

NEPAL

NATIONAL SECTOR EXPORT STRATEGY

TEA

2017-2021



Government of Nepal



International
Trade
Centre

This national sector export strategy was developed on the basis of the process, methodology and technical assistance of the International Trade Centre (ITC) within the framework of its Trade Development Strategy programme.

ITC is the joint agency of the World Trade Organization and the United Nations. As part of its mandate of fostering sustainable development through increased trade opportunities, the ITC offers a suite of trade-related strategy solutions to maximize the development payoffs from trade. ITC-facilitated trade development strategies and roadmaps are oriented to the trade objectives of a country or region and can be tailored to high-level economic goals, specific development targets or particular sectors, allowing policymakers to choose the solution that meets their needs.

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Photo: ITC, Tea plantation, Fikkal, Ilam Nepal

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The document benefited particularly from the inputs and guidance provided by the members of the tea product core team that steered the formulation of the sector Strategy, namely:

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ACRONYMS

ADS	Agriculture Development Strategy	ITC	International Trade Centre
AEC	Agro Enterprise Centre	MoAD	Ministry of Agricultural Development
AVE	Ad valorem equivalent	MoC	Ministry of Commerce
CAGR	Compound Annual Growth Rate	MRL	Maximum Residue Level
CFL	Central Food Laboratory (India)	NARC	Nepal Agricultural Research Council
CTC	Crush, tear and curl	NBSM	Nepal Bureau of Standards and Metrology
CTCF	Central Tea Cooperative Federation Ltd	NCARP	National Commercial Agriculture Research Programme
DADO	District Agriculture Development Office	NECTRADE	Nepal Enhanced Capacities for Trade and Development
DFTQC	Department of Food Technology and Quality Control	NGO	Non-governmental organization
DoA	Department of Agriculture	NOC	No Objection Certificate
EIF	Enhanced Integrated Framework	NTCDB	National Tea and Coffee Development Board
ETP	Ethical Tea Partnership	NTDC	Nepal Tea Development Corporation Ltd
EU	European Union	NTIS	Nepal Trade Integration Strategy
FAO	Food and Agriculture Organization of the United Nations	NTM	Non-tariff measure
FDA	Food and Drug Administration (United States)	NTPA	Nepal Tea Planters Association
FNCCI	Federation of Nepali Chambers of Commerce and Industry	PoA	Plan of Action
HACCP	Hazard Analysis and Critical Control Points	PPD	Plant Protection Directorate
HIMCOOP	Himalayan Tea Producers Cooperative Ltd	QM	Quality Management
HOTPA	Himalayan Orthodox Tea Producers' Association	R&D	Research and development
HS	Harmonized System	RA	Rainforest Alliance
IPM	Integrated Pest Management	SAOS	Soil Association Organic Standard
ISO	International Organization for Standardization	SPS	Sanitary and phytosanitary
		STAN	Specialty Tea Association of Nepal
		TEPC	Trade and Export Promotion Centre

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Photo: ITC, Tea withering

FOREWORD BY
MR. MEEN BAHADUR
BISHWAKARMA,
HON. COMMERCE MINISTER



The Constitution of Nepal 2015 has a provision of Trade and export promotion. Development of export sector has been the priority agenda of the Government of Nepal to spur economic growth, employment generation and social inclusion. Nepal has competitive and comparative advantage in natural resource based goods and services. Nepal Trade Integration Strategy (NTIS) 2016 has identified a range of goods and services – tea is one of the high priorities. Tea has been an emerging sector in the economy of Nepal over the past two decades and has achieved recommendable results on several socio-economic fronts. It contributes to employment and income generating opportunities to a significant number, a majority of whom are women. Tea also provides benefits to multiple actors in our society including farmers, processors, exporters, supporting institutions and business associations.

I am delighted to launch the Sector Export Strategy (SES) which is an outcome of the hard work of public and private stakeholders, and developed with support of the International Trade Centre. The SES is being launched at the right time when the implementation of the NTIS 2016 Action Matrix has been accelerated – the SES would definitely complement NTIS 2016. The SES is expected to be instrumental in improving the quality of Himalayan tea, add value to increase market diversification and enhance coordination to manage quality of Nepali tea among concerned institutions. The SES will provide a blueprint to boost quality tea exports from Nepal and diversify its market by improving quality and compliance to meet market demand in global market.

I look forward to the continued support of the related ministries and concerned agencies to play t instrumental role as expected from them in the plan of action. At the same time, I would like to urge international partners, bilateral donors and multilateral institutions to ensure the cohesion and alignment of their interventions with national needs and priorities, while supporting the sector to implement its strategic plan of actions. The tea sector can make real contributions to alleviate poverty and help raise living standard of ordinary people, in particular, rural communities through export-led development.

I would like to express my thanks and appreciation to the ITC for supporting us to develop this Sector Export Strategy. I would also like to appreciate the stakeholders from the public and private sectors, as well as the Core Team members for their relentless effort in bringing out this document. The Government of Nepal is fully committed to play constructive and facilitative role for the implementation of this strategy with a view to realizing the vision and strategic objectives as set out in the SES.

FOREWORD BY
MR. NAR BAHADUR CHAND,
HON. STATE MINISTER
FOR COMMERCE



The aim of a sustained socio-economic growth has been highlighted as a priority development agenda for Nepal. Over the past two decades tea has emerged as an important sector in this regards ranking high on several socio-economic goals including employment in both remote mountain areas and urban centers, ranging from low-skilled –majority of whom are women– to highly skilled human resources. The increasing demand of tea in the world market as well as promising export potentials bodes well for the sector in Nepal. The tea sector is also a priority product identified in the NTIS 2016.

I am pleased that the National Sector Export Strategy (NSES) – Tea 2017-2021 has been developed. The NSES provides a road map for the development of the tea sector in Nepal. The objective of the NSES is to bring the tea sector to a new level to diversify its export destinations and have a positive impact on the income of the communities engaged in the sector. ¹

The NSES identifies the challenges faced by the sector in terms of market diversification, market access regulations and compliance and areas for further strengthening. The strategy paper provides an actionable plan to strengthen the institutional mechanisms for ensuring quality production, diversifying export destinations and leveraging opportunities for Himalayan Nepali tea in the international market.

I appreciate the International Trade Center for its support in successfully designing this important strategic document. Similarly, I would like to thank all concerned Ministries, agencies, developmental partners and private sector stakeholders for their contribution in strategy development. I look forward to having continued collaboration and support in the relevant areas indicated in the action plan and contribution to achieving the objectives of the NSES.

The Ministry of Commerce (MoC) is committed to working alongside with the relevant stakeholders to realize the vision and objectives set forth. The vision of a inclusive and prosperous Nepal lies on our ability to work hand in hand and we hope that with these initiatives we are able to jointly achieve this vision.

FOREWORD BY MR. CHANDRA KUMAR GHIMIRE, COMMERCE SECRETARY



The Trade Policy 2015 and Nepal Trade Integration Strategy (NTIS) 2016 have identified domestic supply capacity constraints, value chain and product development and quality assurance of exportable items, among others as the major bottlenecks of Nepal's trade sector. The NTIS 2016 has identified 12 priority export potential sectors with due consideration in having a manageable set of priority value chains to ensure that sufficient capacity and resources are available for the complex tasks of realizing the desired outcome of sustainable export growth, benefitting poor and marginalized groups.

Tea sector is one of the priority export potential sectors identified by the NTIS 2016. In the spirit of the recommendations of NTIS 2016, a sector-specific export plan of tea sector was a felt need by all the concerned stakeholders so as to address challenges and opportunities created due to changing environment in International market. On this account, Ministry of Commerce has prepared National Sector Export Strategy (NSES) of tea sector with technical support from the International Trade Centre (ITC). The NSES is an outcome of the series of consultations and stakeholder interactions at the local as well as the central level. Through this consultative process, a road map of tea sector has been outlined with a detailed 5-year plan of action for implementation.

The Strategy targets to developing Himalayan Nepali tea and diversify trade to help become more sustainable, eco-friendly and inclusive. Furthermore, the NSES emphasizes on improving Nepali tea quality with a view to increasing export revenues, diversifying export destinations and leveraging opportunities in the world market.

During the formulation period, I have been very encouraged by the active collaboration amongst policymakers, tea businessperson, support institutions, enterprises and civil society organizations in preparing this Strategy. Continuation of such collaborative efforts will be needed during the implementation phase of the Strategy. I would like to extend sincere words of appreciation to the ITC for its technical assistance. My thanks go to all public and private sector organizations for the invaluable supports. I look forward to having support from all stakeholders including government agencies, private sector, civil society, academia, and donor community, among others, for the successful implementation of this Strategy.



Photo: ITC

FOREWORD BY
MS. ARANCHA GONZÁLEZ,
EXECUTIVE DIRECTOR,
INTERNATIONAL TRADE CENTRE



The Nepal Trade Integration Strategy (NTIS 2016) has identified tea as a priority sector with high potential for increased exports and for inclusive, sustainable, eco-friendly economic growth within the country. The five-year National Sector Export Strategy for tea will serve as a compass as Nepal pursues this path. The goal is to provide businesses with greater access to the regional and international value chains that dominate most international trade in tea. Rigorous implementation of the plan of action contained in the Strategy should result in improved Himalayan Nepali tea quality and in profitable participation in a wider range of foreign markets.

Capitalizing on that potential, however, requires overcoming multiple problems. The sector is fragmented, and its multiple actors – from experienced tea exporters to new farmer-processors – are having difficulty developing a common approach that reflects their respective interests. Over-dependence on traders in neighbouring countries and on foreign technical expertise also hinders efforts to establish effective teamwork within Nepal's tea sector. An additional challenge is that cumbersome market access regulations create barriers to expanding sales overseas. Finally, technical agencies within the country lack the financial resources needed to improve production quality and to enhance the national branding and reputation of Nepali tea. Some 70,000 people in rural and urban areas – a majority of whom are women – depend on the tea sector. It is vital to improve the competitiveness of this product and to make the most of its trade potential.

It is from this perspective that the International Trade Centre (ITC) has been of assistance to Nepal's export development plan. The National Sector Export Strategy for tea has been jointly developed with associations in the tea industry and with the coordinated efforts of the Ministry of Commerce and the Ministry of Agricultural Development.

The Strategy highlights effective options and sets a path for the expansion of exports. The options align with the country's needs, priorities, and ambitions for sustainable development through trade. The result is a comprehensive five-year roadmap focused on improving the quality and diversity of the country's tea.

There is an emphasis on increasing institutional coordination and on strengthening public-private partnerships so that a national tea research centre and a quality management programme can be established. Steps are outlined to enable producers and exporters to improve their technical knowledge and cooperation so that the rigorous standards for entry into various profitable foreign markets can be met. Packaging and export promotion also should be improved. The result should be enhancement of the Nepali tea brand and a heightened international reputation that attracts new buyers.

It should be noted that the Strategy is not the undertaking of a specific institution. It is a national undertaking. Improving the quality and marketing of the country's tea will require structured and coordinated efforts by policymakers, institutions, businesses, and development agencies. Extensive consultations among them during the design of the Strategy sparked momentum for concerted action. This momentum needs to be upheld. The success of the Strategy will depend on how thoroughly it is put into effect.

The ITC is committed to its collaboration with Nepal as the country journeys towards further economic development. It stands ready to accompany those involved in the tea sector on this new road towards enhanced trade and towards the improved national living conditions that should result.

कार्यकारी सारांश : चिया

चियाको विश्व बजार, परिमाण र गुणस्तर दुवै दृष्टिले, निरन्तर वृद्धि हुँदै गइरहेको छ र यसले साना उत्पादक राष्ट्रहरूका निम्ति नयाँ अवसरहरू उपलब्ध गराएको छ। यो आशालाग्दो क्षेत्रको विकासका लागि नयाँ अग्रगामी बाटो तय गर्न सरकार तथा निजी क्षेत्र दुवैले संयुक्त दृष्टिकोण अपनाएका छन्। चियाको राष्ट्रिय रणनीतिले निर्यात राजस्वमा वृद्धि गर्ने, निर्यात गन्तव्य बजारहरूको विविधीकरण गर्ने र प्रत्येक किसिमको चियालाई अन्तर्राष्ट्रिय बजारमा अवसरहरू विस्तार गर्ने उद्देश्यले नेपाली चियाको गुणस्तरमा सुधार गर्ने कुरालाई जोड दिएको छ। केही थोरै संख्याका कम्पनीहरूले आफ्नो अर्थाडक्स चियाको गुणस्तरमा वृद्धि गरी तथा प्राङ्गारिक रूपमा प्रमाणीकृत भई चियाको क्षेत्रमा सफल साहसी निर्यातकर्ता हुनसकिने बाटो पहिले नै देखाइसकेका छन्।

विगत दुई दशकमा चिया नेपालको अर्थतन्त्रको यौटा उदीयमान उपक्षेत्रको रूपमा रहेको छ र यसले थुप्रै सामाजिक आर्थिक लक्ष्यहरूमा योगदान गरेको छ। यो क्षेत्रले भण्डै सत्तरी हजार मानिसलाई प्रत्यक्ष रूपमा रोजगारी प्रदान गरेको छ र अप्रत्यक्ष रूपमा दुर्गम पहाडी क्षेत्र तथा शहरी केन्द्रका न्यून सीप भएका मानिसहरू - जसमा बहुसंख्यक हिस्सा महिलाको छ, देखि प्राविधिक कामदारहरू र इन्जिनियरसम्म गरी औसतमा तीस हजार जतिलाई पूर्णकालीन काम समानको रोजगारी उपलब्ध गराएको छ।

निर्यातको आशालाग्दो सम्भाव्यताका बावजूद, चिया क्षेत्रको विकास विभिन्न समस्याहरूबाट अवरुद्ध छ। पहिलो, चियाको निर्यात भारतीय व्यापारीहरूमाथि अत्यधिक मात्रामा निर्भर छ, जसले यस क्षेत्रका

सरोकारवालाहरूमा सहकार्य गर्ने तत्परतालाई सीमित तुल्याएको छ। दोस्रो, पूर्वाधारका विषयहरू र भन्कटिलो बजार पहुँच नियमनहरू हुन् जसले नेपाली चियाको अन्तर्राष्ट्रिय बजारमा सहज पहुँचलाई घटाइरहेका छन्। चियाको गुणस्तरको नियमितता कायम राख्न र कृषि-रसायन पदार्थहरूको अत्यधिक अवशेषका कारण चियाको निश्चित मापदण्ड परिपालनामा भोगपुरेका कठिनाइहरूका कारण यो क्षेत्रले समुद्रपार निकासीका लागि गम्भीर व्यवधानहरू भर्नुपरिरहेको छ। तेस्रो, यो क्षेत्रको पछाडि बलियो राजनीतिक सहयोग छ, तर प्राविधिक सहायताको लागि वित्तीय स्रोतहरू उपलब्ध नहुँदा निजी क्षेत्र उत्पादन र गुणस्तर सुधार तथा ब्रान्डिङका लागि अत्यधिक मात्रामा विदेशी प्राविधिक विशेषज्ञमाथि निर्भर छन्। अन्त्यमा यो क्षेत्र विखण्डित छ, जसमा विभिन्न अनुभवी निर्यातकर्ताहरूदेखि नयाँ कृषक-प्रशोधनकर्ताहरूसम्म संलग्न छन्। यसले गर्दा उनीहरूको सम्बन्धित चासोलाई सम्बोधन गर्न समान दृष्टिकोणको विकास र अवलम्बन गर्न कठिन छ।

चियाको यो राष्ट्रिय रणनीति तर्जुमा गर्ने अभियानले चिया क्षेत्रमा संलग्न सबैलाई एउटै टेबलमा ल्याउन, उनीहरूको साभ्वा सवालहरूलाई पहिल्याउन र सम्बन्धित क्षेत्रको विकासको लागि विस्तृत मार्गचित्र विकास गर्न सहयोग गरेको छ। यसको उद्देश्य चिया क्षेत्रको विकासलाई नयाँ उचाइमा पुऱ्याउनु, यसको गन्तव्य बजारहरूलाई विविधीकरण गर्नु र यस क्षेत्रको मूल्य शृंखलामा संलग्न समुदायहरूको आम्दानीमा सकारात्मक प्रभाव सिर्जना गर्नु हो। यो रणनीति देहायको दीर्घकालीन सोचबाट निर्देशित छ :

दिगो, वातावरण-मैत्री, समावेशी सामाजिक आर्थिक विकासलाई सहयोग पुऱ्याउन हिमाली नेपाली चियाको गुणस्तरमा वृद्धि तथा व्यापार विविधीकरण गर्ने।

उक्त दीर्घकालीन सोचलाई साकार बनाउन यो रणनीतिले देहायबमोजिमका चारवटा रणनीतिक उद्देश्यहरूमा जोड दिएको छ :

१. हरियो पत्तीको गुणस्तर अभिवृद्धि गर्ने :

चिया क्षेत्रको भविष्यको निर्यात विकास यसका सरोकारवालाहरूबीच सुरक्षित, सफा र वातावरणमैत्री गुणस्तरीय चियापत्ती उत्पादन गर्ने कार्यमा सहकार्य गर्ने तत्परतामा निर्भर छ। यसको पहिलो खटकिलाको रूपमा यो रणनीतिले राष्ट्रिय हरियो पत्ती गुणस्तर सुधार कार्यक्रम लागू गर्ने कुराको सिफारिश गरेको छ। यसले असल कृषि अभ्यासहरूलाई प्रवर्द्धन गर्दछ। साथै, चियाको बोट लगाउने बेलामा विषादीको उच्चतम अवशेषको मात्राको आवश्यकतालाई सम्बोधन गर्न विषादीको व्यवस्थापन गर्न सघाउ पुऱ्याउँदछ। साथसाथै, सङ्कलन केन्द्रको सुदृढीकरण गर्ने, गुणस्तर सुनिश्चितताको कार्यक्रम र अनुगमन प्रणाली स्थापना गर्न थोक खरिद गर्ने प्रक्रियालाई प्रवर्द्धन गर्ने क्रियाकलापहरू पनि यसमा समेटिएका छन्।

२. बजारको माग पूर्ति गर्न गुणस्तर र आवश्यक परिपालना बढाउने

अन्तर्राष्ट्रिय बजारमा नेपाली चिया गुणस्तरीय छ भन्ने प्रतिष्ठाको अभाव छ, किनकि यस क्षेत्रमा विषादी प्रयोगको उच्चतम अवशेषको मापदण्ड पूरा गर्न कठिन छ। त्यसैले प्रस्तावित रणनीतिले उच्च गुणस्तरको चिया उत्पादन गर्न र चियाको प्रतिस्पर्धी क्षमता बढाउन चियाको प्रशोधन र संवेष्टन प्रक्रियाहरूमा सुधार गर्न जोड दिएको छ। यसले चिया उद्यमहरूलाई चिया प्रशोधन र उत्पादनका असल अभ्यासहरू (Good Manufacturing Practices) सिकाउने तथा त्यसपछि खतरा विश्लेषण एवं महत्त्वपूर्ण नियन्त्रण बिन्दुहरू (HACCP) को प्रमाणीकरण कार्यक्रमलाई समेटेको छ। साथसाथै, बजारको माग पूर्ति गर्न यौटा नमूना दिगोपना र प्राङ्गारिक प्रमाणीकरण कार्यक्रम कार्यान्वयन गर्ने कुरालाई पनि यसले समेटेको छ।

३. गुणस्तर व्यवस्थापन, बजार पहुँच वृद्धि तथा नेपाली चियाका विभिन्न प्रजातिहरू विकास गर्न संस्थागत समन्वयलाई सुदृढ गर्ने

चिया क्षेत्रका मूल्य शृंखलामा आवद्ध पात्रहरूबीच सहयोगको अभावका कारण चिया क्षेत्रको भविष्यलाई अवरुद्ध पार्ने जोखिम छ। यो रणनीतिले सार्वजनिक र निजी क्षेत्रका सरोकारवालाहरूलाई एकै ठाउँमा ल्याएर नयाँ चिया विकास नीतिको आधारशिला खडा गर्ने काम गरेको छ। निजी क्षेत्रलाई यसको निर्यात बजार विविधीकरण गर्न र यौटा नमूना चिया प्रदर्शनी गृह स्थापना गर्न सहयोग पुऱ्याउन यो रणनीतिले यौटा स्पष्ट कार्ययोजना समेटेको छ। यस अतिरिक्त, सार्वजनिक-निजी साझेदारीलाई लामो समयदेखि आवश्यक महसुस गरिएको राष्ट्रिय चिया अनुसन्धान केन्द्र स्थापनाका लागि उपयोगी माध्यमका रूपमा पहिचान गरिएको छ, जसको उद्देश्य चियाका नयाँ प्रजातिहरू विकास गर्नु र गुणस्तर परीक्षणको कार्य सम्पादन गर्नु रहेको छ। संगसंगै, राष्ट्रिय चिया तथा कफी विकास बोर्डलाई काट्ने, च्याल्ने र घुमुको पार्ने (सिटीसी) चिया र अर्थोडक्स चिया उत्पादनसँग सम्बद्ध निजी क्षेत्रका विभिन्न संघसंस्थाहरू बीचको संवादलाई सहजीकरण गर्ने र राष्ट्रिय चिया निर्यात रणनीतिको कार्यान्वयनमा अग्रणी भूमिका निर्वाह गर्ने ऊर्जाशील संस्थाको रूपमा अधि बढाइनेछ।

४. बजार विविधीकरण गर्न राष्ट्रिय ब्राण्ड र मूल्य अभिवृद्धिलाई सुदृढ तुल्याउने

यो रणनीतिले नेपाली चियाको समुद्रपार बजारमा बढ्दो प्रविष्टिलाई परिकल्पना गरेको छ। यसको लागि नेपाली चियाको ब्राण्डलाई सुदृढ बनाएर तथा अन्तर्राष्ट्रिय स्तरमा नेपाली चियाको प्रतिष्ठालाई प्रवर्द्धन गरेर नयाँ क्रेताहरूलाई आकर्षित गर्ने नीतिलाई यसले समेटेको छ। यसले पारदर्शी प्रमाणीकरण प्रक्रिया र नवप्रवर्तनशील क्षेत्रगत निर्यात प्रवर्द्धन कार्यक्रमलाई जोड दिएको छ। यस अतिरिक्त, मौजुदा नेपाली चियाको चिह्न (लोगो) लाई गुणस्तर व्यवस्थापन कार्यक्रमको यौटा पक्षका रूपमा लिई यो चिह्न उपयोग गर्नका लागि परिपालना गर्नुपर्ने शर्तहरू विकास गरी सो पालना भए नभएको निजी क्षेत्रका सरोकारवालाहरूबाट अनुगमन गरिनेछ। उच्च मूल्य प्राप्त हुने बजारमा उच्च गुणस्तरको चिया निर्यातका लागि उन्नत सवेष्टन संयन्त्रको स्थापना गर्न अनुसन्धान कार्य सञ्चालन गरिनेछ। यो संगसंगै, विक्रेता-क्रेता भेटघाट कार्यक्रम, र छानिएका केही कम्पनीहरूलाई चियाको वार्षिक व्यापार मेलामा सहभागी गराइने क्रियाकलापहरूलाई प्रवर्द्धनात्मक कार्यक्रमअन्तर्गत समेटिएको छ।

निर्यात विविधीकरण अगाडिको बाटो

रणनीतिले केही चिया प्रशोधनकर्ताहरू जसले युरोपेली बजारमा गुणस्तरीय चियाको निर्यात गरिरहेका छन् तथा अन्तर्राष्ट्रिय रूपमै प्रतिष्ठा बनाई सकेका छन् तिनको निर्यात सफलतालाई चियाको समग्र क्षेत्रमा जोड्ने (मूलप्रवाहीकरण गर्ने) प्रयास गरेको छ। वास्तवमै खास केही प्रकारका नेपाली चिया छिमेकी दार्जिलिङको चियाभन्दा उत्कृष्ट छन्। यसो भए तापनि, अल्पकालमा स्थानीय तथा भारतीय बजार नै नेपाली चियाको प्रमुख गन्तव्यका रूपमा रहनेछन्। गुणस्तर र आवश्यक परिपालनालाई सुधार गर्दै, रणनीतिले प्रत्येक खण्डका खास बजारहरूलाई लक्षित गरी तथा प्राङ्गारिक चिया,

व्यापार मेलाहरूमा राखिने चिया र युरोपेली तथा अमेरिकी बजारहरूमा निर्यात हुने अति उच्च गुणस्तरको चियाको लागि समेत ध्यानमा राखी, निर्यात विविधीकरणमा जोड दिएको छ। यस क्रममा भारत एवं चीनमा विशेष खालका चिया, र कम गुणस्तरका चियालाई क्षेत्रीय बजारहरू, मध्यपूर्व तथा रसियाको बजारलाई लक्षित गरी ठूलो परिमाणमा एउटै स्थलबाट विक्री वितरण गरी पछि साना प्याकेटमा भरेर खुद्रा तहमा विक्री गर्ने विक्रेताहरूलाई आपूर्ति गर्न जोड दिइनेछ। अन्त्यमा, यो रणनीतिले भारतीय व्यापारीहरू र विदेशी अवलोकनकर्ताहरूलाई सहजीकरण गर्न चिया प्रदर्शनी गृह स्थापना गर्ने कार्यमा पनि सहयोग गर्नेछ।

यो रणनीतिको उद्देश्यहरू हासिल गर्न पाँच वर्षको अवधिमा कार्यान्वयन गरिनुपर्ने शृंखलाबद्ध कार्यक्रमहरूलाई विस्तृत कार्ययोजनाले निर्देश गरेको छ, र त्यसको वरपर निर्दिष्ट र समन्वित प्रयासहरूको खाँचो पर्दछ। यी प्राथमिकताका कार्यहरू पहिचान गर्न सार्वजनिक तथा निजी क्षेत्रका सरोकारवालाहरूसँग व्यापक परामर्श गरिएको छ र यो कार्य संवाद-मञ्च र यस क्षेत्रका अन्तरङ्ग व्यक्तिहरू सम्मिलित टिमको स्थापनाबाट सम्भव भएको छ। नीति-निर्माताहरू,

सहयोगी संस्थाहरू, उद्यमी-व्यवसायीहरू, नागरिक समाजका संस्थाहरू र विकास साझेदारहरूबीचको यो सहकार्य प्रस्तुत नीतिको प्रभावकारिता र उच्च प्रभावहरूको सुनिश्चितताको लागि कार्यान्वयन चरणमा पनि निरन्तर रहिरहनुपर्दछ। कार्यान्वयन संरचना खाकाले व्यवस्थित व्यवस्थापन, अनुगमन तथा मापन संयन्त्रहरूलाई परिभाषित गर्छन् जसले नेपाल व्यापार एकीकृत रणनीति (२०१६) मा पहिचान गरिएका विषयहरूको कार्यान्वयनमा समेत सहयोगी भूमिका खेल्छन्। यो संरचना खाकाको कार्यान्वयनले प्रस्तुत रणनीतिको कार्यान्वयनको सफलताको मापनलाई निर्धारण गर्छन्।

यो रणनीतिको कार्यान्वयनले मूल्य शृंखलामा आवद्ध व्यक्तिहरूलाई नेपाली चियाको उत्पादन र गुणस्तरमा वृद्धि गर्न सहयोग पुऱ्याउन एकैठाउँमा ल्याउनुका अतिरिक्त यसले मुलुकको वैदेशिक मुद्रा आर्जनलाई बढाउन र यो क्षेत्रको वातावरणीय र सामाजिक दिगोपना कायम गर्न समेत मद्दत पुऱ्याउँछ। यसबाट चिया व्यवसायमा संलग्न समग्र समुदायहरूलाई अन्तर्राष्ट्रिय मूल्य शृंखलामा एकीकृत गर्न, ग्रामीण क्षेत्रका हजारौँ परिवारको आर्थिक कल्याणलाई क्रमशः अभिवृद्धि गर्न र यस क्षेत्रमा छिमेकी व्यापारीहरूको वर्चस्व घटाउन पनि मद्दत पुग्नेछ।



Photo: ITC, Tea bag machine in Kathmandu

EXECUTIVE SUMMARY

World tea market demand is growing in volume and quality and provides new opportunities for small producing countries. Both the Government and the private sector of Nepal have taken a concerted approach to set a new way forward for the development of this promising sector. Both the Government and the private sector of Nepal have selected tea as priority sector part of the Nepal Trade Integration Strategy (NTIS 2016) and have taken a concerted approach to set a new way forward for the development of this promising sector. The National Export Strategy focuses on improving Nepali tea quality with a view to increasing export revenues, diversifying export destinations and leveraging opportunities in the international market for each production grade. A small number of companies have already shown the way by becoming successful export ventures through raising the quality of their orthodox teas and becoming certified as organic.

Tea has been an emerging subsector in the economy of Nepal over the past two decades and scores well on several socioeconomic goals: the sector employs approximately 70,000 people directly and indirectly for an average of 30,000 full-time equivalent jobs in both remote mountain areas and urban centres, ranging from low-skilled workers – a majority of whom are women – to technical workers and engineers.

Despite promising export potential, the development of the tea sector is hindered by multiple problems. Firstly, exports are overly dependent on Indian tea traders, limiting the willingness of sector stakeholders to collaborate. Secondly, logistics issues and cumbersome market access regulations reduce access to international markets: the sector faces serious constraints to increasing overseas exports in terms of quality consistency and compliance difficulties with maximum residue levels (MRLs) of agrochemicals. Thirdly, while the sector has strong political backing, technical support lacks financial resources and the private sector relies heavily on foreign technical expertise to improve production quality and branding. Finally, the sector is fragmented, with multiple actors – from experienced tea exporters to new farmer-processors – having difficulty developing a common approach to respond to their respective interests.

This national sector strategy initiative has helped to bring all actors to the same table to identify their common issues and develop a relevant and detailed roadmap. The objective is to bring the tea sector to a new level to diversify its export destinations and have a positive impact on the income of communities engaged in the sector's value chain.

This Strategy is driven by the following overall vision.

“ Develop Himalayan Nepali tea quality and diversify trade to support sustainable, eco-friendly, socioeconomically inclusive development ”

To achieve this vision, the Strategy focuses on four strategic objectives.

1. Improve the quality of green leaves.

The future export development of the tea sector depends on stakeholders' willingness to collaborate to produce safe, hygienic and environmentally friendly quality teas. As a first step, the Strategy recommends kicking off a national green leaf quality improvement programme.

This promotes good agricultural practices and pesticide management at the plantation level to resolve concerns about MRL requirements. Simultaneously, actions are included to strengthen collection centres and bulk purchasing to set up quality assurance programmes and traceability systems.

2. Improve quality and compliance to meet market demand.

Nepali tea lacks a reputation for quality in the international market because it has difficulty complying with MRL requirements. To produce higher quality teas and enhance competitiveness, the Strategy focuses on improving tea processing and packaging procedures. This entails training enterprises in Tea Processing Good Manufacturing Practices and following a Hazard Analysis and Critical Control Points (HACCP) certification programme. The Strategy also allows for an upgrade of machinery in order to reduce production costs and reinforce product differentiation. In parallel, a pilot sustainability and organic certification programme to meet market demand is also incorporated.

3. Reinforce institutional coordination to manage quality, improve market access and develop Nepali tea varieties.

Lack of cooperation among tea sector value chain actors hinders its future. The Strategy has brought public and private stakeholders together to lay the foundations for a new tea policy. A clear action plan is now established to support the private sector in diversifying its export markets and piloting a tea auction house. Additionally, public-private partnerships are identified as a means to establish the long-needed National Tea Research Centre, the objective of which is to introduce new tea varieties and perform quality assessments. In parallel, the National Tea and Coffee Development Board (NTCDB) will become the driving force in facilitating dialogue between the various private sector associations in the crush, tear and curl (CTC) and orthodox segments, and monitoring the implementation of the National Export Strategy.

4. Strengthen the national brand and value addition to increase market diversification.

The Strategy envisions increased overseas market penetration, thereby strengthening the Nepali Tea brand and building Nepal's reputation internationally to attract new buyers. This underpins a transparent certification process and innovative sector-wide export promotion programme. Additionally, the existing Nepal Tea logo will become a quality management programme built around compliance requirements and monitored by private sector stakeholders. Research will be conducted on getting improved packaging machinery for high-quality teas destined for high-end markets. In parallel, promotional activities include the organization of buyer-seller events and participation of selected companies in annual trade fairs.

Export diversification is the way forward

The Strategy seeks to mainstream to the entire sector the export success of the few tea processors who supply quality tea to the European Union (EU) market and have built a solid reputation internationally. Indeed, a few Nepali black teas are today considered superior to the neighbouring Darjeeling tea. Nevertheless, in the short term the local and Indian markets will remain the main destination of Nepali tea. While improving quality and compliance, the Strategy concurrently focuses on export diversification by targeting specific markets for each segment, including organic, fair trade and ultra-premium teas mainly to the EU and United States markets; specialty teas to India and China; and bulk-selling platforms for lower grades to supply tea packers focusing on the regional market, the Middle East and the Russian Federation. Finally, the Strategy supports the auction house initiative to facilitate business relationships with Indian traders and attract foreign auctioneers.

Achieving the objectives of this Strategy requires a focused and coordinated effort around the detailed Plan of Action (PoA) that specifies a series of activities to be implemented during the five-year lifetime of this Strategy. A great deal of consultation with public and private sector stakeholders has taken place to identify these priority actions, and this is visible through the dialogue platform and the sector's Core Team that have been established. This collaboration among policymakers, support institutions, enterprises, civil society organizations and development partners must continue during the implementation phase of the Strategy to ensure effectiveness and maximum impact. The implementation framework defines systematic management, monitoring and measurement mechanisms that are complementary to those identified in the Nepal Trade Integration Strategy (NTIS) 2016. The establishment of this framework will determine the degree of success of this Strategy.

Implementation of this Strategy will not only bring value chain actors together in cooperation to improve Nepali tea quality, it will increasingly contribute to the country's foreign exchange earnings while raising the environmental and social sustainability of the sector. In doing so, entire communities will be integrated into international value chains, raising the well-being of thousands of families while reducing the hegemony of neighbouring traders.

THE PRODUCT MAP

Nepal grows two types of tea: *Camellia assamica* for crush, tear and curl (CTC) tea and *Camellia sinensis* for orthodox tea, at altitudes of 3,000–7,000 feet. After plucking, tea factories process the tea leaf into two types of 'made tea',¹ CTC and orthodox, using separate processing techniques. CTC and orthodox production can result in black, green, white and oolong teas.

CTC tea is cultivated at low altitudes or on the plains of Terai. CTC is a method of processing tea in which the leaves are passed through a series of cylindrical rollers with hundreds of sharp teeth that crush, tear and curl the tea into small, hard pellets.

1. 'Made tea': ready for consumption, in contrast with 'green leaf': plucked at the farm, in order to be processed in a tea factory.

Orthodox tea is grown mainly at high altitudes, mostly in eastern mid-hill regions. Ideally, orthodox tea is produced with only the top two leaves and a bud from each branch. But this 'plucking standard' can be eased if tea quality is less crucial. 'Orthodox' refers to a traditional production process where the plucked tea leaf is partially dried ('withered'), rolled and then fermented to give a light colour, unique aroma and fruity flavour. It usually attracts a higher price than CTC tea in view of its quality, demand in the market and higher cost of production. Orthodox tea can be placed in different categories: that produced by large and medium processing units and specialty teas produced by medium and small units.

Box 1: Comparison of orthodox and CTC teas²

Orthodox tea	CTC tea
Leaf	
Mainly leaf from seedling plants, China Jat (type) is preferred.	Leaf from vegetative propagated plants. Assam Jat is preferred.
Seedling leaf has less moisture, more leathery appearance and has more concentration of flavour compounds (amino acids), which can be enhanced by environmental conditions.	More moisture or more juicy, less leathery; and environment does not assist in enhancing concentrates.
In the withering process, the moisture content of the green leaf is reduced to 40–45% by using hot air for 12–16 hours.	Withering is done to reduce moisture to 65–70% by using normal air for a shorter period of time.
Processing	
Processing is broken up into four main stages of withering, rolling in 4–5 rolls, fermentation and drying (firing). The leaf is rolled to process whole-leaf, semi-leaf size and a lesser percentage of small leaf. There are 10–12 grades based on leaf size.	The process is continuous. The leaf is broken into small particles using a rotovane (similar to a mincing machine), and sent through the CTC machine to make the small leaf pellets. It then goes through the fermenting bed and into the dryer. There are no big leaf grades in this method of processing. Only three grades.
Liquor properties	
Leaf is black in appearance. Has more flavour, aroma and quality, less bright infusion, not very strong and coloured but brisk and bright in the cup.	Leaf brown in appearance. Very strong liquor, with darker colour and bright infusion. Less quality, flavour and aroma.
Suitable for traditional brewing but small leaf grades are used in the quality-conscious and high-end teabag markets.	Suitable for teabags but also used in the traditional manner of brewing in certain countries which prefer very strong liquors.
Marketed as loose tea in packets and tins as well as pyramid bags.	Mainly marketed in the single or double-chambered 2g teabags servicing the middle segment of the global market.
Popular in the Middle East and high-end developed markets.	Quick-brewing convenience item that is very popular in developed markets.

2. International Trade Centre (2007). Nepal: Advisory Services on Export Development of Priority Sectors of Nepal, Sector Study on Tea. p.33.

Grades in orthodox tea and types of specialty teas

Regular orthodox tea is mostly organized following four grades of tea through four growing seasons. The product produced and offered is regular orthodox black and green. The four grades of these teas are leaf grade, broken, fannings and dust. The four growing seasons are spring, summer, monsoon and autumn. There are phases between seasons (called *banjhi*) when tea plants rest,

and the teas produced in this season are of inferior quality (mostly flaky teas). Similarly, there is a season called back end crop which comes after autumn season and remains until the beginning of winter, prior to the period when tea goes dormant and stops production from mid to late November. Teas produced during both of these seasons are inferior in quality and are normally blended and offered with seasonal teas. The various types of teas are produced under the specialty tea categories described in box 2.

Box 2: Specialty teas produced in Nepal³

Himalayan Gold/Golden black tea	Fully oxidized teas popularly known to the market as Himalayan Gold or Golden black teas. Such fully oxidized teas are easier to manufacture and are well accepted by the domestic market, with special regard to the Chinese tourist markets in Kathmandu and Pokhara. For this reason, most black tea small processors produce these teas.
Ruby black tea	Some small producers of upper Ilam region have been producing Ruby teas since 2012. However, the quantity of tea produced is very small and is estimated at around 3 tons per annum. This tea is now finding its way to Russian Federation and European Union (EU) markets.
Black Pearl teas	Some producers are also producing small balled teas named Black Pearl teas, which are being offered in the local market. Some producers export this type of tea to the EU and Chinese markets. However, the quantity produced and offered is tiny.
Oolong tea	Only a handful of small producers and medium segment factories produce semi-oxidized teas, also known as oolong teas. The market for oolong teas is mostly limited to overseas markets. The local and Indian market availability of such tea is negligible. Therefore the production volume of oolong teas is minute.
White teas	Partially oxidized premium teas such as white tea from Nepal are gaining rapid recognition in EU markets. There has been a surge in demand for white tea in Germany and, as a result, most medium segment factories and a few small processors are producing white teas. An estimated 10–12 tons of white teas (including silver tips) are being offered and sold in the international, local and Indian markets.
Green teas	As most machines used by small processors are imported from China, they are designed to manufacture green teas. Therefore, almost all small processors produce green teas of one particular type, known as Maofeng green. An estimated 100 tons of Maofeng green tea is presently being produced by small processors. Besides Maofeng green, some producers also produce balled green tea, categorized as regular green pearls and premium green pearls. These teas have limited local market availability now because of market saturation. However, of late, this tea is finding its way to Indian and overseas markets.
Japanese green tea	At least one small processing factory is producing green teas that are steamed and dried using Japanese technology. This factory is the oldest (in the small segment) in specialty tea production in Nepal. The factory is the Nepal Green and Specialty Tea Factory located in Baudhdhadham, Fikkal and produces both sencha and bancha types of Japanese green tea.
Hand-rolled and handcrafted teas	Some small processors also make handcrafted teas such as blooming teas and pearl teas. However, the production volume is miniscule.

3. UNNATI Field Study.

GLOBAL TRENDS IN TEA

In this section, an overview is given on global production, consumption, exports and trade. Subsequently, we look at the trends in tea consumption in developed and emerging markets.

GLOBAL PRODUCTION

Between 2011 and 2015 World tea production (including black, green and instant teas) increased by a compound annual growth rate (CAGR) of 3.85% to reach 5.3 million tons in 2015. To be more specific, black tea output increased by 2.72% while green tea output increased by 6.33%. The reason for the growth in world output is the considerable increase in production in the major tea-producing countries, China and India, and also in the two largest tea exporting countries, Kenya and Sri Lanka. As can be seen in table 1, China continues to be the largest tea-producing country with an output of around 2.3 million tons, accounting for more than 43% of the world total. On the other hand, production in India increased to 1.2 million tons in that same year. Kenya and Sri Lanka also increased production output, with the former reaching 399,211 tons and the latter 328,964 tons.

GLOBAL TEA TRADE

Tea is a popular beverage and globally traded commodity due to its increasingly recognized benefits for health and wellness. Unlike coffee, however, the majority of tea production is consumed locally in domestic markets.⁴ In 2015, the global tea market stood at approximately US\$6.4 billion, with roughly 1,737,000 tons of tea traded worldwide. As illustrated in figure 1, imports have increased at a CAGR of approximately 6.3% over the past 15 years and the value of traded tea grew from roughly US\$3.54 billion in 2005 to US\$5.32 billion 2008. In 2009, world imports of tea in both volume and value dropped brutally following the financial crisis but recovered to their previous level in 2010. The global tea market then continued to increase until 2012, when the market became stagnant. The market experienced a sharp decline between 2014 and 2015, with a CAGR of -7% between 2013 and 2015.

