality of product to meet buyers' demand	Scope to expand production area. Good opportunities for employment creation Increasing global demand for Nepalese tea Organically certified areas are gradually expanding. Attractive price for organic tea in the global market Scope for product diversification and premium value in niche markets	Competition with major tea producers, eg. China, India, Bangladesh, and Sri Lanka Price volatility Unable to meet delivery requirements, including quality control such as meeting MRL regulations in destination markets. High dependency on a single market Problems due to labor unions India bringing legal provision to restrict import of tea from Nepal

	Key Performance Indicators		
Development Impacts, Outcomes, Actions	**2014 Baseline**	**Target by 2017 (Short-term) and by 2020 (Medium Term)**	**Responsible Agencies**
Outcome10: Tea	Export of Orthodox tea was approximately $2.7 million in 2013	Export of Orthodox Tea reached to about $6 million	NTCDB, MoAD, MOC, producers
Export of Tea significantly increased	3,000 MT of Orthodox tea was produced in 2013	At least 4,500 MT of Orthodox tea produced	NTCDB, MoAD, MOC, producers
Short Term Actions: 2016-2017			
Action 1: Attract foreign buyers through direct auctions in Nepal	There is no Auction market in Nepal	An Auction house/ market operated	NTCDB
Action 2: Promote tea for foreign buyers in Nepal	There are no Tea House (promotion centers) in Nepal	At least two Tea Houses established (in Ilam and Kathmandu)	NTCDB, CFTC
Action 3: Promote Nepalese tea overseas	Collective Trademark is in the final stage of registration in Nepal and abroad. There is no GI for Nepalese Tea	A Collective Trademark for Orthodox Tea was established and registered overseas. A GI for Orthodox Tea established and registered overseas	NTCDB, MoC, MoAD, HOTPA, TEPC
Action 5: Strengthen surveillance capacity of MOAD at field level for proper use of chemical and pesticides	Surveillance capacity of MoAD at field level is weak, including use of chemicals and pesticides on crops	Registration and Licensing system for supply and sale of chemicals, pesticides, veterinary medicines effectively implemented	MoAd

Action 6: Establish internationally accredited laboratories in Nepal for MRLs	No internationally accredited laboratories for MRLs and other key food safety parameters	DFTQC Chemical Lab is internationally accredited for MRLs. Other labs accredited or on their way to be accredited	DFTQC
Action 7: Adopt export standards to support organic cultivation, collection and processing in Nepal	There are no Nepali standards for Orthodox tea	Export standards for Orthodox tea developed	DFTQC, NBSM, NARC
Medium Term Actions: 2018-2020			
Action 1: Increase acreage for tea plantations and gardens	8.800ha plantation for Orthodox tea I 2012/13	At least 12,000 ha plantation for Orthodox tea	MoAD, CTDS, NTCDB, private sector
Action 2: Increase acreage for tea plantations and gardens	1200 ha of plantation was certified for organic tea in 2012/13	At least 5,000 ha plantation for Orthodox tea	MAD, DFTQC, NBSM, private sector
Action 3: Record existing and potential acreage for tea cultivation	No GIS mapping for tea potential acreage	GIS mapping for existing and potential tea acreage completed	NTCDB, MoAD, NARC
Action 4: Increase number of cooperatives for tea processing	There are 50 Tea Producers Cooperatives	Number of tea producer cooperatives reached to 100	MoAD, MoPAC, CFTC, NTCDB, HIMCOOP
Action 5: Increase processing capacity	The private sector is reluctant to invest in processing facilities. Inadequate technology for processing	Private sector investment in processing facilities increased through support measures. Processing technology enhanced	MoAD, MoF, NTCDB, NRB, ADB
Action 6: Conduct research on product development of tea	There is no research and development activity in tea sector	A tea research center was established for product development. A tea research lab established in Fikkal	MoAD, NTCDB, NARC
Action 7: Strengthen human resources capacity	There is a shortage of trained human resources including tea technicians. Skilled labor for plantations and gardening. Junior technicians for providing extension services to small holders	Officials in tea sector trained. At least 125 technicians trained by Machi Multiple Campus (MMC). At least 5,000 tea producers trained. At least 200 junior technicians trained by CTEVT to provide extension services	MoAD, MMC, CTEVT, NTCDB, private sector

