

# Linkages and Impacts of Cross-border Informal Trade in Agricultural Inputs in Eastern South Asia







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Research Report

# Linkages and Impacts of Cross-border Informal Trade in Agricultural Inputs in Eastern South Asia

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Cover picture was clicked while conducting field survey under the project, in Kaptangunj, Nepal, by CUTS, of farmers using informally traded seeds and fertilisers

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## Acronyms

ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
ACIAR	Australian Centre for International Agricultural Research
BARI	Bangladesh Agricultural Research Institute
BIS	Bureau of Indian Standards
BSTI	Bangladesh Standards Testing Institute
CGE	Computable General Equilibrium
CIMMYT	International Maize and Wheat Improvement Centre
DFID	Department for International Development
DAP	Diammonium Phosphate
DAE	Department of Agriculture Extension
DES	Directorate of Economics and Statistics
DGFT	Directorate General of Foreign Trade
EAT	Enabling Agricultural Trade
FAO	Food and Agriculture Organisation
FCO	Fertiliser Control Order
FGD	Focussed Group Discussion
HYV	High Yielding Varieties
ICAR	Indian Council of Agricultural Research
ICT	Information and Communication Technology
ICEGATE	Indian Customs Electronic Data Interchange Gateway
MoA	Ministry of Agriculture
MRAs	Mutual Recognition Agreements
NARC	Nepal Agricultural Research Council
NATP	National Agriculture Technology Programme
NBSP	Nepal Bureau of Standards and Metrology
NOC	No Objection Certificate
MRA	Mutual Recognition Agreement
NTBs	Non-Tariff Barriers
RCEP	Regional Comprehensive Economic Partnership
SAFTA	South Asian Free Trade Area
SAPTA	SAARC Preferential Trading Arrangement
SAWTEE	South Asia Watch on Trade, Economics and Environment
SCDP	Second Crop Diversification Project
SPS	Sanitary and Phyto-sanitary

SRFSI	Sustainable and Resilient Farming Systems Intensification in the Eastern Gangetic Plains
SSNP	Social Safety Net Programme
SWS	Single Window System
TBT	Technical Barriers to Trade
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
USAID	United States Agency for International Development
VERs	Voluntary Export Restraints



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The study is largely based on survey findings from Bangladesh, India and Nepal, and presents the views of differentiated group of stakeholders, who are involved in informal trade and related activities in the border areas of these countries. We duly appreciate their cooperation.

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Garima Shrivastava carried out the editing of this report and Madhuri Vasnani, Mukesh Tyagi and Rajkumar Trivedi contributed

in its proof-reading and lay-outing. G C Jain, L N Sharma and Lokesh Sharma handled its financial management. We thank all of them. Many other names deserve special mention but could not be referred here for want of anonymity. We thank them all for their support.

Finally, any error that may have remained is solely our responsibility. Our dedication to this critical and sensitive subject will be sustained while contributing towards the current and future discourse on the regional as well as individual country-wise development objectives.

**CUTS Centre for International  
Trade, Economics &  
Environment**

## Foreword



**Sisira Jayasuriya**  
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This pioneering study of informal agricultural input trade between Bangladesh, India and Nepal, is both important and timely. It highlights the continuing, expanding informal trade in agricultural inputs in the South Asian region. Further, expanding trade in agricultural inputs is a global phenomenon, and the study raises a number of issues that have wider relevance beyond South Asia.

At first glance, this seems puzzling because formal barriers to trade between these countries have come down very substantially in recent years due to both unilateral and regional trade liberalisation initiatives. However, in reality agricultural input trade as in the case of agricultural trade more generally, the reduction in formal trade barriers – both tariff and non-tariff barriers – has lagged well behind the pace of overall trade liberalisation in South Asia, and significant barriers to international trade in agriculture remain.

Further, as the study describes, the structure of trade barriers also differs between the geographically contiguous neighbours, Bangladesh, India and Nepal, reflecting differences in the policy stances of their governments that implement significantly different domestic tax/subsidy policies in the agriculture sector.

In the case of agricultural input trade, incentives for informal trade are enhanced by the lack of harmonisation in standards, seed certification

systems, and in Sanitary and Phyto-sanitary regulations, and costly and cumbersome custom clearance procedures.

The resulting cross-border price differentials and consumer demands that are not met through formal trade channels, generate large incentives for informal trade. The study shows how close ethnic, social, and sometimes even family links, between communities that straddle the porous borders makes it difficult and costly to enforce restrictions on cross-border transactions. The high incentives for informal trade also reinforce and entrench corruption in the inefficient and corruption-prone bureaucracy.

What are the welfare consequences of such informal trade? The study provides many examples of the positive effects of informal trade on agricultural communities as farmers across borders share seeds, technologies and other inputs, improving productivity and income.

This appears to be a powerful illustration of the ‘welfare increasing smuggling’ thesis advanced by Professors Jagdish Bhagwati and Bent Hansen in 1973 where they showed that in some circumstances informal (or illegal) trade can be positively beneficial for communities or countries.

But the costs associated with informal trade and evading legal channels should also be recognised, and in the case of agricultural inputs, these may be quite large.

There are legitimate concerns about the potentially catastrophic consequences of evading bio-security restrictions on movement of seeds and other inputs. This is in addition to the non-trivial economic and social costs of encouraging people to engage in activities that break or bend laws and regulations and strengthen corruption and waste resources.

There are also other aspects of input trade to be considered. In particular, trade in inputs can significantly impact outputs of agricultural products, and consequently on prices and cross-border trade.

The study recognises these issues, and the conclusions and policy recommendations are balanced. It presents a strong case for accelerating the broader process of agricultural trade liberalisation in South Asia to exploit the economic complementarities among neighbouring countries and regions, while emphasising the need for appropriate measures to harmonise standards and coordinate bio-security measures.

However, the study also points to the formidable policy challenges that stand in the way of

eliminating such trade because the trade barriers that exist are essential if the countries are to maintain different domestic of tax subsidy policies that have powerful political economy roots. For example, in the case of subsidised inputs that can be traded across country borders, such as fertilisers, informal trade results in a transfer of the subsidy to the consumers in neighbouring importing countries.

If India wishes to maintain high fertiliser subsidies, then restrictions on cross-border trade are almost mandatory. It will not be easy to craft a set of transitional policies that can facilitate greater formal trade in agricultural inputs while minimising bio-security risks, and navigating the minefield of politically entrenched tax/subsidy policies.

The authors of this report must be congratulated for a most valuable contribution to this regional policy challenge and ongoing policy debate on agricultural trade liberalisation. I hope that this study will stimulate other studies, broader in scope, depth and geographical coverage.

## Preface



**Bipul Chatterjee**  
Executive Director  
CUTS International

The deep-rooted shared historical, cultural, ethnic and geographical contiguity are pillars of economic and trade relations among Bangladesh, India and Nepal. Notwithstanding the political boundaries, the flow of both resources and people has continued to thrive across the borders of these countries. While the nature of porosity of India's borders with these countries is different, it has never meant that they cease to exist. In some cases, however, with political boundaries posing as hurdles, the process has become more difficult and also become more of informal exchange.

Since early 1990s, Bangladesh, India and Nepal have taken various bilateral and regional initiatives to expand their economic and trade ties. These include treaty of transit, duty-free quota-free market access, the Agreement on South Asia Free Trade Area (SAFTA). The overarching goal of these initiatives was to enhance economic and trade cooperation. Trade Agreements like SAFTA has been able to make some progress in liberalising trade in the region, but import tariffs are still high on some agriculture products, including agricultural inputs.

In addition, some member countries have put a large number of products under the sensitive list of SAFTA. In particular, restriction on trade in agriculture products has enabled large-scale informal exchange of such goods. Other than this, non-tariff barriers (NTBs), particularly trade restricting regulations increased the cost of doing

cross-border trade, which encouraged traders and local people to get into informal trading.

Bangladesh and Nepal share long borders with India and large volume of informal trade takes place through these borders. Cross-border informal trade in agricultural inputs is significant because of diverse range of issues, which include quality concerns and productivity. Other than this, ineffective trade facilitation, domestic policy distortions and other related impediments also result in huge informal trade in agricultural inputs across these countries.

Divergent rules and regulations including SPS and TBT regulations for specific products, often create obstacles to formal cross-border trade. In this study, it is noted that frequent quarantine checks and administrative hassles in cross-border trade compel local traders, agents and also local people to use informal channels. The lengthy process of laboratory testing with multiple authorities, pre-shipment certificates and other documents to prove compliance with the given norms, customs clearance documents, and transshipment at the border point result in unnecessary delay and cost escalation, which in turn, hamper efficient movement of goods across borders. Consequently, traders prefer to adopt informal channels for export and import of goods as it is relatively less cumbersome and cost-effective.