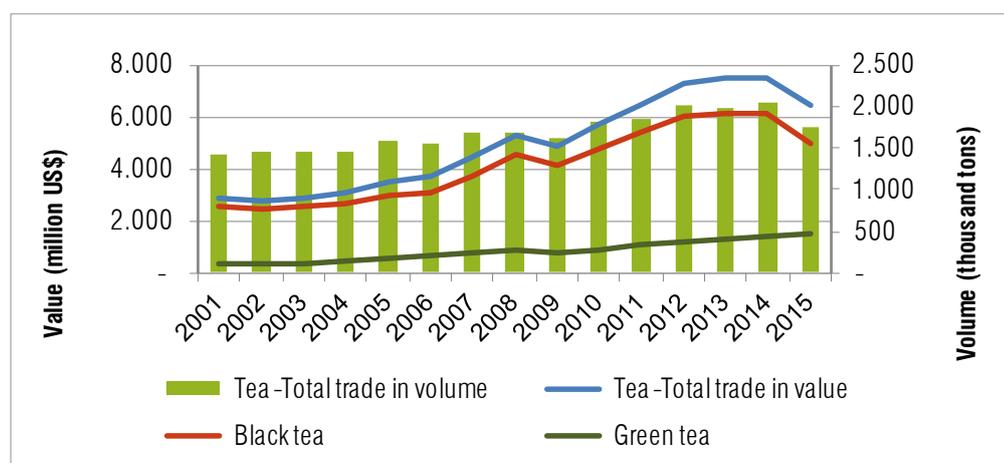
4. Joint Initiative of ENTWINED, IDH, IIED, FAST and IISD (2014). The State of Sustainability Initiatives Review 2014: Standards and the Green Economy. Retrieved from: https://www.iisd.org/pdf/2014/ssi_2014_chapter_14.pdf

Table 1: Top 10 tea-producing countries in 2015

Country	Quantity (tons) 2015	CAGR 2011–2015 (%)
World	5 304 814	3.85
China	2 278 000	8.84
India	1 208 660	2.02
Kenya	399 211	1.38
Sri Lanka	328 964	.03
Viet Nam	170 000	-1.14
Turkey	258 541	1.24
Indonesia	129 293	-2.38
Argentina	83 000	-2.78
Japan	76 400	-1.78
Bangladesh	66 347	0.17

Source: International Tea Committee Annual Bulletin of Statistics 2016.

Figure 1: Global tea imports, 2001–2015



Source: ITC Trade Map database.

Tea can be further broken down into two categories: black tea⁵ and green tea.⁶ In 2015, 77% of global imports were black tea and 23% green tea (see figure 2). The last few years have witnessed a major change in tea consumption patterns: while demand for black tea significantly declined in main importing markets –partially causing the global

tea market to shrink by almost 10% since 2014 – green, fruit, herbal and specialty teas have grown substantially but not enough to make up for the fall in standard black tea.⁷ On the supply side, such trends can be explained by recent production shortages as a result of climate change in some major black tea-producing countries, such as India, Sri Lanka and Kenya.⁸

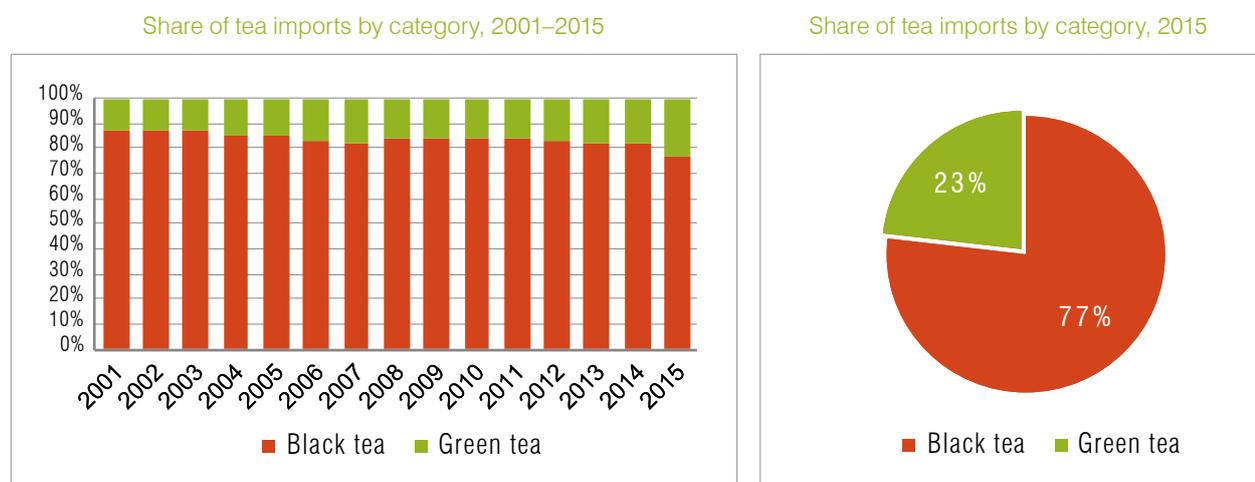
5. This category includes tea products under the Harmonized System (HS) 090230 - Black fermented tea and partly fermented tea, whether or not flavored, in immediate packings of ≤ 3 kg and 090240 - Black fermented tea and partly fermented tea, whether or not flavored, in immediate packings of > 3 kg.

6. This category includes tea products under HS 090210 - Green tea in immediate packings of ≤ 3 kg and 090220 - Green tea in immediate packings of > 3 kg.

7. White, V (2015 August 5). Coffee pods brewing up growth but black tea is on the decline. *New Food*, Retrieved from <http://www.newfoodmagazine.com/18919/news/industry-news/coffee-pods-brewing-up-growth-but-black-tea-is-on-the-decline/>.

8. World Tea News (2014, August 25). Global Black Tea Production Declines. *World Tea News*, Retrieved from <http://worldteanews.com/news/global-black-tea-production-declines>.

Figure 2: Share of tea imports by category



Source: ITC Trade Map database.

Box 3: Black tea loses its charm among young people

According to market research by Mintel in the United Kingdom of Great Britain and Northern Ireland, young people are shunning the traditional cup of tea in favour of more specialist drinks such as fruit tea and green tea. One of their worries is that too much black tea can stain their teeth. The study also found that fewer than one in six people aged 16–34 drink five or more cups of standard black tea a day, contributing to a 5% overall decline in tea sales in the United Kingdom in 2016.

Instead, this group is twice as likely as over-55s to consume specialty drinks such as green and fruit teas. Other developed countries showed a similar trend of growing consumption of specialty teas in the place of standard black tea.

Source: Telegraph. 'Traditional tea sales drop as the young turn to herbal brews'.

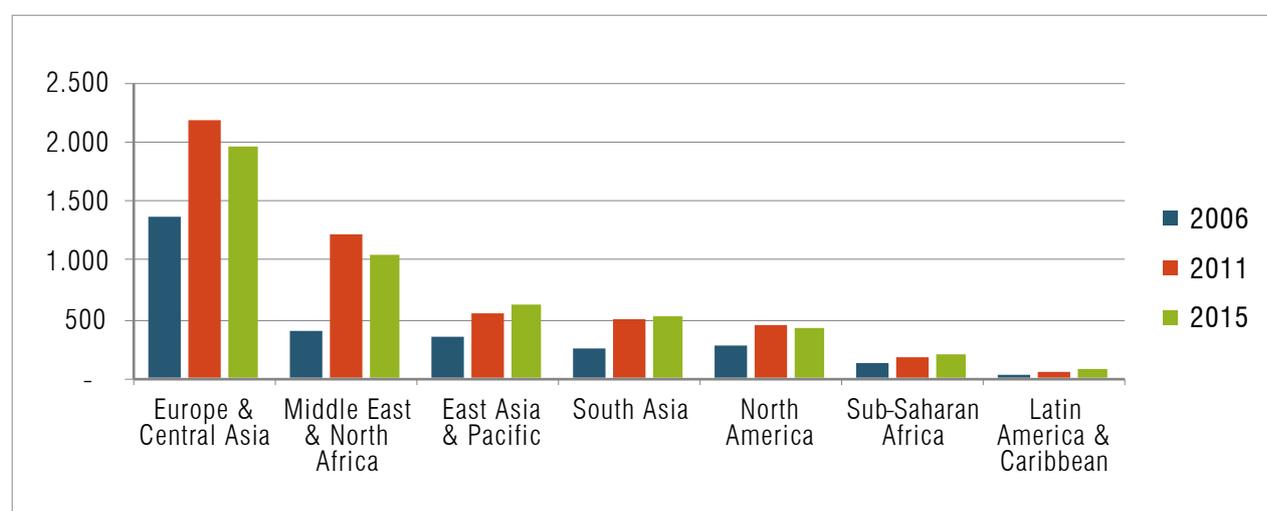
GLOBAL TRENDS IN BLACK TEA

The global black tea market increased between 2001 and 2010 and then slightly declined over the next five years. The drop has been particularly significant in some of the largest importing regions for black tea, including Europe, North America and the Middle East. As illustrated in figure 3, demand from these regions declined between 2011 and 2015 and their shares in the world market fell from 43% to 40% for Europe and from 23% to 21% for the Middle East. The Russian Federation is the largest importer of black tea, accounting for 12% of world imports in 2015, followed by Pakistan (9.3%), the United Kingdom (7.7%), United States (6.9%) and Iran (5%). Although East

Asia, South Asia and Africa account for a smaller portion of the global black tea market, their black tea imports grew respectively by 13%, 7% and 12% between 2011 and 2015.

As seen in table 2, exporters of black tea are mainly from Asia and Africa. Sri Lanka is the world's largest producer and exporter of black tea, accounting for 26.2% of world exports, followed by Kenya (16%), India (13.6%), China (6.6%) and the United Arab Emirates (6.4%). Among the top five exporters of black tea, exports from Sri Lanka, Kenya and India decreased at a negative CAGR in the past five years, while China exhibited more rapid growth at an average annual rate of 11%.

Figure 3: Black tea imports by region in 2006, 2011 and 2015 (US\$ millions)



Source: ITC Trade Map database.



Photo: Asian Development Bank, 29472-013- Road Network Development in Nepal.jpg

Table 2: Top five exporters and importers of black tea by value (Harmonized System (HS) 090230 and HS 090240)

Exporters of black tea	Exports 2015 (US\$ millions)	Exports 2015 (thousand tons)	Share (%)	5-year CAGR (%)	10-year CAGR (%)	Importers of black tea	Imports 2015 (US\$ millions)	Imports 2015 (thousand tons)	Share (%)	5-year CAGR (%)	10-year CAGR (%)
World	4 880.3	1 383.4		-4	4	World	4 839.5	1 370.1		-3	5
Sri Lanka	1 277.0	300.3	26.2	-3	11	Russian Federation	580.3	160.9	12.0	1	7
Kenya	781.1	271.5	16.0	-10	4	Pakistan	449.2	158.6	9.3	7	8
India	663.7	231.0	13.6	-6	14	United Kingdom	371.8	129.7	7.7	-4	2
China	323.1	46.7	6.6	11	26	United States	335.8	111.0	6.9	1	6
United Arab Emirates	313.5	36.3	6.4	N/A	N/A	Iran	241.4	75.1	5	5	29

Source: ITC Trade Map database.

Competitors in black CTC and orthodox teabag grades: Kenya and other African tea exporters, India, Indonesia, Sri Lanka, Bangladesh and Argentina. Price is essential and for many markets sustainable certification (mainly Rainforest Alliance (RA), or Ethical Tea Partnership (ETP)) is required. In Kenya, many factories have RA and Fairtrade certification, as well as International Organization for Standardization (ISO) 22000. Compared with Nepal, these countries have significantly higher production, a higher volume of sustainable-certified teas and better logistics, and are also more export-oriented. Additionally they have better quality management (QM) systems,

although Maximum Residue Levels (MRLs) are an issue everywhere, except in Kenya where pesticides are hardly used. A problem equal to MRLs is logistics: Nepal is a landlocked country and has weak marketing infrastructure so 95% of its tea goes through India and is blended.

Competitors in orthodox leaf grades: India (Darjeeling), Sri Lanka, China, Bangladesh and Chinese Taipei. Compared with Nepal, these countries have QM and better certification in place. Price and logistics are less essential as long as Nepal offers consistent (very) high (exclusive) quality.

Box 4: A competitor and an example to follow



Darjeeling logo



Official EU logo

Darjeeling

Darjeeling is the tea district in northern India famous for its high-grown teas with seasonal character. Currently there are 87 estates producing 8–9 million kgs. Of this, 80% is certified organic. For many years, the Tea Board of India put its logo on packages containing 100% Darjeeling tea. In reality, however, Darjeeling tea was mixed with other teas and sold as pure Darjeeling. Often Nepali teas – which at their best are very similar in quality – were imported into India and blended with Darjeeling. This was done on a large scale and is still being done to some extent.

In 2000, the Tea Board of India started the process to establish Darjeeling tea as a **geographical indication** in the international arena under the Trade-Related Aspects of Intellectual Property Rights agreement (see: www.wto.org/english/tratop_e/trips_e/intel2_e.htm). It was internationally registered, and registered in the EU in 2011.

The Tea Board of India introduced a trade chain management system to monitor the supply chain and address traceability issues in the Darjeeling tea trade chain. The system entails computerized collection and validation from all plantations and processing of related data, namely:

- Daily green leaf plucking records
- Daily area plucked records
- Daily manpower used records
- Daily green leaf transfer/purchase records
- Daily processing records
- Daily invoice entry records
- Daily dispatch records.

All 87 registered gardens have been provided with customized software for the data entry. All these measures should warrant that a package with the name 'Darjeeling' contains only tea from the Darjeeling district.

Despite all these arrangements, many Darjeeling tea producers do not make a profit because the costs of running a tea plantation are very high and labour is getting scarcer every year. Owners generally have to provide schools, kindergarten, hospitals and food for the labourers who work on their estates. Plantations are also out of favour in the tea-consuming countries of the West, where they are increasingly seen as exploitative.

Market prices for Darjeeling tea have gone up considerably because of the geographical indication registration and increasing labour and energy costs. Therefore, Nepali teas have become much more attractive in India and abroad.

GLOBAL TRENDS IN GREEN TEA

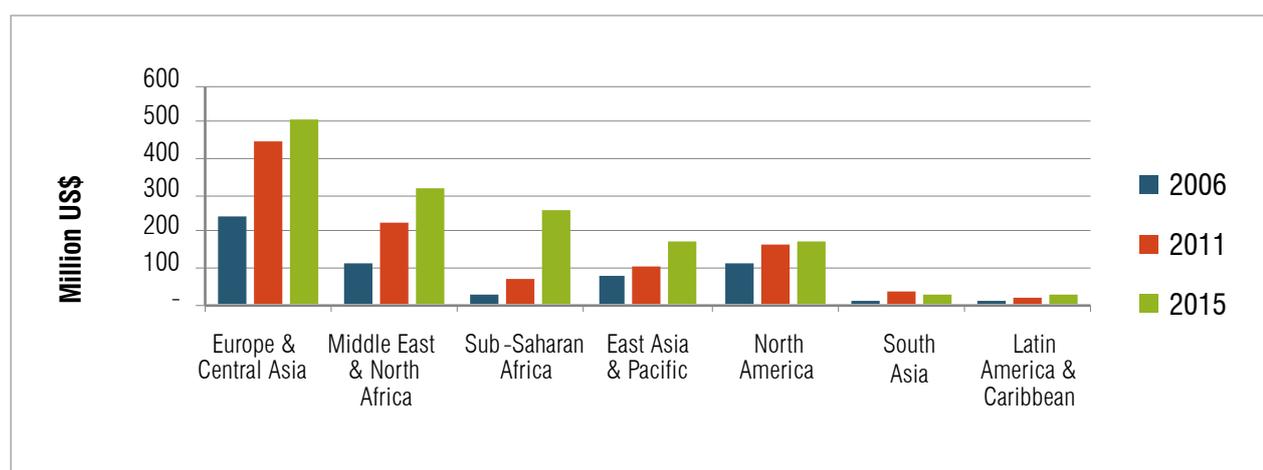
Despite the decline in demand for black tea, green tea performed remarkably well over the past five years (2010–2015). World exports of green tea stood at US\$ 1.7 billion in 2015, growing at a CAGR of approximately 10% over the past 15 years. It is worth noticing that the lack of disaggregated data for fruit teas and other specialty teas, which are currently classified under the HS code for green tea, does not allow for an accurate analysis of global trends in the green tea market.

While green tea imports have recorded growth in almost every region, substantial growth has been observed in sub-Saharan Africa and, to a lesser extent the

Middle East, and East Asia and the Pacific (see figure 4). Morocco is the leading green tea importer, accounting for 13% of world imports in 2015, followed by the United States (8.9%), France (5.5%), Germany (5%) and the Russian Federation (3.9%).

The supply of green tea is highly concentrated. China dominates production and exports of green tea, accounting for 62.6% of world green tea exports in 2015, followed by Japan (4.9%) and Sri Lanka (2.7%). Germany and Poland are re-exporters of green tea, accounting respectively for 5.1% and 2.3% of world exports. Germany is a major importer and re-exporter of both black tea and green tea, supplying mainly neighbouring European countries.

Figure 4: Green tea imports by region in 2006, 2011 and 2015 (US\$ millions)



Source: ITC Trade Map database.

Table 3: Top five exporters and importers of green tea by value (HS 090210 and HS 090220)

Exporters of green tea	Exports 2015 (US\$ millions)	Exports 2015 (thousand tons)	Share (%)	5-year CAGR (%)	10-year CAGR (%)	Importers of green tea	Imports 2015 (US\$ millions)	Imports 2015 (thousand tons)	Share (%)	5-year CAGR (%)	10-year CAGR (%)
World	1 693.9	385.0		5	9	World	1 489	367.2		9	10
China	1 059.9	281.0	62.6	9	11	Morocco	193.1	65.2	13	3	9
Germany	85.9	8.0	5.1	6	10	United States	132.2	18.7	8.9	3	5
Japan	83.5	4.1	4.9	9	14	France	81.2	9.9	5.5	3	9
Sri Lanka	44.9	4.5	2.7	-1	10	Germany	73.9	17	5	3	8
Poland	39.0	3.8	2.3	7	30	Russian Federation	57.5	14.4	3.9	0	6

Source: ITC Trade Map database.

Box 5: Key trends in global trade impacting Nepal

Global tea trade trends have an impact on the Nepali tea sector as it seeks to diversify its markets, in particular:

- World black tea imports have recently decreased in value, mainly due to production shortages and changes in consumer behaviour in traditional importing markets. Competition in the low-cost and price-competitive CTC black tea segment has increased in the world market. Nepal is not well positioned to be competitive.
- Green tea performs well in the world market, with a growing market share and only a few producing countries. There is a market opportunity for Nepal in green tea.

GLOBAL CONSUMER TRENDS IN TEA

As incomes increase in developed and emerging markets, consumers are willing to spend more on the teas they consume. The main consumer-led drivers are: healthier lifestyles, more natural products, flavour experimentation and functional benefits. Tea is particularly appealing to the health-conscious consumer because of its health benefits, low calorie count and medicinal properties.

When consumers have more to spend, they look for **premium products**. They are also concerned about their own health and about the sustainability of tea production in the countries of origin. This development can be seen in the West and also in countries like India, China and Indonesia. A threat to this trend is economic recession.

More variety



Picture: Dutch supermarket. JPierrot.

There is a wide assortment of different teas on shop shelves now. People want a broader choice of tea flavours, for instance Earl Grey tea or other flavoured teas such as mango or orange. They try green tea, tea mixed with rooibos, herbs, spices, dried fruit, etc. More variety in teas will result in more educated consumers and this leads to sales of higher quality (orthodox) teas.

Herbal teas have also become more attractive to consumers due to their many healthful properties and nearly endless varieties and blends, as well as the fact that they are naturally caffeine-free. More fruit and herbal tea varieties are a threat for tea suppliers.

More sophistication in packaging

Packaging of tea in teabags has evolved from single chamber bags without tags to pyramid-shaped teabags containing orthodox tea.⁹ The 'tea caddy' is another example of an improved teabag, also with orthodox tea. More sophisticated teabags help increase the sales of orthodox teas.



9. United Kingdom Tea & Infusions Association. The History of the Teabag. Retrieved from www.tea.co.uk/the-history-of-the-tea-bag.



Picture: 'tea caddy' www.ronnefeldt-gastro.com.



Picture: Tea specialty shop www.thedubaimall.com/.

Specialty tea shops

Tea drinkers in many Western countries are used to buying their tea in local supermarkets and taking their usual brand of teabags. For instance, 90% of tea consumed in the United Kingdom is in teabags, and the rate is similar (80–95%) in many developed markets. Germany is an exception: here 60% of tea is orthodox leaf tea and 40% teabags.¹⁰ In the United States the value of loose tea was estimated at 15% of the value of the total United States tea market in 2015, with a forecast increase of 17%.¹¹

People get exposure to specialty teas in cafes and restaurants: there is more attention to educating the consumer about the specific origin of the tea, infusion time, and water temperature and quality. This leads to consumers trying similar methods in their own homes and buying in specialty shops: this is the origin of the trend for specialty teas, which are basically all orthodox teas.

The worldwide growth in out-of-home tea consumption in 2015 was estimated at 4%,¹² compared with 2% growth in tea sold in retail channels. In the high-value world of specialty teas, dedicated consumers are seeking education and brand stories with regard to the different varieties of tea, their provenance and proper brewing techniques.

Whole-leaf tea is evolving, with more and more professionals and tea companies using the term 'premium' when referring to high-quality tea versus tea that is simply whole-leaf or scented. While sales of specialty tea remains a small portion of many markets, this fast-growing segment is driving innovation and the growth of specialty retail ventures in the United States. Like cheese shops and wine merchants, tea retailers are appearing that have 100 to 150 selections in the full range from medium to high and exquisite qualities. Also, specialty tea is becoming popular and is reaching a new generation that includes men and 'millennials' (people born between 1980 and 2000).

10. Deutscher Teeverband e.V. (2015 May), Article about Jahresbericht 2014: Teekonsum in Deutschland auf hohem Niveau Absatz im Inland stabil, Exporte steigen deutlich an. Retrieved from www.teeverband.de/wirtschaft/Jahresbericht_2014.php.

11. Euromonitor: Tea in US, March 2016.

12. Euromonitor, May 2016.

Internet tea shops

The rise of specialty tea shops and the increasing quality consciousness of consumers have also given rise to Internet tea shops. Here, there is a large choice of orthodox teas in a wide price range. Specialized tea stores have developed their own online shops, such as Simon Levelt¹³ in the Netherlands. Tea estates are also starting to develop these new sales channels, such as Glenburn Tea Direct¹⁴ in Darjeeling.



Picture: www.mariagefreres.com.

Convenience and brewing sophistication

Some consumers have started purchasing tea pods or capsules that fit in coffee machines. This is a more convenient way to prepare tea; in fact, in the catering sector these capsules are widely used. It is a significant portion of the market in some Western markets. For instance, it was 14% by value in 2015 in the United States¹⁵ and 3% in France. Usually only large brands offer this type of tea. This type of tea product usually contains orthodox teas.



Picture: <https://teforia.com/> - Lipton tea capsules for infusing machine (mainly used in catering sector)

Offering more convenience, several trendy teapots have been designed for brewing leaf tea. This stimulates sales of orthodox teas. Once having purchased better teas, consumers start to pay more attention to brewing the perfect cup. They monitor brewing time, learn that green teas sometimes need water cooler than 100 degrees, and that water quality influences the quality of the brew.

13. www.simonlevelt.com.

14. www.glenburnteadirect.com/.

15. Euromonitor: Tea in US, March 2016.



Picture: <https://nl.pinterest.com>: Tea infuser with thermo cups and timer

Ready-to-drink tea

The global ready-to-drink tea and coffee market is expected to expand rapidly during the period from 2012 to 2018.¹⁶ In 2015 ready-to-drink tea generated US\$5.56 billion in sales.¹⁷ In the broad mass market beverage universe, consumers are seeking premium ready-to-drink teas as a healthier alternative to other beverages. Many young, health-conscious consumers have shifted from carbonated drinks like Coca Cola to ready-to-drink tea because they think iced tea is healthier.

Health

Tea is generally perceived as a very healthy drink. Specifically, green tea is considered a beverage that promotes health and wellness. It is therefore used in many other applications such as pills, body care products, etc. More attention on food's effects on human health also makes the public worry about chemicals in their food. Regular reports of agrochemical residues in tea induced authorities to pass legislation about MRLs in food. This trend has given tea exporters in many tea-producing countries a lot of headaches and is one of the most challenging market access requirements in the tea sector today. Food safety standards have a deterrent effect on trade if exporters fail to comply with regulations.¹⁸

Sustainability

The effects of agrochemicals on the health of producers and consumers, and on the environment, gave rise to an 'organic movement', resulting in standards, certification and legislation. Similar concerns about socioeconomic conditions resulted in the fair trade movement, which also led to standards and certification. Later, standards like RA and UTZ Certified emerged, trying to combine environmental, social and economic aspects of production,

16. Transparency Market Research (2015, October 20). Ready to Drink Tea and Coffee Market – Global Industry Size, Market Share, Trends, Analysis and Forecast, 2012-2018. Retrieved from <http://globenewswire.com/news-release/2015/10/20/777503/10153009/en/Ready-to-Drink-Tea-and-Coffee-Market-Driven-by-Busy-Lifestyle-of-the-Modern-Consumer-Transparency-Market-Research.html>.

17. Bolton, D. (2016, April 12). Global Tea Industry Faces Diverse Challenges. Retrieved from <http://worldteanews.com/insights/global-tea-industry-faces-diverse-challenges>.

18. Dutta, I (2014, November 17). MRLs have larger impact on tea trade, feels FAO. *The Hindu*, Retrieved from www.thehindu.com/business/Economy/mrls-have-larger-impact-on-tea-trade-feels-fao/article6608807.ece.

processing and trade in one system of standards. Organic products remain in market niches while RA and UTZ were adopted by major (multinational) brands. Fairtrade certified teas are particularly strong in the United Kingdom.¹⁹ The costs of certification and the real impact and benefits on the ground²⁰ for producers²¹ and the environment have remained under debate ever since the birth of standards and certification.

A recent trend in sustainability is the holistic approach: not concentrating on certification of a single crop on a single farm but taking into account the whole landscape.²² The effect of climate change²³ on sustainability²⁴ of tea production is also a topic receiving more and more attention.²⁵ Another ongoing discussion is whether large commercial estates can sustain tea production, because of high costs and less favourable labour conditions.²⁶



Logos of certified organic (EU, Japan, United States), certified Fairtrade, RA, ETP, UTZ Certified, Trustea²⁷

19. For instance, all teas in Sainsbury supermarkets are certified Fairtrade.

20. <https://thecosy.org/>.

21. Rowlatt, J and Deith, J (2015 September 8). The bitter story behind the UK's national drink. *BBC News*, Retrieved from <http://www.bbc.com/news/world-asia-india-34173532>.

22. Biggs, E (2014, December 9). Sustainable Landscapes and the Tea Value Chain. Retrieved from <https://teacclimate.com/2014/12/09/sustainable-landscapes-and-the-tea-value-chain>.

23. Ethical Tea Partnership. Challenges, opportunities, and ways forward for the Indian tea industry. Retrieved from www.ethicalteapartnership.org/wp-content/uploads/TEAM-UP-India_V3_LR_final.pdf.

24. <https://teacclimate.com/>.

25. International Trade Centre (2014). Mitigating Climate Change in the Tea Sector. www.intracen.org/uploadedFiles/intracenorg/Content/Publications/Climate%20Change%20Tea-%20Final%20Manual_Low%20Res.pdf.

26. Sharma, A (2016 June 10). Nepal spoils Darjeeling's tea party. *Nikkei Asian Review*, Retrieved from <http://asia.nikkei.com/Business/Trends/Nepal-spoils-Darjeeling-s-tea-party?page=2>.

27. Europe: <http://ec.europa.eu/agriculture/organic/>; United States: www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=organic-agriculture.html; Japan: www.maff.go.jp/e/jas/specific/organic.html; Fairtrade International: www.fairtrade.net, www.rainforest-alliance.org, www.ethicalteapartnership.org, www.utz.org, www.trustea.org.



Photo: ITC, Family business at the cottage tea unit in Ilam

Box 6: Key global market trends for Nepal

Global market trends have an impact on the Nepali tea sector as it seeks to diversify its markets, in particular:

- Health and certification requirements: complying with increased phytosanitary measures imposed by importing markets is mandatory to preserve market access.
- Quality and specialty teas are a fast-growing segment: developing premium quality teas, promoting origin through improved traceability and producing teas flavoured differently from the competition.
- Sustainability: reassuring consumers that their teas are produced in environmentally friendly conditions while developing the social and economic aspects of producers.

THE TEA SECTOR IN NEPAL: VALUE CHAIN ANALYSIS

Tea is an emerging sector in Nepal. Since the early 1990s, it has witnessed remarkable achievements and contributed to economic growth following economic liberalization and privatization policies. Tea is also one of the major export-oriented agricultural cash crops that provides high levels of employment and earning opportunities for a large number of rural individual tea farmers in Nepal.

2000 to support and promote tea sector growth. This policy, still in force in 2016, is focused on production, marketing, and institutional and capacity development. The Policy has made provisions for value chain development through inputs supplies, credit facilities, infrastructure development, market promotion, research and development (R&D), training and tax exemption.

HISTORICAL SECTOR PERSPECTIVE

Tea planting was started in Ilam and Saktim in 1863 and the first tea factory was established in 1878.²⁸ Historically, the first tea bushes in Nepal were grown from seeds which were given as a gift by the Chinese Emperor to the then Prime Minister, Jung Bahadur Rana.²⁹ The Government took the initiative for the development of the tea sector and consequently a second processing factory was set up in the plains of Jhapa district in 1965, mainly for CTC tea. In 1966 the Nepal Tea Development Corporation (NTDC) was established to support the expansion of tea planting, processing and production in Nepal. NTDC played a crucial role in developing the tea sector by encouraging and mobilizing small and marginal farmers in tea planting and assuring the purchase of tea leaves from them.

With the gradual commercialization of tea production in 1982, the Government declared five districts –Jhapa, Ilam, Panchthar, Dhankuta and Terhathum– a ‘Tea Zone’, and since then the Government has continued to support small farmers as well as tea estates and processors. When Nepal moved towards economic liberalization, deregulation and privatization in the late 1990s, the management of NTDC was handed over to a privately owned organization on a long-term lease basis. Subsequently, in 1993, a non-profit institution –the Nepal Tea and Coffee Development Board (NTCDB)– was set up under a separate charter for overall sector development from research support and promotion activities to production, processing and marketing of the tea and coffee sectors in Nepal. The Government launched a new National Tea Policy in



Photo: ITC, Tea plantation, Fikkal, Ilam Nepal

28. Ilam district is in the mid hills of Nepal and has favourable topography, soil composition and climatic conditions for mountain tea production, similar to Darjeeling and Assam in India.

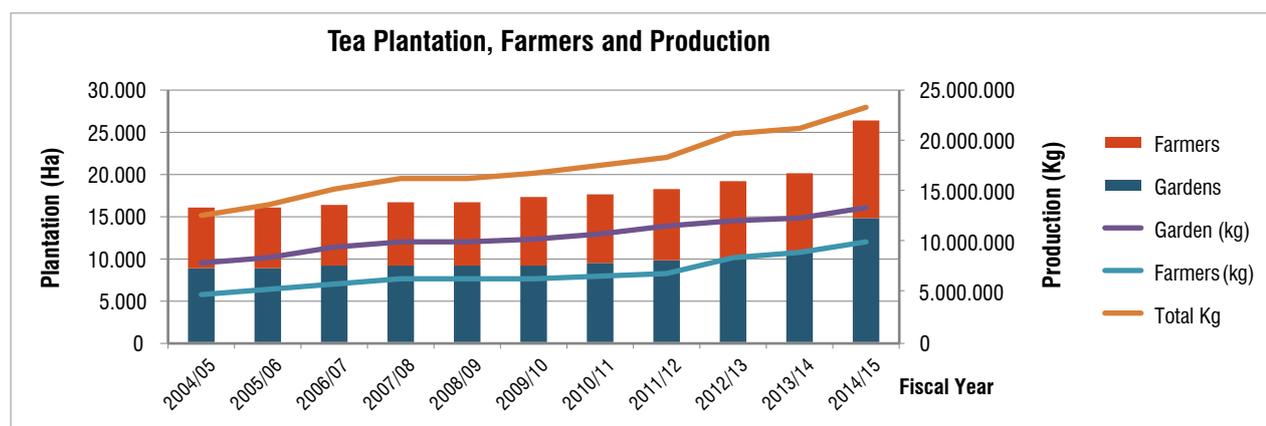
29. NTCDB.

TEA PRODUCTION

In the past 11 years (2004/05–2014/15), tea planting in Nepal increased remarkably from 15,900 ha in 2004/05 to 26,165 ha in 2014/15. At the same time, tea production also grew from 12,606 tons in 2004/05 to 23,187 tons in 2014/15, a growth of 84% (CAGR). During the same

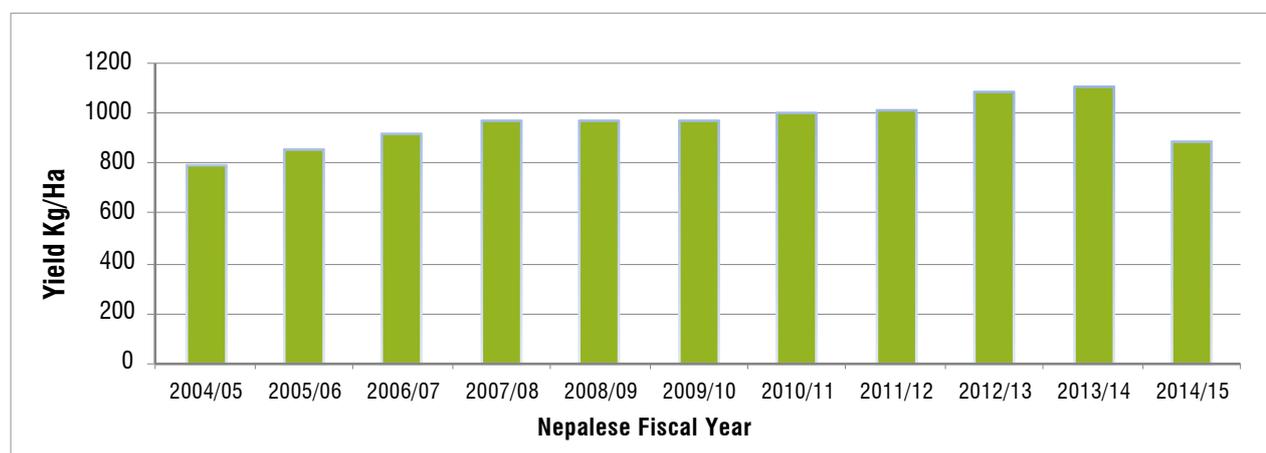
period, average production yield or productivity also gradually increased from 792 kg per ha in 2004/05 to 1,110 kg per ha in 2013/2014; however, in 2014/15 there was a decline to 886 kg per ha. Average annual production growth is recorded at 1.13% during the period 2004/05 to 2014/15 (see figures 5 and 6).

Figure 5: Production by Nepali commercial and non-commercial producers, 2004/05–2014/15



Source: NTCDB and MoAD.

Figure 6: Tea plantation yields in Nepal 2004/05–2014/15

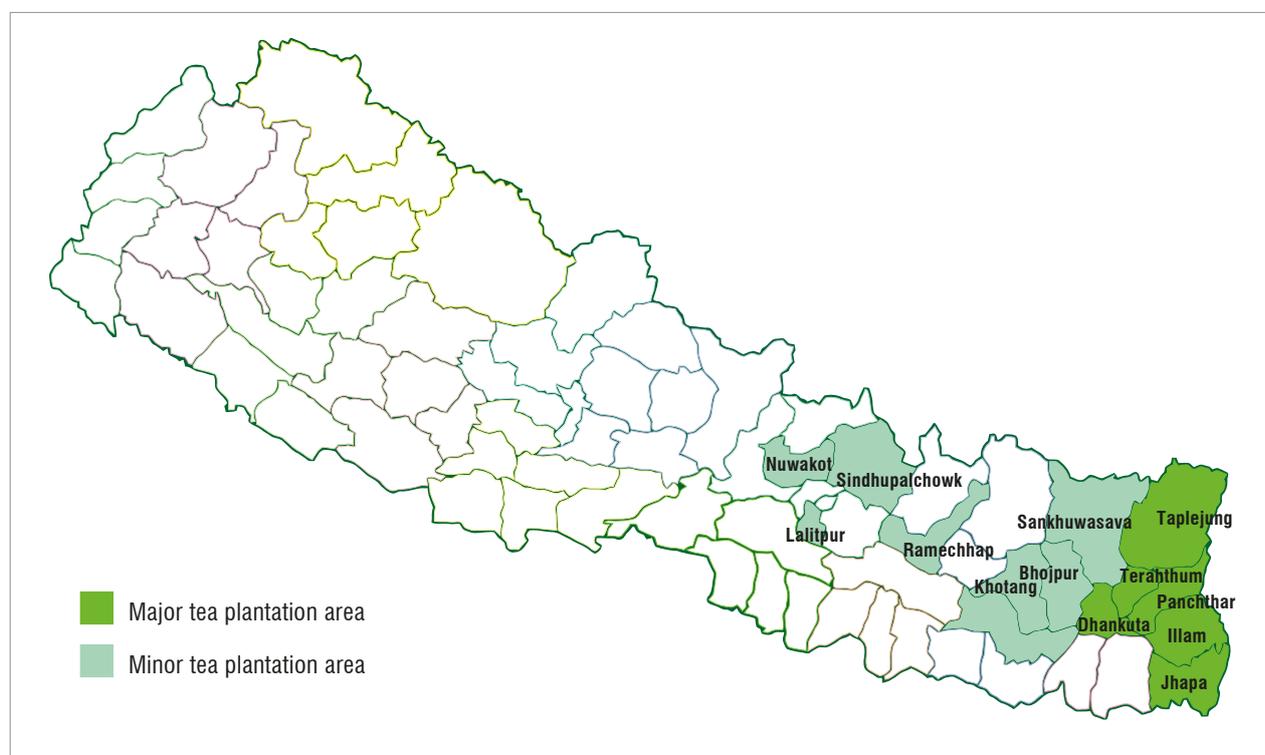


Source: NTCDB and MoAD.

Figure 7 presents the major tea plantation areas and clearly indicates that they are located in the Eastern Development Region, which is under states 1 and 2 of the newly promulgated Constitution of Nepal. There is also a possibility of tea planting and production in other mid-hill and mountain areas which are currently considered new and minor tea planting areas. The major production districts

are Ilam, Jhapa, Panchthar, Terhathum and Dhankuta. However, while assessing the existing and potential areas, Sankhuwasava, Solokhumbhu, Bhojpur, Khotang, Udayapur, Ramechhap, Lalitpur, Kavre, Sindhupalchowk and Nuwakot, among others, are the main districts that have high production potential for tea.

Figure 7: Map of the major tea plantation areas in Nepal



Source: NTCDB.

PRODUCTION STRUCTURE

Tea in Nepal is produced by: (a) tea estates or tea gardens; and (b) individual farmers. There are 157 tea gardens, of which 63 specialize in orthodox and 94 produce CTC tea. Similarly, 44 tea factories are in the organized sector, of which 19 specialize in orthodox tea and 25 in CTC tea. There are 97 cooperatives with 6,200 members and some of these cooperatives (22) have their own processing units. Additionally, three cooperatives plan to set up processing units. Small tea producers and small farmers altogether have 65 processing units.

Tea cooperatives for farmers were established in 2010 after the Tea Zone was established by the Government. There is one central federation of cooperatives and five district federations. According to the Central Tea Cooperative Federation Limited (CTCF), there are 97 tea cooperatives in 12 tea-producing districts. The majority of tea cooperatives are in Ilam, Panchthar, Terhathum, Dhankuta, Lalitpur and Jhapa. There are also one or two such cooperatives in other tea-producing districts such as Sankhuwashava, Solukhumbhu, Taplejung, Bhojpur, Ramechhap and Udayapur. Other tea-producing districts are in the central part of Nepal. Those are Nuwakot, Kavre and Sindhupalchowk.

Some farmers in the selected production locations have also formed cooperatives for tea planting, processing and marketing. Tea planting and production by tea gardens and individual farmers during the past 11 years are presented in annex 2.

In fiscal year 2014/15, tea gardens had 14,596 ha of plants with a production record of 13,265 tons. In addition, 14,898 farmers occupied a planting area of 11,569 ha and produced 9,922 tons of tea in Nepal (see table 4). Almost half (47%) of tea farmers are located in Ilam district alone. The total land holdings of small tea farms is 11,570 ha, of which 8,764 ha (75.6%) is used for orthodox tea, representing 31% of their tea production. On average each small farmer holds 0.78 ha of land for tea farming and the average tea production of an individual farmer is 666 kgs (see annex 1).

Table 4: Summary of tea production structure in Nepal in 2014/15

Description	Unit	Orthodox	CTC	Total
Plantation area	Ha	14 742	11 423	26 165
Gardens	Ha	6 878	7 718	14 596
Farmers	Ha	7 864	3 705	11 569
Total production	Tons	4 924	18 263	23 187
Gardens	Tons	1 837	11 428	13 265
Farmers	Tons	3 087	6 835	9 922
Total farmers	No.	11 946	2 952	14 898
Tea gardens	No.	63	94	157
Tea factories	No.	19	25	44
Tea cooperatives	No.	97	0	97
Tea cooperative processing units	No.	22	0	22
Cooperative members	No.	6 200	0	6 200
Small tea processors	No.	65	0	65

Sources: NTCDB and CTCF Nepal.

Orthodox tea production

About 4,924 tons of orthodox tea was produced in 2014/15, or 21.2% of total tea production in Nepal (see table 4). Orthodox tea is planted on 14,742 ha in mountain districts of Nepal. Orthodox tea is mainly produced in hill districts such as Ilam, Panchthar, Dhankuta, Terathum, Solokhumbhu, Udayapur, Sankhuwasava and Bhojpur in the eastern part of the country; and Sindhupalchowk, Kavre, Makwanpur, Lalitpur, Ramechhap and Kaski districts in the central part (see annex 1).