As a next generation of NTIS 2010, NTIS 2016 provides more detailed information on how the best tea sector should be developed for the next 5 years. The document provides SWOT analysis of tea sector and has a detailed implementation matrix for its overall short term and mid term planning. The document also provides information on what is the base line and what is the expected outcome in the next five years. It also provides information on relevant government agencies that could possibly be linked directly to each output. Among all the three NTIS documents, NTIS 2016 is more comprehensive and provided good strategic direction. However, the implementation of the plan was not executed in the best possible manner to truly achieve its objectives. Except for a few targeted action goals, many of the others were not achieved. The limitation of NTIS 2016 was the fact that it did not provide any funding requirements to meet the set objectives of each action plan.

NTIS 2023 and Tea

NTIS 2023 is the latest strategic document created by MoIC that includes the strategic plan of 32 export potential products of Nepal. This plan is set to be implemented in next 5 years by government of Nepal. Tea is included in this strategic document for the third time and is recognized as one of the agriculture-based export potential products.

Strength	**Weakness**	**Opportunities**	**Threats**
Geography and climate suitable for tea cultivation	No brand identity in global market	Scope to expand production area	Competition with major tea producers, eg. China, India, Bangladesh, and Sri Lanka
Strong and functional farmer cooperatives	Ineffective marketing and publicity	Good opportunities for employment creation	Price volatility
Most of large tea estates produce organic tea	Lack of internationally accredited laboratories	Increasing global demand for Nepalese tea	Unable to meet delivery requirements, including quality control such as meeting MRL regulations in destination markets
Strong tea associations and related organizations with capacity to lobby and advocacy	Limited technical schools, training centers and R&D	Organically certified areas are gradually expanding	High dependency on a single market
Tea and Coffee policy being properly design and effectively implemented	Lack of transparent mechanism to determine price for green tea	Attractive price for organic tea in the global market	Problems due to labor unions
	Inconsistent quality of product to meet buyers' demand	Scope for product diversification and premium value in niche markets	India bringing legal provision to restrict import of tea from Nepal

NTIS 2010, 2016, 2023

The National Tea Policy 2057 aimed at increasing the area of tea cultivation to 40,875 ha and raising production to 46.11 million tons within 10 years. However, even after twenty years, the cultivated area of tea has not exceeded 17,000 ha and total production is less than half of the target. Several measures are proposed in the Policy for the promotion of exports. Policies, such as, declaring new tea pockets with more than 3,000 Ropani of cultivated land, development of auction house, land consolidation for standardization in tea production, Geographical Identification of tea, improvement in packaging, etc. have not been implemented.

NTIS is supposed to be a strategic document that could develop a plan for gaining comparative and competitive advantage for all the export potential products of Nepal. However, the analysis of all three documents provides us with no clear evidence in the given direction particularly with regards to the tea sector. NTIS 2010 provided four key indexes that helped in developing understanding of the overall scenario of the tea industry. This document, although provided some strategic direction on moving forward but could not provide an action plan on how to achieve them. NTIS 2016 has documented a strategic action plan by considering a benchmark and the expected outcome in the next 5 years. This document provides more detailed information on the strategic plan. However, it lacked the explanation on the budgetary requirement to execute the given plan. This could possibly be the reason why; the implementation of the action plan was not properly done. The consequence resulting into not a significant change in the overall tea industry of Nepal during the last 5 years. New NTIS 2023 although has allocated estimated budget for the implementation of the action plan, however, the breakdown of the budget and the scientific methodology for its execution is not well documented. NTIS 2023 has adopted most of the action plan and identified the SWOT analysis not much different than NTIS 2016 with regards to tea sector.

Qualitative interview with relevant stakeholders:

We conducted in-depth interview with private sector, government agencies and sector association representative to capture their views on how tea sector has evolved in last 15 years since the implementation of NTIS. Interview with one of the prominent tea industrialist Mr. Udaya Chapagahi, from Gorkha Tea estate provided us with the information that in past decades, tea industry has not gone through any productive significant changes. There have been different projects that were implemented by various government agencies and international organizations, but the overall production and the export of the Nepali tea has not significantly increased. He mentioned that most of the project were focused on providing incentives to the farmers to become entrepreneurs and establish their own tea processing factory. This has increased the number of factories, but the overall tea production area has not increased. There is a problem of finding a buyer for small-scale factories because they do not have skills and finances to do marketing and branding of their products. For big tea factories, the growing number of tea processing units and no significant increase in tea leaves production has created unnecessary hike in price of tea leaves. On one hand, the price of leaves is increasing because of increasing demand, increase in inflation rates and other macro-economic factor, but on the other hand, the price of 'made tea' in international market has remained the same for Nepali tea. This implies that the cost is increasing but the selling price remains the same, which means the profit margin is shrinking. According to Mr. Chapagahi, also there are requirements from the buyers to receive organic certification of tea. This has added more cost, however, the return on investment in transiting to organic is a major challenge. Gorkha tea estate has also taken various initiatives to invest in helping the farmers to go organic by providing cows and creating a good shelter for them. This is to help farmers become self-staining in terms of producing organic fertilizers. As per the company, although the tea businesses in past two decades have changed quite a lot, there wasn't much done by the government to support the tea industry. There were a few projects that were initiated by various international organizations to support tea producers, but according to Mr. Chapagahi the outcome of those projects was not very impactful. According to him, government plans such as NTIS seem to create good strategies in paper but when it comes to practical implementation of it, they lack proper execution plans.

We conducted another interview with Mr. Maan Kumar Mukhai. He is a tea entrepreneur who established his tea processing factory using a grant obtained by one of the international organizations. He made an investment of 50% of the project cost by himself and the remaining 50% of the funding was supported by the project. His factory is one of the many such factories who received funding in a similar modality. The objective of the project was to support SMEs by helping them to uplift their skills in the tea processing business. During his interview he mentioned that although he had set up a factory and has been producing different verities of tea, he is struggling to find a buyer who could provide good prices for his tea. Since his production capacity is limited, he is not able to attract big buyers and invest a lot in branding and promotion. He has very good skill in making some of the finest quality tea, but his product is not able to find a good international market other than India. Although his life has transformed from being a farmer to an entrepreneur, this hasn't provided him with better opportunities but rather added more responsibilities and made him more dependent on buyers to buy his products.

Discussion:

Reviewing all three version of NTIS, we developed an understanding that tea is considered as one of the most important export potential products of Nepal since 2010. Nepali CTC tea has a good domestic market presence and has been exported to Indian market as well. Whereas most of the orthodox and specialty Nepali teas exported to European and American markets. NTIS 2010 explains in detail about the market conditions of Nepali tea which has almost remained the same until now. NTIS 2016 has presented the action matrix to implement various activities as per the set goals and targets to be achieved in 5 years' time (2016-2021) but lack of proper allocation of budget in the given heading and the proper execution plan to meet the target and various systematic risk related to COVID 19 and natural calamities related to earthquake of 2015 has made more complexity for its implementation. NTIS 2023 has again identified tea as a priority sector and has estimated a certain budget for its execution, but it does not provide the detail breakdown of how those budget needs to be spent and what are the expected outcomes. During the informal discussion with the representatives of government agencies it was stated that NTIS although is a prepared by government with proper discussion and dialogue with private sectors, there were issues in its implementation because the private sector did not take the serious ownership of the implementation plan. Whereas when asked with the private sector, they always point the finger on the government organization for not supporting the private sector. The consequence of all this is the fact that there hasn't been any significant growth in gaining the competitive advantage of Nepali tea sector despite its inclusion in NTIS 2010, 2016 and 2023.

Discission with both big factory owners and small-scale producers have pointed out that there hasn't been any significant contribution to the tea industry in past 15 years. Rather the sector has been more fragmented because of shortage of tea leaves and increasing number of tea processing factories. Although Nepali tea in recent time has won various international awards because of its quality, this has not been reflected in the increase in sales volume of the tea. NTIS 2016 recognizes the importance of opening tea auctions, and it has been indicated in one of the action plans to be implemented. Still, this hasn't been implemented yet. Recently, achievement for Nepali tea industry is the collective trademark "Nepal tea, Quality from the Himalayas" that was provided to the tea manufacturing companies. This was also envisioned in NTIS 2016 and was implemented with the help of two different projects supported by international agencies. However, the utilization of the given trademark for promoting our tea in the international market and using it to boost our sales hasn't materialized. As per the stakeholders of the tea industry, the tea sector that includes both CTC and orthodox tea, requires proper short term and long-term planning to increase its competitiveness in the international market. As per the tea factor owner, at present our tea industry is mainly dependent on Indian market. Indian buyers have a lot of bargaining power so Nepali producers must depend on them for market. This reality hasn't been addressed by NTIS. There is no strategy mentioned on how best to work in close collaboration with Indian government to ensure the win-win situation in any of the NTIS.