Absence of policy coherence between border sharing countries is another reason for informal trade. Social and welfare-oriented schemes in which governments use subsidies or administered price mechanism for distributing products to the domestic consumers also play a catalytic role behind informal trade. This issue is primarily noted in case of subsidised agricultural inputs, such as fertilisers and machineries. Besides this, inadequate employment opportunities as well as social, ethnic relationship between the communities across borders are two additional factors behind the increasing trend of informal trade in the border areas of this region, which is exacerbated by inadequate attention of governments to the welfare of border communities and lack of political willingness for the betterment of their livelihood.

Thus, this study has captured some of key factors which are responsible for informal trade between India-Bangladesh and India-Nepal. Some of the key factors found in this study are differences in quality, prices and productivity, due to which both farmers and traders are involved in informal trade.

It underscores the current state of such trade along the these border areas and has come up with a set of policy recommendations, such as reduction in tariffs on the part of Bangladesh and Nepal, harmonisation of standards and technical regulations, improvement in soft and hard infrastructure, addressing domestic policy distortion, development of border *haats*, and

capacity building and knowledge sharing of border agencies to convert informal trade into formal channels.

CUTS believes that if the set of policy recommendations provided in this study are recognised and implemented, a significant volume of informal trade can be shifted into formal channels which will have far-reaching socio-economic implications, and will contribute towards better livelihood of those who are marginalised in the current development discourse.

Therefore, I hope that this report will be disseminated among the relevant policymakers and will generate interest amongst them, which will result in a more comprehensive economic cooperation between Bangladesh, India and Nepal.

I thank my colleagues at CUTS and our partners in Bangladesh and Nepal – Unnayan Shamannay and South Asia Watch on Trade, Economics and Environment – for their diligent work. Let me also thank the Australian Centre for International Agricultural Research and the United Kingdom's Department for International Development, for their support. Last but not the least, thanks are due to the project advisers for their guidance. Any errors remain those of ours.



## Executive Summary

### Background

Economic and trade relationships among India, Bangladesh and Nepal (the Eastern South Asian region) are shaped by geographical, historical, ethnical and cultural linkages. They have been strong facilitators of cross-border trade between India-Bangladesh and India-Nepal. These trade relations are further augmented by a number of factors, which include preferential, unilateral, bilateral and regional trade agreements.

Various agreements have been playing catalytic roles in expanding economic and trade ties among the three countries. Despite the growth of bilateral trade flows, a significant portion of informal trade is also taking place. The term informal trade refers to unofficial trade that takes place due to high NTBs, ineffective trade facilitation, domestic policy distortions and other related impediments.

Among others, tariff barriers have been recognised as the major issue for unprecedented growth of informal trade in the Eastern South Asian region. Despite the consistent efforts to reduce the tariffs under the SAPTA, followed by SAFTA, the import tariffs are still very high on the trade of agricultural inputs in the region. High tariff provides 'incentives' to local inhabitants and traders to circumvent formal channels and move towards informal ones.

This is also recognised in case of these three countries. India impose high import tariffs on the imports of paddy seed, wheat seed, maize seed and potato seed. Exports of Urea and DAP are also restricted, to fulfil the domestic requirements.

In addition to the tariff barriers, bilateral trade flows of agricultural products between India-Bangladesh and India-Nepal are subject to a large number of NTBs. Bangladesh, India and Nepal have their specific SPS measures, quality related norms and standard related regulations for export and import of agricultural input and output products. The lengthy process of laboratory testing with multiple authorities, pre-shipment certificates, customs clearance documents, transshipment at the border points, result in unnecessary delay and cost escalation, consequently, affecting the formal trade negatively.

The existing studies have found various factors responsible for the large amount of informal trade between India-Bangladesh and India-Nepal. Some of the major reasons are inadequate attention by the state machinery towards informal trade, lack of policy coherence between border sharing countries and improper use of country specific domestic social and welfare policies.

Inadequate employment opportunities as well as social, ethnic relationship between the communities across borders are two additional factors behind the increasing trend of informal trade in this border region which is duly supported by existing corrupt bureaucratic systems, political protection and lack of political will.

## Evidence from the Field Survey

In order to understand the dynamics of informal trade in agricultural inputs at the borders, primary evidences were collected from Indo-Nepal border, i.e. Madhubani and Arariya districts in Bihar-India and Dhanusha and Sunsari districts in Nepal; and Indo-Bangladesh border, i.e. Malda and Coochbehar districts in West Bengal-India, Rajshahi and Rangpur districts from Bangladesh. The study analysed the impact of informal trade on the livelihoods of the people living in the border areas (farmers and local traders both formal and informal), who are engaged in informal trade.

### Case of Indo-Nepal border

Most of the farmers along this border are small and marginal farmers. Women participation in informal trade is not direct but quite significant. The farmers earn their livelihood through agricultural income by supplying the surplus output, after self-consumption, into the local markets, which help them meeting the demand of local consumers. Poverty and lack of job opportunities in the border areas are the main reasons resulting in their involvement in informal trade.

Other key drivers influencing informal trade of agricultural input commodities are high productivity, proximate markets across borders, easy accessibility and availability of products, cultural, social and ethnic relations, lower transportation cost, longevity and post-harvest management.

### Case of Indo-Bangladesh border

Farmers along this border are also small and marginal and both men and women are engaged in farming practices. Most of the women along this border are engaged in secondary farming

practices, while a huge number of them are involved in other informal activities, such as smuggling. Informal trade activities are the easy ways of earning their livelihood and meeting the sustained lifestyle for both men and women.

The key reason influencing farmers to get indulged in informal trade is easy availability of agricultural inputs at lower prices on the other side of border.

Other reasons are high productivity of informally traded seeds in comparison to the formally available seeds, lack in the supply of suitable alternatives, longevity and post-harvest management, and cultural, social and ethnic relationships that are shared between the two countries.

## Policy Recommendations

The study has identified few but relevant policy recommendations for addressing informal trade between India-Bangladesh, India-Nepal in particular and overall for the sub-region. It is recommended that necessary actions should be taken by the governments and private sector to channelise informal trade into formal trade.

### Trade Policy Reforms

Trade policies in Eastern South Asian countries are restrictive which in turn, affect cross-border trade. As a result, local traders and agents tend to get into informal trading which is relatively easy, less cumbersome and less time consuming.

#### *Tariff Barriers*

Tariffs on most of the informally traded agricultural inputs are relatively high which magnify the cost of formal export and import. Considering this, it is important for the Eastern South Asian countries to emphasis on greater degree of tariff liberalisation in these products to facilitate cross-border trade. The reduction in tariffs and elimination of sensitive lists under the SAFTA could play an important role in this regard. Additionally, the possibilities can also be explored at bilateral basis to eliminate sensitive lists.

### Non-Tariff Barriers

Trade in agricultural inputs, such as seeds, fertilisers, pesticides, chemicals, is more prone to SPS and TBT issues. Cross-border trade in these products face more barriers given their health, safety and quality concerns. Harmonisation of trade, technical and regulatory standards through Mutual Recognition Agreements (MRAs) and conformity assessment procedures could be an option to reduce the potential incidence of NTBs, which will further help the people and traders to move to formal channels of cross-border trade.

Research institutions, such as Indian Council of Agricultural Research (ICAR) in India, National Agricultural Research Council (NARC) in Nepal and Bangladesh Agricultural Research Council (BARC) in Bangladesh, should work on developing quality seeds and fertilisers together under the ambit of regional bodies, such as South Asian Regional Standards Organisation (SARSO). They should collectively come up with a plan to develop, produce and distribute these inputs in the local markets of the respective countries, in the markets of the border areas and thus to meet the regional demand.

High trade transaction costs due to inefficient customs clearance procedures, cumbersome export and import formalities, absence of single window system (SWS) and Information and Communications Technology (ICT), encourage traders and local people to get involved into informal trading, which is efficient, less time consuming and involves no transaction costs. Therefore, it becomes imperative for governments of the three countries to create better infrastructure facilities, streamlined customs clearance procedures and SWS to reduce the operational costs.

### Development of Formal Routes

Governments of these three countries should emphasis on identifying and developing more of formal border points while considering their cost benefit analysis. Moreover, it is important to upgrade the existing formal border points, known as, land customs stations, in terms of better road infrastructure, better internet facilities, and single window documentation system, risk management system for both exporter and importers.

### Regional Policy Coherence

Domestic policies, such as subsidies to agricultural inputs, lead to price distortions across the markets of other country, thus providing incentives to local traders, agents and people to involve in informal trade practice. The government of these three countries should emphasise on promoting greater policy coherence in institutional and regulatory framework, so that the prevailing policy induced distortions can be addressed.

### Setting up Regional Factories

Informal trade of fertilisers in the Eastern South Asian region can be addressed and channelised by setting up regional factories of fertilisers similar to those in South-East Asia. India, Nepal and Bangladesh can jointly pool financial resources for the establishment of regional factories which will significantly lower informal trade in fertilisers.

### Development of Border *Haats*

It is being recognised that border *haats* have been instrumental in promoting trade between India and Bangladesh, and they have helped the people living in border areas in getting productive employment and positively impacted their socio-economic transformation. It has been noticed that border *haats* have played an essential role in arresting and reducing informal trade in that area. Currently, there are only four border *haats* across the lengthy Indo-Bangladesh border, along the borders of Meghalaya and Tripura states of India. Considering their importance and impact, replication of border *haats* in the new locations will greatly help towards better local economic development, people-to-people connectivity and apprehending informal trade.