CTC tea production

CTC tea is produced by tea estates as well as by small farmers, mainly in Jhapa. In 2014/15 total production of CTC was recorded at 18,630 tons and the area covered was 11,423 ha. The yield for orthodox tea is far lower than the productivity/yield of CTC tea. The record shows that orthodox tea had a yield of 334 kg per ha while CTC produced 1,598 kg per ha.

TEA GRADING IN NEPAL

Tea factories follow scientific grading systems based on the predetermined standards of the international tea market. Currently orthodox tea is graded with the help of standard mechanical processes and products are packed based on grading. There are five grades of orthodox tea that are packed in aluminium foil-coated paper bags, as mentioned in table 5.

Table 5: Orthodox tea grading and packing

Grade	Nomenclature	Weight in one pack in kg
SFTGFOP	Very finest (Special Finest Tippy Golden Flowery Orange Pekoe)	22
TGFBOP	Tippy Golden Flowery Broken Orange Pekoe	26
TGFOF	Tippy Golden Flowery Orange Fannings	29
BPS	Broken Pekoe Souchong	24–25
OF	Orange Fannings	35–36

VALUE DISTRIBUTION

The green leaves provided by farmers are processed in large and small factories located in and around production areas. At the factory level, there seems to be no fixed method of calculation to arrive at the green leaf price. The price of orthodox green leaves is mostly determined by the price received by made tea in the Siliguri and Kolkata markets and reviewed on a weekly basis. Farmers have to accept the price levels offered by the factories. During shortage periods, CTC processors go to the hills to purchase green leaf and offer competitive prices to fulfil their requirement for raw materials. This leads to an overall green leaf price increase which has a very negative impact on the price competitiveness of orthodox tea in the world market.

Organic green leaves receive a premium and are priced higher than conventional leaves. The average price difference between organic and conventional leaves was NPR 20–26 per leaf in 2016. The price of green leaf also differs according to the flush and leaf quality. The cost of manufacturing depends on the types of tea made and the production volume.

A general price structure analysis for orthodox tea is presented in table 6. According to these estimations provided by Nepali sector experts, farmers normally receive 6.25% to 7.4% and processors receive 43.75% to 52.65% of the total sale price to consumers in the market (see annex 3: prices of orthodox tea leaves in 2016).

Table 6: General price structure analysis for orthodox tea

	Price range (NPR)	Estimated value distribution (%)	Estimated cumulated value distribution (%)
Farmers (Green Leaves)	125–185	6.25–7.4	6.25–7.4
Processors	1 000–1 500	50–60	43.75–52.6
Middlemen / packagers	1 200–1 700	60–68	10–8
Retailer or exporters	1 500–2 000	75–80	15–20
Importers	2 000–2 500	100–100	20–25

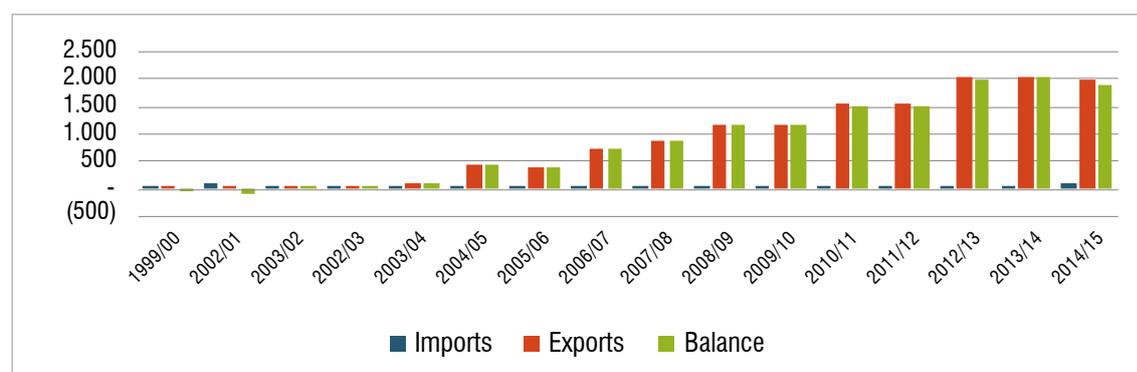
Source: Estimation provided during sector consultations.

EXPORT PERFORMANCE

Tea constituted about 2.68% of total merchandise exports from Nepal in 2015. Nepali tea exports account for only 0.3% of global tea exports. Since 2001/02, the tea trade in Nepal has presented a most favourable trade balance. Before this period, Nepal had been a net tea importing

country. It was only from 2001/02 onwards that Nepal started to become a tea surplus and net exporting country. Currently, the country's tea trade surplus is almost NPR 2 billion, equivalent to US\$ 19 million. Referring to figure 8, it can be seen that exports of tea grew continuously from 2004/05 until becoming stagnant for the last three years.

Figure 8: Nepal's tea trade balance, 1999/00–2014/15 (value in NPR millions)



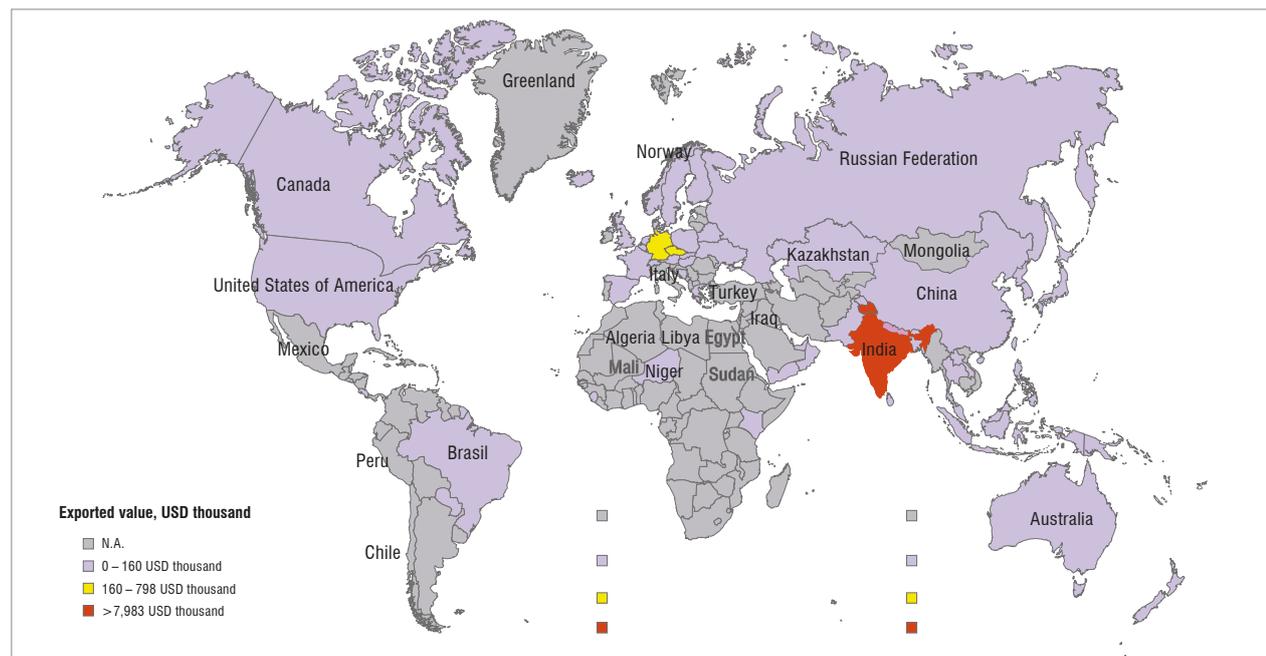
Source: NTCDB.

EXPORT CONCENTRATION: PREDOMINANCE OF THE INDIAN MARKET

Nepal exports tea to more than 35 countries but India represents around 88% of total exports. Currently, Nepal's average annual export comes to 11,000 tons valued at NPR 2 billion. Nepal mainly exports CTC tea to India with

the help of Indian importers who take part in the Kolkata auction market to sell their products. Exports to other destinations are mostly high-value orthodox and organic orthodox tea. Other major destinations for Nepali tea are Germany, the Czech Republic, the Russian Federation, China, France, the United States, Japan, Canada and Ukraine.

Figure 9: Map of importing countries for Nepali tea



Source: ITC Trade Map.

Table 7: Major export destinations of tea from Nepal

Importing country	2014–2015		Share (%)	CAGR (%)	
	Quantity (tons)	Value		Quantity	Value
Subtotal	11 143.0	2 006 877	99.995	1.42	6.67
India	10 836.0	1 769 296	88.200	2.06	6.01
Germany	75.9	88 141	4.390	3.52	17.80
Czech Republic	34.7	43 579	2.170	-26.11	38.31
Russian Federation	97.7	30 051	1.500	-15.07	-7.00
Others	35.0	20 717	1.000	-27.83	-8.65
China	31.5	14 094	0.700	51.37	88.64
France	5.9	12 228	0.610	38.57	30.07
United States	6.7	9 529	0.470	5.54	9.34
Canada	4.0	8 727	0.435	-36.50	13.77
Japan	9.1	6 440	0.320	3.60	16.34
Ukraine	6.2	4 075	0.200	45.07	82.54

Source: Nepal Foreign Trade Statistics, Trade and Export Promotion Centre.

TEA CONSUMPTION IN NEPAL

Tea is very popular in Nepal. The tradition in most communities is that guests are always offered tea.³⁰ In fact, Nepali people drink tea at least twice a day. Traditional Nepali tea is a reddish mixture made by boiling water, milk, tea and sugar together in a kettle, although some prefer black tea without milk. In the hilly and mountain regions some people drink tea with salt and ghee instead of sugar and milk.

SOCIOECONOMIC IMPACT OF THE TEA SECTOR

Tea cultivation tends to take place in disadvantaged districts of the country and contributes to job and income creation in poverty-stricken areas. It offers opportunities to turn marginally used fallow land in disadvantaged districts into productive areas. Tea farmers earn more income from their land than those involved in growing other crops except for cabbage, ginger or large cardamom.

The tea sector in Nepal employs approximately 70,000 people directly and indirectly for an average of 30,000 full-time equivalent jobs.³¹ Most technical workers and engineers in the tea sector have studied in neighbouring Darjeeling and gained experience in Indian tea estates. Women are approximately 60% of the total labour involved, although mainly in the low-skilled work of leaf picking. Wages are low, which is challenging for the sector in terms of retaining skilled workers.

MARKET ACCESS CONDITIONS

TRADE AGREEMENTS AND TRANSIT TREATIES

As a landlocked country, Nepal faces issues of transit routes and ports to access the international market. Bilateral trade agreements and transit treaties are key elements of trade policy with its neighbouring countries. Over the last three decades, Nepal has made conscious efforts to foster deeper economic integration with neighbouring countries and regional partners in South and East Asia as well as within the global economy. Nepal has signed 17 trade agreements and two transit treaties which have provided the country with improved access to regional and global markets. Transit agreements with India and Bangladesh are fully operational. In March 2016 Nepal also signed a transit and transport agreement with China

and currently its protocol and operational modalities are under study and preparation.

Nepal acceded to the World Trade Organization in 2004. The country is a founding member of the South Asian Association for Regional Cooperation and has been actively participating in the South Asian Free Trade Area and the South Asian Association for Regional Cooperation Agreement on Trade in Services. Nepal is also a signatory to other important regional cooperation initiatives, such as the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation. Similarly, the country participates in the Asia-Pacific Trade Agreement as an observer.

Nepal has bilateral trade agreements with India and China, which are also its major trade partners. The trade treaty signed with India is reviewed periodically and renewed every seven years, with the latest renewal having occurred in October 2016. China also provides zero-tariff access to its market for Nepal's 7,831 export items under a letter of exchange. Nepal's exports also enjoy preferential access to developed countries' markets under the Generalized System of Preferences. Furthermore, the EU has offered duty free, quota free access to all export items under its Everything but Arms initiative. Nepal signed a Trade and Investment Framework Agreement with the United States in 2011.

TARIFF ANALYSIS AND TARIFF ADVANTAGE

As illustrated in figure 10, tariffs imposed on Nepali exports of tea vary widely. Among its main important trading partners, Nepal faces 0% tariff under its bilateral trade agreement with India, under Most Favoured Nation regimes in the EU and United States markets, and under the Preferential Tariff for Least Developed Countries in Japan.

Thanks to the Preferential Tariff for Least Developed Countries, Nepal benefits from clear tariff advantages in three major importing markets: China, India and the Russian Federation. Nepal faces 0% ad valorem equivalent (AVE) tariffs³² in India, compared with 100% AVE applied to all its competitors. In China, Nepal also faces a 0% AVE compared with 7.5% for India and Sri Lanka. The same tariff advantage exists in the Russian Federation, where its competitors India and Sri Lanka face a 10.09%³³ AVE and Nepal a 0% AVE.

32. AVE tariffs are calculated using the World Tariff Profile methodology. Data is retrieved from the ITC Market Access Map database. More information on the methodology is available from the Market Access Map website at <http://www.macmap.org/>. AVE tariffs are not the Customs duties applied by the Customs authorities.

33. Only for HS 090230 - Tea, whether or not flavoured: Black tea (fermented) and partly fermented tea, in immediate packings of a content not exceeding 3 kg.

30. We All Nepali. How to make Chiya. Retrieved from <http://www.weallnepali.com/recipe/special-items/nepalitea>.

31. NTCDB.

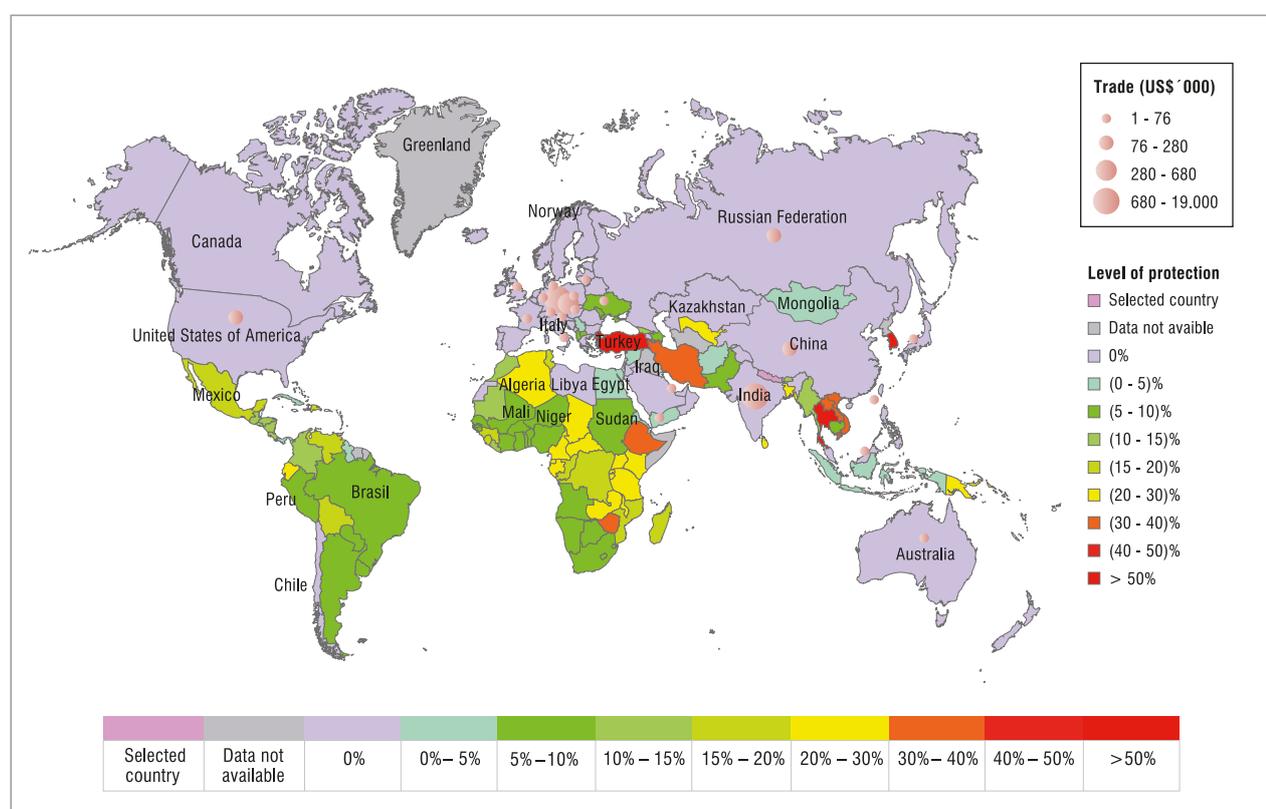
The matter of preferences has increasingly become a competitiveness concern for Nepal due to the erosion of preference margins caused by tariff reductions under the multilateral trading system of the World Trade Organization and unilateral preferential arrangements to least developed countries and developing countries that compete on exports of products similar to those of Nepal. Preferential margins could also be affected with India, Nepal's main trading partner, with a unilateral decision

such as India's Duty Free Trade Preferences Scheme,³⁴ which reduced tariffs for Nepal's competitors.

Through active trade negotiations, Nepal could potentially gain tariff advantages in important importing markets such as Egypt (2% AVE) or Ukraine (5% AVE). These duties can be quite high in a number of markets, such as the AVE tariffs imposed by Turkey, Iran and Ethiopia.

34. International Trade Centre (2015). India's Duty Free Trade Preference Scheme for Least Developed Countries. Retrieved from <http://www.intracen.org/uploadedFiles/intracenorg/IndiaDutyFreeTariff.pdf>.

Figure 10: Level of Customs duties faced by Nepali exports of tea (HS 0902)



Source: International Trade Centre (2016) (a).

NON-TARIFF MEASURES (NTMS)

If tariffs are not a significant restraint for exports of tea to access international markets, the imposition of various non-tariff as well as para-tariff measures poses challenges for easy access to destination markets. As an agricultural commodity, Nepali tea must also comply with legal requirements (sanitary and phytosanitary (SPS) and technical barriers to trade requirements), and sometimes with non-legal requirements such as private standards.

Legal requirements

Legal requirements are the basis for market entry and products marketed in any target market must meet them. They are established by law and must be adhered to by all producers who want to export. Any product that fails to meet these requirements is not allowed in the importing market.

MRLs: Monitoring and control of residue levels of agrochemicals in tea production is essential for entering most emerging and developed tea markets. Many, if not all, potential buyers will require proof of compliance with the legislation in their country. Therefore, a lab analysis is very often asked for or the buyer does it at a lab in their country. The residues are checked on dry material. The tea industry is lobbying to consider MRLs in the tea brew, rather than in dry tea, as this might be more realistic and could give a more favourable picture.

A specific Tea Intergovernmental Group on issues like MRLs³⁵ has been established by the Food and Agriculture Organization of the United Nations (FAO). The EU legislation on MRLs, with a list of specific residues, can be found on the EU Export Helpdesk.³⁶

35. FAO. FAO Intergovernmental Group on Tea. Retrieved from www.fao.org/economic/est/est-commodities/tea/tea-meetings/en/.

36. European Commission (Revision date: 2015 June 01). Trade Export Helpdesk. Retrieved from: http://www.exporthelp.europa.eu/thdapp/taxes/show2Files.htm?dir=/requirements&reporterId1=EU&file1=e1=ehir_eu15_04v001/eu/main/req_heapestires_eu_010_1003.htm&reporterLabel1=EU&reporterId2=NL&file2=ehir_nl15_04v001/nl/main/req_heapestires_nl_010_1003.htm&repo

Box 7: Anthraquinone

Anthraquinone is a relatively new residue, discussed since 2010. Anthraquinone is a raw material for dyes and is used in the paper and pulp industry but not recommended by the German Federal Institute for Risk Assessment for food contact since 2013. It was used on cereals as a bird repellent. It is ubiquitous in the environment. Its sources are both natural and anthropogenic. It is formed during combustion and appears from oxidative degradation of polycyclic aromatic hydrocarbons. In urban air, its main source is diesel combustion. It is not used in tea production as an agrochemical and there is still speculation on the root cause:

- Smoke from tea drying?
- Glue used in paper sacks?
- Paint used in paper sacks?
- Chemicals used in paper production?

The European Food Safety Authority continues to investigate the source. Many tea exporting countries are facing this issue. It is not known if anthraquinone in the tea brew has any impact on human health. There are no toxicological data available.

Uptake from the soil seems to be unlikely and there is no evidence for endogenous formation in the tea plant. The European industry continues its research and will look more closely into environmental contamination and the manufacturing/drying step. It will also look at plants which grow close to tea estates.

The Authority published a report earlier in 2016,¹ in which it was mentioned that anthraquinone is most likely a result of drying processes. This might give the possibility to discuss with the EU Commission moving anthraquinone from the pesticide regulation (396/2005) (because it is not a pesticide) to the contaminants regulation (1881/2006) and perhaps, when that is the case, it might create an opportunity to increase the MRL for anthraquinone in tea and herbal infusions for the EU. For the time being, there is no clarity on the anthraquinone issue and the tea sector must comply with existing regulations.

Food safety – hygiene – Hazard Analysis and Critical Control Points (HACCP)

Food safety and food control are key issues in most markets. For instance, according to the EU General Food Law (the legislative framework for food safety in the EU), to guarantee food safety and to allow appropriate action in cases of unsafe tea, it must be traceable throughout the supply chain and risks of contamination must be limited. An important aspect to control food safety hazards is defining critical control points (HACCP). For example, it is advised to carry out checks for chemical contamination and to keep moisture levels of tea under 10% (buyers typically ask for 8%). Another important aspect of controlling food safety is subjecting tea to official controls. In the event of repeated non-compliance, tea from non-complying countries will be registered on a list included in the Annex of Regulation (EC) No 669/2009. Due to problems with pesticide residues, tea from China, Viet Nam and other exporters is currently (since January 2013) subject to an increased level of official controls.

In the United States, all commercial imports of food products require the filing of prior notice³⁷ with the Food and Drug Administration (FDA), and foreign manufacturers and/or distributors of food products must register with the FDA before their goods may be admitted. Third party certification is required by the FDA. According to the Food Safety Modernization Act,³⁸ all food imported (including tea) must offer third party testing to ensure the foreign food facilities comply with United States food safety standards.³⁹

37. United States FDA Filing Prior Notice. Retrieved from <http://www.fda.gov/Food/GuidanceRegulation/ImportsExports/Importing/ucm2006837.htm>.

38. United States FDA. Imports under FSMA. Retrieved from <http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm257980.htm>.

39. United States FDA. Chemical Contaminants, Metals, Natural Toxins, Pesticides Guidance Documents & Regulations. Retrieved from: <http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/ChemicalContaminantsMetalsNaturalToxinsPesticides/default.htm>.

Food Safety and Standards Authority and Central Food Laboratory (CFL) of India:

CFL issues certificates to producers or sellers of tea. In the case of Nepali tea sales in India, an exporter needs to acquire a CFL certificate for their tea products on a yearly basis. For Nepali manufacturers and traders of tea it is important to understand that, according to Indian regulations, only importers with an Importer Exporter Code and registered Customs House Agent (on behalf of a registered importer) can submit an application to CFL for a No Objection Certificate (NOC) to import food items into India. Goods from Customs can be cleared only after submitting the CFL NOC to the Customs Authority.

The Food Safety and Standards Authority of the Indian Ministry of Health and Family Welfare has clearly indicated the names of 'notified laboratories' that are responsible for testing food items being imported into India under the provisions of the Food Safety and Standards Act, 2006, and the Food Safety and Standards (Laboratory and Sample Analysis) Regulations 2011. Nepal shares borders with West Bengal, Bihar and Uttar Pradesh states of India and therefore any exports to India from Nepal through land routes will go via border Customs points in these states. Notified laboratories for imports into India in cases of imports from Nepal are: CFL Kolkata (for Bengal and Bihar) and CFL Ghaziabad (near New Delhi, for Uttar Pradesh).

CFL is mandated to send a sample of any imported article to the Authorized Officer for analysis and submission of the Certificate of Analysis. CFL normally sends such samples of Nepali exports of food items to either the Referral Food Laboratory, Kolkata – 700016 or the Referral Food Laboratory, Ghaziabad – 201001. The Certificate of Analysis and report of analysis are issued by the Referral Food Laboratory as specified in the regulation. The regulation also specifies the charges for the test and the quantities of samples that need to be forwarded to CFL. For example, in the case of whole spices, tea and coffee, the sample specified is 500 grams for each test.

Box 8: Steps involved in CFL certificate acquisition

Tea exporters have to submit five bags/chests/boxes of tea representing actual packing of tea from five invoices of tea, and 500 grams of tea samples from the same invoice to the Office of the CFL Certificate Issuing Authority based at the border point in India. Along with this, the exporter has to submit their registration and tax clearance certificates. Application forms need to be filled out, whereupon each producer will have to declare the buyer's credentials based in India. A fee of INR 75,000 is applied for the initial CFL certificate and this certificate, if approved, is valid for six months only. Once the CFL certificate is issued, the producer can export tea to India with an additional fee of INR 15,000 per consignment/truckload of tea. The CFL certificate needs to be renewed with the same process every six months.

Non-mandatory regulations and private standards

Private-standard compliance and voluntary sustainability standards

Many buyers look specifically for certified⁴⁰ tea: Organic, Fairtrade, RA, ETP, UTZ Certified, or the Indian model, Trustea.⁴¹ In Europe, North America (and South America to a lesser extent), Japan and East Asia, demand for certified tea has been growing steadily for a number of years. Almost 20% of all tea produced in the world has some form of certification/verification. Mainstream international standards – RA, ETP and, to a lesser extent, UTZ Certified – are dominant and generally demanded by the mass market segment. Organic and Fairtrade certifications are found primarily in niche and external markets.

Social requirements are often based on International Labour Organization basic standards, laying down principles on what are perceived as the most important labour issues. These concerns, among others, include basic safety conditions for workers such as occupational health and safety and no use of child labour or forced labour. The basic International Labour Organization standards are widely used by international companies and as a basis for the development of international management systems such as ETP,⁴² Social Accountability SA8000 and Sedex.⁴³

Many companies seek close cooperation with producers when dealing with social issues in the supply chain. In some cases, companies choose to become certified by an independent certifier or take part in industry initiatives, or work together on certain issues with special interest groups such as non-governmental organizations (NGOs). Although supplier requirements are not always a must in the selection, performance and awareness may play a role when making a decision between equally strong suppliers competing in the market.

Traceability

Traceability is an important concept in international trade of foodstuffs. There is both a legal and non-legal aspect to traceability: food ingredients like tea should be traceable for **food safety** purposes.

Traceability is the ability to track any food, feed, food-producing animal or substance that will be used for consumption through all stages of production, processing and distribution. In the event of a food incident

it enables the identification and subsequent withdrawal or recall of unsafe food from the market. If the food has not reached the consumer, a trade withdrawal is undertaken. If the food has reached the consumer, a product recall is undertaken which includes notification of the consumer through in-store notices and press releases.⁴⁴

Another reason is that clients want to know **who produced the tea** they purchased from a more social point of view. They want to know the environmental and socio-economic conditions of the production, processing and further trade. In other words: What payment do the farmers get, how healthy is the soil where tea is grown, are chemicals used in processing, etc.

Traceability is essential for larger, sometimes multinational, supermarkets and tea packers; other buyers are sometimes more interested in quality and MRLs.

POLICIES GOVERNING THE TEA SECTOR

This section provides an overview of the key policies in place which impact the sector. A specific policy was formulated in 2000 to support the development of the tea sector. The Ministry of Commerce (MoC) has included the sector in the National Trade Integration Strategy (NTIS) 2016 priority export sectors and the Ministry of Agricultural Development (MoAD) has a bearing on tea production.

NATIONAL PLAN AND AGRICULTURAL POLICY

The national economic plan – like the 13th Plan, which ended by July 2016, and the 14th Plan, which is under formulation – is expected to support growth of major exportable cash crops like tea, large cardamom and coffee. The 20-year Agriculture Perspective Plan (1995) ended in 2015. However, its continuity is envisaged through the Agriculture Development Strategy (ADS) 2015 and tea is one of the cash crops receiving priority in such plans, strategies and programmes of MoAD. Important programmes under the 14th Plan include:

40. ITC Standards Map is a very useful tool for more information on the different standards and certifications: www.standardsmap.org/.

41. For the websites of all these certifications: See reference 24 on page 7.

42. www.ethicalteapartnership.org.

43. www.sedexglobal.co.m.

44. European Food Information Council (2014). Food Traceability: Cornerstone of EU food safety policy. Retrieved from www.eufic.org/article/en/artid/Food_traceability_cornerstone_of_EU_food_safety_policy/.

1. **Trade promotion programmes:** Collection and dissemination of information, market promotion, capacity development, R&D on export products, and policy advice and advocacy.
2. **Trade, information and private sector support programmes:** Production development drive for export growth through product quality improvements, design developments and use of new technologies in association with the private sector.
3. **NTIS programmes:** Interministerial coordination for the implementation of programmes under NTIS, including establishment and promotion of collective branding, trademarks, traditional knowledge and geographical indications for Nepali products and services.
4. **Trade infrastructure, logistics and procedural development:** Programmes for the construction and development of inland container depots, container freight stations or dry ports, roads, trade portals, single window systems and roads for the speedy clearance and movement of cargoes, thereby reducing transaction costs and time.

The vision of ADS is: 'a self-reliant, sustainable, competitive and inclusive agricultural sector that drives economic growth and contributes to improved livelihoods and food and nutrition security leading to food sovereignty.' Average agricultural gross domestic product growth is targeted at 6% from the position of 3% in 2010. ADS will accelerate agricultural sector growth through four strategic components related to governance, productivity, profitable commercialization and competitiveness. It has also recognized that farmers have a right to participate in the planning, decision-making, implementation and monitoring of ADS. In the meantime, ADS activities are expected to impact three groups of farmers (commercial, subsistence and landless). Commercial farmers are directly affected by most of the ADS measures: in some cases the impact is direct and very strong, for example in the case of irrigation, mechanization, value chain development and exports.

TRADE POLICY AND TRADE STRATEGY

NTIS 2010 was launched by MoC and tea was identified and included as one of the 19 priority products for export from Nepal. Top priority for tea continued in NTIS 2016. The Government has been implementing various programmes under NTIS for the development of tea in recent years. *The Trade Policy 2015* also prioritized the development of exportable agricultural cash crops including tea. MoAD has regular tea development programmes, including technical support to farmers, distribution of disease-free saplings, etc. through the respective District Agriculture Development Offices (DADOs). The Nepal

Agricultural Research Council (NARC) has regular research programmes in Pakhribas for the development of varieties and agronomic practices for tea in Nepal.

NTIS 2016, the third successive trade integration strategy and main trade strategy document, sets out actions and measures of intervention in cross-cutting areas and priority sectors with export potential. The purpose of NTIS 2016 is to substantially enhance the trade sector's contribution to gross domestic product through a trade-centred growth strategy and to overcome the constraints and challenges associated with trade development and export competitiveness. The development objectives are strengthening the trade and export enabling environment, focusing on product development, strengthening institutional capacity including trade negotiation and inter-agency cooperation, and building and enhancing trade-related infrastructure. The cross-cutting issues taken up in NTIS 2016 are:

- Trade capacity-building, including trade negotiation
- Trade and investment environment
- Trade and transport facilitation
- Standards and technical regulations
- SPS measures
- Intellectual property rights
- Trade in services.

NTIS 2016 has identified tea as one of the top priority export sectors to receive focused attention. Key priorities and targets to be achieved for the development of the sector have been defined.⁴⁵ NTIS 2016 has targeted:

- a. Exports of orthodox tea to reach about US\$6 million
- b. At least 4,500 tons of orthodox tea produced
- c. At least 12,000 ha planted with orthodox tea
- d. At least 5,000 ha of plantations certified for organic tea.

National Tea Policy 2000

Nepal has a separate Tea Policy in consideration of tea as one of the major cash crops that provides a sustainable source of income, employment and foreign currency, with the active involvement of farmers at the grass roots level and the private sector in the production, processing and exporting of tea. The Government of Nepal announced the National Tea Policy in 2000 with five components:

- a. Production and processing
- b. Marketing and trade promotion
- c. Institutional arrangements
- d. Manpower development
- e. Development and promotion of auxiliary industries.

45. NTIS activities and targets are included in the Plan of Action of this document and have been revisited by the sector stakeholders.



Photo: ITC, Tea plantation, Ilam Nepal

The Tea Policy 2000 has provisions for:

- Priority credit of up to 80% of project cost with a tax grace period and land revenue exemption;
- The possibility of direct imports of fertilizers, pesticides, weedicides and agricultural equipment;
- Use of the Tea Development Fund for extension;
- Priority to infrastructure development in plantation areas;
- Cooperation and collaboration with governmental and private sector agencies for market promotion through improved packaging, a collective trademark and participation in international trade fairs;
- Support for R&D with institutional capacity development through communication and knowledge-sharing, human resource development programmes and setting up of a Tea Research and Training Centre;
- Encourage establishment of supportive industries with tax exemptions and other facilities.

Important activities envisaged in the Tea Policy are yet to be initiated, especially concerning support for R&D.

LEGAL FRAMEWORK FOSTERING ENVIRONMENTAL SUSTAINABILITY IN THE AGRICULTURE SECTOR IN NEPAL

Environmental sustainability is important to Nepal. This is evidenced through it being a signatory to more than 20 international environmental conventions and agreements, including the United Nations Convention on Biological Diversity, 1992; the United Nations Convention on Combating Desertification, 1994; the United Nations Framework Convention on Climate Change, 1992; and the Kyoto Protocol, 1997.

With its strong institutional and legal framework for environmental protection, Nepal established the Ministry of Science, Technology and Environment and a high-level Environment Protection Council, and also enacted the Environment Protection Act, 1996 and the Environment Protection Regulations, 1997. Nepal prepared and implemented guidelines on environmental impact assessments and strategic environmental impacts to assess the impact of all development projects.

Some programmes and policies that support the integration of environmental sustainability into the development of the agricultural sector in Nepal are the Nepal Biodiversity Strategy (2002), Nepal Biodiversity Strategy Implementation Plan (2006–2010), National Biosafety Framework (2007), Forestry Sector Policy (2000), Herbs and Non-Timber Forest Products Policy (2006), National Wetlands Policy (2003) and so on.

INVESTMENT POLICY

Investment climate and investment-friendly policies in Nepal

For the past two years, the agricultural sector and other export sectors have been negatively affected and stunted due to two major shocks that happened in Nepal: the April 2015 earthquakes that caused huge loss of life and assets, and the political tension that disrupted external trade.⁴⁶ Compared with countries such as Bhutan or Bangladesh, Nepal performs at a lower level in terms of electricity and transportation. However, it performs better regarding tax rates and tax administration, labour skills, the functioning of courts and business licensing permits.⁴⁷ Due to poor infrastructure, crime and vandalism, Nepali firms bear higher aggregate costs associated with the poor investment climate than any comparator countries.

The country is now in the process of full fledge implementation of the new Constitution, where local election has already been completed and the election for federal

parliament and provincial parliament is approaching very close. This will definitely drive the country towards socio-economic development by keeping these agenda on the top in the days ahead.

Nepal has a lot of export potential in the agricultural sector. According to a World Bank study,⁴⁸ one of the main reasons it is being held back is because of low levels of foreign direct investment. The bulk of exports of its products such as teas, herbal remedies and spices, which are said to fit the 'brand' of Nepal, are of low quality. Additionally, its exports are repeatedly rejected due to being part of the lowest quintile of countries for food safety.

The Government provides financial incentives in the tea sector: exports of tea to third countries benefit from a cash incentive of 2% against the hard currency earned to compensate the high cost of doing business with countries other than India. In October 2016, the Nepal Industrial Enterprise Act 2016 was approved by Parliament and granted tea plantations an incentive of a 10-year income tax holiday. Parliament has also approved amendments to the Labour Act to improve the investment-friendly environment in Nepal, with more flexible labour regulations 'on no work no pay'. Additionally, the Foreign Investment and Technology Transfer Act was introduced as the most liberal regulatory measure for the promotion and attraction of foreign direct investment in Nepal in 1992. An amendment is currently being prepared to enhance the investor-friendliness of the environment.

Current foreign direct investment in the tea sector

In 2010, two Indian companies established their production units in Sri Antu and Fikkal. Similarly, another Indian company took over several local tea processing factories and started its operation on the basis of a lease contract.

46. The World Bank (2016). Nepal Development Update, May 2016: Remittances at Risk. World Bank, Kathmandu. Retrieved from <https://openknowledge.worldbank.org/handle/10986/24663> License: CC BY 3.0 IGO.

47. Afram, Gabi G.; Pero, Angelica Salvi Del (2012). *Nepal's investment climate: leveraging the private sector for job creation and growth*. Directions in development; private sector development. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/343221468157793055/Nepals-investment-climate-leveraging-the-private-sector-for-job-creation-and-growth>.

48. The World Bank (2016). Could Trade and FDI be the Key to Unlocking Nepal's Potential? New Report Suggests 'Yes'. *The World Bank*, Retrieved from <http://www.worldbank.org/en/news/feature/2016/07/12/could-trade-and-fdi-be-the-key-to-unlocking-nepals-potential>.

Table 8: Investment climate in Nepal and neighbouring countries

International benchmark	Viet Nam	China	Pakistan	Nepal	Sri Lanka	India	Bangladesh	Myanmar
Ease of Doing Business ranking (World Bank Group, 2016)	90	84	138	99	107	130	174	167
Competitive Industrial Performance ranking (United Nations Industrial Development Organization, 2012)	55	5	73	128	79	44	77	Not ranked
Global Competitiveness Index (World Economic Forum, 2015–2016)	56	28	126	100	68	55	107	131
Inward Foreign Direct Investment Performance Index (United Nations Conference on Trade and Development, 2010)	22	86	110	134	113	97	114	52
Corruption Perception Index (Transparency International, 2015)	112	83	117	130	83	76	139	147
Economic Freedom Index (Heritage Foundation, 2016)	131	144	126	151	93	123	137	Not on the list

Box 9: Positive impact of supporting policies for the development of the tea sector in Nepal

The Government has had a positive understanding of the export potential of tea for the last two decades and tea has been one of its top priority sectors for export since the first NTIS. The Tea Policy 2000 has been essential in the development of production, financial incentives and the establishment of institutional support.

DEVELOPMENT ACTIVITIES SUPPORTING THE TEA SECTOR

Various development agencies are already working in the sector. Among them are the major Enhanced Integrated Framework (EIF) programme and UNNATI, both implementing in 2016.

NTIS AND ITS IMPLEMENTATION MECHANISM: THE EIF NATIONAL STEERING COMMITTEE

The implementation mechanism of NTIS 2016 involves the establishment of an EIF National Steering Committee under the Chair of the Minister of Commerce, to ensure effective coordination for implementation of the strategy through policy, strategic guidance and resource mobilization. The Steering Committee is composed of Government and private sector executives. Provision has been made for six thematic committees responsible for facilitating implementation of actions as well as coordination and collaboration with all agencies. Agricultural Product Development and SPS Measures is one of the six thematic committees of NTIS led by MoAD that will work on tea development issues.

MoC is responsible for coordinating and monitoring the entire implementation of the strategy. Recognizing the role of the National Implementation Unit in facilitating and coordinating the implementation of the strategy, the Unit will be further strengthened through capacity-building and other required administrative adjustments. It will also coordinate in mobilizing aid for trade and enhancing the capacity of World Trade Organization Focal Points in line ministries and private entities. Line ministries and agencies, as specified in the action matrix, will have responsibility for implementing specific activities. In addition, concerned private sector entities are entrusted to carry out the assigned activities so as to facilitate the implementation of the strategy.

UNNATI

Various development agencies are active in the sector. Among them is UNNATI, a major project currently being implemented. UNNATI is an agricultural development project with three components, funded by the Danish Government and working in seven districts of eastern Nepal. The objective of the value chain component is to ensure sustained improvement in the competitiveness of selected products like tea, large cardamom, ginger and dairy products. Major areas of intervention include:

- Strengthen applied research on farmers' production issues
- Improve farmers' practices to increase productivity and the quality of the production
- Improve availability of quality inputs to farmers
- Value addition and market diversification.

Currently UNNATI is working to conclude a memorandum of understanding with the Department of Agriculture (DoA) to: (a) strengthen tea plant nurseries for improved supply of disease-free seedlings and suckers; and (b) promote improved tea garden management, including management of soil and plant nutrients, removal of infected plants, improved irrigation, shade, etc. In the tea sector UNNATI has received funding proposals from DADO as well as from private sector institutions and firms for value chain development and institutional strengthening for marketing in different districts.

Table 9 presents ongoing development projects in the tea sector implemented by development agencies.

Table 9: Past and ongoing trade and value chain-specific development assistance in the tea sector

Donors	Programmes	Description	Role in economic growth and employment creation / sector activity: tea	Impact on the sector
Danish International Development Agency and Embassy of Denmark	UNNATI– Inclusive Growth Programme in Nepal Lead agency: CTCF Period: 2014–2018 Budget: €54 million	Areas of UNNATI intervention on value chains are: strengthening applied research on farmers' production issues; improving production practices for productivity and quality; improving supply of quality inputs; and supporting value addition and market diversification.	Value chain (€14 million: As one of the components): UNNATI focuses on the commercialization of the value chains within large cardamom, ginger, dairy and organic tea products. UNNATI also works on widened financial services for smallholders and micro, small and medium-sized enterprises.	Farmers and entrepreneurs in seven districts of eastern Nepal will be able to sell and earn more, both regionally and globally, by improving the value chain and getting access to better finance, technology and infrastructure. It is expected that project impact will be on the increase in production of tea.
World Trade Organization / EIF	Nepal Enhanced Capacities for Trade and Development (NECTRADE) 2 Project period: 15 March 2010 to 28 February 2017. Budget: Tier 1: US\$ 1,685,000 Tier 2: US\$ 7,820,000	The EIF Tier 2 Process is supported by the EIF Trust Fund for priority small-scale projects to build trade-related and supply-side capacities. NECTRADE supervises and monitors the implementation of projects in collaboration with other development partners.	In the past NECTRADE supported some programmes like buyer–seller meetings, media broadcasting and Public-Private Dialogue in the sector.	NECTRADE has contributed indirectly to increasing export trade, income and employment generation and also encouraging women entrepreneurs; strengthening of institutions; and supporting formulation of trade policies and strategies that are directly concerned with export priority products like tea, coffee, large cardamom and handmade paper and paper products.
World Bank	Project for Agricultural Commercialization and Trade Lead agency: MoAD Period: 2009 – June 2018 Budget: US\$ 26,550,000	The Project for Agriculture Commercialization and Trade operates with MoAD as the executing agency. Component 1: Agriculture and Rural Business Development Component 2: Support for SPS Facilities and Food QM	The overall project objective is to improve the competitiveness of smallholders and the agribusiness sector in selected commodity value chains. This will be achieved by helping farmers in market-oriented production and improved access through technology and information services, infrastructure and linkages; creating and strengthening industry-wide partnerships among stakeholders along the value chain; and reducing existing obstacles to trade, thereby increasing SPS measures and food quality standards to market requirements.	The second component aims at strengthening the efficiency and effectiveness of SPS services in order to reduce existing obstacles to agricultural and food trade. The products that will benefit from better SPS services include tea, large cardamom and coffee.
Agriterra Netherlands	Grass roots Entrepreneurship and Capacity-building of Cooperatives and CTCF Nepal Lead Agency: CTCF Nepal	The programme's goal is to contribute to the sustained rural poverty reduction of smallholder tea farmers by increasing their income, and equally empower small farmers' organizations to provide better technical and management services.	The programme focuses on capacity-building; business promotion; lobbying and advocacy; and regular supervision and monitoring of district federations, cooperatives and tea farmers. Specifically, it supports small tea processing units to access relevant markets. The programme also gives aid in the organizational strengthening of primary cooperatives and their members, as well as advocating on various tea-related issues faced by farmers and cooperatives.	The programme goal is that a certain number of cooperatives will be able to generate resources on their own and sustain themselves; and that small tea processing units will be capable of producing quality tea and competing in the market. It is the programme's expectation that there will be a positive view towards the tea sector, which would result in gaining more investment to promote the sector.