Conclusion:

This research work was carried based on intensive literature review of existing literature on tea, in-depth review of NTIS 2010, 2016 and 2023, formal interviews with tea entrepreneurs and informal discussion with government representatives, sector organizations representatives and other relevant stakeholders to search for the answers raised in the research question stated above. Following conclusion can be drawn based on its findings:

1) NTIS 2010,2016 and 2023 has prioritized tea as an export potential sector and recognize it to key agricultural product for Nepal to ensure job opportunity to thousands of people engaged in it. However, these documents lack proper strategic plan that can ensure long term competitive advantage of Nepali tea in international market.
2) All the NTIS only mention tea as a product with high export potential, there is no mention of how this export potential can be converted into comparative advantage relative to other tea producing nations such as India, Sri Lanka or Bangladesh in South-Asian region. Nor does it mention strategies planned to increase the export volume in the existing and potential new market.
3) Majority of our tea are exported to India, both through formal and informal channel. All the NTIS lacks to define the strategies on how best to strengthen the relationship with India to ensure long term sustainable tea trade with India. At present, because of lack of formal business channels, clear business terms and conditions of trade and informal trade happening at the boarder cities, both Indian business and Nepali producers are being victimized by middle-mans in both the countries. A government to government polices to define clear trade terms and maximize tea trade through formal channels could be the best way forward as a short-term or mid-term strategy.
4) Interaction with tea stakeholders that includes all the actors of tea value chain provided us with the valuable insights on why Nepali tea sector is not able to significantly able to strengthen its export bases in international market.
5) Access to the international market, access to finance, lack of support from government agencies are some of the important concerns raised by the tea producers. Similarly, rapid expansion of tea processing factors but no significant increase in tea gardens has created unhealthy competition to increase the price of tea leaves in recent time. To address these issues there has not been any strategic plan in any of the NTIS.

References

Awasom, I. (2011). Commodity of the Quarter Tea. *Journal of Agriculture and Food Information. 12*(1). 12-22. https://doi.org/10.1080/10496505.2011.540552

BK Joshi and R Shrestha, eds). Proc. National Workshop, 21-22 June 2018, *Horticultural Crop Species in Nepal: History, Investment, Achievement, and Working Groups*

Dufresne, C.J., & Farnworth, E.R. (2001). A review of the latest research findings on the health promotion properties of tea. *The Journal of Nutritional Biochemistry, 12*(7), 404–421.

Falkowitz, M. (2019). Don't Call it Darjeeling. It's Nepali Tea. *The New York Times.* https://www.nytimes.com/2019/05/28/dining/drinks/nepal-darjeeling-tea.html.

Food and Agriculture Organization of the United Nation, *International Tea Market: its situation, prospects, and issues 2020*

Ghosh, S. et. al. (2023). Investigating the Key Performance Parameters of Green Supply Chain Management for Sustainability in Tea Processing Firms using Pareto Analysis. *Journal of Institution of Engineers (India). Series C* (104). 113-122. https://doi.org/10.1007/s40032-022-00888-8

ITC Trade Map, 2023

Macrotrends, 2023

Mishra, N. R., Jang, W. W., Ultra, V. U., & Lee, S. C. (2014). Status of tea industry in south Asia and the potential and challenges of Nepal's tea production and trade. *Journal of the Korean Society of International Agriculture*, *26*(1), 11-19.

Mohapatra, P.K.J., Bora, M.C., & Sahu, K.C. (1984). Incorporating Delphi results in system dynamics models: A case of Indian tea industry. *Technological Forecasting and Social Change, 25*(2), 159–177.

Nepal Rastra Bank

National Tea and Coffee Development Board

S. Ghosh, M.C. Mandal, A. Ray, A PDCA based approach to evaluate green supply chain management performance under fuzzy environment. Int. J. Manag. Sci. Eng. Manag. (2022).

Sharangi, A.B. (2009). Medicinal and therapeutic potentialities of tea (Camellia sinensis L.) – a review. *Food Research International, 42*(5–6), 529–335.