### Trade Capacity Building Programmes

Countries should create more awareness generation programmes at local and regional level about trading through the formal routine or on the benefits that can accrue from regularising informal trade. Also, they need to be informed about the quality of the product that they are producing. They need to be educated regarding the bio-safety issues and environmental issues.

### Mandatory Education Schemes and Job Creation

As people residing along the borders are mostly uneducated and lack job opportunities, governments of the respective countries should allocate some funds from the Border Area Development Programme towards mandating compulsory education. Education will help them availing job opportunities which will lead to better livelihood, thus alleviating poverty. In Addition, governments should consider and focus upon creating jobs in the border areas resulting in employment opportunities for better livelihood.

## Chapter 1

## Introduction

Countries of Eastern South Asia – Bangladesh, India, and Nepal – share deep-rooted historic & cultural linkages that play an important role in shaping their economic and trade relationships (Rahman et al, 2012). Despite the political boundaries, the flow of both resources and people has continued to thrive across the borders of all the three countries.

The long open porous borders between India, Bangladesh and Nepal have never ceased the flows of water and movement of cattle in these areas. However, in some cases, these political boundaries have posed numerous challenges, which lead to hidden transactions across the borders, termed as informal trade.

Different studies have interpreted the term *informal* in different contexts. The term *informal* refers to illegal economic activities; parallel markets (not regulated by the government).

Undoubtedly, there exists an illegal component to informal trade if one takes into account trafficking in drugs, narcotics or arms. In addition, informal trade is a form of smuggling of goods across frontiers due to policy related barriers (tariff and NTBs). It is possible that a substantial volume of informal trade is in the nature of 'extra-legal trading, tolerated in practice even if illegal in the letter of the law'. This happens due to the fact that

the governance of state machinery does not extend to all corners of the society in poor countries (Taneja, 2000).

In the past, studies have tried to estimate the quantum of informal trade along India's border with Bangladesh and Nepal, and most of them have estimated very high figures for such trade. This comprises of both bootleg and technical smuggling.<sup>1</sup> Estimates based on a survey in Bangladesh, undertaken in the year 2002-03, put the figure at a whopping US\$500mn for the year 2002-03, which is about 42 per cent of Bangladesh's recorded imports from India and 30 per cent of its total (formal plus informal) imports during the same year (World Bank, 2006).

One of the most striking observations of the World Bank (WB) study is that a large volume of the cross-border informal trade is in agricultural products, which constitute 14 per cent of the total informal trade. This is well aligned with the findings of Taneja (2005) which claimed that food/agricultural products constitute a major proportion of India's trade with Bangladesh and Nepal through both formal and informal channels.

A recent study by United States Agency for International Development (USAID) and Enabling Agricultural Trade (EAT) observed that both Bangladesh

**Existing scenario brings forward that informal trade in agriculture items is mainly focussed on High Yielding Varieties (HYV) of rice, wheat and maize seeds amongst India, Bangladesh and Nepal**

and Nepal are heavily dependent on India for their seed and fertiliser requirements. It indicates that Indian seeds going to Nepal via informal channel can account for as high as 30 per cent to 45 per cent of the total vegetable seeds consumed in Nepal (Ministry of Agriculture and Cooperatives, Government of Nepal, 2011).<sup>2</sup> The main reason behind this is the prevalence of policy, procedural, political and regulatory barriers that hinder smooth flow of agricultural inputs across borders through official route. This indirectly encourages trade of such inputs through informal channels.

However, such informal trade in agricultural inputs often translates into high prices and low quality of products for farmers. The resilience, climate suitability and high returns of these seed varieties and non-availability of other agricultural inputs at the local-level are the principal reasons that farmers are informally adopting/sourcing them from across political borders. Moreover, people living in border areas of these three countries share common practices in agriculture.

This is well documented in the earlier work of CUTS, in the border areas of Bangladesh, where it was found that migration from Bangladesh to the Eastern states of India has contributed to the rise in agricultural productivity in the region, through the introduction of better techniques, crop diversity, and multiple cropping.

This phenomena started during the colonial era and still prevails. In the present times, a substantial part of intensive agriculture in the Eastern part of India is done by such migrant cultivators. This has generated more demand for agricultural technology, seeds, equipment, among others across the border from Bangladesh.

Another remarkable feature of trade in selected locations in agricultural products in the region is the gender dimensions; agriculture is a female labour-intensive<sup>3</sup> activity in Bangladesh, India and Nepal (FAO et al, 2010). An increase in women's participation in agricultural activities has been witnessed owing to increasing migration of the rural male population to other urban centres within the respective countries and also to other countries in search of work and higher wages. This has led to the delegation of a lot of responsibilities of agricultural work on women. A study by Food Agriculture Organisation revealed that around 3 per cent of households headed by women used mechanical equipment, compared with 8 per cent of those headed by men (FAO 2010-11). In short, agriculture farming managed by women generally characterised by low level of mechanisation and technological inputs.

Easy and cheap availability of agricultural inputs, arguably has a huge potential to increase incomes for marginalised and women farmers in the region, which can result in higher consumption.

**Literature highlights that cross-border informal trade in seeds and fertilisers across the border has enhanced the resource use efficiency in farming activities**

## 1.1 Existing Scenario of Formal Trade

### 1.1.1 Trade between India and Nepal

India and Nepal are important trading partners in the Eastern region. Nepal, as a landlocked country, is highly dependent on India for its foreign trade. Figures 1.1.A and 1.1.B show the export and import flows of all products including agricultural products and non-agricultural products, between India and Nepal for the last three years (2013-2015).

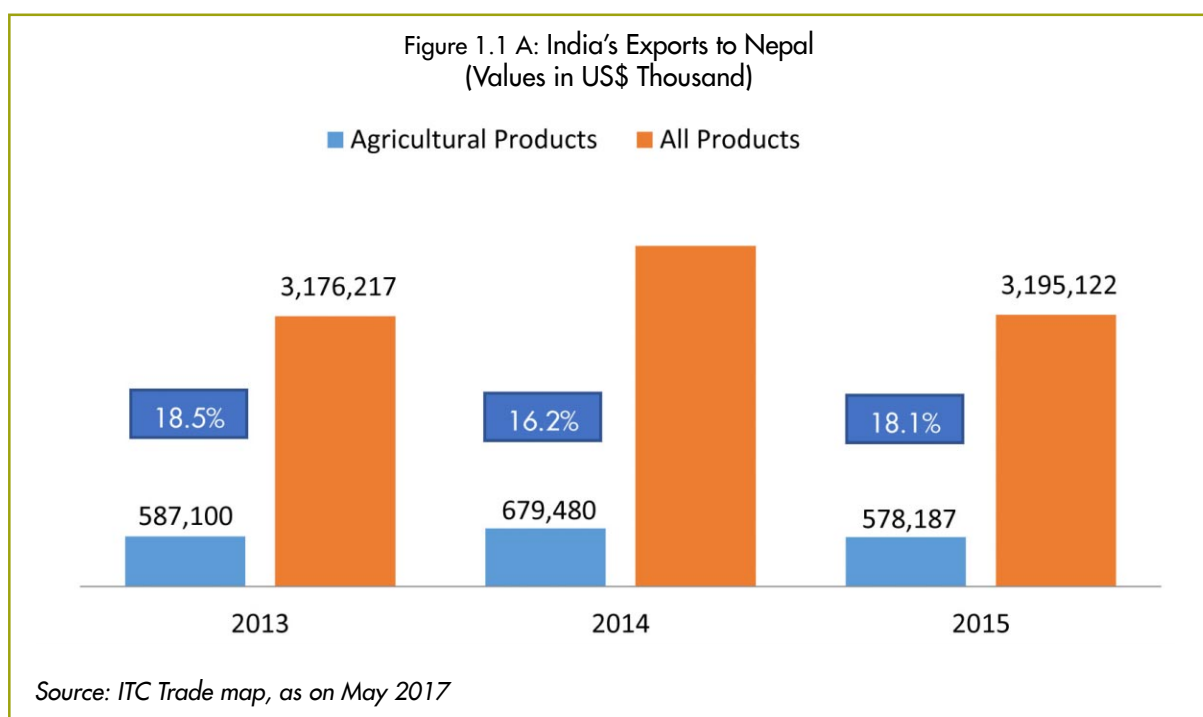
In the entire trade between India and Nepal, agricultural trade plays an important role. Although, the share of India's exports to Nepal is less than the share of India's imports from Nepal, the volume of exports is higher than imports. Major exports from India to Nepal are milled rice, maize, rice in husk, paddy, potatoes and wheat (excluding seed for sowing).