VALUE CHAIN MAPPING: CURRENT SITUATION

The roles and functions of the main actors are described below along the value chain functions, from inputs suppliers to green leaf collection to tea processing, branding and trading; and finally distribution to domestic and export markets. Figure 11 displays the interrelationship between actors at different levels of the value chain. A clear distinction is made between the actors involved in CTC and orthodox tea because actors do not collaborate much and are geographically located in different regions in Nepal. Orthodox tea is mainly produced in the hills while CTC is produced in the plains of the Terai. Trading of tea is mainly led by Indian importers because 90% of exports go to India, particularly in the case of CTC tea. At the processing level, there is usually an environment of mistrust between small farmers and processors due to tea leaf price negotiation. This situation has led to the emergence of a multitude of actors at the processing level for orthodox tea, including small private units, cooperatives, and medium and large private processing units. Fewer processors are involved in CTC, with only a few large holding companies and privately managed state-owned companies. Most exports are conducted by the processing units.

INPUTS

Nepal's tea planting is carried out using cloned planting materials. Most of the clones are derived from an existing mother bush originating from neighbouring countries. Tea gardens and smallholders usually prepare clones from



Photo: bjornman, Tea plantation in Nepal.jpg

their own fields; however, some get the clones from commercial nurseries which are very few in number. Extension offices of NTCDDB also maintain the mother bush.

Most inputs for the production of tea are available in Nepal. Some inputs are imported by specialized importers such as the Agriculture Inputs Company, agro-vet services and material providers. Large suppliers at the central and district levels supply inputs to farmers through their district or local distributors, agents, retailers or agro-vet shops. The inputs required, suppliers and sources or origins are presented in table 10.

Table 10: Inputs, suppliers and sources for tea planting and production

Inputs required	Suppliers	Source or origin
Land and labour (skilled and semi-skilled)	Locally available	Nepal
Tea plants and planting materials	Locally available or from DADO or private nurseries, or imported from India	Nepal and India
Water and electricity	<ul style="list-style-type: none"> Natural water supply through irrigation system, Drinking Water Corporation Nepal Electricity Authority 	Nepal
Fuel	Nepal Oil Corporation	India
Machinery and tools	Regional or district distributors	India or Nepal
Fertilizer and pesticides	Agriculture Inputs Co. or district distributors	India
Packaging materials		
Jute bags or plastic-coated jute bags	Jute products manufacturing companies in Biratnagar	Nepal
Aluminium foil-coated paper bags or corrugated boxes	Regional or district distributors	India, Nepal and other countries

PACKING AND PACKAGING

The majority of farmers pack and transport fresh leaves in bamboo baskets and leaves are taken directly to the factory because they should be processed within six hours from the time of harvest. Small tea processors and tea factories use different packaging and packing materials of different sizes depending on market requirements. For wholesale packing, most factories use aluminium foil-coated paper bags that carry 22–36 kg of tea leaves depending on the type of tea. Some factories also use jute bags. For retail packaging 100 gram, 500 gram and 1 kg packs are used. Such packaging materials are mainly printed aluminium foil bags.

PROCESSING CAPACITIES

Tea factories follow standard tea processing practices as performed by Indian processing factories in Darjeeling and Assam. In the case of orthodox tea, black tea needs withering while roasted green tea does not. After withering, tea leaves are rolled for twisting and curling for 45 minutes. Twisted and curled tea leaves are fermented (oxidation) for 90 minutes before the tea leaves are dried for 23 minutes at 117–123°C. Dried tea leaves are sorted and broken as needed. Final products are packed as needed by the buyers.

STORAGE CAPACITIES

The storage capacities of small processors and factories are unknown. However, it is understood that processing units and factories mostly have adequate storage facilities for their processed tea. Processed teas are stored in well-ventilated dry rooms or storage facilities. Packaging and packing are done just before transportation or export.

MAJOR ACTORS AND FUNCTIONS

Farmers

Individual farmers in the villages are the main actors engaged in production of tea leaves, representing almost 43% of total production. It is estimated that there are more than 14,900 individual farmers engaged in tea farming. These farmers carry out the following functions:

- a. Prepare land for planting
- b. Collect and purchase inputs like tools, equipment, fertilizers, pesticides and packaging materials
- c. Watering, fertilizing, composting and pesticide use
- d. Plucking of leaves or harvesting
- e. Postharvest practices: cleaning and transportation to collection or processing centres.

Local collectors and green leaf brokers (agents of processing units or factories)

There are three types of local collectors: individual collectors, large middlemen (also called green leaf brokers) and cooperative collectors. All of them work separately for a particular processing unit or factory. In each district, cluster of villages or for each processing centre or factory there are different collection centres or collectors. Local collectors play the following roles in the tea business:

- a. Meet farmers in village collection centres and discuss the prospects for harvesting and collection of tea leaves;
- b. Give assurance of buying harvested green leaves;
- c. Collect harvested products from farmers or collection centres;
- d. Transport products to the processing unit or factory;
- e. Arrange payments to the farmers.

Green leaf brokers: The increasing number of new factories in the sector of orthodox tea since 2010 has led to increased competition for green leaves. Factories do not have a local presence or local purchasing capacities. In order to cater to the need for green leaf bulk supply for large processing units, green leaf brokers have emerged to fill the gap. Brokers purchase other agricultural produce from farmers. They have a good knowledge of local situations and are equipped with transportation and supply facilities such as local vehicles and sufficient manpower, backed by good purchasing capacity.

Processing units or factories

There are 109 tea processing units in Nepal, of which 44 are large- and medium-scale tea factories (orthodox 19 and CTC 25) and 65 are small processing units of small farmers and farmers' cooperatives (22 units). Most of the 44 large- and medium-scale factories have their own plantation (tea estate or garden) and also collect tea leaves from individual farmers located in surrounding areas.

After harvesting, tea leaves are carried on human backs or transported to specific factories or processing units based on predetermined terms and conditions in the agreement. If the leaves are from the garden of the processing unit, labourers are hired to pluck tea and deliver it to the factory. In some cases local collectors play an important role in arranging transportation of products from village collection centres to factories. The major functions of tea processing units or factories include:



Photo: ITC

- a. Management of tea gardens with technical operations for productivity growth.
- b. Mobilize local small farmers or farmers' cooperatives to supply additional green tea leaves during the seasons and develop linkages with farmers; provide technical support if needed and exchange information on the preharvest production status.
- c. Arrange the first stage of green leaf grading and withering if needed.
- d. Follow all tea processing operations as per market demand and consumer preferences.
- e. Negotiate the final price of tea leaves with small farmers based on the minimum price determined by the NTCDB.
- f. Make final payments to farmers, normally within two months of leaves delivery.
- g. Maintain contacts with domestic and foreign market partners.
- h. Arrange transportation of product up to wholesalers or exporters, or manage direct exports to foreign countries.

Processing units in orthodox tea

Large segment: The majority are located within Fikkal / Sri Antu / Kanyam / Aitabare in the hill regions and contribute over 80% of total orthodox tea produced in Nepal. The production capacities of these factories range from over 100 tons to 500 tons per annum. Large segment factories are completely dependent on Indian markets. All the factories are more or less well-equipped with modern machines and quality manpower to run the operation.

Medium segment: Almost all tea factories that fall outside the Fikkal / Sri Antu / Kanyam radius of Ilam district (besides Gorkha Tea factory) and other districts fall into this segment. The production capacities of these factories range from under 100 tons to 150 tons per annum, and four out of nine medium segment factories are certified organic. Medium segment factories are focused on quality tea production and export to overseas markets. Field plantations, management systems and collaboration with small farmers are fairly well organized. Most of these units collaborate with farmers' cooperatives instead of green leaf brokers. Farmers' cooperatives are well trained in terms of quality production. Most importantly, these farmers are provided with higher green leaf prices compared with prices offered by larger units. For certified organic factories, farmers are paid an extra NPR 5 per kilo for their organic green leaves on top of existing premium market prices.

Small segment: cottage industries or home-made teas: Around 58 small processors are actively involved in tea processing and marketing. Due to green leaf price fluctuations and difficult access to processing units, farmers started to produce home-made teas. With the support of development agencies or local entrepreneurs, small processing equipment imported from China has been gradually introduced since 2011. Despite initial doubts from the rest of sector concerning the quality of tea made with small machines, teas from some of the small processors have won awards in International Tea Championships.

Steps in processing tea



Withering



Rolling



Drying



Sorting and grading



Sorting and grading



Quality checking



Fermentation



Sorting and grading

Box 10: Success story of small producer – Sakhejung Tea Estate

Sakhejung tea comes from the Sakhejung village of Ilam district in the Himalayan foothills. This locality has been known for growing one of the finest teas in the world. The tea is grown by the Srijansil Integrated Pest Management (IPM) Tea Farmer Group under the supervision and technical support of DADO in Ilam and the National IPM Programme Nepal. It is tough to grow this tea and even tougher to wait for the yield because it grows slowly in the Himalayas. It is planted at high altitudes at around 6,500 ft. This, together with the fertile soil and the ideal weather, are the key factors that contribute to the unique aroma and character of the tea. The farmers of Sakhejung have amazingly adapted to the circumstances and have learned the methods of producing tea both agriculturally and industrially. Many Nepali small producers are now receiving visits from interested international buyers willing to buy directly from them.



Pictures: ITC field visit in June 2016.

Processing units in CTC tea

There are about 25 tea estates and CTC tea processing units. Total production and export of these units exceeds 15,000 tons of tea annually.

TRANSPORTATION SYSTEM

Farmers to tea processing units or factory: Normally green tea leaves should be processed within six hours of being harvested. Therefore, tea plucking labourers or individual small farmers directly deliver tea leaves to the processing unit or factory if these are within half an hour walking distance. If the distance is further, farmers join

together to transport their leaves from garden to factory in hired pickup vans. Different means of transportation are hired depending on the quantity of leaves, the distance, the types of roads and the availability of transport means. A human can carry up to 50 kg at a time, a donkey carries up to 100 kg, a tractor can carry up to 500 kg and a pickup van can carry up to 1,500 kg at a time.

Tea processing unit or factory to market centre: Most processed tea is transported to Biratnagar, Birtamod or Kathmandu, depending on where the tea processor or factory has its storage and trading facilities. From Biratnagar more than 95% of processed teas are exported to India and other countries. Some portions of highly valued tea are also airlifted from Kathmandu.



Photo: ITC, Tea drying machine

Biratnagar or Birtamod to Kolkata: Indian trucks have access to Birtamod and Biratnagar. Therefore, tea consignments are directly loaded from the warehouse of the company or factory office and the truck moves to India through the Biratnagar/Jogbani Customs point. Normally trucks carry about 8–10 tons of tea.

QUARANTINE CERTIFICATE

In cases of exports to overseas countries, most exporters of orthodox tea have arrangements with the buyers to recognize and accept product certification from internationally recognized institutions such as the Institute for Marketecology, Japanese Agricultural Organic Standard, National Association for Sustainable Agriculture, etc. In cases of export to India, a quarantine certificate is obtained by exporters for tea on a lot basis, known as a CFL certificate (see legal requirements in previous chapter). The samples for testing are consigned to Kolkata through the Indian Quarantine Office located at Forbesganj. Testing is carried out by the authorities in Kolkata. The responsibility for testing is taken by the transporter or Customs agent in Jogbani or importers.

DOMESTIC MARKET

There are a number of small tea retailers spread across the country. However, those offering Nepali specialty and orthodox teas are concentrated within tourist areas like Thamel in Kathmandu and Pokhara Lakeside. These retailers source their teas from traditional large producers at cheaper prices for regular orthodox teas and premium prices for specialty teas from small and medium segment processors. Chinese tourists represent the major buyers of Nepali specialty teas from such outlets.

EXPORT MARKETS

Nepali teas are currently being sold in the local domestic market and exported to India and a few other markets. Based on the categorization of Nepali teas vis-a-vis existing markets, tea buyers can be classified into the following types.

Tea packers

Tea packers in a global sense are usually large corporations such as Unilever (Lipton), Tata Global Beverages (Tetley) and Associated British Foods (Twinings). Such packers source their teas from various countries such as India, China, Sri Lanka and other producing countries.

However, most of them do not buy directly but entrust buying and sourcing to assigned agents. Tea packers provide quality and price requirements to their agents, who then do the sourcing / buying / importing from different countries. In the case of Nepali teas, in the United States, Tazo has started buying Nepal teas for their blend through one of their assigned agents at Tea Importers Inc. Similarly, for India, Tata started buying Nepali teas for its blend through Indian importer-distributors. However, none of the large tea packers have adopted Nepali tea as an origin product in their blends/brands.

There are many smaller packers who are using Nepali teas in their packs but the volume of market share is insignificant. There are a few tea packers and traders in Nepal who are already involved in tea packet marketing and trading. Teas from NTDC are being marketed by its own company throughout the country as well as in India. Similarly, Rakura brand of tea is also actively involved in domestic and export marketing. Kanchanjangha Tea Estate Research Centre has been in this trade for a number of years and they continue to grow. Other than these major brands of orthodox teas, there are hundreds of small businesses in the country who are selling teas in fancy gift bags. Almost all of them are located in Kathmandu (mostly Thamel) and Pokhara.

Industry opinion

Importer-distributors

These companies import teas from different origins and carry out the distribution job for tea packers and traders. Importer-distributors have now replaced tea brokering businesses around the world. These businesses work on the basis of their clients' approval on quality and prices of teas. Once the tea samples have been approved, these importers buy the teas directly from the source.

In most cases, according to our experience, most importer-distributors work on the basis of a 30% markup on quality teas. One of the most recognized importer-distributors in the EU is Haelssen and Lyon of Germany. They have a presence/clients in over 160 countries. Similarly in the United States, the GS Haly Company, Tea Importers Inc., the Martin Bauer Group, (EU/United States) and Universal Commodities (Tea) Trading are active importer-distributors. In India, most producers sell directly to the destinations. In the case of Nepal teas, Haelssen and Lyon is already involved in buying directly on 30–90 days Cash Against Documents. GS Haly and Kentea in the United States used to purchase Nepali tea. Tea Importers Inc. and Special Teas Inc. are presently buying Nepal teas in smaller quantities.

Industry opinion

Tea brokers

The business of independent tea brokers (besides those active for tea auction centres) is now outdated in overseas markets because most buyers like to source directly or through assigned agents.

One of the oldest tea brokers still active is Schroeder and Hamman of Germany, who cater to their select clientele on a commission basis. In India, there are several independent tea brokers who are involved in tea marketing. In the EU, Schroeder and Hamman of Germany is presently very active in buying Nepali teas. This company buys Nepali teas directly as well as from India.

Industry opinion

Wholesalers

Wholesalers mostly cater to retail tea outlets.

Some of the wholesalers involved with Nepali teas in the EU are Frank Pauls, Wollenhaupt, WB Michaelsen, K. Fisher, etc. TeeGschwendner of Meckenheim, Germany is probably the largest buyer of Nepali teas and this company operates with hundreds of franchises. Similarly, Tao of Tea (wholesaler/retailer), QTrade and Nepali Tea Traders are some examples of wholesalers in the United States. In India, most Nepali companies have established their own marketing offices and they cater to various segments of the market, including wholesale.

Industry opinion

Retailers, tea boutiques and online shops

Retailers usually source from wholesalers; however, many retailers have started to source directly from producers. It has become easier to contact producers directly using online services. This is particularly important in the case of high-end specialty teas. Retailers find it cheaper to source teas directly from the producer. Furthermore, buying directly from a known origin helps retailers to market and brand the teas themselves. Similarly, there is a significant increase in tea sales through online marketing. Most tea rooms and food service businesses in importing markets buy teas from tea retail outlets closer to their facilities.

WOMEN IN THE TEA SECTOR

In Nepal, around 90% of the farmers are women and most are usually small farm operators. Their role is important in various stages of crop production, processing and preparing for market.^{49,50} More specifically, women weed, harvest, apply fertilizer, thresh, mill and prepare land.^{51,52} In addition, they collect fuel and water, care for family members and maintain their homes and are usually unpaid family workers.⁵³ Many of their tasks are not 'economically active employment'.⁵⁴ Men usually undertake ploughing but it is common to see rural Nepali women carrying heavy loads of fuelwood, water and fodder.⁵⁵ Women's tasks are more time-consuming – on average, Nepali women work three hours longer than men work per day. (FAO, 2010)

Although there are female collectors, these actors are usually men and in cases of collection groups, it is often

a man who heads the group. This situation is similar for traders and wholesalers. As for retailers, they may be male or female or a business owned by both; however, they are usually subject to the dominant market prices set by the traders or middlemen, who are mostly men.⁵⁶

Women are not offered higher-paying jobs in factories or on tea estates in positions such as supervisors or managers. The main reason for this is illiteracy, as without literacy skills the records required by higher positions cannot be kept. Although minimum wage is not paid in all tea factories, men and women receive equal pay for equal work, even though generally in the agricultural sector women earn about four-fifths of what men earn. Factories have a diverse workforce but they have clear gender roles. Women work in low-paid, repetitive, labour-intensive tasks, while men usually hold leadership positions.⁵⁷



49. FAO (2010). *Integration of Gender in Agriculture: An Analysis of Situation*. p. 5.

50. SOFA Team and Doss C (2011). *The Role of Women in Agriculture. ESA Working Paper No. 11-02, p. 2*. Retrieved from <http://www.fao.org/docrep/013/am307e/am307e00.pdf>.

51. *Ibid.*; p. 11.

52. Honsberger, A. (2015). *Professionals in their Field: Women Vegetable Farmers in Nepal* FAO (2010). P. 29; and in FAO, *Socioeconomic and Gender Analysis Programme (SEAGA): Field Handbook*.

53. FAO (2010). *Integration of Gender in Agriculture: An Analysis of Situation*, p. 5.

54. SOFA Team and Doss C (2011). *The Role of Women in Agriculture. ESA Working Paper No. 11-02, p. 2*. Retrieved from <http://www.fao.org/docrep/013/am307e/am307e00.pdf>.

55. FAO (2010). *Integration of Gender in Agriculture: An Analysis of Situation*, p. 5.

56. Honsberger, A. (2015). *Professionals in their Field: Women Vegetable Farmers in Nepal* FAO (2010). p. 30.

57. Druzca, K. (2009). *Gender and Social Inclusion in Nepal's Tea Sector. SNV Nepal*, p.10.



Source: ITC, *Tea plantation, Fikkal, Ilam Nepal*

Figure 11: Value chain map of the tea sector in Nepal

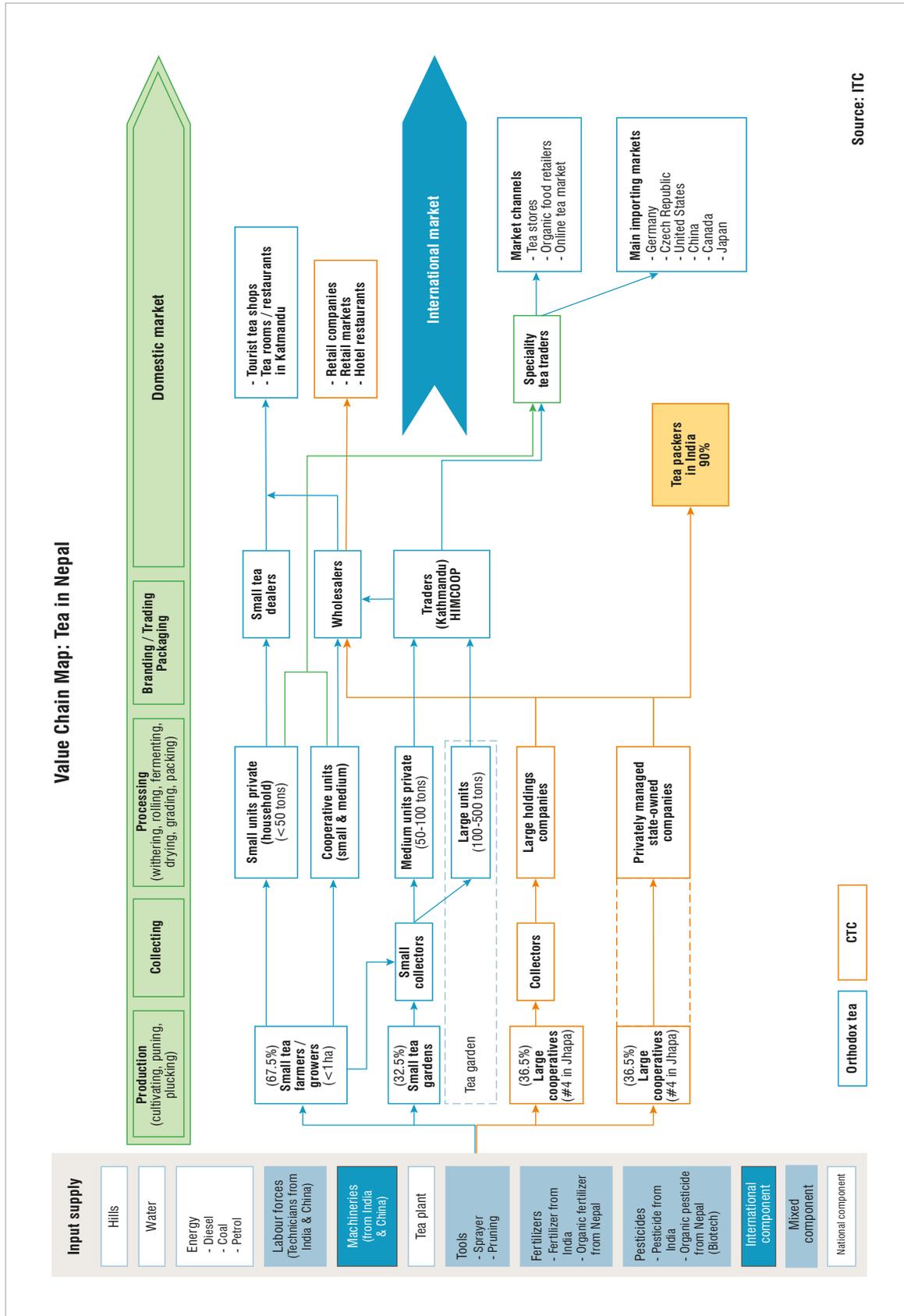


Figure 12: The Nepali tea sector trade support network



THE TRADE SUPPORT NETWORK

Various ministries and departments –including specific public supporting agencies such as NTCDB, as well as many cooperatives, farmers' organizations, international NGOs and development agencies– have been involved in the development of the tea sector in Nepal with specific roles in production, processing and marketing.

POLICY SUPPORT NETWORK

These are many ministries involved in the policy support network but also in specific assistance programmes for the development of the tea sector, including MoAD, the Ministry of Industry, MoC, the Ministry of Federal Affairs and Local Development, DoA, the Department of Industry, NTCDB, the Tea and Coffee Section of the Horticulture Division of DoA, District Offices of the Ministry of Local Development and DADOs.

Ministry of Commerce (MoC)

Tea is a fully export-oriented cash crop of Nepal. Therefore, MoC gives it priority in its policy agenda and intervenes directly in trade development and promotion of tea. As indicated earlier, tea was identified and included as one of the 19 priority products in NTIS 2010 and this is continued in NTIS 2016. In recent years MoC has implemented various product and market development programmes for such priority products under NTIS with the engagement of the Trade and Export Promotion Centre (TEPC) and NECTRADE.

Ministry of Agricultural Development (MoAD)

MoAD has various departments and agencies responsible for the policy and technical services required for the development of tea in Nepal. There are various institutions for the promotion and development of the tea sector in Nepal. Some major institutions under MoAD have been listed below.

i. Department of Agriculture (DoA)

The main objective of DoA is to increase production and the productivity of agricultural products and agricultural inputs to meet both domestic and international demand for such products and to implement production- and employment-oriented agricultural programmes for small farmers, disadvantaged groups and women. DoA has 12 functionary sections and 184 offices. The most active in the sector are DADO, the Regional Agriculture Directorate, Regional Agricultural Training Directorate, Regional Soil Test Laboratories, Regional Plant Protection Directorate (PPD), Agricultural Development Farms, and Plant

Quarantine Offices and Check Posts. All of these offices are responsible for implementing national plans and annual programmes for the overall development of the agriculture in the country.

ii. Department of Food Technology and Quality Control (DFTQC)

DFTQC is the apex organization responsible for the enforcement of the Food Act and Regulations in Nepal. DFTQC ensures and enhances the quality and safety of food and feed products in the country. It has a paramount role in augmenting appropriate food processing and postharvest techniques to promote agribusinesses. DFTQC has been entrusted as the Codex Alimentarius contact point for Nepal for more than three decades and was given the role of National SPS Enquiry Point in 2004. Major functional areas of the Department are: (a) food safety and quality control; (b) food technology research and training services; (c) analytical services for food and feed including microbiological services; and (d) food and nutrition development programmes. DFTQC can perform laboratory tests and issue test certificates for certain parameters. However, the DFTQC laboratory is not certified internationally for tea testing.

iii. Regional and local agriculture technical and governance offices

a. **DADO** (located in 75 districts): DADO works on behalf of DoA for the overall development of the agriculture sector. DADO plays an important role as the coordinator of all agriculture-related offices and projects for the smooth implementation of annual programmes approved by the Government. In tea production districts specific responsibilities of DADO include:

- Production area expansion
- Support for the establishment of plant nurseries
- Distribution of seedlings
- Training on farming, agronomy, plantation management, harvesting and processing
- Coordinating district-level stakeholders and conducting consultative dialogues on policy formulation, farming practices and crop management facilities for overall improvements, including processing techniques.

Presently, DADOs are also working to support training programmes on farming, agronomy, plantation management and distribution of improved packaging materials to farmers.

b. **PPD**: PPD issues SPS certificates for tea. PPD is responsible for implementing the mandates of the Plant Protection Act and Regulations of Nepal. It

has two wings with separate responsibilities: (a) Regional Plant Protection Laboratories have responsibility for plant disease and pest diagnosis, surveys, surveillance and information; and (b) the National Plant Quarantine Programme is responsible for quarantine checks and product SPS certification at border points. There are five Regional Plant Protection Laboratories and 10 plant quarantine check posts and sub-check posts at different border points in Nepal.

MoAD also has a special programme called the Agricultural Products Export Promotion Programme to support product certification.

Cottage and Small Industries Development Board

The Cottage and Small Industries Development Board works in parallel with the Department of Cottage and Small Industries and functions in the same way as the Department. It provides industrial registration, promotional and coordination services to entrepreneurs in cottage and small industries in the country. Its most important activities include providing inputs, training workers and entrepreneurs, marketing and market promotion, and coordination with other stakeholders for the overall development of cottage and small industries. The Board has offices in 48 remote and mountain districts out of 75 districts of Nepal. In the remaining 27 districts the Department of Cottage and Small Industries has offices to provide the same types of services. They are working to register tea processing units and also provide training on management and entrepreneurship development.

TRADE SUPPORT SERVICES NETWORK

National Tea and Coffee Development Board (NTCDB)

NTCDB was established in 1993 under the patronage of MoAD with the objective of promoting and strengthening development efforts in the tea and coffee subsectors through policy formulation and research, and technical and managerial support. The major responsibilities of NTCDB include:

- Policy inputs and advice on policy implementation to MoAD;
- Research and feasibility studies and support in production extension;
- Management support for supplies of inputs including tools and equipment;
- Identification of critical issues and constraints, and recommending solutions;

- Technical services for entrepreneurs and industries in marketing, market promotion, market surveys, QM, branding, etc.;
- Coordination and networking of stakeholders;
- Capacity development of technicians and professionals;
- Operation of training and research centres to increase the knowledge and skills of the institutions and people involved in the sectors.

The Executive Committee of NTCDB is chaired by the Minister for Agricultural Development, and public and private stakeholders are well-represented, including private tea producers, private coffee producers, small tea farmers, the Nepal Tea Planters Association (NTPA), MoAD, the Ministry of Finance, MoC, NARC, the Agriculture Development Bank, NTDC, TEPC, tea industry workers and coffee industry workers. The Executive Director is the Member Secretary of NTCDB.

Irrespective of the ever-growing demand for tea in world markets and the high market prospects for Nepal, NTCDB as a focal point institution currently suffers from some limitations in terms of the absence of a stakeholder-friendly pragmatic plan, strategies and action plans; the absence of dynamic leadership with effective modern management knowledge and a lack of quality technical manpower; inadequate technical R&D efforts; poor knowledge-sharing and management systems; and inadequate capacity development programmes and training facilities for stakeholders.

NTCDB Extension Offices in Jasbire, Fikkal and Mangalbare provide services to local tea farmers and processors in supporting farm management for the development of tea production and processing.

Collective trademark Nepal Tea

Nepali orthodox tea has been given the collective trademark 'Nepal Tea', with a specific logo which was registered with the Department of Industry in July 2015. There are two logos. The round one was introduced by the Government of Nepal and can be used by any company with permission. Companies producing CTC can use it with the CTC mark and companies engaged in orthodox can use it accordingly. The other logo, 'Nepal Tea Quality from the Himalayas' is used for orthodox tea only by companies who comply with the code of conduct of the Himalayan Orthodox Tea Producers' Association (HOTPA).

NTCDB is authorized to issue a permit to use the collective trademark to industries that fulfil norms and standards set out by the Government. The collective trademark is an assurance of the origin and product quality of Nepal. A monitoring mechanism has been developed by forming

a team to inspect the proper use of the collective trademark by tea traders. The team is keeping a strict watch to make sure the logo is not used on products that do not meet the standards and that do not originate in Nepal. NTCDB is collaborating with HOTPA to monitor and promote the collective trademark with the logo in the international market. Recently NTCDB has taken initiatives to register the trademark in the main importing countries. The collective trademark and logos are presented in figure 13.

Figure 13: Collective trademark logos.



Tea auction house in Jhapa

MoAD and NTCDB are working to set up a tea auction house in Jhapa with a view to facilitating tea growers and buyers to meet and negotiate prices for their products with the highest bidder, ensuring the best possible rate in the market. At the initial stage the tea auction house will be operated by NTCDB. And at a later stage it would be handed over to an independent authority to be formed and represented by private stakeholders including tea producers' cooperatives, tea entrepreneurs and others. So far the Board has not received any Government budget for the construction and operation of such an auction house.

Trade and Export Promotion Centre (TEPC)

TEPC, the Government authority under MoC established in 1971 with the objective of national trade promotion, supports stakeholders in product development, trade and market research, and market promotion of the export products of Nepal. TEPC services include market information and market research; training on trading systems, trade policy, marketing and product development; and market penetration measures including Nepal's participation in international trade fairs, buyer-seller meets and store promotions. TEPC is also responsible for maintaining foreign trade data and informing entrepreneurs about

global trade scenarios for major export products of the country. TEPC frequently collaborates with NTCDB and other major trading groups to promote collective trademarks or logos, and in Nepal's participation in international trade fairs and exhibitions.

Agro Enterprise Centre (AEC)

AEC, initially set up as a project funded by the United States Agency for International Development, is the agriculture wing of FNCCI. AEC is focused on policy lobbying on behalf of private sector entrepreneurs and farmers involved in the production and trade of crops. It collects qualitative and quantitative domestic and international information including price, quality and production of agro products, and analyses and disseminates such information to stakeholders including the Government, farmers and institutions. In the past AEC has played important roles in policy advocacy for tea. For about nine months from November 2015 to July 2016, UNNATI and AEC had an agreement for collaborative activities to support the development of tea production in the eastern region of Nepal.

SECTOR ASSOCIATIONS AND COOPERATIVES

There are various sector associations and cooperatives at the value chain production, processing and marketing levels. CTCF is involved at production level. In the processing and marketing levels, HOTPA and the Himalayan Tea Producers Cooperative Ltd. (HIMCOOP) are actively involved. Similarly, district Chambers of Commerce and FNCCI also assist in the development of the tea sector.

Central Tea Cooperative Federation (CTCF)

CTCF is an umbrella organization made up of district tea producers' cooperatives. Its primary role is to conduct advocacy and lobbying activities at the national level in support of tea. It was established in September 2010 and has members from four tea producers' cooperative associations and 92 primary tea producers cooperatives from seven districts, including Ilam, Jhapa, Panchthar, Tehrathum, Dhankuta, Udayapur and Bhojpur.

Seventeen cooperatives have established their own processing units and have started to process and market their teas. CTCF has a strong field presence and conducts various field-based programmes. Currently CTCF works with Agriterria Netherlands (Grass Roots Entrepreneurship and Capacity-building of Cooperatives and CTCF, Fifth Phase); UNNATI (training of smallholder lead farmers on improved tea cultivation practices in UNNATI programme districts); and Foundation de France (Relief, Recovery, and Reconstruction of the Tea Sector in the Context of the Nepal Earthquake 2015).

Himalayan Orthodox Tea Producers Association (HOTPA)

HOTPA was established in 1998 to address the issues and problems faced by the Nepali orthodox tea industry and to establish orthodox tea as a major export commodity. HOTPA currently has 22 members comprising tea farmers' federations, tea gardens and tea estates, and processing factories. From its inception, HOTPA has been actively involved in providing training to farmers, international marketing, code of conduct implementation, policy advocacy and much more in partnership with various donor agencies including: the United States Agency for International Development, the German Society for International Cooperation, Japan International Cooperation Agency, Netherlands Development Organization, the United Kingdom Department for International Development, International Development Enterprises and Winrock International.

Over the last few years, HOTPA has faced severe internal problems caused by several factors. The major issue was its dependence on external funding for its operation coming from international NGOs or development project support. The Association has to develop its own financial capacity. The second issue is related to the segmentation of orthodox tea producers (see value chain analysis), who face different challenges and started to compete between themselves for green leaf supply and buyers. Despite the current difficulties, HOTPA members remain influential and the Association retains its capacity to influence the Government in its plans and policies pertaining to orthodox tea. HOTPA can become active again and help the industry tremendously to speed up the implementation of this Strategy.

Himalayan Tea Producers Cooperative (HIMCOOP)

HIMCOOP is a marketing cooperative established in 2003 and initiated by HOTPA. Most HOTPA members are also members of HIMCOOP, representing approximately 17 industry-specific members. HIMCOOP was established because HOTPA was registered as an NGO and the Association could not legally carry out tea marketing activities. HIMCOOP has been successful in establishing several international market linkages and diversifying exports of orthodox tea. It has been promoting the Nepal Tea brand through participation in numerous trade fairs and tea events, and has also been involved in providing export technical assistance (sending samples, investigating buyers, disseminating product information, quality control, policy advocacy and others). Several donor agencies – such as the German Society for International Cooperation, the Netherlands Development Organization and Winrock International – have supported HIMCOOP. Since the recent issue of pesticide MRLs faced by some

of its members, HIMCOOP is only marketing the teas of a few of its members.⁵⁸

Tea Development Alliance (TDA)

The Tea Development Alliance is an alliance of national and international organizations providing services to support the development of the orthodox tea subsector. Its main objective is to enhance the orthodox tea value chain by helping link the efforts of various supporters and actors. The Alliance's Secretariat is with AEC and is presently not active.

Nepal Tea Planters Association (Associate Member of FNCCI)

NTPA is an associate members of FNCCI. This Association has about 24 members, who together produce almost 85% of the total tea production in the country. All the members are focused on CTC tea production, mainly in Jhapa district of Nepal. Almost all the members have tea estates and most of them have tea processing units.

Nepal Tea Development Corporation (NTDC)

NTDC is a government-owned entity with tea estates and processing units in Ilam and Jhapa districts. Currently all of its major production activities – including tea gardens and tea factories – are leased out to Sanghai Group for 50 years. NTDC is working only in a small way at its corporate office in Dhulabari, where part of the premises is rented out for different business purposes.

Specialty Tea Association of Nepal (STAN)

STAN is an association recently established to represent the interests of small producers and entrepreneurs of specialty tea. Its office is located in Kathmandu. At present STAN has 25 members.

RESEARCH

Nepal Agricultural Research Council (NARC)

NARC conducts qualitative agricultural research studies at a national level, identifies constraints and issues, and proposes policy and strategic measures for the overall development of agriculture. It also coordinates, monitors and assesses agricultural research activities conducted by other agencies in Nepal. It has four Regional Agriculture Research Stations at Tarahara, Lumle, Parwanipur and Nepalgunj and other research stations under these regional stations.

58. Himalayan Tea Producers Cooperative Ltd. (HIMCOOP Nepal) website: http://nepaltea.sauer-medientechnik.de/index.php?option=com_content&view=article&id=8&Itemid=9.

NARC established the National Commercial Agriculture Research Programme (NCARP) in 2008 to overcome the perceived challenges in commercialization of agriculture with a view to focusing on policy as well as technological research and to meeting the demand for long-run commercial agriculture research. NCARP is located at the NARC Regional Agriculture Research Station at Pakhribas and currently it is mandated to conduct research on tea and large cardamom varieties, agronomic practices and other related technologies. Ongoing activities include development and dissemination of technologies through a tissue culture system for disease-free seedlings, energy-efficient dryers and water-efficient irrigation systems. Other tasks it has assumed are varietal assessments based on collection of different cultivars from different sources, disease and nutrients management, and IPM.

BUSINESS SERVICES NETWORK

Input suppliers

Nepal Electricity Authority and Nepal Oil Corporation: each has a monopoly on supplying electricity and fuel, respectively. Other energy is supplied by private entrepreneurs located in Birtamod and Biratnagar.

The Agriculture Inputs Company Ltd has a good network and almost a monopoly on supply of different varieties of chemical fertilizers. However, organic fertilizers certified by reputable institutions are imported by organic tea planters themselves from Thailand and other countries.

Machinery and packaging suppliers

There are many dealers of Indian processing machinery in Siliguri and Kolkata. However, tea processors have recently identified suppliers of the most modern machinery and tools in China and Chinese Taipei. Some of the leading Indian suppliers of tea processing machinery, tools and services located in Kolkata and Siliguri are: T & I Pvt. Ltd, Zenith Forgings Pvt. Ltd, [G.K. Tea Industrial Corporation](#) and [Vikram India](#).

Similarly, there are many specialized packaging material manufacturers for tea in Kolkata and other parts of India. Tea processing factories requiring large quantities of such packaging materials can also request to print the label and trademarks on such materials. However, the printing requirements of small processors are not met by the suppliers of packaging materials.

GENDER-SPECIFIC SUPPORT ASSOCIATIONS OR INSTITUTIONS

The Women's Foundation Nepal

This is a non-profit NGO in Nepal that helps women and children who are victims of abuse and poverty. Their projects involve eliminating gender bias in laws, rules and regulations; enhancing independence by giving access to microcredit and promoting local business and saving schemes for women; and increasing access to education and various skills training and empowerment programmes. Their goal is for women to become strong and independent and for them to become integral in shaping the future of Nepal.

Federation of Women Entrepreneurs Associations Nepal

The Federation's goal is to promote female entrepreneurship through advocacy, networking, information dissemination, capacity-building and promotion of women entrepreneurs throughout the country. They have partnerships with three other organizations to increase women's access to employment, skills and enterprise development. Activities involve training in costing, pricing, book-keeping, packaging and labelling; providing counselling to entrepreneurial groups; training for capacity strengthening of women entrepreneurs; and workshops on sensitization to gender issues.

FINANCIAL SUPPORT SERVICES

The Government of Nepal is focused on policy support for the production and promotion of agriculture crops including tea. Agricultural loans, export credit and cash incentives on export are some of the major supports. The Nepal Rastra Bank (the central bank of Nepal) has created a special scheme and instructed financial institutions to provide commercial and production soft loans to any enterprise engaged in the export sector. Commercial banks, development banks, credit cooperatives, small farmers' banks and microfinance lenders are the major financial institutions extending credit facilities to entrepreneurs engaged in the tea subsector.

According to this provision, commercial banks are supposed to charge 4–4.5% interest, for which the Nepal Rastra Bank refinancing rate is only 1%. However, not many entrepreneurs know about this provision and the financial institutions in tea-producing districts have not shown much interest in promoting this scheme due to lower spread or margin compared with normal market rates for other loans and credit.

EDUCATION SERVICES

The Government of Nepal has developed a strong institutional base to support capacity development of the policy and functional agencies in the agricultural sector. Tribhuvan University has set up the Institute of Agriculture and Animal Science as a main institute to support capacity-building in the agriculture sector. This institution provides opportunities to students to select tea as a major area of study under an elective course. It also encourages conducting research on tea development and its various aspects, including value chain development. Mechi Campus of the Tribhuvan University has developed a graduate course on tea technology. The graduates from this campus are currently working in tea processing units in Ilam and Jhapa districts.