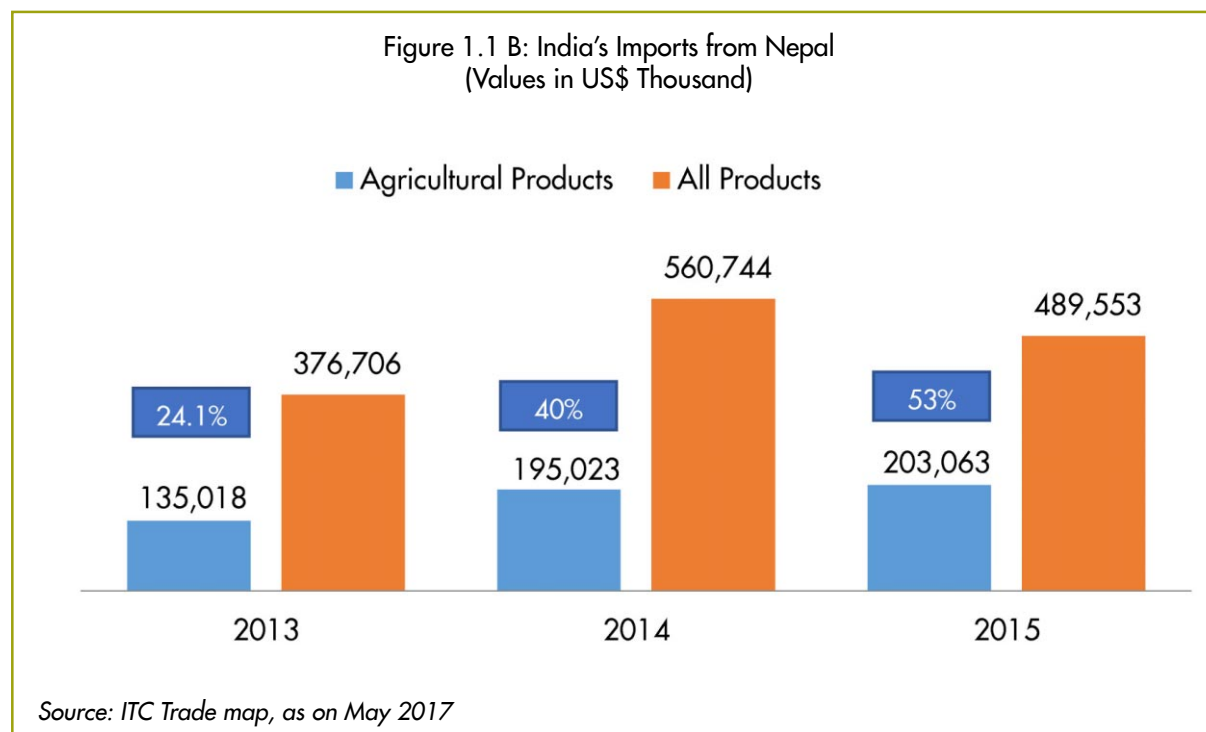
The agricultural products coming from Nepal to India through formal channels majorly comprise non-alcoholic beverages, cardamoms, nuts and tea. There is negligible trade in agricultural seeds like wheat, rice, vegetable seeds from Nepal to India because of the restrictive policy of India on seeds trade.

Given the fact that the focus of work is on trade in agricultural inputs, particularly in seeds, fertilisers and agriculture machinery, Table 1.1 shows bilateral trade flows between India and Nepal in these products, in the last three years.

The data demonstrates that India's exports in seeds to Nepal were US\$36,026 in 2013 and increased to US\$47,339 in 2015 while imports from Nepal were insignificant in the same period. Exports of fertilisers from India were US\$15,286 in 2013 and decreased to US\$11,083 in 2015. The declining export of fertilisers might be caused by restrictive export policy.

Moreover, India had no import of fertilisers from Nepal over these three years. Exports of machinery products from India to Nepal have also declined from US\$35,516 in 2013 to US\$25,600 in 2015 and imports have also declined from US\$1,633 in 2013 to US\$1472 in 2015. The current bilateral trade flows in selected agricultural inputs reflects ups and downs.





### 1.1.2 Trade between India and Bangladesh

Despite varying political relations, economic and trade relationships between India and Bangladesh have improved over the years. In the recent years, India and Bangladesh have registered strong growth in their bilateral trade flows. This has contributed to significant social and economic development in both the countries (CUTS, 2014).

Figures 1.2.A and 1.2.B show the values of export and import between India and Bangladesh, both in agricultural products and all products. It is important to note that bilateral trade between India and Bangladesh is dominated by agriculture products. This reflects traditional comparative cost advantage and trade complementarity in the agriculture sector of both the countries.

Table 1.1

Bilateral Trade Flows between India and Nepal in Agricultural Inputs (2013-15) <sup>4</sup> (Values in US\$ thousand)						
Product Label	India's Export to Nepal			India's Import from Nepal		
	2013	2014	2015	2013	2014	2015
Seeds	36,026	46,513	47,339	53	98	62
Fertilisers	15,286	10,743	11,083	0	0	0
Machinery	35,516	42,281	25,600	1,633	187	1,472

Source: ITC Trade Map database, as calculated on September 2016



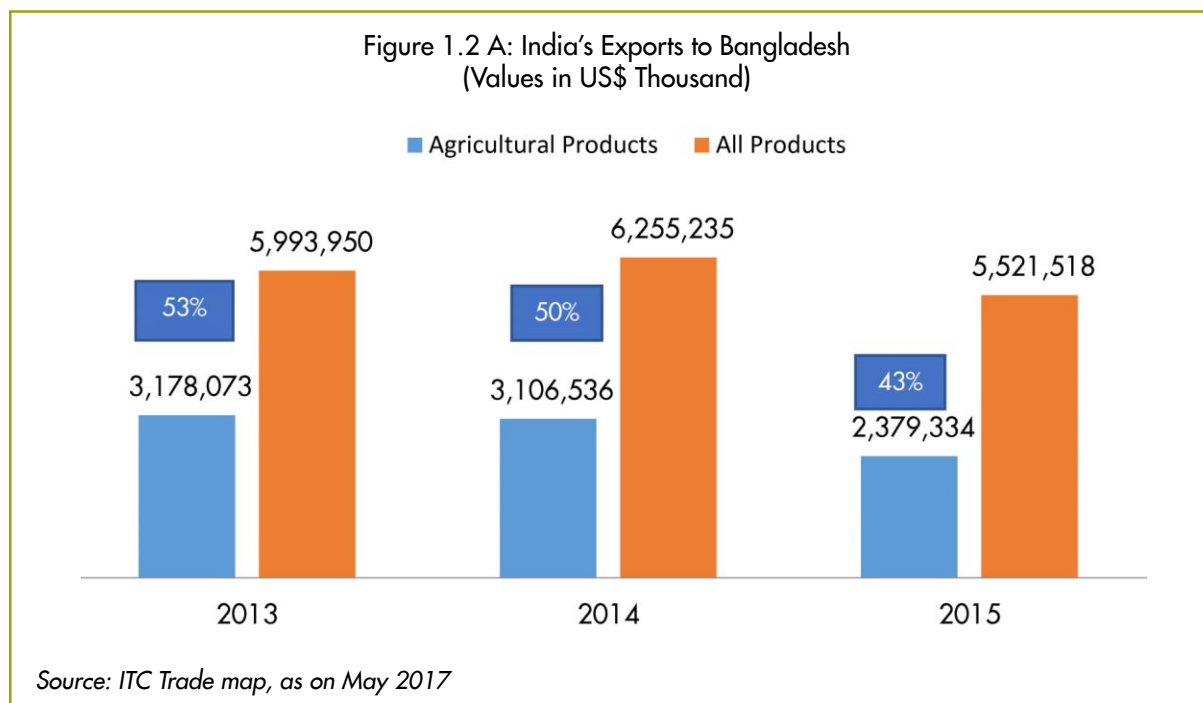


Table 1.2 shows the trade flows specific to seeds, fertiliser, and machinery between India and Bangladesh in 2013-15. Values of imports given in Table 1.2 reveals that India's imports in seeds and machinery are very less relative to Bangladesh's imports from India in the same products.

In case of imports of fertilisers, the value of imports in the year 2015 reveals that India's imports of

fertilisers are approximately double of its exports to Bangladesh. This trade flow between India and Bangladesh is below the trade potential. There is huge scope of gains from trade to both the producers and the consumers due to geographical proximity and ethnic ties among other reasons.

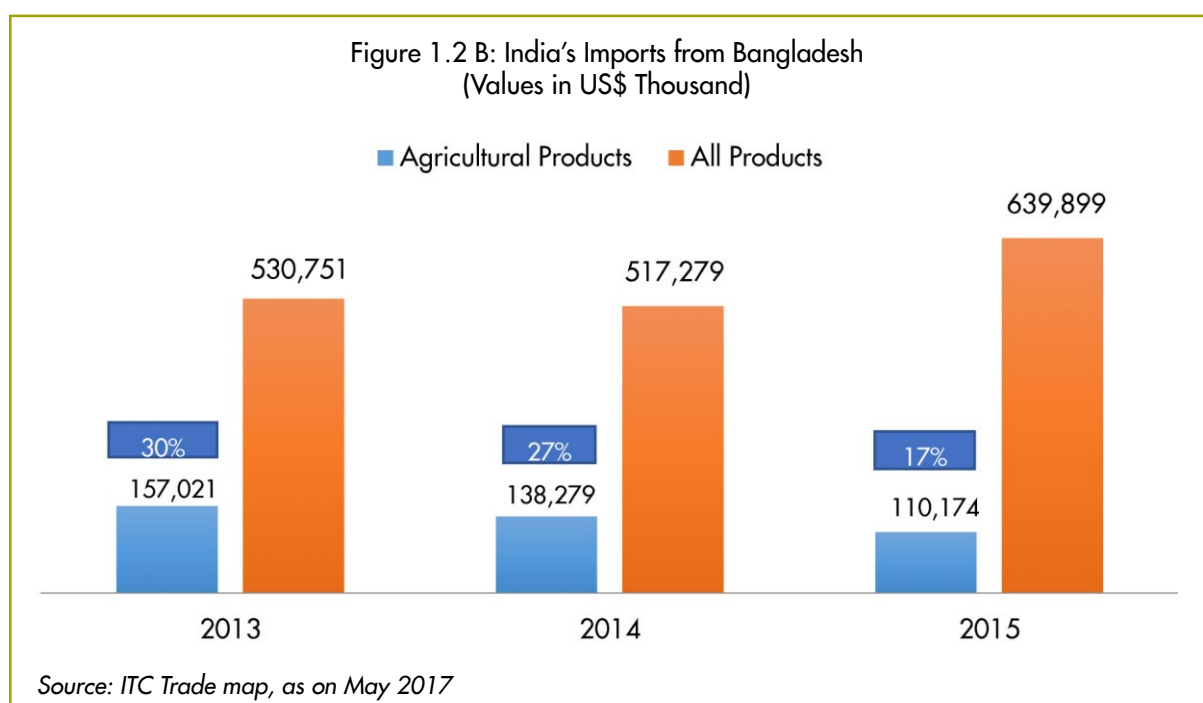


Table 1.2

Bilateral Trade Flows between India and Bangladesh in Agricultural Inputs (2013-15) (Values in US\$ Thousand) <sup>5</sup>						
Product Label	India's Export to Bangladesh			India's Import from Bangladesh		
	2013	2014	2015	2013	2014	2015
Seeds	24,237	24,629	23,442	27	47	—
Fertilisers	912	2,144	3,129	00	00	6,001
Machinery	15,114	15,398	17,448	117	143	183

Source: ITC Trade Map database, as calculated on September 2016

The main reason behind low trade flow is the restrictive trade policy in terms of high non-tariff barriers (NTBs), para tariff measures and lack of trade facilitation measures. Particularly in case of trade in agricultural inputs (seeds, fertiliser, and agriculture machinery), restrictive trade policy has been followed by both of the countries. It mainly includes stringent SPS and TBT measures related to trade of seeds and fertiliser, particularly by India.

## 1.2 Background and Context

It is a well-established fact that tariff and NTBs escalate the cost of export and import of goods and hence affects the growth of trade. This in turn, creates potential opportunities of informal trade particularly in those countries, which have geographical proximity and long open borders.

The issue of informal trade is well noted across many regions of Africa, South Asia and Association of Southeast Asian Nations (ASEAN). The informal trade is recognised as a major issue in the South Asian and Eastern South Asian countries.

A large body of literature proves that tariff and non-tariff barriers are the most important factors behind thriving informal trade. In a notable study by Taneja (2011) it was revealed that the volume of informal trade constituted 72 per cent of formal trade in the South Asian region (Taneja, 2005).

She further added that informal trade in the region is due to inadequate trade liberalisation in agricultural products.

The existing literature only provide adequate insights on existing drivers and estimates about total volume of informal trade but it does not deal with product specific drivers of informal trade and there linkages with livelihood of local people. This creates the need for a deeper analysis to understand the product-wise drivers of informal trade.

This study is an attempt to understand the key drivers of informal trade in agricultural inputs (seeds, fertilisers and machinery) between India and Nepal and India and Bangladesh through primary-level survey. It also attempts to analyse the impact of informal trade in agricultural inputs on the livelihood of rural households in the border areas.

## 1.3 Objectives and Methodology

The overall goal of the study is to frame policy proposals for addressing high volume of informal trade in agricultural input products along the borders of India-Nepal and India-Bangladesh, in a way that it does not adversely impact the livelihood of the local economy negatively. The specific objectives of the study are:

Table 1.3

Description of Selected Agricultural Inputs				
Category	India to Nepal		Nepal to India	
	Dhanusha	Sunsari	Madhubani	Arariya
Seed	Rice Seed ( <i>Sona Mansuli</i> )	Vegetable Seed	Wheat Seed ( <i>Gautam</i> )	Wheat Seed ( <i>NL297</i> )
Fertiliser	DAP*	DAP	–	–
Machinery	Spray Machine	Spray Machine	–	–
	India to Bangladesh		Bangladesh to India	
	Rajshahi	Rangpur	Malda	Coochbehar
Seed	Tomato Seed ( <i>Rocky</i> )	Rice ( <i>Guti Swarna</i> )	Paddy ( <i>BR11/BB11</i> )	Paddy ( <i>BIRI 28/29/Heera</i> )
Fertiliser	DAP	Thaiodin	Sathi (Herbicide)	—
Machinery	Tractor Parts and Nut Bolts		CD Pump	—

Note: \*Di-Ammonium Phosphate

Source: Primary Survey

- Understanding the drivers of informal trade in agriculture inputs across specific locations along the India-Bangladesh and the India-Nepal border,
- Understanding the impact of informal trade in agricultural inputs on the livelihoods of local people who are engaged in the same, and
- Suggesting policy recommendations for addressing informal trade in agricultural input products

To pursue these objective, CUTS along with its partners, have conducted field research in eight locations. The locations are Malda-Rajshahi and Coochbehar-Rangpur (near Indo-Bangla border); and Madhubani-Gidhha and Arariya-Sunsari (near Indo-Nepal border).

The selection of these locations was done in consultation with the International Maize and Wheat Improvement Centre (CIMMYT), which is implementing a project study 'Sustainable and

Resilient Farming Intensification in the Eastern Gangetic Plains (SRFSI)' in the region, supported by the Australian Centre for International Agricultural Research (ACIAR).

At each location, three rounds of survey were done, comprising of one scoping visit and two rounds of field survey as per the Delphi technique. Scoping visits were made to contact project partners, establishing SRFSI contact points and identify grassroot stakeholders to be interviewed in the following two rounds of survey. Lists of 60 stakeholders, including both men and women, were prepared for each of the eight locations, comprising farmers, local agents, retailers and traders.

Some of these stakeholders were contacted in this round to identify key agriculture input product(s) at each location to be studied further, and to validate the draft questionnaire. Questionnaires are given in Annexure -1 & 2.

Three broad categories of agricultural input products were considered under the study – seed, fertiliser and machinery. Selection was made on the basis of the products which are brought illegally in that particular location from the other side of the border. Specific products identified at each of the selected location are given in the Table 1.3. Scoping visits were followed by finalising of the questionnaires and two other rounds of survey were conducted on an interval of two-three months, at each of the eight locations by using Delphi Technique.<sup>6</sup> Same set of respondents were interviewed in both the rounds of survey. The responses were validated and those respondents were eliminated whose responses did not match in both the rounds of survey.

Those respondents whose responses deviated by more than 20 per cent were deleted. Also, in some cases, there were some outliers, which too got eliminated. Thus, after elimination, analysis has been carried out on data collected from 240 respondents, 30 each from each of the eight locations. Some of the respondents were also deleted for some locations to maintain symmetry across all locations.

The questionnaire (see Annexure-1) was designed to accommodate almost all possible drivers that can influence informal trade in the selected locations. The collected data on all such drivers has been analysed to develop strong narrative. Other than this, the study has also used the qualitative information collected from the relevant stakeholders through interview method, group discussion, using a separate questionnaire, as given in Annexure-2.

## Chapter 2

# Drivers of Informal Trade between India-Nepal and India Bangladesh: *A Literature Survey*

There is no formal estimation of informal trade between India and Nepal in the existing literature. Taneja (1999) in her study stated that informal trade between these two countries is eight to ten times higher than that of official recorded trade. It has also been highlighted in her study that the informal trade flow is mostly one-sided from India to Nepal. In recent times, it has been observed that farmers from Terai areas in Nepal use unregistered Indian varieties, such as maize that have been smuggled from India.

Similarly, the smuggling of agricultural inputs from India to Nepal also takes place in rice seeds (USAID and EAT, 2014) and fertilisers (Joshi et al, 2012). A seminal study by Tanjea and Pohit (2001) identified the role of policy related factors in thriving informal trade in South Asian region. These factors are tariffs, non-tariff barriers and ineffective trade facilitation.