Agriculture and Forestry University has been established to focus on quality education in the areas of agriculture and forestry where both the areas are interlinked and inter-related. Other universities also have agriculture faculties conducting various academic programmes where the tea subsector is also a priority area. Additionally, foreign universities also provide scholarship programmes to Nepali students to pursue various academic programmes abroad.

TRADE SUPPORT NETWORK PERFORMANCE ANALYSIS

The Government and its agencies provide, in principle, various trade support services based on the Tea Policy 2000 and its various implementation programmes. However, the policy and programmes are not regarded

as effective. The overall perception of the private sector expressed during the two sector stakeholder consultations was a lack of coordination in development support for the sector. It appeared quite clear that an absence of communication between the actors in the value chain is the origin of the problem.

A number of key institutions play a critical role in the development of the tea sector. The most relevant are plotted in figure 14 according to the observations of ITC analysts and sector stakeholders, in terms of each institution's importance for the sector and its capacity to fulfil mandates related to the tea sector. Various institutions have a significant level of influence on the sector, including MoAD, NTCDB, sector associations (CTCF for orthodox tea cooperatives and NTPA for CTC producers). NTCBD is supposed to play a central role in the development of the sector but its functions are limited to political support and advocacy.

Consequently, while the sector has strong political support it clearly lacks technical support capacities, with limited public financial resources at the disposal of the technical agencies to respond to its specific needs. Although various sector associations and institutions such as HOTPA/HIMCOOP, AEC and CTCF have benefited from foreign development aid to implement development activities either at the production level or at the marketing level, once the financial support was gone the sector was not able to develop sustainable private business support services in trade promotion or trade information. When it comes to business services to improve production quality or technology, the sector still relies on foreign technical expertise coming from India.

Figure 14: Perception of trade and investment support institutions – influence versus capacities

		Capacity of the institution to respond to the needs of the tea sector		
		Low	Medium	High
Capacity to influence the tea sector	High	<ul style="list-style-type: none"> • NARC 	<ul style="list-style-type: none"> • MoAD • NTCDB • HOTPA 	<ul style="list-style-type: none"> • HIMCOOP • CTCF • NTPA
	Medium	<ul style="list-style-type: none"> • Department of Cottage and Small Industries • DFQTC • Nepal Bureau of Standards and Metrology (NBSM) 	<ul style="list-style-type: none"> • MoC • AEC (FNCCI) • Tribhuvan University • Rastra Bank • STAN 	
	Low	<ul style="list-style-type: none"> • Ministry of Industry / Department of Industry • DoA/DADO • NTDC 	<ul style="list-style-type: none"> • TEPC 	

Legend: (blue) policy support network, (orange) public trade support services, (green) business support services, (grey) civil society support network

To conclude, despite the number of ministries, technical agencies, cooperatives and sector associations involved in the sector, individual separate interests and insufficient willingness to collaborate to achieve common objectives have hampered the development of the sector. This sector strategy initiative has helped to bring all actors to the same table and identify their common issues, which are described in the analysis of competitive constraints affecting the tea value chain in the following section.

KEY COMPETITIVE CONSTRAINTS AFFECTING THE TEA VALUE CHAIN

A sector's competitiveness depends on a number of factors, ranging from supply of export goods and services to the quality of the business environment, market entry and the development impact of the country's trade, which is important to its sustainability. For a sector export strategy to be effective, it must address a wider set of constraints across these four dimensions of competitiveness. This integrated approach is illustrated by the ITC four gears framework in box 11.

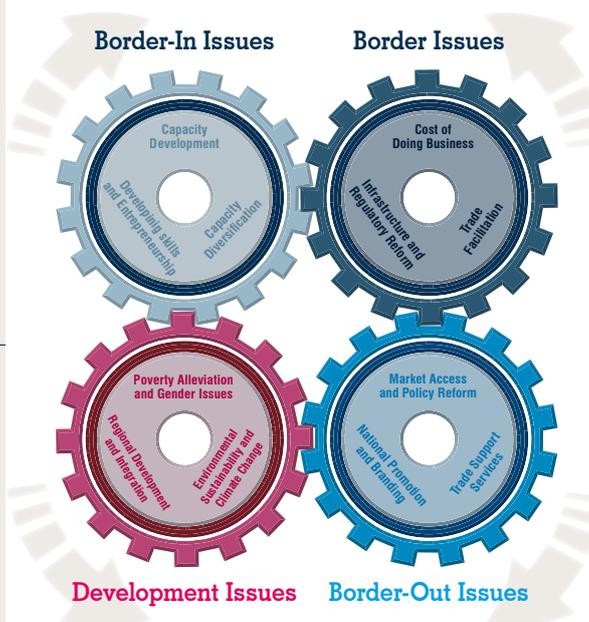


Photo: ITC, Tea drying machine

Box 11: ITC four gears competitiveness constraints analysis framework

Supply-side issues affect production capacity and include challenges in areas such as availability of appropriate skills and competencies, diversification capacity, technology and low value addition in the sector's products.

Market entry constraints are essentially external to the country (but may also be manifested internally), such as market access, market development, market diversification and export promotion.



Business environment constraints are those that influence transaction costs, such as regulatory environment, administrative procedures and documentation, infrastructure bottlenecks, certification costs, Internet access and cost of support services.

Social and economic concerns include poverty reduction, gender equity, youth development, environmental sustainability and regional integration.



Photo: S Pakhrin, tea kathmandu Nepal.jpg

The constraints are classified according to three criteria.

Competitiveness severity

The issue is critical for the competitiveness of the sector.

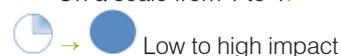
On a scale from 1 to 4:



Urgent action needed

The issue/constraint is hampering export competitiveness and requires immediate action. This could potentially be a quick win in the short or medium term for the implementation of the Strategy.

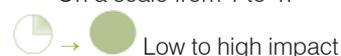
On a scale from 1 to 4:



Ease of resolution

Assessment based on the discussion during the stakeholders meetings, taking into account the nature of the stakeholders involved in the action, time needed for implementation, investment required, the need to adapt/change the legal framework and the contentiousness of the reform.

On a scale from 1 to 4:





SUPPLY-SIDE CONSTRAINTS

Supply-side issues impact production capacity and include challenges in areas such as availability of appropriate skills and competencies, diversification capacity, technology and low value addition in the sector's products.

Supply-side constraints: tea	Competitiveness severity	Urgent action needed	Ease of resolution
Capacity development issues			
Productivity issues			
<ul style="list-style-type: none"> There is a shortage of labour to extend planting and also to continue operating existing plantations, due to the migration of labour to foreign countries. This has affected the harvesting of quality leaves and resulted in reduced prices. 			
<ul style="list-style-type: none"> New farmers and existing farmers lack transportation to get leaves to processing plants. In many cases there are no processing plants near the farmer's land, requiring support for the purchase of pickup vans. 			
<ul style="list-style-type: none"> High cost of energy and unavailability of enough energy in time. There is frequent load shedding of electricity. 			
<ul style="list-style-type: none"> Most processing units are operating below capacity, leading to high costs of processing and reduced competitiveness. 			
<ul style="list-style-type: none"> Insufficient financial support for the introduction of modern and improved technology. Old machinery needs to be replaced. In the case of small processing units, there are mismatches with the different types of machinery from India and China, resulting in misuse of higher capacity machines when lower capacity machines are being used in the production process. 			
Quality issues			
<ul style="list-style-type: none"> Insufficient quality as farmers tend to pluck leaves without proper attention to quality and the possibility of contamination. 			
<ul style="list-style-type: none"> MRLs have been exceeded recently due to negligence and lack of knowledge on the part of farmers in certain tea plantations. 			
<ul style="list-style-type: none"> Revisions to the Nepal standards for different types of tea have been under consideration for a long time by NBSM and NTCDB. Delays in announcing the revised tea standards has impeded the definition of or agreement on common standards. 			
Capacity diversification issues			
<ul style="list-style-type: none"> Continuous and thorough research has been generally neglected due to the lack of a tea research centre, which has resulted in the absence of: soil testing; research on native varietal development; seedling multiplication systems; identification of native cultivars; controlling pests and diseases; and development of technical human resources. Due to its proximity and easy access, progress at field level and use of inputs and technology has all been highly dependent on India. 			
<ul style="list-style-type: none"> Certified organic manures are not available in Nepal. Certified organic manures are imported from India, Thailand and other countries. There is no certification programme in place for organic manure. 			
Developing skills and entrepreneurship issues			
<ul style="list-style-type: none"> Lack of skilled technicians and tea agronomists to provide guidance on tea cultivation. 			
<ul style="list-style-type: none"> Lack of skilled and professional technicians for tea processing. For many years Nepal depended totally on expensive Indian experts but Nepali educational institutions have started education in tea technology. 			
<ul style="list-style-type: none"> Lack of competence of technicians in energy consumption and factory modernization. 			
<ul style="list-style-type: none"> Absence of proper marketing skills among small processors. 			

Tea has been one of the emerging subsectors in the economy of Nepal over the past two decades. World market demand in volume and quality is growing. However, Nepal is not in a position to meet the demand of its customers because of supply capacity development issues associated with productivity and quality.

Productivity and quality issues

The shortage of labour to extend planting and continue operating existing plantations is the most crucial issue. Labour shortages are caused by migration for foreign jobs that are more attractive than jobs at home. Moreover, tea processing factories are operating below capacity – leading to high processing costs and loss of competitiveness – due to inadequate energy supply during the production season.

In order to maintain quality, it is necessary to ensure that tea leaves reach processing units within six hours of being picked. Some farms are located far from processing units, necessitating vehicles or other appropriate transport. It is essential either to encourage setting up of processing units near such farms or to arrange transportation from appropriate collection centres near the farms.

The tea sector mainly uses Indian and Chinese technology and machinery. In some small processing units, there are mismatches of technology and machinery resulting in misuse of high capacity machines and low product quality. A good part of the mismatch is due to donors providing free machines to unsuspecting farmers. Even well-established and well-funded private factories are making mistakes because machinery is being provided free or at very low cost.

Because of the shortage of labour, farmers pluck leaves without paying proper attention to quality and the possibility of contamination. Farmers also lack knowledge about good agricultural practices. This situation has resulted in an increase in the risk of pests and diseases. An increase in MRLs is also a possibility.

The Nepal standards of tea determined by NBSM are outdated. Therefore, the process of harmonization of national tea standards with international standards should be a priority for NBSM.

Tea processing is highly energy-intensive, and power shortages and electricity costs are a major issue in Nepal. Different stages of tea processing – including withering, rolling, drying, grading and packing of tea – require energy. Different types of energy are used for each of these processes, including firewood, coal and electricity. Nepal's tea processing units are more energy-intensive because of the use of inefficient and outdated machinery requiring both high electrical and thermal energy, with energy costs contributing 30–40% of the total processing



Photo: ITC

cost. Drying, the most energy-intensive phase of tea processing, is mainly carried out using firewood from natural forests. Data from some tea processing units in Nepal indicate that 0.45 kWh of electrical energy, 4 kg of fuelwood and 0.7 kg of coal is required to produce 1 kg of made tea.⁵⁹

Capacity diversification issues

Supplies of inputs, technology, experts and machinery are highly dependent on India. Recently, some Chinese machinery and technology has become popular among processors. In the meantime, serious R&D tasks have been neglected for many years because of the lack of a specialized tea research centre. In the absence of such an institution, urgent activities like soil testing, native varietal development, seedling multiplication systems, identification of new native cultivars, controlling pests and diseases, and development of technical human resources have been neglected.

The world market for organic tea is growing fast. However, organic certified manures are not available in the domestic market, although there are prospects to use local

59. Sectoral Assessment report, Under Project, Promoting resource efficiency along the value, Chains of key sectors in South Asia.



Photo: Akshay Mahajan, *Tea Pickers in Eastern Nepal Near Itahari, Eastern terai.jpg*

resources to prepare organic manures. It is therefore necessary to introduce organic manure production technology and a certification system in the domestic market. Entrepreneurs are of the view that the high tea-growing districts (Dhankuta, Terathum, Ilam, Panchthar and Taplejung) should be declared organic districts and no pesticides should be allowed in, be they for tea, vegetables, other crops or livestock. As an example, some counties and townships in Chinese Taipei – such as parts of Hualien County and Ruisui Township – have been declared organic throughout the area.

Skills development issues

In the past 15 years, planting and production of tea in Nepal grew by 2.55 and 4.56 times respectively. Tea production marked a historic record of more than 23 million kg in 2014/15. The number of small farmers involved is almost 15,000 with over 90 tea cooperatives. Nepali tea, particularly tea grown in the high mountains, has developed solid links to the world market and fetches gradually rising prices. Despite the increase in tea planting, production, processing and marketing, there is still no highly specialized and autonomous institute that facilitates research and training on all aspects of tea – including farming practices, processing technologies and trading systems – and thereby supports the enhancement and modernization of cultivation, processing and marketing in the sector.

There is a total absence of integration and coordination of R&D activities in good agricultural practices for tea cultivation. There are also not enough senior tea scientists and highly specialized technical manpower. Specific issues are related to plant breeding for improved and

market-oriented cultivars, soil fertility management and improvement, IPM (entomology and pesticides), mechanization and productivity improvements, energy management (alternative sources, efficiency and economy), quality and automation, laboratory management and certification, and by-products utilization.

There are 177 tea processing units (140 in orthodox and 37 in CTC) of different scales and capacities in Nepal. Tea processing units require tea technologists and tea experts to produce quality and standard tea as per the requirements and preferences of international and domestic markets. However, there is limited skilled manpower and there are not enough technologists for the urgently needed guidance in production and processing of tea in Nepal. Training in new technology for production and processing from countries like Japan and China might be appropriate for Nepal.

Research in the sector has been generally non-existent and neglected. Development of new plant varieties, progress in agrochemical management practices and technology upgrades have all been directly or indirectly brought into Nepal, mostly from India. Moreover, the majority of the machinery in CTC and in the large segment of orthodox tea is of Indian origin, except in older factories, which is from the United Kingdom. Most technicians and tea agronomists have pursued their training in India. Therefore Nepali tea bears a very close similarity to its neighbouring competitors, the Indian Darjeelings and CTCs. Innovation has not been integrated in the mindset of sector stakeholders. In order to develop a Nepali tea with clear differentiation with its competitors, a dedicated tea research centre must be established.



BUSINESS ENVIRONMENT CONSTRAINTS

Business environment constraints are those that influence transaction costs, such as regulatory environment, administrative procedures and documentation, infrastructure bottlenecks, certification costs, Internet access and cost of support services.

Business environment constraints: tea	Competitiveness severity	Urgent action needed	Ease of resolution
Regulatory issues			
<ul style="list-style-type: none"> The Government's Tea Policy is outdated and not being effectively implemented, which constrains the development of the sector. 			
<ul style="list-style-type: none"> There is no crop insurance system in Nepal for tea. In Kenya, the Government has doubled its subsidy system in view of the decrease in the world price of tea. 			
<ul style="list-style-type: none"> The existing export cash incentive system of 2% on all exports is not applicable to tea exported to India. 			
<ul style="list-style-type: none"> Importing packaging materials is costly for small processors as they cannot import large volumes of printed packaging materials in bulk from India. Imports without printing attract 35% duty, while those with printing of a company name attract 1% duty as industrial raw materials. 			
Trade facilitation issues			
<ul style="list-style-type: none"> Goods cannot be consigned through the Mechi Customs point due to a lack of facilities for quarantine checking and clearance on the Indian side and demand for a luxury tax. For exports to third countries, Indian Customs demand an Indian bank guarantee and a letter of credit opened by the foreign buyers needs to be presented. The bank guarantee is only requested at one Customs point. 			
Institutional support and coordination issues			
<ul style="list-style-type: none"> The NTCDB mandate was well-defined in the Tea Policy but activities in the field lack effectiveness, especially concerning research and financial mechanisms to support the sector's growth. 			
<ul style="list-style-type: none"> The Government's commitment to improving sector coordination is not clear and transparent. 			
<ul style="list-style-type: none"> There is insufficient public-private dialogue and cohesion between stakeholders, CTC and various segments in orthodox tea to find a common development plan and solve issues. 			
<ul style="list-style-type: none"> There are no national financial schemes to support the development of the sector based on memberships or contributions towards quality programmes, branding and trade promotion. 			
<ul style="list-style-type: none"> Access to credit is difficult because tea plantation cannot be used as collateral for loans. National legislation prohibits to the production of different crops on a tea plantation. The Agriculture Development Bank does not provide loans due to this legislation. 			
<ul style="list-style-type: none"> Lack of institutional mechanisms to address energy issues in the sector. 			
Ease and cost of doing business constraints			
<ul style="list-style-type: none"> The overall business environment is not conducive due to political interference and disruptions to work in processing units and tea fields. 			
<ul style="list-style-type: none"> Farmers are not getting a reasonable price and processing factories are not making payments in time. 			
<ul style="list-style-type: none"> Farmers and cooperatives are not receiving soft loans. The system of granting soft loans was stopped at one point. Cooperatives cannot access the Rural Self-Reliance Fund for long-term soft loans from the Nepal Rastra Bank. 			
<ul style="list-style-type: none"> There are insufficient coordinating efforts among factory owners, brokers and farmers in determining sources and prices of green leaves. 			
<ul style="list-style-type: none"> The cost of electricity and interruptions to its supply affect quality and increase processing costs, reducing the price competitiveness of Nepali tea. The machine downtime and effect on the quality of product can be expensive. 			



Photo: USAID Nepal, A member of the EcoTea Cooperative, plucks the first flush of organic tea in her farm in Illam in eastern Nepal.jpg

Regulatory issues

The National Tea Policy 2000 was envisaged to begin implementation in 2003 for the development of tea as a sustainable source of income, employment and foreign exchange earnings through increased participation of the private sector. This Policy spelled out a number of provisions and commitments to facilitate the tea sector, especially in the areas of production and processing, marketing and trade promotion, institutional arrangements, manpower development, and development and promotion of auxiliary industries. Private sector entrepreneurs consider that this policy has remained in limbo due to a failure to translate the policy into action through appropriate regulatory provisions in respective acts, regulations, directives, plan and programmes of the Government of Nepal.

For instance, commercial banks are not enthusiastic about providing priority credit for tea planting and tea processing units at a subsidized rate for grace periods as indicated in the Policy. Similarly, it is not easy for private sector entrepreneurs and farmers to get land allocated on

lease for a period of 50 years for tea plantations. There is no provision for capital grants for irrigation, partly because the Tea Development Fund is not effectively in place. Tea processors also do not receive adequate energy supply as envisaged in the Policy. Additionally, tea planters are not facilitated by the provision of a crop insurance system, and imports of the packaging materials required by small tea processing units still attract 35% import duties while large units enjoy the benefit of only 1% duty on packaging materials imports. Moreover, domestic packaging industries are not encouraged to assist the tea sector with appropriate and adequate production to meet domestic demand. The Policy also failed to implement its commitment of providing facilities to export tea to India on a par with those provided for third country exports.

Trade facilitation issues

Mechi Customs point is the border point closest to the tea plantation and processing locations in Nepal for exports of tea to India and other countries via Kolkata Port. However, Customs on the Indian side discourages

imports or transit tea cargoes because of the lack of facilities such as a quarantine check post. They also make additional regulatory demands such as a guarantee from Indian commercial banks, presentation of a letter of credit from foreign buyers, provision of clearance for limited volumes or value of transaction, etc.

Institutional support and coordination issues

There are many specialized agencies under MoAD and DoA providing services on different facets of agriculture. The Tea Policy has also made provisions for additional institutional arrangements to facilitate and support stakeholders, mainly farmers, producers and processors. However, tea entrepreneurs question the effectiveness of institutional performance to improve the sector's coordinated development due to lack of a clear strategy and plans of action backed by cohesive public–private dialogue.

NTCDB faces many constraints in implementing the Tea Policy 2000, due mainly to a lack of funding and highly specialized scientists, technical experts and manpower. A quick review of the past achievements and performance of NTCDB reveals that the Board is more focused on policy research and promotion activities like feedback to the Government for policy and programme formulation; participation in international conferences and trade fairs; communication through data publication, trademarks and postage stamps; and periodic short-term training programmes. MoAD and DoA do not oversee the R&D activities of NTCDB. Additionally, NTCDB, in view of its structural limitations, has a restricted role in overall coordination of the tea R&D programmes that are taking place sporadically and partially through many government agencies.

Irrespective of the impressive increases in turnover and export of tea in the past two decades, the Government has not taken initiatives to establish a tea research and training centre as planned in the Tea Policy 2000. This centre is supposed to conduct research and training programmes funded by the Tea Development Fund and in association with NARC and international donor partners. NARC is the only agency focusing on all types of research covering all components of agriculture in Nepal, although it does not have a wing specializing only on tea R&D.

NCARP has recently initiated research on crops including tea and large cardamom. However, this programme is very new and so far it does not possess a separate research farm and it has not established its own research laboratory or other physical and technical facilities. Considering the lack of adequate financial resources and technical expertise, currently it has assumed very limited tasks on varietal research, IPM, disease management, improvement of quality through improved drying systems, improved irrigation systems, etc. These activities are not adequate and effective enough to support planters and processors in the development of tea to meet export market demand.



Photo: The Advocacy Project, *Tea Plantation past Hile*, Katie Baczewski, Peace Fellow 2014, Dhankuta, Nepal.jpg

Difficult access to finance

In the absence of clear government policy guidance and articulate directives from the Nepal Rastra Bank, commercial banks and financial institutions are hesitant to finance the tea sector – even based on the collateral of tea gardens or factories. The systems of extending priority credit, or soft loans or finance, through the Rural Self-reliance Fund Scheme are also in limbo in the absence of clear directives from the Nepal Rastra Bank. In addition, cooperatives cannot be extended this type of soft loan by the Nepal Rastra Bank.

Ease and cost of doing business constraints

There is no coordinated mechanism among processing units, brokers and tea farmers for the supply of tea leaves. Processing units are mostly dependent on brokers to ensure a regular supply of tea leaves from farmers or tea gardens. Brokers play an important role in determining the leaf price for farmers and sources of leaf supply for particular processing units. This arrangement has often resulted in a high cost of leaves for processing units. Additionally, tea processing units are also suffering from increased processing costs and low quality output due to frequent interruption of electricity supply and high electricity tariffs.



MARKET ENTRY CONSTRAINTS

Market entry constraints include issues such as market access, market development, market diversification and export promotion.

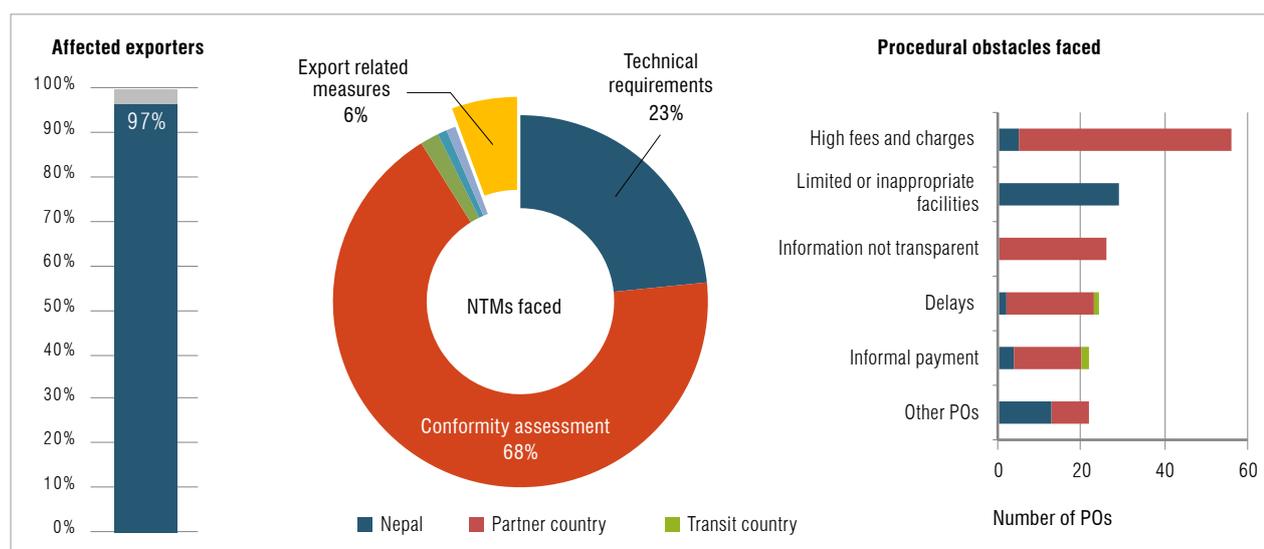
Market entries constraints: tea	Competitiveness severity	Urgent action needed	Ease of resolution
Market access constraints			
<ul style="list-style-type: none"> • CFL: Burdensome regulations, procedural obstacles and expensive related costs imposed by the Indian Food Safety Authority, which requires submission of a test report from CFL: <ul style="list-style-type: none"> – Testing facilities are not available at Customs points – Testing must be done at CFL in Kolkata – Multiple tests required – for each shipment and buyer – Multiple test requirements can lead to high costs – Long waiting times: minimum two weeks to a month – Large quantity of tea taken as a sample – Harassment at CFL and Indian Customs – Additional fees not mentioned in the regulations must be paid to resolve any issues. 	●	●	◐
<ul style="list-style-type: none"> • A few good examples of tea producers have been able to cope with MRLs but a large part of the sector lags behind and has difficulty meeting market requirements. For instance, a few cases of excess levels of anthraquinone have been found. 	●	●	◐
<ul style="list-style-type: none"> • Lack of recognition of tests performed by Nepali laboratories as they are not internationally accredited. Many buyers and countries require additional test reports on MRLs and heavy metals with each consignment. 	◐	◐	◐
<ul style="list-style-type: none"> • It is difficult to meet the requirements and high cost of organic certifications needed for each country for exports of organic tea. 	◐	◐	◐
<ul style="list-style-type: none"> • Informal non-tariff barriers at Customs across the border are high for Nepal transit cargo to third countries. 	●	●	◐
<ul style="list-style-type: none"> • Nepali tea is not allowed in Indian auctions except private non-registered auctions. There is no auction market in Nepal to attract foreign buyers, thus limiting competitive bidding. 	●	●	◐
Trade services support constraints (in and outside the market)			
<ul style="list-style-type: none"> • Tea sector associations are competing and there is no common vision for the future development of their sector. 	●	●	◐
<ul style="list-style-type: none"> • There is no business information dissemination system on tea. Because of the lack of information, large and medium producers/processors are not able to sell third and fourth grade products like broken, fannings and dust to India or Europe, even if they are organic certified. Products could be exported to the Middle East but there is no authority that can issue organic certificates. 	◐	●	◐
<ul style="list-style-type: none"> • Absence of a tea auction house to provide easier access to buyers and price transparency. An auction house should be established as early as possible in view of increasing tea production and trade in Nepal. 	◐	●	◐
Trade promotion constraints			
<ul style="list-style-type: none"> • Insufficient promotion of Nepali tea. Global tea buyers are not aware of Nepali tea quality and potential. 	◐	◐	◐
<ul style="list-style-type: none"> • Absence of promotion and communication programmes like market research, participation in trade fairs for cottage tea farmers and language training programmes for tea traders. 	◐	◐	◐
<ul style="list-style-type: none"> • As Nepal does not have a tea auction house registered with the International Tea Committee, Nepal does not appear as a tea producer in international tea statistics. 	◐	◐	◐

Market access issues

Most of the problems faced by tea exporters are associated with India both as a partner country and a transit country. The ITC NTM survey interviewed 30 tea exporters, most of whom (97%) responded that they have faced difficulties with NTMs (see figure 15 below). In addition,

15 tea producers were interviewed on their difficulties in relation to production and market access. SPS-related technical requirements (23% of NTMs) and conformity assessment (68%) are the main types of burdensome NTMs tea exporters face. Only a small fraction of their difficulties relate to Nepali regulations.

Figure 15: Tea exports – share of affected companies, NTMs and procedural obstacles faced



Source: ITC NTM Business Survey in Nepal, 2016.

Burdensome regulations and procedural obstacles with CFL

Major export items of Nepal going to India that require NOCs are large cardamom, tea, ginger, medicinal herbs, essential oils and lentils. Currently large cardamom and tea are permitted to clear Customs at the Biratnagar (Nepal) / Jogbani (India) border Customs point and ginger can be cleared at the Mechi (Nepal) / Panitanki (India) border Customs point. These items require a NOC from CFL Kolkata. In cases of exports to India, consignments at the border Customs points on both sides are normally cleared by the Nepali exporters even though it is the responsibility of the importer in India to clear the import from Indian Customs. The online clearance system is virtually unused by the importers of such items into India. For each consignment, an Indian Customs House Agent is hired by the Nepali exporters on the Indian side of the border to clear the consignment, including the responsibility of obtaining a NOC from CFL. As per normal procedures, after Customs clearance in Nepal, all the documents along with the consignment have to be submitted to the Indian border Customs Authority, which removes samples for testing to be sent to Kolkata. Well-packed and sealed samples are taken to Kolkata to receive a NOC, which takes between two weeks and one month. The maximum time should be one week.

In view of the constraint of holding consignments at the border in trucks for so many days, CFL Kolkata and the border Customs Authority have made arrangements to allow periodical advance submission of applications for NOCs for production lots and consignments to be cleared only through designated border Customs points. This arrangement is found practical by exporters in Nepal. However, exporters often report that the informal charges requested by Customs House Agents to get a NOC are unreasonably high – CFL Kolkata charges INR 75,000 per buyer valid for six months – and more than 5 kg of samples of tea are demanded for testing purposes, as against the 500 grams specified in the regulations.

Difficulties of tea exporters to with comply foreign regulations related to MRLs

Although Nepal produces and exports high-quality orthodox tea and a few good examples of tea producers have been able to cope with MRLs, indiscriminate use of chemicals and pesticides by some producers has caused all Nepali tea to be scrutinized by importing markets. The use of a number of banned or severely restricted pesticides such as phorate and metacid has had an impact on market access for Nepal's exports. For example, Germany rejected a consignment of Nepali orthodox tea on the grounds that it contained tetradifon at a level of

0.24 parts per million, which is 24 times the permissible MRL in Germany. Germany also rejected a tea sample due to high trace residue levels of the pesticide ethion.⁶⁰

Another issue is related to MRLs for anthraquinone. For instance, buyers are currently asking for an MRL of anthraquinone of 0.01 mg/kg even when the government regulation level is 0.02 mg/kg. As described earlier (see box 7), it is reported that anthraquinone residues are a worldwide problem. The exact reason for anthraquinone is unknown. In Nepal, anthraquinone has only been found in some cases.

Testimony: 'MRL levels in tea are defined and should not be crossed. High MRL levels might be harmful to health; therefore such issues are to be considered. If an MRL is crossed, the importer sends back the goods after testing MRL levels in the importing country. Besides this, Nepal's lab test is not approved by importing countries as they do not recognize certificates issued from Nepal.'

Tea exporter, ITC NTM Survey, Nepal 2016

Given that Nepal does not have in place minimum mandatory food standards in harmony with the Codex Alimentarius, it is often the case that requirements for MRLs for certain pesticides are more stringent in export markets. Some pesticides banned or severely restricted in the EU and the United States are still in use in Nepal. Nepal does not have MRLs for pesticides, nor a national residue monitoring programme, which creates a stumbling block for tea exports.

There is a hygiene requirement for tea processors to enter the EU market

Tea imported into the EU is subject to the requirements laid down in the regulation (EC) No. 852/2004 concerning the hygiene of foodstuffs. This Regulation requires that food business operators put in place, implement and maintain a permanent procedure or procedures based on HACCP principles. This requirement applies to tea processors carrying out any stage of production, processing and distribution of food after primary production and associated operations. Therefore food hazards present at the level of primary production and associated operations should be identified and adequately controlled to ensure the achievement of the objectives of the regulation.

Other examples of NTMs affecting tea exports

Some Arab countries request official health certificates from the Ministry of Health of the exporting country. This certificate does not exist in Nepal.

Difficult organic certification

Nepali exports of organic tea also face problems due to a lack of understanding of the procedures for organic certification and the multiplicity of requirements imposed by each importing market; for example, the United States Department of Agriculture National Organic Programme certification for the United States (organic tea exported to the United States needs this certification); Japanese Agricultural Organic Standard for Japan; and National Association for Sustainable Agriculture for the EU. Additionally, organic certification is very expensive. Certified tea processing plants have reported spending NPR 1–2 million per year on organic certification. Overall, there is insufficient expertise in agro-food inspection and certification systems. Nepal had an SPS-related trade dispute concerning exports of orthodox tea to the EU due to non-compliance with pesticide residue levels.

Laboratory testing costs

Recently some modern private labs (Zester Lab, Water Engineering Lab) and the Government facility lab (DFTQC) have been set up and equipped to perform reliable MRL tests. However, these laboratories have not received accreditation from internationally recognized institutions. Therefore, for the time being, buyers in importing markets do not recognize the validity of Nepali laboratories and request additional testing to be performed in their home countries. The cost of such pesticide residue analysis in the EU and the United States is approximately US\$200 per sample, which is a significant cost for a Nepali small or medium-sized enterprise.

Procedural obstacles

There are several obstacles to Nepali food exports. Food quarantines have become a major hurdle to trade between Nepal and India. Since 2000, India has required strict quarantine regulation formalities on agricultural products, which raise the costs and make it more difficult for Nepal to remain competitive in agricultural exports. There are also instances of intentional misbranding of Nepali tea as Indian Darjeeling tea. Lack of information on the specifications for packaging in export markets as well as noncompliance with SPS and technical barriers to trade requirements in exporting countries hinder food trade.

In order to fulfil the requirements of the United States market, exporters have to obtain product acceptance from the FDA and comply with quality specifications. The procedure for a product to be accepted by the FDA requires meeting the criterion of appointment and acceptance of a local agent who is responsible for penalties, destruction of the consignment or any defects. Since the introduction of the Bioterrorism Act (2002), the FDA requires prior notice of food imports.

60. ITC NTM Business Survey in Nepal – 2016.

TRADE SERVICES SUPPORT CONSTRAINTS (IN AND OUTSIDE THE MARKET)

Sector associations are competing and lack a common vision for the future development of their sector

Various sector associations represent the interests of each segment of the sector along the value chain: CTCF represents small farmers at the production level; large and medium segment orthodox tea producers have set up HOTPA and HIMCOOP for marketing purposes, recently followed by STAN for small producers; FNCCI is also involved with producers and CTC with NTPA. The lack of cooperation between sector associations became clear during the initiation of the sector strategy design carried out by ITC and MoC.

Firstly, the orthodox and CTC segments do not collaborate because they perceive each other as competitors as they face pressure to secure access to quality green leaves from small farmers when tea exports start to increase. Secondly, within the orthodox segment HOTPA and HIMCOOP have successfully developed the export of high-quality orthodox tea overseas; however, the positive results have only been felt by a few processing units of the middle segment so far. As financial support from development agencies has recently stopped, these two sector associations are not functioning well any more. The joint marketing initiative related to Nepal Tea and its code of conduct has consequently been held up and NTCDB does not have the financial resources to take over. Additionally, previous problems related to green leaf supply between the large and medium segments and the small cottage segment have left the orthodox tea sector in disarray.

The overall lack of trust between the different actors has impeded a fruitful reflection about the future of the tea sector. This Strategy initiative has helped to foster a new dialogue between the different value chain actors. There is still much to be done to facilitate the implementation of this sector Strategy.

Problems consolidating lower tea grades between producers of the orthodox middle segment

The price competitiveness of lower grade teas such as broken and fannings, as well as leaf tea produced during the monsoon season, is a major issue for medium segment producers. Lower grade teas in this middle segment have to be sold in Indian markets at prices traditionally offered by the market for large segment similar grade teas. The middle segment is not price competitive on these specific types of tea because the cost of production in the medium segment is higher compared with large segment teas, mostly because of higher costs

related to high-quality production methods and organic certification. Thus producers face the need to lower their production costs and to find alternative markets overseas. Opportunities exist in the organic market but producers have not been able to work together to consolidate and blend their production to reach a sufficiently attractive volume for organic buyers overseas.

Absence of a tea auction house

Another critical concern felt by the business community is the prevailing unorganized trading system in the tea sector. This is due to the absence of a central tea auction house. The largest and closest auction house to Nepal is in Kolkata. However, this auction house is not regional or international as Nepali tea manufacturers or traders are not permitted to register and participate as suppliers, buyers or brokers of tea from this auction house. For this reason, for the past 20 years, tea manufacturers or traders have contacted buyers in the open markets in India, where Nepali parties are not generally in a win-win position because in most cases they are almost forced to conclude deals under unreasonable terms and lower prices than they would fetch through an auction system. Thus, Nepali traders do not enjoy the advantages of a professional international trading system.

The proposed tea auction house is in an indeterminate state for many reasons. Firstly, the tea auction house regulatory committee is to be chaired by the Executive Director of NTCDB, which does not have sufficient budget or financial management capacity to set up a modern auction house with warehouses, logistics and handling facilities, and modern electronic devices. Secondly, NTCBD does not have well-trained and capable human resources to operate an auction house. Furthermore, in the Nepali context there is a lack of local expertise in operating a commodity auction house as Nepal has not yet developed any auction system in the country for similar products. A legal framework to attract tea brokering businesses to Nepal is also lacking.

TRADE PROMOTION CONSTRAINTS

Tea entrepreneurs are of view that government initiatives to communicate the potential and quality of Nepali tea to major world buyers are not enough to support export diversification and growth of tea to overseas markets. There is also a lack of market research and training programmes on marketing and market promotion techniques, including technical business language, particularly among small tea processors in the mountain areas. The tea logo is not implemented and shared by the entire sector and apparently there is no funding mechanism for it.

TEPC is a specialized agency under MoC and is particularly assigned with the overall promotion and support to

product development of Nepali export items. In the case of tea, it has a good rapport with stakeholders through various associations and chambers. It mobilizes participation of private sector representatives in international trade fairs and exhibitions and coordinates among various tea-related institutions on other aspects of trade promotion.

The Nepal Tea logo has not been authenticated and registration of the collective trademark and logo in different countries is still pending. The general understanding is

that there should be only one logo to make it easy and economical to register and communicate with buyers and consumers. At the moment there are different logos, which might create confusion in buyers of Nepali tea. NTCDB is yet to include TEPC in initiating coordinated work –along with tea-related associations, cooperatives and entrepreneurs– to reach a consensus on the issue of a single logo for Nepali tea. Once this issue is resolved, MoC is prepared to develop a funding mechanism and implement the task of registration through TEPC.



SOCIAL AND ENVIRONMENTAL CONCERNS

Social concerns include poverty reduction, gender equity, youth development, environmental sustainability and regional integration.



Photo: John Havard, Upton Tea Nepal SFTGFOP Mai Estate.jpg

Social and environmental concerns: tea	Competitiveness severity	Urgent action needed	Ease of resolution
Environmental concerns			
<ul style="list-style-type: none"> Climate change: droughts are expected to occur more frequently. Agrochemical usage: there an indiscriminate use of banned or severely restricted chemicals and pesticides such as phorate and metacid. Deforestation and potential loss of wildlife and habitats: to meet the world's demand for tea, expanses of farmland and forest have been converted to growing only tea. These monoculture plantations tend to drastically decrease biodiversity through loss of plants and animals. Exhausted land: intensive tea culture tends to reduce the productivity of the soil, leading to nutrient-sparse soils that are easily degraded. Water and air pollution: Sedimentation and discharge of agricultural effluents such as pesticides and fertilizers are prominent sources of water pollution. 	<p>○</p> <p>●</p> <p>○</p> <p>○</p> <p>○</p> <p>○</p>	<p>○</p> <p>●</p> <p>○</p> <p>○</p> <p>○</p> <p>○</p>	<p>○</p> <p>○</p> <p>○</p> <p>○</p> <p>○</p> <p>○</p>
Social concerns – youth are not working in the field and migration of labour			
<ul style="list-style-type: none"> Migration of labour to work abroad. Women in the tea sector face low wages and repetitive, labour-intensive tasks (plucking or harvesting). <ul style="list-style-type: none"> – A high percentage of women are illiterate due to lack of access to education, which impedes access to higher job positions. – In small processing units, women's businesses tend to be small and are thus subject to high volatility. As a result, they are incapable of leveraging credit to grow the business. Youth are uninterested in pursuing agriculture. <ul style="list-style-type: none"> – Farming is not valued as a prestigious pursuit. 	<p>●</p> <p>○</p> <p>○</p> <p>○</p>	<p>●</p> <p>○</p> <p>○</p> <p>○</p>	<p>○</p> <p>○</p> <p>○</p> <p>○</p>

Climate change and rainfall

In general, temperatures of 21°C to 29°C are ideal and 150–250 cm of rainfall is required for tea cultivation. Tea farmers and garden managers in Nepal have already experienced unusual climatic conditions with erratic precipitation and increases in temperature that have gradually affected the crop. According to an FAO study, temperature observations in Nepal show a great warming trend with annual mean temperatures increasing by 0.06°C, and these increases are more pronounced at higher altitudes and in winter.⁶¹

A number of research studies have found that climate change will have a stronger impact on agriculture in developing countries than in developed countries. Such studies have established that increasing temperatures will directly impact crop quality and volume by affecting plant physiology.⁶² Additionally, the output of crops will be steadily affected through changes in the water regime and increases in the intensity of pests and diseases. It is high time to consider adopting policy measures in Nepal to manage the possible negative effects of climate change. Future agricultural research should also focus on the development of tea varieties that are tolerant of higher temperatures and erratic rainfall.

Migration

Temporary migration workers have had positive impacts on the overall economy and standards of living since new markets for jobs opened up for Nepali workers, increasing the volume of remittances remarkably. The incidence of poverty has declined from 42% to 31%.⁶³ Migrant workers have developed skills; earned enough to enable household members to access better food, clothing, medicines and education; increased financial and social capital; and empowered spouses with their own earnings as well as remittances from abroad.

The flip side of these positive impacts is that there is declining interest in working in the agricultural sector and wages for agricultural workers have become more expensive as the workforce has shrunk, adding to the cost of cultivation. Land use for agriculture has been reduced,

as mostly only female workers are available. According to the FAO study in Ward No. 5 of Topgachchi Village Development Committee in Jhapa district (where tea is one of the main crops), women still continue to plough agricultural land on their own as male agricultural workers are not available. Additionally, there are many social costs to migration, as cases of sexual harassment of migrant women, extramarital sexual relations in home towns, psychological pressure and depression among children, victims of HIV/AIDS and human trafficking have been frequently reported.