Chaudhari (1995) quantified the informal trade between India and Bangladesh for the year 1992-93. He estimated the volume of trade by using Delphi technique in the three states: Assam, Tripura and West Bengal. Results showed that in value terms, India's total exports to Bangladesh were INR1165 crore in 1992-93. This figure was higher than 1992-93 formal exports (INR1050 crore) to Bangladesh. Among major traded

commodity groups, food items and animal products account the major share of such exports (58.7 per cent). Among the food items, sugar, rice (coarse), pulses (mainly lentil), common salt, food, and vegetables are being smuggled (Chaudhari, 1995).

According to a survey, rice inbred varieties have covered 12 per cent of farming areas of Bangladesh in all seasons. In addition to this, informal trade also facilitates the movement of Bangladeshi seeds into India. Farmers in India plant smuggled varieties such as *BR 11* (released in 1980 by Bangladesh Rice Research Institute), *BR 28* and *BR 29* (released in 1994).

## 2.1 Drivers of Informal Trade

The situation where trading of product formally becomes difficult because of various factors, creates the situation of informal trade. Formal trade procedure is a cumbersome process, and requires passing through various stages. Therefore, traders, informal agents, or people living in the border areas, often tend to adopt the easy way, and start trading informally. Major reasons or drivers that are found by number of studies, which influence informal trade over formal, which are discussed in this section.

### 2.1.1 Trade Policy Drivers

Because of high dependence of people on agriculture in the border regions of India, Bangladesh and Nepal, it is argued that informal trade of agricultural inputs is highly influenced by trade policy regime at country level. Therefore, it is important to understand the role of trade policy in facilitating cross-border informal trade in agricultural inputs.

#### *Trade Policy of India and Nepal for Selected Agriculture Inputs*

Table 2.1 analyses the restrictiveness of trade policy of India and Nepal in selected agricultural inputs. The import policy of India is restrictive for the trade of paddy seed, wheat seed, and potato seed. On one hand, the import policy for other agricultural inputs, such as Diammonium Phosphate (DAP) and spray pumps are liberal and permit their imports. On the other hand, the export policy of India put restrictions on export of DAP and Urea while paddy, wheat and potato seeds are allowed for export.

The key reasons behind the extensive usage of restrictive trade policy is either to protect domestic market or to address domestic supply shortage. In addition, restrictions are also used to reduce the

Table 2.1

Restrictiveness of Trade Policy of India and Nepal for Selected Informally Traded Agricultural Inputs			
Import Policy			
HS Code	Agriculture Inputs	India	Nepal
10061010	Paddy Seed	Restricted*	Free
10019100	Wheat Seed	Restricted*	Free
07011000	Potato Seed	Restricted*	Free
31021000	Urea	State Corporation	State Corporation
31053000	DAP	Free	State Corporation
84242000	Spray Machine	Free	Free
Export Policy			
10061010	Paddy Seed	Free	Free
10019100	Wheat Seed	Free	Free
07011000	Potato Seed	Free	Free
31021000	Urea	Restricted*	Free
31053000	DAP	Restricted*	Free
84242000	Spray Machine	Free	Free

Note: \* Diammonium Phosphate

Source: Trade policy of India and Nepal

Note: Restricted\* - export and import is allowed with special permission from competent trade authority in respective country. For example, Directorate General of Foreign Trade (DGFT) regulates the export and import of products.

Table 2.2

Restrictiveness of Trade Policy for India and Bangladesh Selected Informally Traded Agricultural Inputs			
Import Policy			
HS Code	Agriculture Inputs	India	Bangladesh
12099160	Tomato Seed	Free	Free
10061010	Paddy Seed	Restricted**	Restricted
10051000	Maize Seed	Restricted	Restricted
38089390	Herbicides	Free	Free
31053000	DAP*	Free	Free
84321020	Tractor parts and others	Free	Free
84133030	CD Pump	Free	Free
Export Policy			
12099160	Tomato Seed	Free	Free
10061010	Paddy Seed	Free	Restricted
10051000	Maize Seed	Free	Restricted
38089390	Herbicides	Free	Free
31053000	DAP	Restricted	Free
84321020	Tractor parts and others	Free	Free
84133030	CD Pump (Water Pump)	Free	Free

Source: Trade Policy of India and Bangladesh

Please Note:

\*DAP is Diammonium phosphate,

\*\*Restricted export and import is allowed with special permission from competent trade authority in respective country. For example, Directorate General of Foreign Trade (DGFT) regulates the export and import of products.

potential risk of variety specific disease, which could come through trade.

The import and export policies of Nepal is liberal and allows trade of agricultural inputs. The import of Urea and DAP is managed by State Trading Corporation in Nepal.

#### *Trade policy of India and Bangladesh for selected agriculture inputs*

Table 2.2 shows the restrictiveness of trade policy of India and Bangladesh for selected agricultural inputs. The import policy of India for paddy seed

and maize seed is restrictive and imports of such seeds are not allowed. However, there is no restriction on the imports of other agricultural inputs. The export policy of India is liberal, which permits the exports of most of the selected agricultural inputs except DAP.

Furthermore, the import and export policies of Bangladesh are open for all agricultural inputs except for paddy seed and maize seed. The restrictions are used to protect its domestic agriculture sector and domestic shortage.

**Overall, the bilateral trade policies of India and Bangladesh are not restrictive and allow exports and imports of majority of agriculture inputs**

*Tariff barriers*

The role of high tariff barriers is intrinsically linked with cross-border informal trade (Taneja, 1999). A plethora of studies show that tariffs play a major role in thriving informal trade among three countries of Eastern South Asia. High tariff provides 'incentives' to traders to circumvent formal channel and move towards informal channel. This in turn, allows them to save substantial amount of costs and makes the final product more profitable.

Tariffs are still high in India, Bangladesh and Nepal despite their consistent efforts towards trade liberalisation through various initiatives, such as SAPTA and SAFTA (Chatterjee and George, 2012).

Countries use different type of policy instruments to address their demand and supply shocks of agricultural commodities in Eastern South Asian countries. The most common policy instruments used include export restriction, quantitative restrictions and ban of export (Dorosh 2009; Dawe 2010).

However, one of the major limitations of these studies is that they failed to establish the link between high tariff barriers and growth in informal trade. Though, there are some passing remarks to explain the relationship between the two but they lack substance and depth.

The prevailing tariff structure of selected agricultural inputs that are informally traded between India-Bangladesh and India-Nepal are given in Figure 2.1. It reflects that tariffs applied by

India are very high in comparison to tariffs applied by Bangladesh on the same set of products. The import tariffs are very high on paddy and maize seeds by India as compared to Bangladesh. Similarly, in case of India-Nepal, tariffs applied on the imports of selected agriculture inputs are high in India as compared to Nepal.

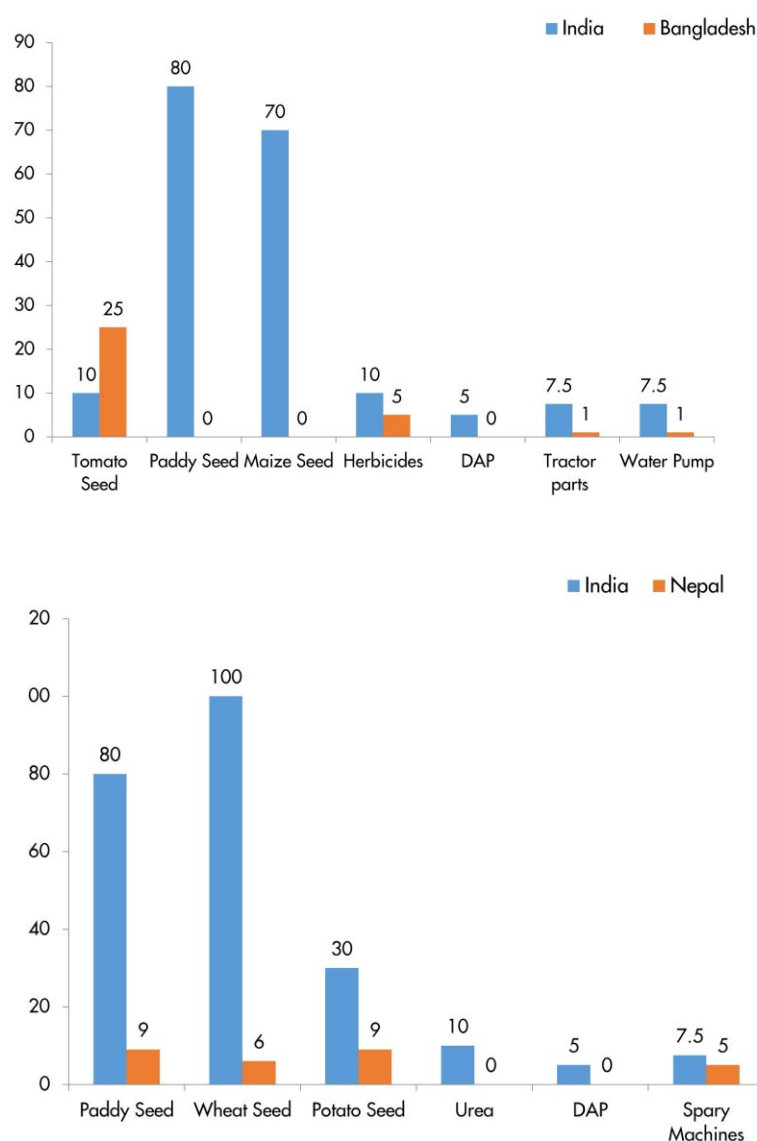
India maintains high import tariffs on paddy seed, wheat seed and potato seed. The current tariff structure of agriculture inputs in India, Bangladesh and Nepal clearly demonstrates that high tariff provides significant scope to traders and local people to indulge into informal trade.