Women in tea sector

Women in the tea sector work in low-paid and repetitive, labour-intensive tasks (plucking or harvesting).⁶⁴ They are not usually offered higher-paying jobs in factories or on tea estates.⁶⁵ In fact, women workers are only paid US\$ 1 per day during tea season, which is below the minimum wage.⁶⁶ Upper caste males are more likely to hold management positions in cooperatives and factories and own larger plots of lands.⁶⁷ Women are unable to complete various tasks of higher-paying jobs because a high percentage of women are illiterate due to lack of access to education.⁶⁸ The overall literacy rate is 51% for women and 72% for men, and this gender difference in literacy is more pronounced in rural areas⁶⁹. This lack of knowledge lowers self-confidence and affects other activities in the value chain in that women are unable to bargain for better quality inputs or practice professional farming, for example. Women's businesses tend to be small and thus subject to high volatility and unable to leverage credit to grow the business.⁷⁰

Customary norms on women's roles in the home and in public life, which often show bias in favour of men, limit women's ability to make decisions, seize opportunities and access productive resources (Chaudhary 2007).⁷¹ In fact, due to the legal and sociocultural norms in Nepal,

61. FAO (2010 June). Implications of Climate Change for Agriculture and Food Security and Adaptation Priorities in Nepal.

62. SANDEE, Policy Brief, The Impact of Climate Change on Agriculture – A Case Study from Nepal (No 70 – August 14, 2014) explains: 'Projections of likely increases in seasonal surface air temperatures and seasonal precipitation levels suggest that there will be a significant acceleration in warming in South Asia and that this will be greater than the rise that was observed during the 20th century. The warming, moreover, is projected to be strongest in the Himalayan Highlands (including the Tibetan Plateau) and in the arid regions of Asia. Studies further project an increase in the inter-annual variability of daily precipitation in the Asian summer monsoon'.

63. FAO (2010). A Rapid Situation Assessment on Agriculture and Migration in Nepal. p.19.

64. Corporate Network Agriculture SNV (2010). Gender Mainstreaming in Value Chain Development, p. 10; Groosman, M. (2011), IDH Sector Overview: Tea, p. 3.

65. Druzca, K. (2009). Gender and Social Inclusion in Nepal's Tea Sector. *SNV Nepal*, p.6.

66. *Ibid.*: p. 10.

67. Corporate Network Agriculture SNV (2010). Gender Mainstreaming in Value Chain Development, p. 10.

68. *Ibid.*; and Druzca, K. (2009). Gender and Social Inclusion in Nepal's Tea Sector. *SNV Nepal*, p.10.

69. Central Bureau of Statistics and Nepal Planning Commission Secretariat (2012). National Population and Housing Census 2011: National Report. Kathmandu; Pereznioto, P. (2016). Rapid Review of Programmes for Women and Girl's Economic Empowerment. *EPS PEAKS*.p.1.

70. Honsberger, A. (2015). Professionals in their Field: Women Vegetable Farmers in Nepal FAO (2010). p. 31.

71. International Fund for Agricultural Development. The Changing Role of Women in the Economic Transformation of Family Farming in Asia and Pacific, p. 3; FAO of the UN (2010). Integration of Gender in Agriculture: An Analysis of Situation. Nepal, p.8.



Photo: ITC

women experience poverty and inequality to a greater degree than men.⁷² They are often excluded from formal processes and structures and lack access to market information technologies and productive inputs.⁷³ In addition to this, not all women's tasks are economically productive; rural women play roles such as caretakers of family and unpaid family workers.⁷⁴ As their tasks are usually more tedious and time-consuming, this leads to time poverty and lost opportunities for women to attend trainings and invest in income-generating activities.⁷⁵

Youth interest in the tea sector

In the three fiscal years from 2012/13 to 2014/15, around 40,000 youth migrated to countries other than India from the five major tea production districts: Panchthar, Ilam, Jhapa, Tehrathum and Dhankuta.⁷⁶ Migration of youths to foreign countries is the major challenge of Nepali society, especially in the agricultural sector. According to the National Youth Policy (2010), youths⁷⁷ account for 38.8% of the total population and are valuable assets and a vital

resource for the nation's development as well as being change agents. The low participation of young people in farming and the agricultural economy must be seen as a matter of grave concern to all; indeed, it directly threatens the future of agriculture and rural economic transformation.⁷⁸ Some of the reasons for youth migration from production districts for foreign jobs are poor government investment and a low share of donor agencies in the agriculture sector. Additionally, the new generation does not want to become farmers even if they come from farming families. Achieving the 2030 Sustainable Development Goals and reducing extreme poverty and hunger will be very difficult without significant investment in attracting youths to agriculture.

Competitive constraints analysis

The analysis of the competitive constraints makes it clear that the sector's sustainable development will require an integrated set of interventions that holistically address challenges across the entire value chain. Roadblocks are not limited simply to enterprise capacities or government policy, and many challenges are the result of a combination of factors that require wide-ranging remediation. It is for this reason that a comprehensive sector export strategy becomes all the more necessary: individual stakeholders, and even small groups of stakeholders, will not be able to deal with the constraints on their own. It is only through strategic cooperation that the most effective results will be achieved.

72. Pereznieto, P. (2016). Rapid Review of Programmes for Women and Girl's Economic Empowerment. *EPS-PEAKS*, p.1.

73. The World Bank (2013). Promoting Agribusiness Innovation in Nepal: Feasibility Assessment for an Agribusiness Innovation Centre, p. 77.

74. FAO (2010). Integration of Gender in Agriculture: An Analysis of Situation. Nepal, p.3.

75. International Fund for Agricultural Development (IFAD). The Changing Role of Women in the Economic Transformation of Family Farming in Asia and Pacific, p. 3.

76. Government of Nepal, Ministry of Labour and Employment. Labour Migration for Employment, A Status Report for Nepal: 2014/2015, p. 22.

77. The National Youth Policy defines youth as people aged 16-40.

78. Panday, D. (2012 September 13). Reshaping Youth in Nepali Agriculture. *Young Professionals for Agricultural Development, YPAR*, Retrieved from <http://www.ypard.net/2012-september-3/reshaping-youth-Nepali-agriculture-0>.



Photo: Elizabeth, Afternoon tea.jpg

THE WAY FORWARD

KEY SUCCESS FACTORS FOR THE NEPALI TEA SECTOR IN THE GLOBAL MARKET

Based on the global trends and constraints identified in the first chapter, the following aspects appear to be critical key success factors for the future development and export growth of the tea sector in Nepal.

Quality and exclusivity

It will be no surprise that, specifically in the orthodox tea sector, quality is one of the most decisive success factors. If Nepali tea is of consistent high quality, there is no need to compete on price. As a landlocked country with many logistics issues and non-tariff barriers at its borders, Nepal cannot compete on price in the commodity tea market. If the quality is low, tea will be bought by India at a low price and will be blended, thereby losing its identity. Therefore, the only option is to focus on quality. It starts with no compromise, from plucked leaf quality to improved processing.

MRLs and HACCP

In most markets, even top quality teas cannot be admitted when they contain residues of pesticides that are higher than the legal norm. Some buyers apply even stricter residue levels than the legislation in their own country. MRL monitoring and control is a big problem even for major tea exporters such as China, Viet Nam, India and to a lesser extent Sri Lanka. Darjeeling is solving the MRL issue by converting all its tea plantations to organic cultivation. Currently, more than 75% of Darjeeling tea is certified organic. Additionally, almost all Darjeeling and Sri Lanka tea estates, and many Chinese tea estates, are HACCP certified. Many of the factories also have additional food safety certifications, like ISO 22000, Safe Quality Food and British Retail Consortium.

Voluntary sustainability and organic certification supported by a traceability system

One way to stand out from the competition is certification but it is important to realize that many competing tea exporting countries offer certified teas. Certification alone is not enough to be competitive but can be regarded as a non-legal requirement to enter many markets. It is, however, certain that certification would underline the quality of a company and its ability to ensure traceability throughout the production.

Unilever (Lipton), the world's leading tea packer, has all of its tea RA certified. Other multinational packers like Tata (Tetley) and Associated British Foods (Twinings) also require certification. In the specialty tea sector, organic certification is the most important. In specialized tea shops, 30–40% of all tea is certified organic.

National branding and marketing skills at the small and medium-sized enterprise level

India, Sri Lanka and other tea-producing countries have strong Tea Boards with significant budgets for marketing and promotion. India has established certified trademarks for Darjeeling, Assam, Nilgiri and Kangra tea, and Sri Lanka has the Ceylon Tea trademark. Almost all Nepali tea (95%) loses its identity when it is blended in Indian factories and therefore Nepali teas have not been visible in the world market. This can partly be addressed by the Nepali tea logo but only after other issues like MRLs have been solved. Export marketing capabilities should be strengthened.

At the company level there are many important factors which need to be reinforced: reliability, consistency, professionalism and the like; an adequate website, with regular and updated information; regular and prompt communication in English and follow-up on enquiries and offers; brochures with good information on the company with the teas it offers and printed sample bags; and budget for courier shipments of samples, market updates, newsletters, communication and phone calls/travel.

THE VISION

The tea sector possesses significant potential to impart socioeconomic contributions to Nepal through export-led and domestic market growth. In order to realize this potential, competitive constraints and structural deficiencies along the four export development gears (supply side, business environment, market entry and development side) will be addressed and identified opportunities in line with key success factors will be leveraged. The following is a delineation of the proposed vision and strategic approach in this direction.

Stakeholders of the tea sector of Nepal agreed on the following vision statement.

“ Developing Himalayan Nepali tea quality and trade to support sustainable, eco-friendly socioeconomic development. ”

THE STRATEGIC OBJECTIVES

The vision set up for the sector export strategy is delineated in four strategic objectives built around the key success factors identified where action is required to build the sector's competitiveness over the next five years. The Plan of Action (PoA) (detailed on page 98) will respond to this vision by addressing the sector's constraints in a comprehensive manner.



1. Improve the quality of green leaves.

Nepali teas need to establish and reinforce their reputation for quality in the international market while complying with MRL requirements and producing tea in a safe, hygienic and environmentally friendly manner. Strengthening efforts to improve the quality of green leaf supply is the first step in enhancing tea quality. This would result in selling at better prices to tea packers and importer-distributors in India and increase exports overseas. Although tea leaf quality is not a concern for a specific segment of the sector – the middle and small segments producing orthodox tea in particular – the rest of the sector, which represents the majority of production and export, must start to collaborate to address the issue of tea leaf quality and pesticide management.

This first strategic objective has emerged from the consensus between major stakeholders to **develop a common green leaf quality improvement programme among processing units of the large segment** of orthodox tea and processing units of the CTC segment. This will be done through the **promotion of good agricultural practices at the tea plantation level for quality improvement**.

In order to resolve concerns about MRL requirements, a **capacity-building programme on pesticide and chemical management** for inputs suppliers will be established jointly with an IPM and organic tea cultivation programme for smallholders.

Collection centres for newly formed farmers' groups or small cooperatives will be upgraded and a monitoring system will be established based on a field inspection programme in partnership with cooperatives, extension units of NTCDB and the new outreach offices. For this, **co-operation between farmers, cooperatives and processors must be strengthened by developing** bulk purchasing and cooperation between large processing units, brokers and farmers to set up quality assurance programmes and traceability. Successful Nepali estates such as Himalayan Shangri-La and Ghorka Tea have already shown the way to replicate this cooperation model.

2. Improve quality and compliance to meet market demand.

Working towards the production of safe, quality teas has become mandatory for the future export development of the tea sector. The tea sector must **adopt Tea Processing Good Manufacturing Practices**, which cover facilities, equipment, operating procedures and skills spanning the supply chain from green leaf collection to storage, dispatch and all the processing steps from withering until packaging. The control of safety and quality hazards is achieved by proper product design based on preventative measures that assure the safety and suitability of

made black tea and its packaging. An **HACCP certification programme** needs to be established for large and medium processing units of the orthodox segment as well as for CTC.

Producing higher quality and competitive teas also requires upgrading **machinery in order to cut production costs, improving QM practices and stepping away from the competition** by developing Nepali processing techniques. Additionally, the large and medium segments as well as the CTC segment have to invest in new processing units developed by other producing countries apart from India. This will help Nepali producers to strengthen the from their closest competitor.

The fast-growing market demand in overseas markets for tea that is compliant with private sustainability and organic standards requires the sector to request stronger government support to develop solid partnerships with consuming countries and set up a collaborative platform between small farmers, processing units, NTCDB, cooperatives, the standards organizations (RA, UTZ, etc.) and buyers (tea packers, distributors). Additionally, **sustainability and organic certification programme support** needs to be developed in parallel with the quality improvement programme. The first phase is to a pilot the certification programme in a specific area and then to upscale to reach a large number of smallholders through training on sustainable tea. Finally, organic production should be included within the programme. Once tested and operational, sustainability standards will be embedded within the national requirements and organizational structures.

Market opportunities for specialty teas in ultrapremium markets and private label certification niches can be tapped into by small producers. An important competitive advantage of small processors is the quality and prices of green leaf because they manage their own plantations and can thus supply green leaves according to required plucking standards and ensure traceability. However, to transform this potential into business realities, small producers have to be trained on the 'art of making tea', focusing on processing and product management to ensure quality, consistency and compliance with international business requirements.

3. Reinforce institutional coordination to manage quality, improve market access and develop Nepali tea varieties.

The future development of the tea sector depends on the ability of its stakeholders to work together and to set up a tea research centre to build a solid foundation. A new tea policy is needed to establish a clear development legal framework and support the private sector to diversify its export markets.



Photo: ITC consultation in Ilam

Improving the dialogue between public institutions, private sector associations, development agencies and major importers is mandatory to guide the tea sector in achieving the fundamental objective of market development. NTCDB has recently become an active institution with various programmes now being implemented in the field. The active role of NTCDB is essential for the future development of the sector in improving the collaboration between these different actors in the value chain, especially to facilitate dialogue between the various private sector associations in the CTC and orthodox segments. NTCDB has to ensure the overall coordination of sector tea QM based on the green leaf quality improvement programme and dissemination of good agricultural practices at the tea plantation level, and also adopt the Tea Processing Good Manufacturing Practice supported by an HACCP certification programme at the processing unit level. Additionally, NTCDB will play a leading role in advocating for a pesticide imports monitoring and licensing system in collaborating with the Ministry of Home Affairs, MoAD, Department of Customs and PPD.

In order to consolidate the future of the sector and improve research to develop Nepali tea varieties, a tea research centre and laboratory will be established for tea plant development, including soil testing; research on native varietal development; seedling multiplication systems; identification of native cultivars; control of pests and diseases; and development of technical human resources. This long-needed research centre will be developed through partnerships with international research institutions to reinforce expertise in tea plant varieties, pest management research and pesticide testing. Additionally, the tea research centre and tea stakeholders will cooperate to pilot new tea varieties and perform productivity and quality evaluations.

The Tea Policy will be reviewed and updated in order to clarify the role and funding of NTCDB and relevant technical agencies such as the new tea research centre or tea auction system; and it will adapt the financial mechanism to support the development of the sector in close cooperation with Nepal Rastra Bank.

4. Strengthen the national brand and value addition to increase market diversification.

In the short term, the Indian market remains the main export destination of Nepali tea. CFL regulations and related procedural obstacles are a critical and burdensome market issue hindering the development of the tea sector. The Nepali Government needs to set up a specific task force to address CFL with its Indian partners. Although resolution may be a lengthy process, it is of utmost importance to start facing the problem with Indian partners both nationally and at the regional level in West Bengal.

As the sector aims to consolidate its efforts to export overseas and reach new markets, the **Nepal Tea logo** needs to be finalized and adopted in line with compliance requirements. Once the standards are developed, a quality implementation programme will be put in place in close collaboration with HOTPA, CTCF and NTPA. Clear legal criteria for application for logo registration and compliance issues will be defined and a compliance committee will be formed to formalize logo implementation. The sector brand will help to build Nepal's reputation and attract new buyers. Nepali tea's reputation can only be sustainable if a reliable and consistent product is supported by a clear and transparent certification process and promotion programme. Furthermore, research will be conducted on getting improved packaging machinery and materials for high-quality teas destined for high-end markets.

Export promotion of the Nepali Tea brand will start immediately, focusing assistance on CTC units willing to diversify their markets; large and medium processing units producing orthodox tea that comply with overseas market requirements; and competitive small processing units wanting exposure to international markets. A common platform will be established to assist medium and small processing units to jointly promote and market their teas to tap existing markets in the EU, United States and India. A specific tea trade fair participation programme will be put in place and buyer–seller events organized. A tea auction system will be piloted to establish new export channels with Indian buyers and establish a transparent pricing mechanism.

LEVERAGING MARKET AND PRODUCT DEVELOPMENT OPPORTUNITIES IN THE DOMESTIC AND EXPORT MARKETS

The Nepali tea sector is characterized by a broad spectrum of actors and different segments as described in the value chain analysis. Each segment varies greatly in skills and business knowledge, from experienced and influential tea exporters to new farmer-processors. Presently, almost all producers sell tea in the domestic and Indian markets. Besides a handful, most sell tea to India through informal channels, mostly because of the CFL issue (as described in the competitive constraints). Below, the Strategy provides recommendations on a selection of potential and product development opportunities in the domestic and international markets.

POTENTIAL IN THE DOMESTIC MARKET

Gain market share in CTC and orthodox tea-bags, and trial production of local blends, herbal and medicinal teas in the domestic market

Nepal's domestic market is dominated by CTC tea. The strong reddish colour of CTC tea is the main appeal for most domestic consumers, as the traditional way to drink tea is to boil it and mix water, milk and sugar together in a kettle. As a result, this tea accounts for more than 95% of total domestic consumption. However, the consumption of orthodox tea is increasing in the domestic market. Unfortunately, exact consumption data for orthodox tea is not available. It is estimated that 10% of the total local production of orthodox tea is consumed domestically. Demand for orthodox tea is also driven by foreigners buying from retailers located in tourist areas. The recent increase of Chinese tourists presents interesting potential

to develop local sales. As tourists buy teas for souvenirs or gift items, efforts should be made to develop innovative packaging and use tourism as a platform to promote Nepali tea abroad.

- a. **Local market studies** need to be carried out to improve the understanding of local market potential and consumer trends as well as to assess tourist market opportunities.
- b. **Trial production of blends, herbal teas and medicinal teas:** some trials should be done to assess whether local consumers and tourists would be interested in herbal and medicinal teas. These two are fast-growing segments in developed countries and could offer interesting possibilities for product diversification.

Potential for tea ecotourism

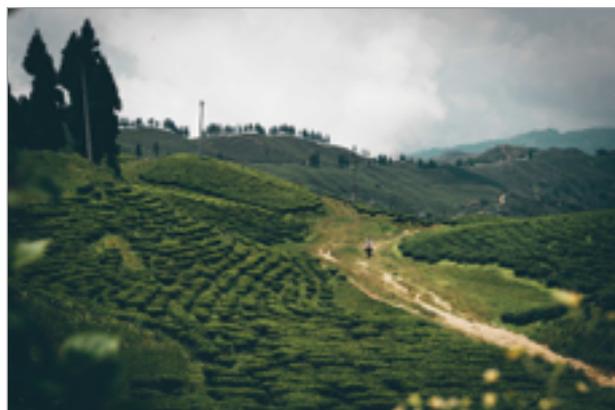
In the context of broader economic development, the tea sector has interesting potential for tea-based tourism including ecotourism, tea-culture tourism and teahouse trekking. A visit to Kanyam Tea Garden and taking photos from the 360° viewing point of 'Shooting Hill'⁷⁹ over Ilam region, the Himalayan peaks and the Mayu River is already a popular tourist pursuit for nationals. A few local travel agencies are already promoting teahouse trekking. International tea lovers from Germany, France, Japan and the United States have also started showing interest. Nepal could also get visitors from Darjeeling – which is only two hours away – when the Pashupatinagar checkpoint has an immigration office.⁸⁰ Tourists could also choose to visit the tea gardens in Jhapa and then journey to Guranse Tea Estate in Dhankuta, the highest garden in Nepal (2,300m).

A development study should be carried out in tea production districts, especially Ilam and Dhankuta, to assess the potential for ecotourism in various tea estates. Small producers may be able to diversify their incomes through involvement in small-scale tourism initiatives and integrate this into a broader community-based sustainable tourism development initiative. There is also potential to increase the employment of women through the development of tea-related services for tourists. Additionally, promoting tea tourism is a good way to market Nepali tea.

- c. The study should include: (1) a field survey at each location to identify the availability of potential resources for ecotourism (e.g. attractions, infrastructure); (2) a community survey with estate households; (3) a series of personnel interviews with estate management; and (4) questionnaire-based surveys with potential local and foreign tourists to these sites.

79. Pokhrel, P. (2006). Promoting Nepali tea through tourism. *Nepali Times*, Issue #302 16 June 2006 – 22 June 2006, Retrieved from http://nepalitimes.com/news.php?id=12018#.V_ygfPI9600.

80. *Ibid.*



Photos: CC BY-SA 4.0 Kanyam, Ilam, Nepal Author Dreamplexx.

Table 11: Summary of market opportunities in Nepal

Product group	Producer types	Key constraints	Suggested actions at the market level	Targeted market channel
CTC tea	All producers of consumer packaged CTC teas	<ul style="list-style-type: none"> Lack of market information Insufficient local production capacities for teabagging, flavouring, mixing with herbs, etc. 	<ul style="list-style-type: none"> Carry out a market study to improve market information about domestic market potential Develop teabagging facilities Training in flavouring, blending (herbs, spices, etc.) Trial of new teas: blends, herbal teas and medicinal teas 	<ul style="list-style-type: none"> Domestic tea packers and retailers Blends, and herbal and medicinal teas, to tourists in Nepal
Orthodox tea	All segments and tea production districts	<ul style="list-style-type: none"> Lack of market information Insufficient packaging for gift items for tourists 	<ul style="list-style-type: none"> Carry out a market study to improve market information about domestic market potential Carry out a specific market study on the tourist market and consumer preferences and packaging 	<ul style="list-style-type: none"> National retailers Mid-class hotels, restaurants Tourists in Nepal High class hotels, restaurants
Tea-based tourism	All segments and tea production districts	<ul style="list-style-type: none"> Lack of tea tourism development strategy and promotion abroad 	<ul style="list-style-type: none"> A study to assess tea tourism development potential 	<ul style="list-style-type: none"> Specialized tea tour agencies and trekking agencies in Europe, the United States, Japan and China

INTERNATIONAL MARKET: NEW PRODUCTS AND MARKETS OPPORTUNITIES FOR CTC TEA

CTC should be considered a commodity product which is very price sensitive. Tea packers can easily exchange one origin for the other. Market diversification opportunities exist but they require dedicated market analysis and a clear market entry strategy.

India will remain the main export destination. Some other regional markets could be explored such as Pakistan, Afghanistan or China (Tibet region). Dubai Tea Trading

Centre⁸¹ is becoming a very important trade hub and tea packing centre. It is now the world's largest re-exporter of tea, processing 41 million kgs in 2015, which is more than triple the 13 million kgs processed in 2013, according to the Tea Centre.⁸² CTC representatives who travelled there recently realized



81. www.dmcc.ae/tea-about.

82. Bolton, D. (2016 April 12). Global Tea Industry Faces Diverse Challenges. *World Tea News*, Retrieved from <http://worldteanews.com/insights/global-tea-industry-faces-diverse-challenges>.

that no one at the Centre knows about Nepali CTC teas. The best option is to use CTC teas for the domestic market and start packaging it in teabags for emerging markets in Nepal and the region. The following actions are suggested:

- a. **Develop teabagging:** This needs financial investment and specific training. Supply of packaging materials (boxes or cartons), filter paper and thread for bags with a tag attached will be challenging and require investment in machinery.
- b. **Trial production of green CTC:** Some trials should be done to assess whether the taste of Nepali green CTC teas are acceptable for target markets. In many cases, green CTC is too strong and bitter, so buyers prefer sometimes orthodox teabag grades of green tea.

INTERNATIONAL MARKET: NEW PRODUCTS AND MARKETS OPPORTUNITIES FOR ORTHODOX TEA

Orthodox Nepali tea has already developed a solid reputation in international markets. However, its quality has not been consistently high and that is one reason that Nepali tea exporters have not been able to reach and sustain a variety of export destinations: 90% of tea is exported to India. Blending, packaging and marketing are done in India and the Nepali tea identity is lost. Opportunities exist because consumers in many markets are looking for better teas with specific origins.

'Markets that have not been well explored are the markets of the Russian Federation, Middle East and China'.

Industry opinion

Depending on the type of tea (variety, quality, processing), markets vary even within available markets. The Strategy presents various opportunities in the international market based on the capacities of the different segments of production in orthodox tea. The market opportunities for each segment are:

- Opportunities for large segment producers to tea packers;
- Opportunities in certified organic tea produced by the medium segment in EU and United States markets;
- Opportunities for lower grade teas produced by the medium segment;
- Opportunities for small segment producers: in specialty tea markets in India and China; and in high quality, ranging from ultrapremium to premium teas and organic and fair trade certified;
- Opportunities across all segments.

The following provides detailed information on the opportunities and required actions to be undertaken and key conditions to be met.

- **Opportunities for orthodox tea large segment producers to tea packers:** Presently, large segment producers are struggling to get higher prices in the Indian market due to insufficient and inconsistent quality. Tea packers such as Lipton, Pickwick, OTG and Teekanne could become major new buyers for Nepali large segment producers. Indeed, these buyers could be interested to try Nepali teas as origin teas produced according to sustainable standards. However, this potential can only be realized if buyers' requirements are entirely met. Important market access conditions to fulfil the requirements of tea packers need to be addressed:

- a. **Higher quality production:** Ensuring higher quality would allow targeting higher-end tea packers in India such as Tata Tea or Meri Chai of Kolkata, and various others willing to pay a higher price.
- b. **MRL compliance needed for overseas markets:** Large segment producers would need to improve their compliance with MRLs, especially to enter the EU and United States markets as the medium segment product has been able to do.

It is important to highlight that Nepal's neighbour and main competitor is moving towards organic production. Darjeeling tea has committed to being fully organic by 2020. Therefore, it becomes mandatory for large segment producers to work towards safe, quality tea production. IPM is the first essential to be implemented seriously and can develop into organic certification.

- c. **Internationally recognized certifications on sustainability and eventually organic:** Various major tea packers are starting to source their teas from sustainable production. For instance, Unilever committed that by 2015, 100% of Lipton teabags globally will be sourced from RA certified farms. By 2020, 100% of tea will be sustainably sourced. This is an opportunity for large segment producers, especially because these packers are struggling to acquire sustainable-certified teas. Large tea estates in India and other producing countries are facing difficulties certifying rapidly given the size of their operations.

One way to stand out from the competition is voluntary sustainability or organic standards. However, many competing tea exporting countries also offer this type of certified tea. Certification alone is not enough to be competitive but it can be regarded as a non-legal requirement to enter many markets. Nevertheless, standard-compliant tea underlines the quality of a company and its tea.

Box 12: Market potential through the commitment of major tea packers to source sustainable products

As a result of growing concern about sustainability issues, the tea industry started to take initiatives like ETP to improve tea sustainability, the lives and livelihoods of tea workers and smallholder farmers, and the environment in which tea is produced. Also, major tea packers have publicly announced their commitments with respect to sustainability, mainly by promising to source certified teas. For example, Tata Global Beverages Ltd promises that all of its tea will be certified either by RA or Trustea by 2020. Table 12 presents the commitments of major tea packers.

Table 12: Overview of sustainability commitments of some major tea brands

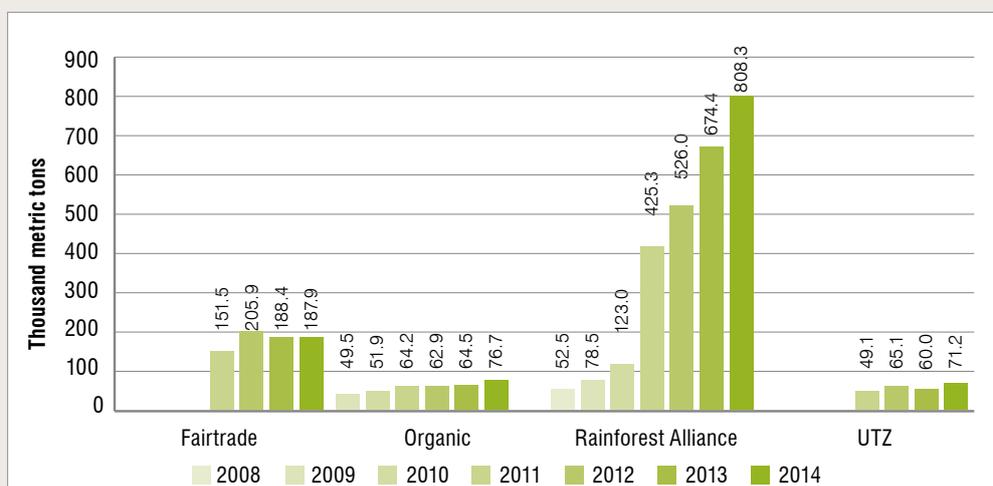
Tea packer (brand)	Commitment	Certification	Implementation
Unilever (Lipton, PG Tips)	100%	RA	2015
Tata (Tetley)	100%	RA, Trustea	2020
ABF (Twinings)	100%	RA (59%), ETP	Not specified
Teekanne	100%	RA	2017
JDE (Pickwick)	No commitment	UTZ Certified (46%), ETP	Not specified
B&TG Ltd (Yorkshire Tea)	100%	RA, ETP	2015
OTG (Messmer, Milford)	100%	ETP	2020

Production volume of the major certification bodies

Four of the voluntary sustainability standards – Fairtrade International, Organic, RA and UTZ Certified – combined represent an estimated 411,000 ha.

- RA has the largest certified tea area and showed the largest area growth (2011 to 2014) with more than 305,000 ha of tea in 2013, representing 8.7% of the global tea area.
- Fairtrade International certified more than 100,000 ha of tea in 2013, representing almost 3% of the global tea area. The largest areas in Kenya (37,000 hectares), India (21,000 hectares) and Uganda (almost 16,000 hectares) represent almost 70% of the total Fairtrade International tea area.
- Organic tea accounts for 2% of the global tea area, more than 71,000 hectares. The Research Institute of Organic Agriculture estimates that more than 76,000 tons of organic tea were registered in 2013, or 1.4% of the world's tea production volume. In 2013, the largest organic areas were in China (50,000 hectares) and India (more than 14,000 hectares). The sum of the area of these two countries represented almost 90% of the total organic tea area. Since 2008, the organic tea area has increased by 3%.
- UTZ certified almost 33,000 hectares of tea in 2013, constituting almost 1% of the global tea area.

Figure 16: Development of the production volume (not actually sold) of the major certifications



It is clear that RA is the most important certifying body but one should bear in mind that 95% of this tea is for teabag grades sourced primarily by multinational tea packers (see table 12 with tea packer commitments). High quantities (20 or 40 ft containers), competing prices and consistency are essential elements here.

■ **Opportunities in certified organic orthodox tea produced by the medium segment in the EU and United States markets:**

Organic certification is the most important one in the specialty tea sector. About 30–60% of all tea in specialized tea shops is certified organic. These are much smaller quantities, which sometimes can go by air freight or can be realized by Internet sales. However, in spite of product availability, organic Nepali producers have not yet been able to tap into these markets. Medium segment producers have the potential and opportunity to tap into specialized tea packers in overseas markets, especially in the EU (Germany, United Kingdom), the United States, Canada, the Middle East, East Asia and Japan. Targeted market channels could also be through agents or importer-distributors or specialized organic tea packers.



Important market access conditions to expand exports and diversify into new markets need to be addressed to access organic markets.

- Diversify the production and product offerings by improving value addition:** This could be done in the form of improved packaging, and modernizing machinery and equipment. For instance, adding colour sorters, vacuum packers and dehumidifiers in the sorting and packing facility or offering the final product in smaller packets and tins.
- Develop targeted market promotion activities in order to improve awareness about high-end quality tea and its origins:** Participation in specialized trade fairs.
- Diversify labelling and private certifications to target new market channels:** Many markets offer opportunities for certified teas such as RA, organic, biodynamic, UTZ, ETP, Fairtrade, etc. The medium segment is already certified by private labels and could potentially also explore new areas to diversify their offer by getting other certifications. For example, certain tea buyers deal with only fair trade teas such as UTZ. RA and ETP have gained a good reputation in the United Kingdom.

- **Opportunities for lower grade teas produced by the medium segment**

The price of lower grade teas such as broken and fanings, as well as leaf tea produced during the monsoon season, is the major issue for medium segment producers. The demand of the organic segment is such that producers need to be able to comply with volume and quality constancy to ensure market access. Most producers in this segment already comply with MRLs required by the EU and some of them are also organic certified.

Important market access conditions to enter these market segments need to be addressed.

- a. **Improve the price competitiveness of lower grade teas and monsoon teas by lowering production costs and saving energy:** Lower grade teas in this middle segment have to be sold in Indian markets at prices traditionally offered by the market for large segment similar grade teas. Since the cost of producing large segment teas is lower compared with middle segment teas, an effort has to be made by the middle segment to lower its cost of production. Lowering the energy costs of medium units could be one easy means. Recent studies show that factories can reduce costs significantly by lowering energy use costs.

- b. **Improve the volume and consistency of organic supply through a single platform:** A solution to improve volume is to develop consolidation of production for the lower grades and to sell them from a single platform, as was done by HIMCOOP. Teas will thus need to be compiled/blended. This could be done in Nepal by establishing a blending unit. From a marketing perspective, high-end tea buyers are quite interested in getting their tea directly from the origin without transit, this way limiting the chance of it getting mixed. This approach would then prove to be more attractive and sustainable in the long run.

- **Opportunities in orthodox tea from small segment producers:** The production costs of small units are higher than medium and large processing units. Therefore, teas produced by small units are not price competitive for traditional orthodox tea packers and importer-distributors. Small units have thus to consider niches in higher-end markets overseas. As these teas are relatively new for the international market, which brings greater interest from potential buyers.

- **Opportunities in small processors' orthodox tea in specialty tea markets in India and China:** Teas produced by small processors in Nepal are mostly new for the Indian market. A recent market study carried out in the context of the UNNATI development project observed

that the specialty tea market in India is a relatively new market. By providing consistent quality with appropriate pricing as well as compliance with CFL, India could be a significant market for specialty green tea produced by small processors. Similarly, China could be another new market for specialty products. In recent years significant quantities of specialty teas destined for Chinese markets have been bought by local and Chinese brokers.

- **Opportunities in high-quality orthodox tea from small processors, ranging from ultrapremium to premium teas and organic and fair trade certified:** The number of small producers has increased rapidly over the last few years. Today they have great potential to produce very high quality, ranging from ultrapremium to premium teas for high-end Indian and international markets. An important competitive advantage of small processors is the quality and prices of green leaf because they manage their own plantations and can supply green leaves according to required plucking standards and ensure traceability. However, there are a number of challenges to be addressed and conditions to be met to transform this potential into business reality.

The first difficulty for many small producers is their relative lack of experience in the tea processing business. On one hand there is a skill gap in processing and product management to ensure consistent quality and compliance with international business requirements. On the other hand, there is a problem of volume supply to reach international markets. However, a few small producers have already overcome these challenges and are becoming competitive in the international market. These successful entrepreneurs are guiding the way and also serve as role models for the segment.

There are clear market opportunities for specialty teas in the ultrapremium market and private label certification niches. Various options exist for small processors to solve the production volume issues and to build competitive advantage.

- a. **Collaboration to blend and offer regular supply of products** such as Maofeng or regular and premium green pearls. The level of manufacturing skills required can be developed through appropriate training. Therefore, it would be possible to source the production from various units. However, blending of ultrapremium teas such as handcrafted teas or white teas is not recommended.

- a. Developing certification schemes at the cooperative level to become organic and fair trade certified is an interesting option to tap into premium niche markets offering suitable prices. Nevertheless, competition will exist as the middle segment is already exporting this type of certified tea a lower production cost.

Box 13: Nepal is not similar to Darjeeling!

Below is an example of how Nepal is positioned as a top ultra premium tea without comparing it with Darjeeling. Research should be done to develop specialty teas like the one below but also others such as pearl, oolong, shan tea or 'crafted teas'* or maybe scented teas** like jasmine, lotus or Earl Grey, but also with new exotic scents that can only be found in Nepal. Following is a description of a premium Nepali tea from the Mariage Frères website.

Gold Himalaya***

Mariage Frères from France reveals its newest opus, an icon from a unique area in the Nepali foothills draped in pure air and imbued with crystalline water. The east of Nepal is known for being an illustrious tea-producing region using only the finest plants. Mariage Frères has worked a small parcel of land, situated between 1,000 and 2,000 metres in altitude, from where this extraordinary Grand Cru Blue Tea TM is issued – 'Gold Himalaya'.

- **Dried leaves:** The buds, elegantly rolled and attractive with silver, gold and brown nuances, breathe out a fruity wake of custard apple joined by a flowery wisp of 'chocolate orchid'.
- **Infused leaves:** Burnt sienna, the young leaves deliver a sweet fragrance of rosewood blended with the freshness of fruity Muscatel grapes.
- **Liquor:** In a robe of coral-amber, the liquor abounds with a soft texture of cotton and rich, diverse aromas. A voluptuous note of roasted chestnut seduces the palate. Graceful and noble, the liquor reflects the delightfully caramelized notes of a can-nelé accentuated with a persistent ripe fruitiness. The cup douses the palate with a lush sensation of fresh macadamia and maple syrup while maintaining a lingering and gourmet impression of white strawberries sprinkled with cardamom.



Gold Himalaya tea

A new elixir for the gods. Consumer price: €50/100g.

* Tea Guardian. Modified Teas: Crafted Teas. Retrieved from www.teaguardian.com/what-is-tea/modified-teas-crafted-teas/.

** Seven Cups: Fine Chinese Teas. Scented Tea. Retrieved from <https://sevencups.com/learn-about-tea/scented-tea/>.

*** Mariage Freres. Gold Himalaya. Retrieved from <http://www1.mariagefreres.com/UK/2-gold-himalaya-black-tea-from-nepal-T4302.html>.

- **Opportunities across all producers segments:** Although all segments need to explore new market opportunities, the help of a joint market promotion programme in strategic trade shows and a common Nepali Tea branding initiative would help to build awareness about Nepali tea's origins.

Table 13: Summary of market opportunities in the international market

Product group	Products	Producer types in Nepal	Key constraints	Suggested actions at the market level	Existing market channels	Targeted market channels
CTC tea	Black CTC	Ninety-four producers, 25 factories	No diversification of markets, at the moment: only domestic and India	<ul style="list-style-type: none"> Market research for potential markets other than India Market research on demand for certified teas Pilot tea auction system Teabagging 	India	<ul style="list-style-type: none"> Tea packers and retailers in India, China Packers who need sustainable-certified tea (RA or Trustea) or other regional markets (Pakistan, Afghanistan, etc.) Dubai Tea Trading Centre EU markets for certified teas
	Green CTC	None yet	Probably no experience with green CTC tea	<ul style="list-style-type: none"> Trial green CTC Install green tea machines Training 	None yet	
Orthodox tea	Conventional	Large segment producers in the Fikkal area Seventeen factories (three Indian-owned)	<ul style="list-style-type: none"> High dependence on green leaf tea brokers Complete dependence on Indian markets in Kolkata and Siliguri; Indian market price has continuously declined MRLs issue with pesticides Inconsistent quality Lack of marketing capabilities 	<ul style="list-style-type: none"> Indian market: improve quality to access higher price segment MRL monitoring and pesticide control by working closely with farmers Improve and maintain plucking standards to improve the quality of standard green leaf supply Introduce price brackets for different plucking standards HACCP certification Marketing training 	Packers, importers, distributors in India Indian market: improved quality targeted at the higher price segment	Develop new markets: the Russian Federation and Commonwealth of Independent States countries, Afghanistan, Iran
	Conventional	Medium segment producers Nine factories (four out of nine certified organic)	<ul style="list-style-type: none"> Low price of lower grades in Indian market because of small volume and lack of blending and consolidation between factories. Teas cannot be sold as single origin. These teas are bulked/blended with lower quality teas by distributors and packers. 	<ul style="list-style-type: none"> Maintain quality efforts concerning plucking standards and MRL monitoring and control Blending / consolidation to be started for lower grades Marketing training Cooperate with other middle segment producers to bulk and market their low grades together in foreign markets Expand green tea production 	For top grades and quality seasons: export to EU (Germany) Lower grade and non-quality season (broken and fannings) to India	Look for new markets for top grades: <ul style="list-style-type: none"> EU: France, United Kingdom, Netherlands, Poland Italy, Spain (Internet) retailers United States, Canada, Australia, New Zealand Middle East Russian Federation, Kazakhstan, China, Japan, Republic of Korea, Chinese Taipei Look for new markets for lower grades and non-quality seasons
	Conventional	Small segment producers Around 58 small processors ('home grown' or 'cottage factories')	<ul style="list-style-type: none"> Very small volume Trial and error approach to processing Inconsistent quality Lack of marketing skills 	<ul style="list-style-type: none"> Aim at high to very high quality Develop training on manufacturing skills and management and build awareness about the art of making tea Marketing training 	EU, United States	Target very high quality ultrapremium to premium teas to the high end of international markets <ul style="list-style-type: none"> (Internet) retailers, traders, Internet sales to distributors and consumers EU: Germany, France, United Kingdom, Netherlands, Poland, Italy, Spain United States, Canada, Australia, New Zealand Middle East (Dubai) Russian Federation, Kazakhstan China, Japan, Republic of Korea, Chinese Taipei India is also potentially a big specialty market
	Organic	Large, medium and small segment producers Four certified factories in the medium segment	<ul style="list-style-type: none"> Certification costs Identification of buyers 	<ul style="list-style-type: none"> Training on organic practices Marketing training 	Middle segment export to Germany and United States	Worldwide in more developed markets: EU, United States, Middle East, East Asia
	Non-conventional	Small, medium and large segment producers	<ul style="list-style-type: none"> Very small volume Trial and error approach to processing Lack of marketing skills Inconsistent quality 	<ul style="list-style-type: none"> Marketing training Aim at high to very high quality Develop training on manufacturing skills and management and build awareness about the art of making tea 	None	Target very high quality ultrapremium to premium teas to the high end of international markets <ul style="list-style-type: none"> (Internet) retailers, traders, Internet sales to distributors and consumers EU: Germany, France, United Kingdom, Netherlands, Poland, Italy, Spain, United States, Canada, Australia, New Zealand Middle East (Dubai) Russian Federation, Kazakhstan China, Japan, Republic of Korea, Chinese Taipei India is also potentially a big specialty market

Market development with tea auction house pilot project

With regard to market development, a tea auction system is planned to be implemented in the near future. The proposed Nepal tea auction centre under NTCDB has already formed a Tea Auction Committee. The Committee is planning to initiate the auction centre within 2017. NTCDB has estimated a budget of NPR 40 million to construct the auction house. So far NTCDB has not received any government budget for the construction and operation of this project. NTCDB is planning to operate the proposed auction house in rented premises initially.

Large segment producers of both orthodox tea and CTC are supporters of the tea auction centre because they face difficulties in the Indian market and the auction centre offers a new market channel. NTPA (representing CTC producers) and other leading tea entrepreneurs believe that there are multiple advantages to a tea auction house such as transparency in tea business; a fair price structure benefiting farmers, planters, factories and traders; transparency in government revenue collection; and gradual improvements in the quality of tea due to higher prices for quality.

The success of the auction centre will depend largely on the participation of a sufficient numbers of buyers and sellers. In order to make the auction centre commercially viable and sustainable, the Government of Nepal and NTCDB need to define attractive incentive packages for future members of the auction centre. The following incentives and conditions should be put in place to ensure sustainable development of the auction centre.

- a) **A clear legal regulation** should be established by the Government to support the auction system.
- b) **Government financial support:** A revolving fund or soft loan from the Government to support the development of the auction centre, including equipment, infrastructure and specific trainings.
- c) **Define incentives for sellers and buyers:**
 - In order to attract sellers to tea auctions, teas sold through the auction centre should be made free of value added tax. Tea purchased from the auction centre should be allowed to be sold free of value added tax in the domestic market.
 - In order to attract Indian buyers to tea auctions, teas sold through the auction centre should face simplified certification handled by Nepali laboratories. The certification should be automatically recognized by Indian authorities. This new certification system would replace the current burdensome CFL system imposed by the Government of India. The Government of Nepal needs to address this issue

with the Government of India and clarify the implementation of mutual recognition of SPS measures.

- d) **Attract foreign auctioneers:** Because an auction system is non-existent in Nepal, there is no tea brokering business in Nepal. An auctioneer or auctioneers from the region (India or Sri Lanka) should be supported to establish representation in Nepal.

Demonstration auction sales: Because the above incentives will take time to put into place, NTCDB and a few CTC producers are willing to develop a pilot auction house to perform demonstration auction sales and raise awareness about the benefits of the auction centre. At the beginning it is proposed to set up an independent committee to manage the auction centre with established guidelines and operational modalities. A draft proposal for guidelines is currently being prepared. As per the guidelines, the committee will select the products that will be allowed to be auctioned depending on their quality and quantity. Similarly, it will also fix the number of days for a re-auction if any product remains unsold. In the meantime, private entrepreneurs are seeking financial support, incentives, or a revolving fund or soft loan from the Government to attract buyers to register with the auction house and participate in this market.

STRUCTURAL IMPROVEMENTS TO THE VALUE CHAIN

A number of structural improvements of the value chain were suggested by value chain stakeholders and are grouped according to the following five value options:

- **Improve efficiency:** develop a high level of integration among supply chain actors
- **Value retention:** retain more value in the country
- **Value addition:** add value by improving existing products
- **Value creation:** create value by developing new products
- **Value distribution:** contribute to the socioeconomic development of the country.

Box 14 summarizes the different structural improvements and activities to be implemented within the value chain in order to improve its competitiveness. Major structural adjustments are also highlighted with the following icon  and then illustrated in the future value chain map schematic in the next section (see figure 17).

Box 14: Value options for the tea sector

Improve efficiency		
Value option	How to implement	Time frame
Coordinate efforts to set up and implement a national quality improvement plan and control pesticide use.	<ul style="list-style-type: none"> Build consensus among all stakeholders, from farmers to exporters, to address QM improvement in the sector. The programme needs to be managed jointly with the branding development and trade promotion programme. Review the Tea Policy and provide clear QM guidelines. 	Short term
Develop Nepali tea varieties and increase productivity by improving sector-specific research capacities.	<ul style="list-style-type: none"> Establish a tea research centre and laboratory for product development. Develop partnerships with international research institutes to reinforce expertise. Develop partnerships between the tea research centre and tea gardens to grow new varieties. 	Medium term
Value retention		
Value option	How to implement	Time frame
Reduce informal exports of green leaves.	<ul style="list-style-type: none"> Simplify CFL procedural obstacles to export to India. 	Short Term
 Reduce production costs for CTC and orthodox processing units and improve energy efficiency.	<ul style="list-style-type: none"> Carry out production and energy audits. Develop best practices guidelines on resource-efficient technologies and required investment in tea processing. Promote alternative sources of energy for tea processing and develop financial support programmes to facilitate investment in solar power, wind turbines, water pumps, etc. 	Medium term
 Improve the quality of green leaf supply and traceability for the orthodox large segment.	<ul style="list-style-type: none"> Create consensus among processing units of the orthodox large segment, farmers, brokers and cooperatives to develop a common green leaf quality improvement programme. Help brokers improve the quality of the green leaves that they purchase from their sources. Develop cooperation between large processing units and cooperatives to improve group purchases of green leaves to ensure quality. Upgrade collection centres for newly formed farmers' groups or small cooperatives. Carry out regular training and field inspection programmes with the creation of outreach offices. 	Short term
 Improve production techniques and upgrade machinery for the orthodox large and medium segments and CTC.	<ul style="list-style-type: none"> Carry out an HACCP certification programme for large and medium processing units and train large and medium processing units on HACCP. Bring in new processing techniques and machinery from new origins. 	Medium term
Improve storage facilities in the dry port in Sirsiya.	<ul style="list-style-type: none"> Develop specific tea storage facilities (in line with the Nepal–India Regional Trade and Transport Project). 	Short term

Value addition

Value option	How to implement	Time frame
 Improve compliance with MRL requirements throughout the tea sector.	<ul style="list-style-type: none"> • Develop training of trainer programmes for inputs suppliers on pesticide and chemical management to guarantee pesticide-free or safe-level MRL green tea leaf production. • Develop a monitoring system with outreach offices and field inspectors within factory premises and cooperatives. • Improve testing facilities for MRLs in Nepal: • Establish internationally accredited laboratories in Nepal for chemical testing; • Improve DFTQC chemical laboratories' and other private laboratories' international accreditation for MRLs. 	Short term
 Increase the production of private-standard tea compliant with organic and sustainability standards.	<ul style="list-style-type: none"> • Support development of IPM and organic tea cultivation. • Develop trainings on standards and certification. • Set up a certification extension network and support to certify farmers and processing units on private standards such as RA, Fairtrade and organic. • Declare specific organic production areas and establish specific legislation at the district level. 	Short term
 Develop teabagging to supply the domestic market and to export high-quality teas.	<ul style="list-style-type: none"> • Feasibility study to investigate teabagging for the cottage industry. • Investment plan for advanced machinery to develop teabagging services for the domestic market. 	Medium term
 Develop high-quality ultrapremium to premium teas from small segment producers.	<ul style="list-style-type: none"> • Build premium quality awareness among small producers. • Organize training of trainers programmes on the 'art of making tea' in small processing units, including training in practical knowledge about tea processing, factory management, invoicing and sampling. • Develop a partnership training programme with successful small processing units to perform demonstrations. 	Short term
Strengthen the Nepali Tea Quality brand, review standards and develop market promotion programmes.	<ul style="list-style-type: none"> • Adapt existing branding initiatives based on the logo and code of conduct. • Redefine branding strategy objectives and compliance requirements, administration processes, branding strategy and a sustainable funding mechanism. • Carry out market promotion programmes for existing competitive tea exporters, targeting international tea trade fairs. 	Medium term

Value creation

Value option	How to implement	Time frame
 Bulk and blend the production of lower grades, including monsoon teas of middle segment orthodox tea.	<ul style="list-style-type: none"> • Build consensus among middle segment producers to market their teas from a common platform. • Establish a common blending unit. 	Short term
 Develop new blended teas for the domestic market.	<ul style="list-style-type: none"> • With Nepali spices and/or medicinal plants 	Short term

Value distribution

Value option	How to implement	Time frame
Promote the integration of women and young smallholders.	<ul style="list-style-type: none"> • Start a self-help group to raise awareness of women's rights and issues; provide skills trainings and knowledge necessary for the industry; and build self-confidence and bargaining power. • Establish a sustainable microfinance programme. • Provide workshops on sensitization of men and issues such as women's participation in decision-making in the household and community. 	Medium term

The following section provides more explanation on the different value options and actions required.

IMPROVE EFFICIENCY

Coordinate efforts to set up and implement a national quality improvement plan and control pesticide use

Improving the overall quality of Nepali teas and satisfying MRL requirements in overseas markets requires the coordination of all activities (detailed below) through a single entity and the support of all sector stakeholders. The Tea Policy 2000 was mostly geared towards increasing and facilitating an increase in tea production and clarifying access to land and investment funds. The Tea Policy needs to be reviewed to integrate the new challenges faced by the tea sector to be more competitive and diversify its export markets. The new Tea Policy thus has to focus on quality upgrading mechanisms. A specific chapter has to be added on quality improvement management, pesticide control and improving testing facilities for MRLs in Nepal.

The success of the implementation of such a programme is the responsibility of all tea stakeholders. NTCDB should play a key role in the coordination of activities, as other Tea Boards are doing in competing countries.

Develop Nepali tea varieties and increase productivity by improving sector-specific research capacities

The future of tea is linked to its capacities to build clear differentiation from its main competitors in neighbouring countries. The development of a dedicated tea research centre has to start as soon as possible and the centre should have all appropriate facilities in terms of: 1) research capacities on alternative approaches to current agrochemical management practices, research on soil fertility and use of biopesticides made from natural products in tea plantation areas; and 2) capacity-building and informative programmes on tea cultivation in close collaboration with processing units, cooperatives and smallholders. The centre's long-term objective is to build a group of tea specialists to support the development of new Nepali tea varieties.

To reinforce its expertise and find new approaches, the research centre will need to develop partnerships with international research institutes – for instance, the Tea Research Institute of the Chinese Academy of Agricultural Sciences or the Tea Research Institute of Sri Lanka – and with countries with a large proportion of tea that is compliant with private organic and sustainability standards, such as Kenya, Uganda and Malaysia. The tea research centre and private tea gardens could establish partnerships

where the private sector would lend small areas to grow new tea varieties and experiment with new agro practices.

VALUE RETENTION

Reduce production costs for CTC and orthodox processing units and improve energy efficiency

Tea processing is energy-intensive, requiring both electrical and thermal energy and with energy costs contributing 30–35% of total processing costs. The tea processing unit offers potential for resource conservation through adoption of advanced and resource-efficient technologies, best operating practices and switching to clean energy solutions. The main sources of energy in processing units are firewood, coal and electricity. Apart from these, diesel is used as a fuel for backup power generators. Experiences of energy conservation from the Indian tea sector indicate that savings of up to 20% of electrical energy and 20% of thermal energy are possible through conservation measures alone.⁸³ The following activities will need to take place.

- a. **Carry out production and energy audits** to assess possible improvements in electrical energy utilization for the withering process; using more energy-efficient dryers; waste heat recovery and recirculation of exhaust air from dryers; fuel-efficient air heaters; and improving energy housekeeping measures (reduce heat losses by insulation, improve heat transfer efficiency by cleaning tubes).
- b. **Assess the potential to use renewable energy sources** such as mini hydropower plants, biomass residue or solar energy for withering and drying.
- c. **Create awareness and develop best practices guidelines on energy-efficient and environmentally sound technologies and housekeeping measures** suitable for the tea sector and the required investment.
- d. **Develop financial support programmes to adopt energy-efficient and environmentally sound technologies.**

By adopting energy-efficient and environmentally sound technologies, the sector will reduce energy consumption and in turn will reduce its greenhouse gas emissions.

Improve the quality of green leaf supply for the orthodox tea large segment

Orthodox large segment producers need to strengthen their efforts to improve the quality of green leaf supply in order to sell at better prices to tea packers and importer-distributors in India and also start exporting overseas. In order to achieve these objectives, the following steps need to be taken.

83. Sectoral Assessment report, Project Promoting resource efficiency along the value Chains of key sectors in South Asia.



Photo: ITC

- a. **Creating consensus to develop a common green leaf quality improvement programme among processing units of the large segment** is the first step. Pricing of green leaves is a key determinant of the success of such a programme. Factories will have to provide attractive prices for higher quality green leaves to encourage farmers' groups to engage and follow quality standards.
- b. **Reduce the level of green leaf purchase from green leaf brokers and start working directly with farmers in order to control the quality of green leaves.** Gradually, the large segment has to select brokers willing to improve the quality of green leaves that they purchase from their sources. At the same time, they have to initiate bulk purchasing of green leaves from groups or small cooperatives rather than purchasing from individual farmers. Such a procurement system has been successful for most organic certified factories. For example, Himalayan Shangri-La in Upper Ilam and Gorkha Tea in Lower Ilam are certified organic factories and they operate with a similar system. As most farmers are already involved in cooperatives or groups, factories could use existing structures and assist them in developing their capacities.
- c. **Upgrade collection centres for newly formed farmers' groups or small cooperatives and develop outreach offices.** Most factories and green leaf brokers already have established collection points. Upgrading these existing collection centres strategically located in and around green leaf collection areas would help farmers' groups or cooperatives to store and sell green leaves in bulk and control the quality. Each factory should also establish outreach offices staffed with trained production and QM technicians to work directly with farmers, cooperatives and brokers throughout the seasons. Their role could be to perform inspections at tea gardens and collection centres. Similarly, each farmers' group and cooperative would nominate their internal quality assessors who will carry out monitoring and supervision of quality standards and pesticides used by their member farmers.
- d. **Carry out regular trainings and develop a field inspection programme in partnership with cooperatives, extension units of NTCD and the newly created outreach offices.** A training of trainers programme focusing on pesticide and chemical management, quality plucking standards, field management and field inspection will be put in place. It is important to also involve inputs suppliers as they play a determinant role by providing advice on pesticide and chemical use. Additionally, a communication campaign on radio and in newspapers on hygienic practices in tea gardens and social accountability will reinforce awareness among farmers on these best practices to improve tea leaf production quality.

Improve manufacturing practices and upgrade machinery for large and medium segment orthodox tea and CTC

Nepali teas need to establish and reinforce their reputation in the international market for quality while also complying with legislative requirements related to MRLs and being produced in a safe, hygienic and environmentally friendly manner. On one hand, the tea sector must adopt Tea Processing Good Manufacturing Practices which cover facilities, equipment, operating procedures and skills spanning the supply chain from green leaf collection to storage, dispatch and all the processing steps from withering to packaging. The control of safety and quality hazards is achieved by proper product design based on preventative measures that assure the safety and suitability of made black tea and its packaging. On the other hand, the processing units have to upgrade their machinery in order to cut production costs, improve their QM practices and step away from the competition by developing their own processing techniques. Additionally, the large and medium segments as well as the CTC segment have to invest in new processing machinery developed by producing countries other than India. This will help Nepali producers to strengthen differentiation from their closest competitor.

- a. In order to improve manufacturing practices, HACCP certification supported by training programmes needs to be carried out for large and medium processing units.
- b. Upgrade machinery and revisit production practices to improve quality.

VALUE ADDITION

Improve compliance with MRL requirements throughout the tea sector

Whenever one Nepali tea company does not comply with MRL requirements overseas, the entire tea sector in Nepal is questioned. The capacities of laboratories in Nepal have been strengthened over the last few years and accreditation has been obtained. MoAD now has to build and defend the reputation of its testing laboratories and the Government needs to ensure that the mutual standard recognition already stipulated in bilateral agreements with its main trading partners is applied.

- a. Develop a training of trainers programme for inputs suppliers on pesticide and chemical management to guarantee green tea leaf production that is pesticide-free or has safe MRL levels.
- b. Develop a monitoring system with outreach offices and field inspectors within factory premises and cooperatives.

- c. Improve testing facilities for MRLs in Nepal:
 - Establish internationally accredited laboratories in Nepal for chemical testing.
 - Improve DFTQC chemical laboratories' and other private laboratories' international accreditation for MRLs.

Increase the production of tea compliant with private organic and sustainability standards

Given the interesting market opportunities for private-standard compliant tea, the tea sector needs to use the example of successful middle segment processing units and start increasing production of organic tea in the different tea segments of orthodox and CTC. This requires various activities directly in line with the improvement of MRL compliance but goes deeper in setting new production practices. Looking at the success of leading countries in the supply of standard-compliant tea, such as Kenya, helps clarify that investment by public and private entities in capacity-building on the ground has contributed to gaining exceptional access to the growing market for sustainable tea.

To replicate these achievements, the tea sector must build stronger government support to develop solid partnerships with consuming countries and set up a collaborative platform between small farmers, processing units, NTCDB, cooperatives, standards organizations (Rainforest, UTZ, etc.) and buyers (tea packers, distributors). The certification programme has to be planned in different phases, starting with a pilot in a specific area followed by an upscale programme to reach a large number of smallholders through training on sustainable production and then embedding sustainability standards within national requirements and organizational structures.

When it comes to organic certification, specific producing areas of orthodox tea in Ilam and CTC in Terai will not be able to reach the requirements before a gradual shift in production practices. In that case, the first step will be to start with the development of IPM trainings for farmers and processing units. In the medium term, specific areas, or even districts, should be declared organic production areas. This will require the full support of local authorities and appropriate legislation.

Develop teabagging to supply the domestic market and to export high-quality teas

Upgrading into value added products such as teabags offers potentially higher export prices. For instance, Sri Lankan tea receives a higher value compared with other competing countries by packaging and bagging its tea. In order to support the development of teabagging, support services, machinery and – more importantly – packaging materials should fall under a duty free scheme. Teabags are usually made of natural fibres, paper or bioplastic.

They can be round, rectangular or double-chambered, tagless or tetrahedral –but above all else they are convenient and profitable.

The increased demand for convenience in the local market indicates good potential to develop a local teabag industry using simple chamber bags. Furthermore, research can be conducted on getting improved packaging machinery (such as for pyramid teabags, vacuum

packing) and materials for high-quality teas destined for high-end markets. A feasibility study for cottage industry will have to be carried out to assess the financial viability of teabagging investment. Training also needs to be conducted in better packaging methods. Potential synergies with the handmade paper sector, especially lokta paper, could also be an interesting way to develop 100% sustainable tea packaging with Nepali origin. Assistance has to be provided to develop such new packaging materials.



Pictures: ITC field visits.

Develop high-quality ultrapremium to premium teas from small producers

There are clear market opportunities for specialty teas in the ultrapremium market and private label certification niches. A few important conditions need to be met in order to tap into these markets.

- Build premium quality awareness among small producers:** At the moment, most small producers produce different types of teas without market knowledge and quality requirements. An awareness-raising programme should be developed to raise small producers' understanding about market opportunities for high-quality tea and the respective requirements.
- Since the majority of the units in this segment are still unaware of quality production and requirements, it will be necessary to **organize a training of trainers programme on the 'art of making tea', including trainings in practical knowledge of tea processing, factory management, invoicing and sampling.** The training of trainers approach has been quite successful in increasing production in the past.

- Develop a partnership training programme with successful small processing units. With the financial assistance of cooperatives, suitable small-scale tea factories will be encouraged to provide training services to other interested existing and new small tea processing units.

Brand development and trade promotion programme: Himalayan Nepal Tea Quality logo

( References A and B in the future value chain map)

The Nepal Tea Quality logo (referred to as the logo in the rest of the document) introduced by HOTPA and NTCDB has to start to be effectively implemented, recognized and supported by all sector stakeholders from both the private and public sectors. The first step is to properly clarify the objectives of this logo. The development of such a branding initiative sector-wide must take into account the production system and QM throughout the value chain as well as the marketing strategy to support it. A collective or sector brand helps to build the reputation and attract



Photo: ITC

new customers or retain existing ones. The value proposition of the brand has to be unique and defined according to market potential. Reputation can only be achieved through a reliable and consistent product supported by a clear and transparent certification process.

a. Sector stakeholders, under the leadership of NTCDB and sector associations, need first to set a common objective which will determine the value added of the branding programme compared to the overall certification cost. The development of the certification process must include the following aspects.

- i. **Objective:** Sector stakeholders in the framework of the sector strategy initiative have clearly stated that improving the quality of Nepali tea is the primary objective for developing a collective brand. As explained previously, this QM needs to be implemented throughout the production but also to be transposed in terms of promotion to build the reputation of Nepali tea in the world market.
- ii. **Compliance requirements:** The old standards of the logo need to be reassessed and improved according to the standards requirements of the international market. A consensus must be reached in defining voluntary quality requirements. This would normally entail specific quality requirements at the production level following international market requirements. It would also include a code of conduct for the sector related to various sustainable development issues such as socioeconomic development, sustainability, gender and youth inclusiveness, among other important aspects.
- iii. **Administration process:** A legal basis has to be established to define the registration process and ultimately the use of the logo. Therefore, a compliance committee needs to be created to supervise the formalization of the branding implementation, rules and regulations, and dispute settlements.

iv. **Branding strategy:** Investing in such a branding initiative is only valuable for the sector if it helps to improve quality standards to penetrate premium markets. The final objective is for the sector to increase the overall value of Nepali teas by creating a clear value proposition for the buyer and the final consumer. The strategy will be based on various activities, including the development of a website promoting the Nepali Tea Quality brand; development of promotional grants to participate in trade fairs and international conferences in partnership with TEPC; and building linkages between medium and small processing units and specialized e-marketplaces.

v. **Sustainable funding mechanism:** The NTCDB budget will have to be dedicated to support the beginning of implementation as seed money. Processing units and traders will have to pay licensing fees to be allowed to use the logo on packaging and promotional material, as well as a subscriber fee to be part of the national brand programme and participate to the activities previously described.

The branding programme is a long-term investment which will require sufficient funding and engagement of all sector stakeholders.

b. In the meantime, the export promotion programme will have to start immediately, focusing its assistance on CTC units willing to diversify their markets, large and medium processing units producing orthodox tea that comply with overseas market requirements, and competitive small processing units willing to be exposed to the international market. A specific trade fair programme will be put in place to participate in major tea trade fairs and organize buyer-seller events. TEPC should be in charge of the coordination and management of the programme given its mandate and experienced staff.

Box 15: International tea trade fairs and forums

Participating in international trade fairs is an effective way of gathering market information, getting to know the competition and meeting potential buyers. It is also a good way to increase the exposure of Nepali tea in the world market. Trade fair websites usually propose catalogues which help to identify potential buyers. A few examples of important trade fairs and forums:

- **Tea & Coffee World Cup** – international coffee and tea trade fair, held annually in different cities worldwide.
- **COTECA** – international trade fair for coffee, tea and cocoa in Hamburg, Germany, held every two years.
- **Anuga** – the world's leading food fair for the retail trade and the food service and catering market. It can be a useful trade fair for discovering new trends and learning about the European consumer market for tea. It is held every two years in Cologne, Germany.
- **SIAL** – one the world's largest food exhibitions, encompassing a number of food ingredients and final products, including tea packers. SIAL is held every two years in Paris, France.
- **BIOFACH** – the most important international exhibition for organic food and fair trade products, held every February in Nuremberg, Germany. It is a crucial trade fair for companies that sell organic tea.
- **Other fairs**: The World Tea Expo, Xiamen Show, Indian trade shows, Dubai Forum, Russian trade shows.
- **Forums**: Intergovernmental Group on Tea, World Tea Forum United States, International Tea Committee.

VALUE CREATION

Bulking and blending the production of lower grades, including monsoon teas of middle segment orthodox tea

As described in the previous section on market opportunities, premium markets for quality teas and lower grades – including monsoon teas – can only be tapped into if sufficient volume is supplied to interested buyers. Therefore the only way for middle segment processing units is to bulk and blend their individual production and market it from a common platform. As middle segment producers already compete with each other to export their high-quality grade, a consensus between enough actors must first be reached. Then a blending unit should be established, supported by a new marketing company in charge of selling this 'blended' tea to large tea packers in India and importer-distributors in overseas markets.

Develop new blended, herbal and medicinal teas for the domestic and tourist markets

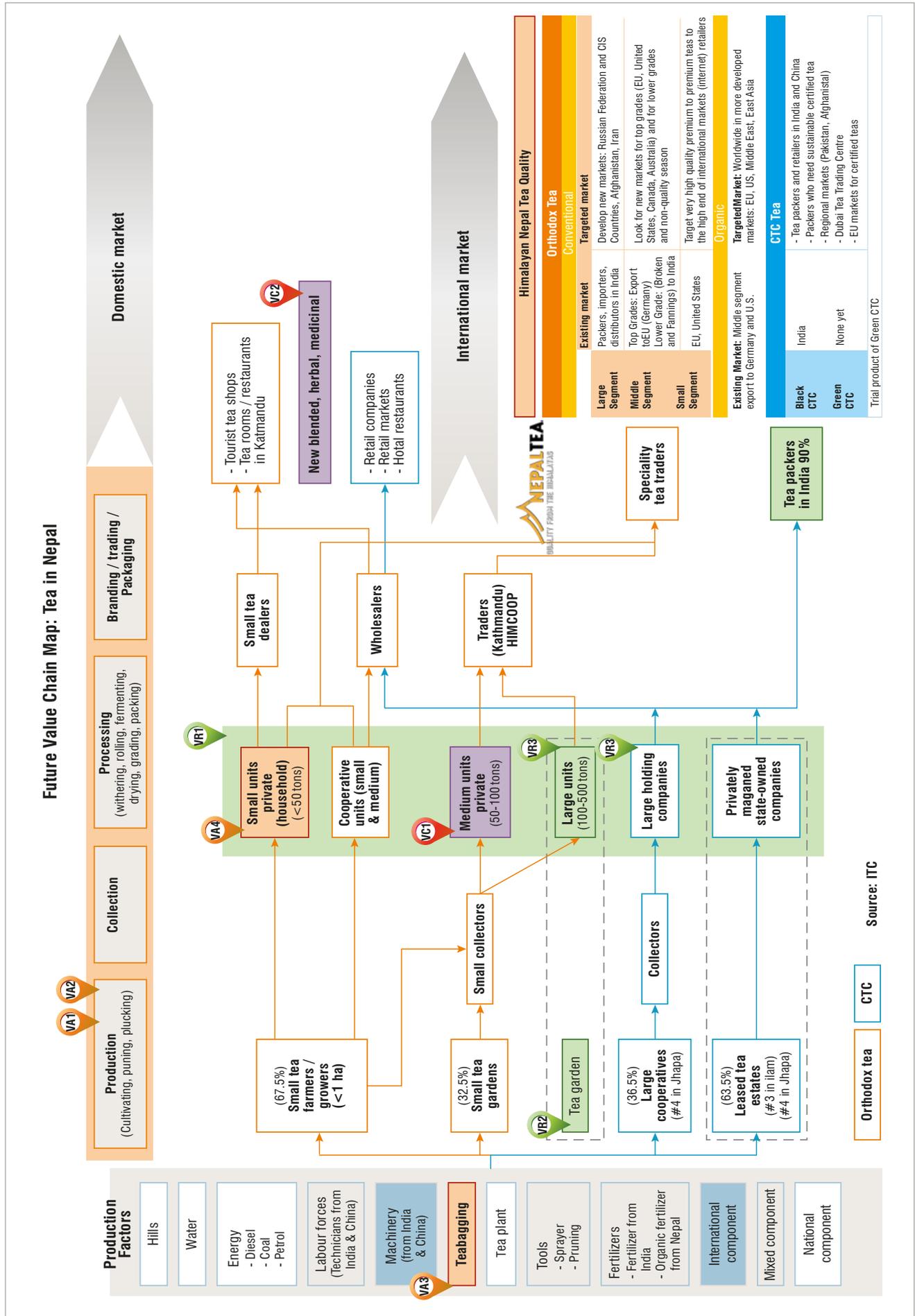
Blended teas – including masala tea, spice blends (such as cardamom), herbal blends, dried fruit mixes and medicinal teas – is a fast-growing segment and highly priced

in niche international markets. Medicinal teas in particular are becoming more attractive to consumers due to their many healthful properties, as well as the fact that they are naturally caffeine-free. Blending facilities, specific processing practices and a sense of innovation are required to produce blended teas. A few Nepali companies are already supplying the domestic market. A promotion campaign could be developed to strengthen the reputation of blended Nepali tea in the domestic market and also specifically target tourists in Nepal. Nearly endless varieties and blends can be developed. These product diversification opportunities could become a springboard for new Nepali blends tested first in the domestic market and then exported overseas.

FUTURE VALUE CHAIN

Developing Nepali tea quality and exports will require transformations throughout the value chain. These structural improvements explained in the previous section are reflected in the future value chain schematic (see figure 17) and presented in green line. Major adjustments in the value chain are also indicated with this icon 📍.

Figure 17: Future value chain map



REINFORCE INSTITUTIONAL SUPPORT AND TRAINING SERVICES

Research on introduction of new and indigenous varieties should be a continuous task of the tea research centre for long-term development of the sector. In view of their historic importance and origin, Ilam and Saktim gardens ought to be used for research purposes and as a foundation for the introduction of new Nepali varieties. Parts of these two gardens can be considered strategic national resources for the use of old plants and seeds for national research in the next 10–20 years.

TEA RESEARCH CENTRE AND TRAINING INSTITUTION

With the growth in tea planting, production, processing and marketing, stakeholders in the sector –including planters and processors– have realized the urgent need for a highly specialized and autonomous tea research and training institute that facilitates research and training on all aspects of tea technology and marketing, including support for the enhancement and modernization of cultivation, processing and marketing. The scope of such an institution is to develop:

- Plant breeding for improved and market-oriented cultivars
- Soil fertility management and improvement
- IPM (entomology and pesticides)
- Mechanization and productivity improvements
- Energy management (alternative sources, efficiency and economy)
- Quality and automation
- Laboratory management and certification
- By-products utilization
- Market research and promotion
- Solutions to socioeconomic and environmental concerns.

Such an institution will integrate and coordinate R&D activities on some of the important areas that attract the services of senior scientists and highly specialized technical manpower. It should also have its own research farm, laboratory and other infrastructure. The Government of Nepal has two options: (a) to set up a completely autonomous institution under public–private partnership; or (b) to restructure NCARP and strengthen its current set-up with private sector participation.

An autonomous research organization would have several advantages in terms of effective professional and team research work, as it would be free of government and political interference and management hierarchical influence. Furthermore, private sector involvement encourages long-term, needs-based, commercial and result-oriented research and training in the tea sector.

Private sector tea plantations can support the institution by providing land and other resources for experimental farming and technological research. The advantages of restructuring and strengthening NCARP for tea technology development would be that: (i) the technical expertise in different facets of NARC could be utilized without much cost; (ii) NARC has established historical data and documentation; and (iii) donor partners will have easy access to work with NCARP for R&D. It is necessary to make a decision between these two options. However, in the immediate future the Government should encourage the restructuring and strengthening of NCARP with the active participation of the private sector as the most important beneficiaries of the results of any research and technological development.

TEA AUCTION HOUSE

It is absolutely critical and necessary that the Government considers the establishment of a tea auction system for the development of the sector, particularly CTC. All over the world, tea is treated as a commodity and trade takes place through auction houses for the overall benefit of the nation and particularly for the direct benefit of planters, farmers, producers and traders. An auction house with a modern management system should be established to serve international tea buyers and sellers (manufacturers) directly, using a modern electronic system.

In view of the several advantages of an auction house and other practical considerations – such as inadequate resources and expertise and low levels of confidence – it is necessary to explore the possibility of establishing and operating such an auction house with the technical support and investment of an independent experienced professional institute that can introduce the most modern techniques and transparent electronic technology acceptable to prospective international buyers. Against this backdrop there are two options for the establishment and operation of such an auction house.

Option 1: Public–private partnership:

High-level auction management and technical experts can be hired by a specialized institution or company (Nepali tea auction house) which will be set up with equal representation and commitments from public and private institutions.

Advantages:

- NTCDB has been working on the regulatory base, which has been approved by the Executive Committee of NTCDB (chaired by the Minister for Agricultural Development). The Board is also responsible for approving the tea auction house operational directive.

- A public–private partnership will have the possibility of donor partner support in the establishment of infrastructure and technical expertise for auction management.
- Foreign institutions or technical experts can be contracted for their technical services for a defined temporary period until Nepali staff become trained to operate and manage the auction house.
- This option is more economic and operational management techniques can be transferred to national workers quickly. Eventually the auction house will become fully independent: owned, managed and operated by Nepali citizens.

Limitations and disadvantages:

- NTCDB has limited financial resources to develop infrastructure, equipment and technical expertise, and even to work with foreign technical experts.
- The regulatory provisions for the establishment and operation of an auction house are inadequate.
- There are limited examples of public–private partnerships successfully working in Nepal for various reasons, including conflicting political and private sector interests in institutional management.

Option 2: Management by a reputed foreign company:

A highly reputed auction house company could be entrusted with the entire task of establishing and operating a tea auction house in Nepal under a mutually agreed memorandum of understanding.

Advantages:

- A foreign company will bring capital as well as financial and technical resources to Nepal, and establish a completely new type of service advantageous to many Nepali stakeholders, including farmers, planters, processors and traders of tea.
- With its experience, a foreign company will establish the most modern and transparent systems within a short timespan and build trust with foreign trading communities.
- Having established infrastructure and an electronic auctioning system in the country, such a house can also auction other agricultural commodities like grains, pulses, spices, etc.
- It will create easy access to international buyers and sellers of tea as well as of other commodities.
- Political interference is minimized and the institution will run with transparent and professional norms.

Challenges and risks:

- Experienced foreign companies normally demand 15 to 20 years of guaranteed operating time to build infrastructure, establish operational systems and operate the tea auction system in order to make a profit and ensure their interests under appropriate terms and conditions.
- Any foreign institution would also like to ensure that the proper regulatory provisions are introduced to register the company legally in Nepal and repatriate the profit and capital as and when needed.
- Once the service is set up and earnings are established, it might be difficult to transfer the whole establishment to a domestic operator or management within a short span of time.

There is urgency for a preliminary study on the exact status of current tea trading systems or practices and to assess the feasibility of operating an auction house. Based on this study, if feasibility is established, NTCDB can take responsibility for facilitating a foreign professional company to provide auction house expertise for the operation of such a house in Nepal.

LEVERAGING INVESTMENT TO DEVELOP COMPETITIVENESS

Developing the opportunities identified within the sector value chain will require investment. Both domestic investment from public and private sectors and potentially financial support from development agencies are seen as essential to accompany the ambitions of tea sector.

Poor infrastructure for product transportation, and poor communication and electricity supplies in remote hilly areas are among the major hindrances to developing the production capacities of tea processing units. Local government has a key active role to play in reinforcing these infrastructures. Furthermore, the remote areas of Nepal have very few financial institutions so financial services are a constraint for enterprise development in these areas.

One of the operational objectives of the sector Strategy is to enhance production efficiency by introducing low-cost and better production equipment for tea processing. It is important to invest in tea processing equipment which helps to differentiate Nepali teas from neighbouring competitors and to identify potential suppliers in countries such as China and Chinese Taipei.

Another important area for investment is in tea packaging machines, especially in bagging machines with all levels of sophistication. These modern machines not only ensure safer packaging but also help retain the taste and

aroma of teas. Developing teabagging to supply the domestic market and to export high-quality teas requires developing sound investment plans and creating business partnerships between tea processing units.

WAYS TOWARDS GREATER SUSTAINABILITY AND SOCIOECONOMIC DEVELOPMENT

ENVIRONMENTAL OPPORTUNITIES

On one hand, development of the Nepali tea sector is predicated on sound management of environmental resources. This calls for strategic measures to integrate environmental concerns into development planning of the sector. On the other hand, the high environmental and social impact of the tea sector has drawn the attention of the industry and consumers to improving agricultural practices in developing countries as well as the level of social and environmental responsibility of firms. This increased global awareness represents an opportunity to diversify markets and raise profitability by integrating sustainability at various points in the supply chain.

The large predominance of smallholder farming creates favourable ground from which one can easily transit to environmentally friendly practices. Smallholder farmers already use fewer pesticides than large-scale tea gardens and therefore generate fewer hazards to the environment. The smallholder production system has less impact on biodiversity. Considering the favourable policy environment and existing predispositions, Nepali tea production offers important potential to compete in the niche market of environmental sustainability in the international market.

Organic tea

Organic tea cultivation may be a viable approach for many small-scale farmers as this would require less expenditure on inputs, fully or partly eliminate health risks associated with pesticides, and farmers also receive a premium payment of about 10–20% above the standard tea price. The organic agriculture movement aims for recognition of carbon sequestration through low external input agriculture, i.e. without the use of any synthetic fertilizers, herbicides or pesticides that use carbon-based fuels.

According to the State of Sustainability Initiatives Review, the organic tea market in 2012 represented 2% of global exports. The market for organic tea has stabilized in recent years. There is significant market growth potential for organic tea; however, this potential is highly constrained due to the high level of concentration in tea manufacturing and the existence of a series of major partnerships



Photo: ITC, Energy plant for tea factory in Ilam

between some of the largest tea manufacturers and other voluntary sustainability standards. With consistent demand, organic tea production not only offers a more environmentally and socially sustainable alternative but is economically viable.

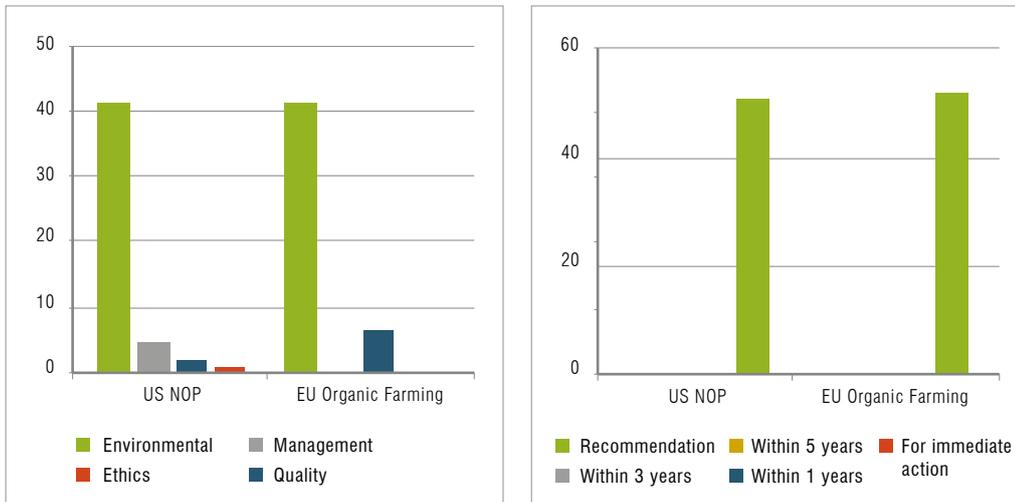
The EU and United States each have their own recognized organic certification: EU Organic Farming and the United States Department of Agriculture National Organic Programme. As can be seen in figure 18, their level of requirements and degree of obligation in terms of implementation are quite similar. In fact, in 2012, the EU and the United States announced that their respective countries' certified organic products can be represented as such across the Atlantic, meaning that the EU recognizes the United States Department of Agriculture National Organic Programme as equivalent to the EU Organic Programme, provided that it complies with a few additional conditions, and vice versa.⁸⁴

A recurring challenge in any organic farming project, however, is that it has few players; it tends to be monopolistic and is essentially a buyers' market where the importing company controls the entire value chain from tea plantation to tea processing in order to ensure quality and compliance with organic certification. The development potential of organic tea production and exports seems possible only by attracting programmes and investment similar to those developed by successful tea estates such as Himalayan Shangri-La and Ghorka Tea.

Organic tea is not the only opportunity in the sustainable tea market. Simply put, organic production is not so much the pinnacle of sustainability, it is rather a pillar. If certified organic is too narrowly defined, the market niche too small, or conversion of fields and farmers to organic practices too slow, then the sector has to look at scalable production under IPM, biologically intensive IPM and Best Management Practices in order to amplify ecological benefits.

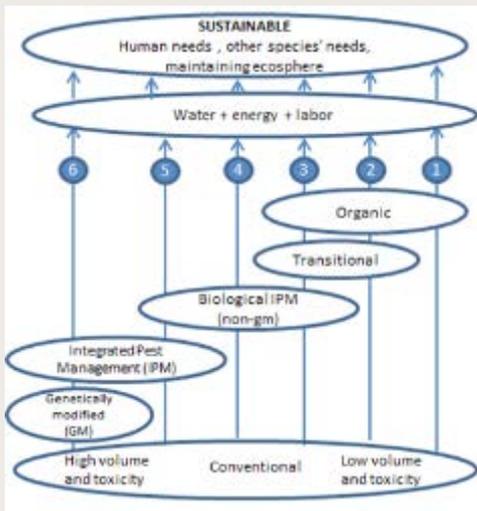
84. United States Mission to the European Union. US- EU Organic Equivalency Arrangement. Retrieved from <http://www.usda-eu.org/trade-with-the-eu/trade-agreements/us-eu-organic-arrangement/>.

Figure 18: Comparison of United States Department of Agriculture National Organic Programme and EU Organic Farming certification areas and degrees of obligation



Source: International Trade Centre Standards Map (2016) (b).

Box 16: Expanded options for 'sustainable tea' production.