The informal channel is always attractive both for traders and consumers because of two reasons. First, traders circumvent duties and taxes while trading through informal channel, allowing them to generate higher economic gains. Second, consumers are able to buy informal traded products at affordable prices. The vested interest of both traders and consumers acts as natural driver of flourishing informal trade. Therefore, high tariffs could be considered as a potent factor behind growing informal trade in agricultural inputs between India-Bangladesh and India-Nepal.

Informal trade plays an important role in price convergence and co-movement of certain agriculture products. In this context, a notable study by Akhter (2017) analysed 'the spatial market integration between an adjacent rice surplus market (India) and deficit markets (Bangladesh and Nepal) in the wake of global financial crisis of 2007-08'. The study summarised that domestic prices of rice are closely integrated both in short run and long run period among the three countries. The key reason for 'smooth price transmission and market co-integration' in India, Bangladesh and Nepal are associated with a significant volume of informal trade. The study clearly outlined the importance of promoting convergence in food policies between these countries.



Figure 2.1: Import Tariff on Selected Agriculture Inputs in India, Bangladesh and Nepal



Source: Extracted from Customs manuals of India, Bangladesh and Nepal 2016-17

### 2.1.2 Non-Tariff Barriers

NTBs include a variety of trade impediments and regulations, such as: TBT and SPS; administrative and custom procedures; arbitrary export ban; licensing; trade through state agencies; mandatory labelling and packaging; infrastructural barriers; export and price-based measures – quotas and Voluntary Export Restraints (VERs), state level taxes, antidumping and countervailing duties; among others. Intra-regional trade within South Asia is subject to wide range of NTBs (CUTS 2013).

Prevalence of NTBs is one of the most important factors behind the sub-optimal growth of cross-border trade between India-Bangladesh and India-Nepal. Bilateral trade between India-Bangladesh and India-Nepal is hindered by different types of NTBs. A study by Asian Development Bank (ADB and UNCTAD, 2008) found that there exist a large number of NTBs, mainly related to TBT and SPS measures. The former is related with labelling requirement while the latter is related with safety related regulations, to ensure food security and prevent spreading of diseases. Both SPS and TBT measures made up 86 per cent of all NTBs in South Asia. Among South Asian countries, India, Bangladesh and Nepal have high number of incidence of TBT and SPS related measures.

In India, there exist bio-security and SPS related regulations. All agricultural imports including livestock and food products require some kind of SPS certificate and import permit. The procedure of getting such certificates is often cumbersome and time consuming (Raihan et al, 2013).

In a similar manner, Bangladesh and Nepal have their specific food safety and SPS related regulations that largely aim to check the quality of imported agricultural products. The purpose of these regulations is to ensure the quality of imports but there are many occasions when SPS and TBT related regulations have been used in a disguised manner to prevent exports. Other than SPS and TBT measures,

**Bilateral trade flows between India-Bangladesh and India-Nepal are concentrated in agricultural products and encounter a large number of NTBs. The most common NTBs in agriculture products are SPS and TBT related requirements, which usually arise due to lack of harmonisation of trade, regulatory standards, testing and certification procedures**

India, Bangladesh and Nepal tend to use export restrictions to deal with seasonal shortages of agricultural commodities, such as rice, onion, potato and fish.

Incidence of NTBs is high due to low level of standards, especially in Nepal and Bangladesh. There exist huge inequality with regard to the development of standards and testing procedures and cooperation. The Indian standards and testing procedures are relatively developed as compared to Nepal and Bangladesh and they find it difficult to comply with the Indian standards. On the other hand, it is to be noted that legal and regulatory frameworks in India, Bangladesh and Nepal are not fully harmonised. Regulatory framework dealing with agricultural inputs is divergent and creates disguised trade barriers.

For example, a SPS certificate issued by the Indian testing agency is not accepted by Bangladesh testing agency despite the agreement for cooperation between Bureau of Indian Standards (BIS) and Bangladesh Standards and Testing Institution (BSTI). This is happening due to divergent testing procedures for particular ingredients of the product at laboratory level in each country.

The aforementioned literature fails to establish a clear link between NTBs and cross-border informal trade due to limited empirical evidence by which the direct relationship between the two could be clearly contextualised. One of the key reasons behind this is that a gamut of exogenous factors that come in the state of play and influence the cross-border informal trade cannot be envisioned. Therefore, it is very challenging to establish a direct relationship between the prevalent NTBs and their impact on cross-border informal trade in the region.

However, it is well established fact that complexities arising due to divergent rules and regulations in Eastern South Asian region make cross-border trade a formidable task for traders. Frequent quarantine checks and administrative hassles in cross-border trade between India-Bangladesh and India-Nepal compels traders, agents and local people to engage in informal trade as they are able to evade administrative checks, phyto-sanitary inspection and other related regulatory requirements. The relationship between increasing prevalence of NTBs and increasing cross-border informal trade among Eastern South Asian countries is palpable.

The cost associated with NTBs and uncertainties due to non-transparent regulations affect the profitability of traders. This in turn, encourages them to indulge in informal trading. This is, particularly true in case of cross-border informal trade in seeds between India-Nepal and India-Bangladesh. Divergent SPS measures for seeds trade in India, Nepal and Bangladesh is

Table 2.3

Legal and Regulatory Framework for Agriculture Inputs in India, Bangladesh and Nepal			
Agricultural Inputs	India	Bangladesh	Nepal
Seeds	1966 Seeds Act and amendments; Seeds Rules and amendments; Seeds (control) order; New Policy on Seeds Development, 1988; Destructive Insects and Pests Act, 1914; Plants, Fruits and Seeds (regulation of import into India) Order, 1989; Plant Variety Protection act and regulations.	Seed Ordinance, 1977; Bangladesh Seed Policy, 1993; Biosafety Guidelines, gazetted in 2008; National Biosafety Framework, gazetted in 2008; Bangladesh's Plant Quarantine Act 2011 (GOB 2011); Destructive Insects & Pests Rules, 1966 (Plant Quarantine) (GOB 1989).	Seeds Act 2045 (1988) as revised through 2010; The Plant Protection Act 2059; Plant Variety and Farmers' Rights Protection Bill.
Fertiliser	The Fertiliser Control Order, (FCO) 1957; Essential Commodity Act, 1955; 1973 Fertiliser (Movement Control) Order.	Fertiliser (Control) order, 1999; Fertiliser Management Act, 1995, and Subsequent amendments.	Chemical Fertiliser (Control) Order, 1998; Chemical Fertiliser Directives, 2000; The National Fertilizer Policy 2002, and Revisited 2009.
Machinery	Indian Bureau Standards (BIS)	Bangladesh Standard Testing Institute (BSTI)	Nepal Bureau of Standards & Metrology (NBSM)

Source: Governments of India, Nepal and Bangladesh

pushing the significant volume of formal trade into informal trade where there is no SPS monitoring. This demonstrates that NTBs could be another important factor, which compels traders to find alternative ways, resulting in increased informal trade between India-Bangladesh and India-Nepal.

## 2.2 Drivers Related to Trade Facilitation

One of the major obstacles in enhancing regional trade in South Asia is associated with the quality of trade and transport infrastructure. Poor quality of soft and hard infrastructure in South Asia

magnifies the cost of cross-border trade, thereby affecting the growth of regional trade in the region (De, 2014). South Asian countries face two major impediments in terms of trade and transport facilitation.

The first problem is related to procedural, administrative, regulatory issues as well as absence of transit agreements and weak ICT. The second problem relates with the state of road, railway and trade infrastructure (testing agencies, banking facilities, and border management agencies).

## **Bilateral trade between India-Nepal faces severe constraints due to weak trade and transport infrastructure**

Currently, trade and transport facilitation between India and Bangladesh faces severe soft and hard infrastructure related impediments. One of the major hurdles is the absence of effective transit agreement and the movement of vehicles across border. Frequent loading and unloading of cargo at border points significantly increase the cost of transportation and make cross-border trade unviable (De, 2014).

Furthermore, these problems are compounded by excessive paperwork, undue formalities and administrative burden that act as major hindrances to cross-border trade flows (Taneja, 2015). For instance, the Hilli land port between India and Bangladesh accounts for a significant amount of bilateral trade but it faces several soft and hard infrastructural related constraints. These include a narrow approach road, inefficient custom clearance, absence of testing agencies and heavy congestion. In addition, the poor internet connectivity also affects the efficiency of custom clearance and other agencies that are operating at the border points.