Different production systems are often perceived as being in competition with each other when they are in fact working towards the same goals. Organic production is one tool that is a stepping stone to more sustainable practices in tea, especially in areas of low chemical use. Other biological systems broaden ecological goals through scalability and may initially provide a stepping stone in highly degraded areas where chemical use and toxicity is high but the risks of evolving genetic resistance in insects are real and acknowledged.*

* Blackburn, Richard, ed. (2009). *Sustainable Textiles: Life Cycle and Environmental Impact*. Cambridge: Woodhead Publishing Limited.

Fair trade teas: RA

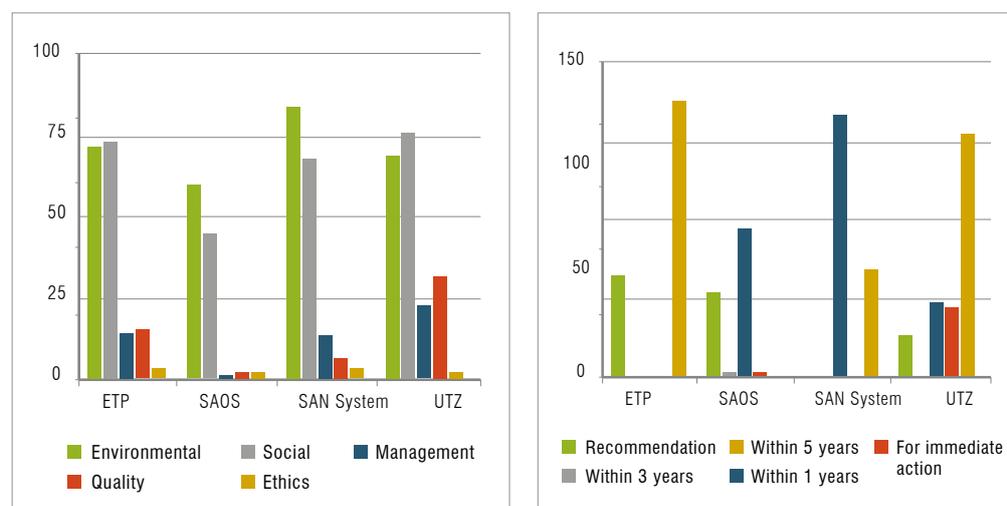
As explained in the global trends section and value options of the Strategy, increased global awareness about rural poverty, climate change and sustainability have spurred the creation of projects to improve agricultural practices in developing countries, with a specific focus on tea. Among these are ETP, Soil Association Organic Standard (SAOS), Sustainable Agriculture Network – RA, and UTZ.

RA is an alternative approach to conventional trade. It is based on a partnership between producers and consumers. The label covers a wide variety of products, including tea. The main goal of RA regarding tea is to offer producers a better deal and improved terms of trade, and consumers a way to reduce poverty through their everyday shopping. The additional RA premium funds allow farmers to take charge of their own collective development. As with ETP, UTZ or SAOS, RA organizes a broad range of training programmes for producers covering areas such as establishment of farmers' organizations and quality control.

In the tea sector, RA seems to be the dominant certification system since it is being used by the three largest global brand owners – Unilever, Tata Tea and Twinings.⁸⁵ However, no tea processors are certified under RA or other fair trade agencies. RA could be within reach for Nepali producers that are already organic certified. Looking at figure 19, it can be seen that most of the requirements for each of the four standards – ETP, SAOS, RA (Sustainable Agriculture Network) and UTZ – are mostly in the environmental and management sustainability area. ETP and UTZ have very similar requirements under the social aspect – ETP is slightly more concerned with employment and work conditions while UTZ focuses on human rights and development and social dialogue. Both of these certifications' obligations are for immediate action while SAOS and Sustainable Agriculture Network have most of the requirements taking a year or more.

85. IDH Sector Overview.

Figure 19: Comparison of ETP, SAOS, Sustainable Agriculture Network and UTZ certification areas and degrees of obligation



Source: International Trade Centre Standards Map (2016) (b).

POTENTIAL OFFERED BY THE SECTOR FOR WOMEN

The sector offers potential for the empowerment of women in both rural and urban areas in Nepal. However, to achieve positive returns a number of orientations need to be considered as priorities. These areas will provide women with immediate opportunities and are those with the lowest involvement of cultural perceptions.

Tea traditionally employs a high proportion of women, especially in tea plucking, where women represent close to 80% of those employed in the industry. Women in developing countries with no income other than the household or the informal economy are very likely to enter tea plucking as it requires a relatively low level of entry qualifications. Tea, being a labour-intensive sector, can also represent great employment opportunities for young women with low levels of education and work experience.



Photo: ITC, Quality control

However, to be competitive, the tea sector requires higher levels of skills and training in a wide range of career opportunities for women. These not only include opportunities in processing but also in technical areas and managerial positions. By reaching a higher number of women, the tea sector could gain a skilled labour force and contribute to integrating women into the economy at higher levels, guaranteeing inclusive socioeconomic development.

Solutions to reduce constraints faced by women in the tea sector: Empowering women and reducing the persistent constraints faced by them can only be achieved if changes are made at all levels: at the individual level, at community and institutional levels, in markets and value chains, and in the wider political and legal environment.⁸⁶

General solutions linked to women in agriculture: The establishment of self-help groups can help women build self-confidence and bargaining power.⁸⁷ This provides a venue for women to get training and knowledge, gain necessary skills and obtain access to resources and opportunities.^{88 89} Trainings and workshops for both genders could address issues such as women's participation

in decision-making processes in the household and in the community.⁹⁰ Through active participation in community-based organizations, women are shown to be capable of being utilized in other positions in the value chain.⁹¹ Additionally, the provision of time- and labour-saving equipment in the household and in the field can help reduce household responsibilities, giving more time for women to attend training courses and be part of community meetings.^{92 93}

Gender sector-specific solutions: Self-help groups raise awareness about women's issues and their rights in the tea sector. Meeting other successful female entrepreneurs can help disseminate experience and women can learn from these successes. In addition, a sustainable financial programme can be created for skills trainings and microfinance opportunities for small businesses in rural villages. In this case, women can form their own savings group within the community from their own contributions, minimizing external influence. This ultimately prevents dependency and gives women a good starting point to build a solid foundation.^{94 95}

86. Pereznieto, P. (2016). Rapid Review of Programmes for Women and Girl's Economic Empowerment. *EPS-PEAKS*, p.3.

87. IFAD, The Changing Role of Women in the Economic Transformation of Family Farming in Asia and Pacific, p. 7; Druzca, K. (2009). Gender and Social Inclusion in Nepal's Tea Sector. *SNV Nepal*, pp. 7 & 19.

88. IFAD, The Changing Role of Women in the Economic Transformation of Family Farming in Asia and Pacific, p. 7.

89. ADB (2012), Support for Agricultural Value Chain Development, p. 40.

90. IFAD, The Changing Role of Women in the Economic Transformation of Family Farming in Asia and Pacific, pp. 4-5.

91. *Ibid*; The World Bank (2013). Promoting Agribusiness Innovation in Nepal: Feasibility Assessment for an Agribusiness Innovation Centre, pp. 74 & 110.

92. IFAD, The Changing Role of Women in the Economic Transformation of Family Farming in Asia and Pacific, p. 4.

93. *Ibid*.

94. *Ibid*.: 6.

95. *Ibid*; Agriprofocus Learning Network. Gender in Value Chains: Practical Toolkit, p.18.

This has been done by the WORTH Programme (a women's empowerment programme) in Nepal together with well-established NGOs working with women. Since the goal is for women to be self-reliant, no start-up loan was provided and it was wholly from their savings contributions that they bought items such as money boxes and calculators and even hired a literacy facilitator. As the businesses or groups prosper, they can then benefit from loans to make larger investments.⁹⁶ Furthermore, they provided skills training on literacy, bookkeeping, business orientation and rights.⁹⁷

In a project in Viet Nam funded by the International Fund for Agricultural Development, the focus was on lightening women's workload and improving opportunities for them. Trainings and workshops were offered to men and women and a wide range of facilities and equipment were provided, such as kindergartens, latrines and scholarships for poor schoolchildren. Threshing machines and hand pumps were also made available and because of this, men were taking on more of the domestic chores usually done by women and women were spending less time on agricultural labour and more time on training courses, village meetings and marketing produce. They had more time due to new clean water supply systems.^{98 99}

Employment opportunities for women in tea sector: More than 100,000 people are employed in the tea sector and most are women.¹⁰⁰ These women mostly work in the fields in plucking, weeding and fertilizer application.¹⁰¹ There are plenty of opportunities for these women to go up the value chain if constraints are reduced through programmes that provide training and skills and aim for the sensitization of men.

Positive impact of organic tea production on women's health and income: The increasing production of organic tea is likely to have a positive impact on both women's health and incomes. Organic tea allows women to work with reduced risk to their health, especially when they are working in the fields during pregnancy, whereas in conventional tea cultivation there might be health risks in the case of incorrect use of pesticides.

96. Agriprofocus Learning Network. Gender in Value Chains: Practical Toolkit, p.26.

97. Women and Girl's Economic Empowerment, Annex 1.

98. IFAD, The Changing Role of Women in the Economic Transformation of Family Farming in Asia and Pacific, p. 7.

99. *Ibid.*

100. International Trade Centre (2007). Export Potential Assessment in Nepal, p.7.

101. SOFA Team and Doss C (2011). The Role of Women in Agriculture. *ESA Working Paper No. 11-02, p.11*, Retrieved from <http://www.fao.org/docrep/013/am307e/am307e00.pdf>; Honsberger, A. (2015). Professionals in their Field: Women Vegetable Farmers in Nepal FAO (2010). p. 29.

POTENTIAL OFFERED BY THE SECTOR FOR YOUNG PEOPLE

The labour-force participation rate of Nepali youth (age 15–35) is roughly 84% in rural areas and 62% in urban areas.¹⁰² Given that youth unemployment is high compared with other age categories (13.4%),¹⁰³ promoting decent and productive employment opportunities for youth has become a national priority. The tea sector has the potential to boost economic opportunities for youth due to being labour-intensive at both the farm and factory levels.

Enhancing the capacity of young farmers by introducing good practices can increase their productivity and therefore their earnings. This can play a significant role in reducing rural-to-urban migration. An example would be the Agriterro project of Agriterro Netherlands in Nepal. This project provides capacity-building to tea farmers' organizations on lobbying and advocacy, marketing and youth employment opportunities. Through this project, around eight cooperatives with the CTCF and District Tea Cooperative Federation submitted a proposal for a soft loan to the Youth Employment Fund and around NPR 12,500,000 was approved. Part of the loan was used to operate a training programme for the Youth and Small Entrepreneur Self Employment Fund in Ilam. This initiative has obtained positive results by improving young farmers' skills in best practices in tea farming.

The need for research agronomists and skilled technicians in tea processing offers the potential for new career development in close collaboration with universities.

Employment opportunities in tea for youth: The tea sector has been identified as a promising sector for employment growth in Nepal and can potentially provide employment opportunities for the new entrants the country's labour force receives each year. Moreover, marketing and brand promotion linked to tea exports – and often associated with young people's innovation capacities – also offer potential for wealth and job creation, provided that adequate policies are in place.

To achieve the vision and strategic objectives that have been discussed above, a robust, actionable and realistic strategic PoA is required. This is provided in the section below, and effectively constitutes the heart of this Strategy.

102. Ministry of Health and Population (2012). National Survey on Adolescents and Youths; DFID, Pereznieta, P. (2016). Rapid Review of Programmes for Women and Girl's Economic Empowerment. *EPS-PEAKS*, p.2.

103. International Labour Organization (2014). Regional commissioners' youth employment forum in Tanzania, 20 November. Available from http://www.ilo.org/addisababa/countries-covered/tanzania/WCMS_321400/lang--en/index.htm.



Photo: ITC, Tea sorting machine

STRUCTURE OF THE PLAN OF ACTION

The PoA of the Strategy is articulated around four strategic objectives. Each strategic objective is composed of operational objectives to answer specific constraints affecting the sector. Below is the structure followed by the PoA.

1. **Improve the quality of green leaves.**
 - 1.1. Improve tea cultivation and quality plucking.
 - 1.2. Support development of IPM and organic tea cultivation.
 - 1.3. Develop cooperation between farmers and processors to improve green leaf quality.
2. **Improve quality and compliance to meet market demand.**
 - 2.1. Improve production techniques through introduction of QM and HACCP certification for large and medium processing units.
 - 2.2. Improve the quality of small processing units' specialty teas.
 - 2.3. Develop tea that is compliant with private organic and sustainability standards.
 - 2.4. Reduce production costs and improve energy efficiency.
3. **Reinforce institutional coordination to manage quality, improve market access and develop Nepali tea varieties.**
 - 3.1. Develop a national plan to improve tea quality and pesticide control.
 - 3.2. Establish internationally accredited laboratories in Nepal for chemical testing.
 - 3.3. Improve research to develop Nepali tea varieties (NTIS 2016).
 - 3.4. Resolve procedural obstacles linked to CFL with Indian partners.
4. **Strengthen the national brand and value addition to increase market diversification.**
 - 4.1. Finalize the development and adoption of a national tea trademark.
 - 4.2. Diversify value added tea production by investing in teabagging and packaging.
 - 4.3. Develop a promotional programme for the Nepali Tea logo and promotional programme support for companies.
 - 4.4. Pilot the establishment of a tea auction system.



Photo: ITC, Tea sorting machine

NEPAL
NATIONAL SECTOR EXPORT STRATEGY
TEA

THE PLAN OF ACTION



Strategic objective 2: Improve quality and compliance to meet market demand.												
Operational objective	Activities	Priority 1=high 2=med 3=low	Starting period					Beneficiaries	Target measures	Leading national institution	Supporting implementing partners	Existing programmes or potential support
			2017	2018	2019	2020	2021					
Operational objective	2.1 Improve production techniques through introduction of QM and HACCP certification for large and medium processing units.											
2.1.1 Improve QM in large and medium orthodox and CTC processing units.	» Introduce 5S housekeeping and then QM practices to factory owners and workers by developing user-friendly training packages and training programmes. » Selected factories could also be supported financially to be certified ISO 9001 whenever QM systems have already been implemented effectively.	1					Orthodox and CTC large and medium processing units	Cover 100% of large and medium processing units	HOTPA NTPA	MoAD Ministry of Industry		
2.1.2 Carry out an HACCP certification programme for large and medium orthodox and CTC processing units.		1					Orthodox and CTC large and medium processing units	Five large and medium processing units certified	MoAD	HOTPA NTPA		
Operational objective	2.2 Improve the quality of small processing units' specialty teas.											
2.2.1 Organize a training of trainers programme on the 'art of making tea' in small and medium processing units.	» Practical knowledge on tea processing, factory management, invoicing and sampling originating from different tea-producing countries. » Develop a partnership training programme with successful small processing units. » Develop a demonstration processing unit to serve as a training and human resource development centre with machinery from different origins.	2					Orthodox small and medium processing units	Ten trainers certified One demonstration processing unit established	MoAD	CTCF STAN HOTPA	UNNATI	
Operational objective	2.3 Develop tea that is compliant with private organic and sustainability standards.											
2.3.1 Support organic certification of orthodox large processing units.	» Support development of IPM and organic tea cultivation. » Develop trainings on organic standards and certification. » Set up a certification extension network and support to certify farmers and processing units in private organic standards. » Declare specific organic production areas and establish specific legislation at the district level.	1					Orthodox and CTC large and medium processing units	Eight processing units certified	MoAD	PPD HOTPA CTCF	Agricultural Products Export Promotion Programme of MoAD	
2.3.2 Conduct sensitization workshops on private sustainability standards and requirements to raise awareness among tea farmers and processing units.	» Large tea packers of the mass market segment are looking for suppliers of RA, ETP and, to a lesser extent, UTZ certified teas.	2					Orthodox large and medium processing units	Sensitization workshop organized annually	NTCDB	MoAD MoC HOTPA CTCF NTPA		
2.3.3 Build a partnership platform with large tea packers and sustainability certification bodies to develop a compliance programme.		2					Orthodox large and medium processing units	One platform established with a large tea packer	NTCDB	MoAD MoC HOTPA CTCF NTPA		
Operational objective	2.4 Reduce production costs and improve energy efficiency.											
2.4.1 Conduct production audits in processing units to assess production and energy costs.		3					Orthodox and CTC large and medium processing units	Ten audits conducted annually	NTCDB	HOTPA NTPA		
2.4.2 Develop best practices guidelines on resource-efficient technologies and the required investment in tea processing.	» Conduct sensitization workshops on production savings opportunities and investment. » Promote alternative sources of energy for tea processing on a pilot project basis and develop a financial support programme to facilitate investment in solar power, wind turbines, water pumps, etc.	3					Orthodox and CTC large and medium processing units	One workshop annually	NTCDB Alternative Energy Promotion Centre	HOTPA NTPA		

Strategic objective 3: Reinforce institutional coordination to manage quality, improve market access and develop Nepali tea varieties.											
Operational objective	Activities	Priority 1=high 2=med 3=low	Starting period				Beneficiaries	Target measures	Leading national institution	Supporting implementing partners	Existing programmes or potential support
			2017	2018	2019	2020					
Operational objective	3.1 Develop a national plan to improve tea quality and pesticide control.										
3.1.1	Strengthen the surveillance capacity of MoAD at field level for appropriate application of chemicals and pesticides (NTIS 2016). » Set up a coordination committee for the sector – including representatives from the public and private sectors and development agencies – to establish a list of prohibited pesticides (NTIS 2016) » and establish a national quality improvement plan. » Implement a registration and licensing system for the supply and sale of chemicals, pesticides and veterinary medicines (NTIS 2016).	1					Tea sector	Coordination committee established	MoAD MoC, HOTPA, HIMCOOP, Tea Sector Service Centre, CTCF, NTPA, STAN	MoAD MoC, HOTPA, HIMCOOP, Tea Sector Service Centre, CTCF, NTPA, STAN	European Commission/ Trade and Private Sector Development, World Bank/ Nepal-India Regional Trade and Transport Project
3.1.2	Review and improve current quality standards for export markets and the compliance manual for the implementation of tea quality standards (linked to 4.2). » The QM programme has to be managed jointly with the branding development and trade promotion programme.	1					Tea sector	Revised tea quality standards established	MoAD MoC Ministry of Industry NBSM	NTCDB DADOS, HOTPA, HIMCOOP, Tea Sector Service Centre, CTCF, NTPA, STAN	
3.1.3	Design a new tea policy providing clearer QM and financial support guidelines at the sector level. » Review and improve the current quality standards for export markets and the compliance manual for the implementation of tea quality standards and use of the Nepal Tea logo (linked to 4.2).	2					Tea sector	New policy endorsed by 2018	MoAD MoC	NTCDB DADOS, HOTPA, HIMCOOP, Tea Sector Service Centre, CTCF, NTPA, STAN	
Operational objective	3.2 Establish internationally accredited laboratories in Nepal for chemical testing.										
3.2.1	Improve DFQTC' chemical laboratories and other private laboratories' international accreditation for MRL tests (NTIS 2016). » Build partnerships with international accreditation bodies to improve technical capacities related to MRL testing specific to the tea sector.	2					Tea sector	Tea-specific MRL Testing performed by DFQTC	MoAD	DFQTC NTCDB	European Commission Trade and Private Sector Development
Operational objective	3.3 Improve research to develop Nepali tea varieties (NTIS 2016).										
3.3.1	Establish a tea research centre and laboratory for product development. » Research will focus on soil testing; research on native varietal development; seedling multiplication systems; identification of native cultivars; control of pests and diseases; and development of technical human resources.	1					Tea sector	One tea research centre established and funded	NARC	MoAD NTCDB	
3.3.2	Develop partnerships with international research institutions to reinforce expertise in tea plant varieties, pest management research and pesticide testing.	1					Tea sector	Three partnership agreements signed	NARC	MoAD NTCDB	
3.3.3	Develop cooperation between the tea research centre and tea stakeholders to grow new tea varieties and perform productivity and quality evaluations.	1					Tea sector	Three areas reserved for pilot testing of tea varieties	NARC	MoAD NTCDB HOTPA CTCF NTPA	
Operational objective	3.4 Resolve procedural obstacles linked to CFL with Indian partners.										
3.4.1	Government to set up a task force to address CFL certification of tea with Indian partners at the national level and regionally in West Bengal. » CFL regulations and related procedural obstacles in India are a critical and burdensome market access issue hindering the development of the tea sector.	1					Tea sector	Task force created with semi-annual progress report disseminated	MoAD MoC	NTCDB	

Strategic objective 4: Strengthen the national brand and value addition to increase market diversification.												
Operational objective	Activities	Priority 1=high 2=med 3=low	Starting period					Beneficiaries	Target measures	Leading national institution	Supporting implementing partners	Existing programmes or potential support
			2017	2018	2019	2020	2021					
Operational objective	4.1 Finalize the development and adoption of a national tea trademark.											
4.1.1 Review and improve current quality standards for export markets and the compliance manual for the implementation of the tea quality standards and use of the Nepal Tea trademark.	» Define clear legal criteria to apply for Nepal Tea trademark registration and compliance. » Review the existing code of conduct and establish a compliance committee to monitor implementation.	1					Tea sector	Quality standards established and use of the Nepal Tea trademark established	Ministry of Industry MoAD MoC	NBSM NTCDB TEPC HOTPA NTPA		
4.1.2 Develop a funding mechanism to support branding activities in collaboration with all sector stakeholders.	» Develop a business plan and budget forecast.	2					Tea sector	Nepal Tea trademark is 100% financially sustainable	NTCDB	TEPC DFQTC		
4.1.3 Register the Nepal Tea trademark in target markets.		3					Tea sector	Trademark registered in five countries	NTCDB	TEPC HOTPA		
Operational objective	4.2 Diversify value added tea production by investing in teabagging and packaging.											
4.2.1 Conduct a national assessment and feasibility study on installation of tea packing machinery with modern technology.		2					Tea sector	Five factories	NTCDB	HOTPA CTCF STAN NTPA	UNNATI	
4.2.2 Develop a plan for investment in modern teabagging machines and blending and flavouring drums.	» Invest in small tea processing equipment from other countries specialized in high-quality teas for the expansion of Nepali cottage production of gourmet teas. » Develop new blended teas using Nepali spices and/or medicinal plants for the domestic market.	3					Orthodox medium and small cottage units	Modern machinery installed in 25% of small cottage units	NTCDB	HOTPA CTCF STAN	UNNATI	
4.2.3 Develop manufacturing of premium packaging for high-quality teas.	» Developing advisory support services through coaching of specialized local advisers. » Establish partnerships with the handicraft sector and handmade paper products producers to develop new packaging for the domestic market destined for foreign tourists.	3					Orthodox medium and small cottage units	Quality premium packaging produced in Nepal	HOTPA CTCF STAN	Federation of Handicraft Associations of Nepal, Nepal Handmade Paper Association	UNNATI	
Operational objective	4.3 Develop a promotional programme for the Nepal Tea logo and promotional programme support for companies.											
4.3.1 Develop a promotional website for the Nepal Tea logo and promotional grants to participate in trade fairs and international conferences.	» Intergovernmental Group on Tea, World Tea Forum United States. » International Tea Committee and popular tea trade shows. » Tea & Coffee World Cup, The World Tea Expo, Xiamen Show, Indian trade shows, Dubai Forum, Russian trade shows. » Bio Fach	1					Tea sector	Annual participation of five selected companies in trade fairs	NTCDB	MoC TEPC HOTPA CTCF STAN NTPA		
4.3.2 Develop the abilities of medium and small processing units to promote and market their teas on a common sales platform to tap existing markets in the EU, United States and India.	» Develop new direct sales channels in traditional markets using e-marketplaces and online marketing. » Improve access to market information for medium and small processing units.	2					Tea sector	One sale platform established online	NTCDB	MoC TEPC HOTPA CTCF STAN	UNNATI with Eastern Tea Processing Industries	
Operational objective	4.4 Pilot the establishment of a tea auction system.											
4.4.1 Provide institutional support for a demonstration auction system in Nepal and select appropriate incentives for all stakeholders to participate.	» Develop a business plan to set up a viable and sustainable tea auction system in Nepal with pragmatic working procedures.	1					CTC	Demonstration auction system established	MoAD MoC	NTCDB NTPA		



Photo: ITC, Tea rolling machine

IMPLEMENTATION MANAGEMENT FRAMEWORK

The comprehensive Tea Sector Export Strategy of Nepal endeavours to generate the conditions for a favourable expansion of the sector so as to contribute to overall socioeconomic development. Nevertheless, a Strategy in and of itself is not enough to ensure the sector's sustainable development. Such development will require the elaboration and coordination of various activities. While the execution of these activities will allow for the Strategy's targets to be achieved, success will depend on the ability of stakeholders to plan and coordinate actions in a tactical manner. Activities must be synchronized across the public sector, private sector and NGO communities in order to create sustainable results.

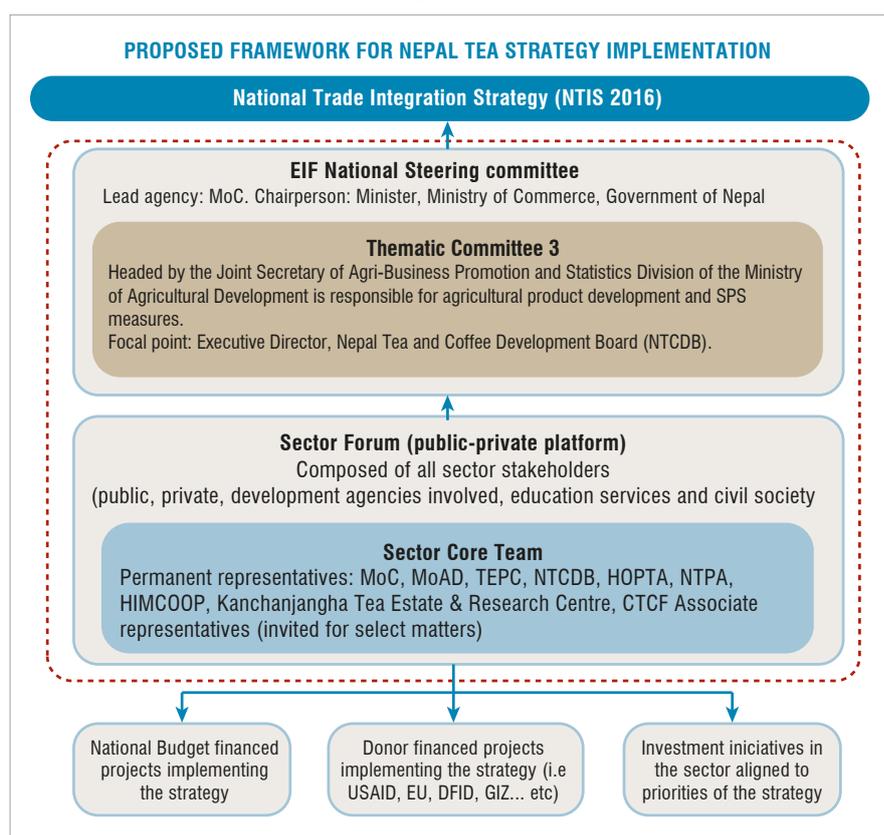
Indeed, the Tea Sector Export Strategy is not the strategy of any specific institution; rather it is the strategy of Nepal, and to ensure its success it is necessary to foster a conducive environment and create an appropriate

framework for its implementation. The following section presents some of the key conditions considered necessary for the Strategy to be effectively implemented and successfully achieve self-sustainability and long-lasting benefits for Nepal.

Establish and operationalize a public–private coordinating body and its subsidiary organ

A key criterion for the success of the Strategy is the sector's ability to coordinate activities, monitor progress and mobilize resources for the implementation of the Strategy. It is recommended that the country establishes an independent **sector forum** for public–private deliberations that acts in an advisory capacity to the Government and the private sector over issues related to or affecting the sector and its Strategy.

Figure 20: Proposed structure for Strategy implementation



Sector forum and sector core team

The formal dialogue platform will require high-level involvement by trade support network members (public and private) because their role is crucial and will impact the effectiveness with which the Strategy is implemented. Likewise, the ability of the private sector to provide inputs to the Strategy implementation process will significantly influence the success of the Strategy.

The stakeholders' group consulted during the Strategy design process was composed of a panel of representatives of key institutions, involving ministries and trade support network members as well as representatives of the private sector. As such, once its mandate is appropriately adjusted, this group of stakeholders, together with additional human resources as required, is best positioned to serve as the public–private platform, **the sector forum**, responsible for the coordination of Strategy implementation. It will also be required that a nominated **sector core team** coordinates, monitors and mobilizes resources for implementing the Strategy (see figure 20).

The creation of the sector forum and sector core team are in line with NTIS 2016. The main functions of the public–private platform, or **sector forum**, should be the following:

- i. Act as a consultative group pertaining to the tea sector, enabling the private sector and government representatives to identify priority issues;
- ii. Coordinate and monitor the implementation of the Strategy by the Government, private sector, institutions or international organizations so as to ensure Strategy implementation is on track;
- iii. Identify and recommend allocation of resources necessary for the implementation of the Strategy;
- iv. Elaborate and recommend revisions and enhancements to the Strategy so that it continues to best respond to the needs and long-term interests of the sector;
- v. Propose key policy changes to be undertaken based on Strategy priorities and promote these policy changes among national decision makers.

As discussed above, the public–private platform should be supported by a **sector core team** to complete the operational work related to implementation management of the Strategy. The core responsibilities of the sector core team should be to:

- a. Support and organize regular meetings of the sector forum (public–private platform);
- b. Monitor the progress and impact of Strategy implementation;
- c. Coordinate Strategy implementation partners;
- d. Mobilize resources to implement the Strategy in line with NTIS 2016.

Specific tasks falling under these broad areas of activities include:

- Formulate project proposals, including budgets, for implementation of activities of the Strategy;
- Develop annual and twice-yearly workplans for approval by the sector forum (public–private platform);
- Collect information from project implementation and prepare regular monitoring reports to be submitted to the sector forum, the EIF National Steering Committee, the NTIS National Implementation Unit and Donor Facilitator;
- Advocate in favour of the Strategy to public and private partners, and development partners;
- Execute any other tasks required by the sector forum.

NTIS 2016 Implementation mechanism

The implementation mechanism of NTIS 2016 has six Thematic Committees working under the EIF National Steering Committee chaired by Honorable Minister of Commerce. Thematic Committee 3 headed by the Joint Secretary of Agri-Business Promotion and Statistics Division of the Ministry of Agricultural Development is responsible for agricultural product development and SPS measures. The focal point for the development of tea is the Executive Director, Nepal Tea and Coffee Development Board (NTCDB).

BUILD THE CAPACITIES REQUIRED FOR MANAGING IMPLEMENTATION

Even with institutional structures in place, Nepal and its Strategy implementation framework will not be able to effectively fulfil their assigned functions without suitable capacity development interventions. The ability and skills of the technical committee and sector core team need to be sufficient to ensure effective management of Strategy implementation. Hence, the sector core team and its partners should have knowledge of the ideas, challenges and best practices behind the Strategy when monitoring implementation progress, assessing overall impact, mobilizing additional resources, programming and communicating results. Without such skills they will not be in a strong position to assume their respective oversight and management responsibilities for Strategy implementation.

PRIVATE SECTOR SUPPORT AND PARTICIPATION

The private sector should benefit from Strategy implementation through improved productive capacities, reduced costs of doing business, facilitated administrative procedures, enhanced access to finance, etc. However,

the private sector clearly expressed during the Strategy design process its willingness to contribute, directly or in partnership with public institutions, to the implementation of the Strategy. Their implementation efforts can range from providing business intelligence to institutions to contributing to development projects, establishing processing and transformation units, advocacy, etc. In brief, the private sector's practical knowledge of business operations is essential to ensuring that the activities of the Strategy are effectively implemented and targeted.

SENSITIZATION OF IMPLEMENTING INSTITUTIONS TO BUILD OWNERSHIP

The key implementing institutions detailed in the PoA need to be informed of the content of the Strategy and the implications for their 2017–2021 programming. This sensitization is essential to building further ownership and it provides institutions with the opportunity to review the PoA in order to confirm the activities they can implement immediately, in both the medium and the long term. This programming approach will permit better resource allocation within the responsible agencies. This allocation can be formalized by integrating the activity of the Strategy into the programme planning of the institution. While the financial dimension is required, the human resource element is no less important.

FINANCIAL RESOURCE MOBILIZATION FOR IMPLEMENTATION

While resource mobilization is only part of the solution, it plays a crucial and indispensable role in supporting Strategy implementation. An integrated resource mobilization plan should be elaborated as soon as the Strategy is adopted. Resource mobilization involves planning the sequencing of communications with donors, project design, project proposals/applications, and resource collection and management. This should facilitate, leverage and strengthen the impact of diverse sources of finance to support sustainable and inclusive implementation, including national resources, development aid and private investment.

- **National resources through direct budget and support programme:** The Government will need to validate defined minimum budget support towards the implementation of the Strategy. Such support for the Strategy's activities will demonstrate the Government's commitment to the initiatives.



Photo: ITC

- **Alignment of donors' support and interventions with the Strategy:** The sector forum and the authorities will need to capitalize on the significant momentum gained as part of the Strategy design process and leverage it for smooth and efficient implementation. International development agencies can use the Strategy as the logical framework for their programmes, as they will surely benefit from its favourable conditions for operation (i.e. political endorsement, private sector buy-in and improved collaboration with national institutions). The PoA of the Strategy should serve the sector forum as well as national institutions to improve communication and facilitate the negotiation, planning, coordination and evaluation of commitments made in the context of development aid, in particular through the development of programmes and project proposals aligned with the priorities of the Strategy.
- **National and foreign investment:** The current Strategy design core team is composed of representatives of national institutions, the trade support network and the private sector. If the sector forum is created and becomes the coordinating body of the Strategy, the Strategy should benefit from a solid channel of communication capable of conveying reliable information to companies about export-related opportunities in the industry, and in turn capable of communicating to the Government the needs that investors have identified in order to operate successfully. Investment in Nepal could serve as a valuable driver of export development. Even so, it must be targeted at specific prospects in order to benefit the industry's development as detailed in 'the way forward' section of this Strategy.

APPENDIX 1: LIST OF PARTICIPANTS IN THE PUBLIC–PRIVATE CONSULTATIONS

Tea – Ilam Bazar, Ilam

	Name of institution	Name
1	Local Development Office Chief	Mr. Madan Koirala
2	Ministry of Commerce, Under Secretary	Ms. Mina Aryal
3	Ministry of Agricultural Development, Navigator	Dr. Pradyumna Raj Pandey
4	Trade and Export Promotion Centre, Navigator	Mr. Bimal Nepal
5	District Agriculture Development Office, Chief	Mr. Prakash Dangl
6	Central Tea Cooperative Association, General Secretary	Mr. Rabin Rai
7	Central Tea Cooperative Association, Member	Mr. Purna Bahadur Mukhiya
8	District Tea Cooperative Federation, Member	Mr. Bed Nidhi Pokharel
9	Green Hill Tea Processing Unit, Salkhajung	Mr. Tanka Dahal
10	UNNATI, Team Leader	Mr. Jan Morrenhof
11	UNNATI	Mr. Rudra Baral
12	UNNATI	Mr. Bishnu Kaphle
13	Nepal TV, Sandakpur Daily	Mr. Bijaya Shekhar Bhattra
14	Ilam FM Radio	Ms. Kanshila Rai
15	NTCDB, Fikkal	Mr. Indra Prasad Adhikari
16	NTCDB, Birtamod, Jhapa	Mr. Sumantri Khatri
17	Gorkha Tea Estate	Ms. Sushmita Banskota
18	Gorkha Tea Estate	Mr. Taysman
19	Uba Sangh, Ilam	Mr. Dambar Lungli
20	International Trade Centre	Mr. Olivier Marty
21	International Trade Centre	Mr. Josef Marie Pierrot
22	International Trade Centre	Mr. Murari Prasad Gautam
23	Kathmandu University	Mr. Dipendra Sanjyal
24	Kathmandu University	Ms. Nisha Pote
25	Trade and Export Promotion Centre	Mr. Rajendra Singha
26	National Cooperative Bank, Ilam	Mr. Upendra Dahal
27	Kanchanjunga Organic Orthodox Tea Udyog, Shakejung 7, Ilam	Mr. Saroj Kumar PC
28	Kanchanjunga Organic Orthodox Tea Udyog, Shakejung 7, Ilam	Ms. Tika Khatri
29	District Development Committee (then)	Mr. Dinesh Poudyal
30	Tara Gaun Tea Estate Pvt. Ltd.	Mr. Purna Rai
31	Tara Gaun Tea Estate Pvt. Ltd.	Mr. Sameer Shrestha
32	Laxmi Tea	Mr. Gopal Adhikari
33	Tmjure Cooperative, Phak Phong	Mr Som Sharma

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ANNEXES

ANNEX 1 : PRODUCTION DATA ON SMALL FARMERS AND DISTRICTS

Table 14: *Small farmers' production and land holding*

Districts	No. of small farmers	Average production in kg	Average land holding in ha
Ilam	6 985	380.0	0.71
Jhapa	2 952	2 315.0	1.26
Panchathar	1 131	176.0	0.46
Terathum	662	85.5	0.37
Dhankuta	482	204.0	0.96
Others	2 686	29.3	0.62
Total	14 898	666.0	0.78

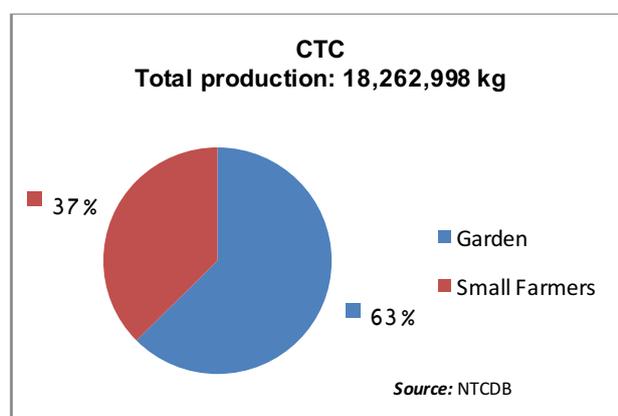
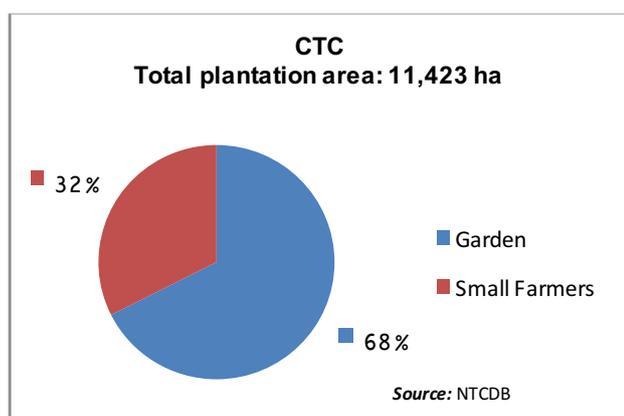
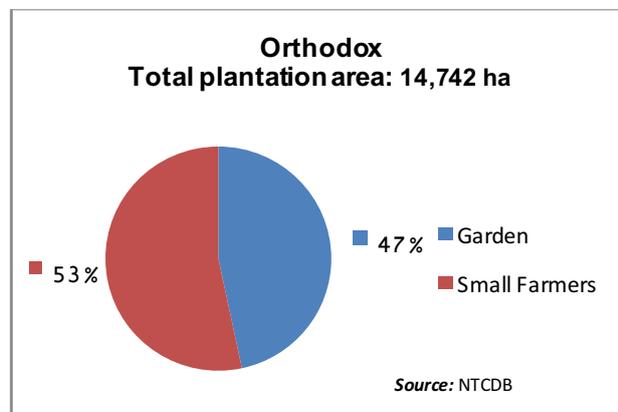
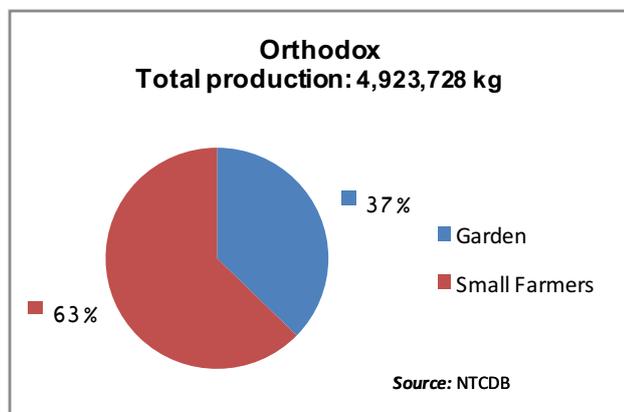
Source: NTCDB.

Table 15: *Tea plantation and production districts in Nepal in 2014–2015*

District	Garden			Small farmers		Total	
	Plantation area (ha)	Production (kg)	No. of small farmers	Plantation area (ha)	Production (kg)	Plantation area (ha)	Production (kg)
1 Jhapa	7 718	11 428 477	2 952	3 705	6 834 521	11 423	18 262 998
2 Ilam	2 818	1 491 594	6 985	4 987	2 654 678	7 805	4 146 272
3 Panchathar	619	153 570	1 131	519	198 742	1 138	352 312
4 Dhankuta	478	79 456	482	462	98 363	940	177 819
5 Terathum	95	19 512	662	242	56 613	337	76 125
6 Others	2 868	92 543	2 686	1 654	78 657	4 522	171 200
Total	14 596	13 265 152	14 898	11 569	9 921 574	26 165	23 186 726

Source: NTCDB.

ANNEX 2: PRODUCTION AND PLANTING AREA OF CTC AND ORTHODOX TEAS



ANNEX 3: PRICES OF ORTHODOX TEA LEAVES

In July 2016, average prices for the three grades of green tea leaves were stable. According to NTCDB, the largest price difference is between leaves harvested in the high mountains north of Madi Khola compared with prices for leaves from the southern parts from Madi Khola in Ilam district. Therefore, the prices in Fikkal are different from the prices in Ilam for different grades; for example, the price of Grade A leaves in Fikkal ranged from NPR 27–28 per kg, while those from northern areas varied from NPR 47–55 per kg.

Price of green leaves of orthodox tea in NPR/kg (July 2016)

Grade	Fikkal NPR / kg	Ilam NPR / kg
A	27-28	47-55
B	17-18	37-45
C	7-8	27-35

Source: NTCDB.



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