Moreover, the absence of testing agencies at land ports creates massive challenges for traders. They have to travel to major cities to get 'no objection certificate (NOC)' (CUTS, 2014). The whole procedure of getting certificate is very cumbersome and time consuming. Other than this, most of the land customs stations between India-Bangladesh have limited warehousing capacity and lack of banking facilities. These constraints magnify the overall trade transaction costs and hinder cross-border trade flows between India-Bangladesh (CUTS, 2014).

The existing capacity of land ports is inadequate and it is difficult to manage large volume of trade flows and movement of trucks. This problem is further exacerbated by cumbersome administrative procedures, inefficient custom clearance, and absence of quality inspection agencies.

One of the key issues at land ports is that India and Nepal use ICEGATE, an E-commerce portal of the Indian Customs and Automated System for Customs Data (ASYCUDA++) respectively for submission of online documents and other related formalities. Lack of compatibility between two systems creates veritable challenge to the efficient clearance of goods (De, 2014). Further, trade procedures between India and Nepal are not fully harmonised and streamlined and they use their own set of rules and regulations for customs clearance. A number of steps have to be followed for completing customs clearance formalities that vary significantly in both countries.

One of the major implications of ineffective trade and transport facilitation is that it augments trade transaction costs and makes formal trade unviable for small traders. It also increases the price of imported goods. As a result, traders and local people tend to move into informal trade which help them to save on process, procedural related transportation costs, which constitutes a significant proportion of the total costs in the Eastern South Asian region. However, other factors, such as quick realisation of payments, no paper work, no procedural delays, lower transportation costs serve as incentives for traders and local people in border areas of India-Bangladesh and India-Nepal (Taneja and Pohit, 2000).

**Lack of IT enabled  
integration among  
operating agencies at  
land ports significantly  
increase the total cost  
of doing trade (CUTS,  
2014)**

## 2.3 Domestic Policy Distortions

One of the most important factors behind thriving cross-border informal trade is 'domestic policy distortions'.<sup>7</sup> These distortions are quite prevalent across regions, such as South Asia, Africa, and ASEAN. The principal reason behind such distortions is associated with lack of policy coherence between border sharing countries.

Policy induced distortions provide incentive to traders and agents to indulge in cross-border informal trade. Such distortions are evident, especially in social and welfare-oriented schemes in which governments use subsidies or administered price mechanism for distributing products, domestically. For instance, rice and wheat are sold under the public distribution system in India and both are highly subsidised items in India. Prices of wheat and rice in India is lower than the market price in neighbouring countries which creates opportunities for traders and local people to 'siphon off subsidised items' through informal channel to Nepal and Bangladesh (Pohit and Taneja, 2000).

Policy induced distortions are prevalent in all the South Asian countries especially in India, Bangladesh and Nepal. Governments of these countries have designed many policies that have aimed to distribute certain essential commodities to marginalised sections of the society in their respective countries. These policies often lead to price difference across borders and make cross-border informal trade profitable. The most critical aspect is that such distortions are not addressed at multilateral and regional levels (Sareen and Bakshi, 2004).

Inadequate regional policy framework in the South Asian region has contributed to the consistent rise of such distortions in the region. Further, domestic policy distortions have pernicious effects as they cause significant loss of revenue for the governments and welfare loss for consumers.

Trade in agricultural inputs, such as seeds, fertilisers, and machinery between India-Bangladesh and India-Nepal are subject to domestic policy distortions. Such distortions lead to cross-border informal trade in agricultural inputs. Such inputs are highly subsidised in India, Nepal and Bangladesh that create opportunities for traders and

local people to engage in informal trade. The quantum of subsidies given on these agriculture inputs varies across three countries and provides significant scope for inputs to be 'siphoned off' through informal channels. For instance, agriculture inputs, such as Urea and DAP are highly subsidised in India, and create enormous opportunities for cross-border informal trade in products with Nepal and Bangladesh.

Recent data from Bihar gives us some idea of fertilisers getting diverted to neighbouring countries. In 2013, fertilisers' consumption in Bihar was about 200 kg per hectare and it was higher than the all-India average of 131 kg per hectare.<sup>8</sup>

On the other hand, the production of wheat and rice in Bihar is not matching with the levels of fertiliser consumption. The Directorate of Economics and Statistics (DES) data reflect that wheat cultivation in the state required fertilisers 125 kg per hectare while paddy consumed 97 kg per hectare. The large difference in these figures shows that a significant amount of

**Issues related to domestic policy distortions were also argued in the Economy Survey of India, 2016 which stated that three eastern states of India – West Bengal, Assam and Tripura bordering Bangladesh are facing a severe shortage of fertilisers due to informal trading**

fertilisers gets diverted to Nepal through informal channels.

A majority of the farmers in border regions of these states have to buy Urea and DAP from the black market as subsidised urea is smuggled to neighbouring states. This is happening due to significant differences in prices of Urea and DAP between India-Bangladesh and India-Nepal. Other agricultural inputs, such as seeds and agricultural machinery are also subsidised in India, Bangladesh and Nepal and are also traded through informal channel. In a nutshell, policy induced distortions in India, Bangladesh and Nepal are facilitating informal trade, particularly subsidised agricultural inputs, such as fertilisers and machinery.

## 2.4 Socio-Economic Aspects

Socio-Economic aspects include the assessment of the impact of economic activity on education, health, employment and level of income of the households under study. Role of such factors is well recognised in thriving cross-border informal trade between India-Bangladesh and India-Nepal. There are two important factors that work as stimulating force behind cross-border informal trade: lack of employment opportunities in border areas; and the social relationships between communities across borders. Informal trade creates employment opportunities for marginalised households and an important source of income for local people living in border areas. Moreover, the bonds of social and cultural relations between the people of two sides of borders become a natural facilitator of cross-border informal trade. Over the years, social, cultural and family links have been the persuading factors behind flourishing informal trade in the Eastern South Asia region (Taneja, 2002).

## 2.5 Political Aspects

It is important to note that cross-border informal trade flourishes due to disturbed political relations between two border sharing countries. Restrictions on trade of essential items through formal channels compel local people and traders to purchase them through informal channels.

It is a well-known fact that governments of India, Bangladesh and Nepal have made inadequate progress in terms of promoting development in border areas and generating meaningful employment opportunities. The failure of the governments of India, Bangladesh and Nepal to build up efficient institutions and regulatory framework is noted as a major concern in promoting cross-border formal trade.

There are, however, many other political factors that affect the volume of informal trade in border areas. These factors include inefficiencies in bureaucratic system, political protection to informal traders and lack of political will for economic reforms in border areas. Among those, inefficiencies in the government systems play a major role in thriving informal trade in these areas. This is well summarised by Colin Scott who stated that traders indulge in informal trading due to inefficiencies in the government system. This happens when there is a lack of good governance and existence of perceived corruption. It has diluted the strength of state institutions in the eyes of the people and created a crisis of confidence for those who are victims of distorted policies.



## Chapter 3

# Nature, Extent and Drivers of Cross-border Informal Trade and its Impact on Livelihood: *Field Level Observations*

To assess the nature, extent and drivers of informal trade of agricultural inputs between India-Nepal and India-Bangladesh, a field level survey had been conducted using the structured questionnaires (Annexure - 1 & 2). The questionnaires were designed in such a manner that almost all possible drivers that are influencing informal trade in the border regions can be captured. All such drivers are categorised into the five broad categories, as shown in Table 3.1.

The data collected on all the drivers has been analysed based on the observations and perspectives collected from the field, which have been highlighted in the subsequent sections of this chapter. The study has used qualitative information collected from the relevant stakeholders through key informant interviews and focussed group discussions (FGDs).

Further, to look into the impact of informal trade on livelihood, the questionnaire also includes questions about improvement in respondents' housing and sanitation facilities. The impact of informal trade on women has also been studied by taking appropriate

representation of female respondents in the sample. The following two sections explain the results obtained from the primary data collected from the fields located in Bangladesh, India and Nepal.

## 3.1 Case of India-Nepal: Survey Findings

To understand informal trade along the Indo-Nepal border, a field level survey was conducted in four locations – Madhubani and Arariya districts in Bihar state of India; and Sunsari and Dhanusha districts in Nepal. A total of 120 individual farmers were surveyed from these four districts, of which the male-female ratio was 3:2 in Bihar, India, while the same was 3:1 in Nepal.

Some of the interviewed farmers were also small traders, who were involved in trade, both formal and informal, at small scales. It was observed that both male and female farmers are involved in practicing farming with the use of informally traded agricultural inputs.

The number of respondents who have university degrees was just three in Bihar, India and four in Nepal out of 60 respondents from each side. The number of uneducated farmers, who never

Table 3.1

Categorisation of Possible Drivers of Informal Trade
Ease to Accessibility
<ul style="list-style-type: none"> <li>• Low Transportation Costs (as compared with the formal transportation cost)</li> <li>• High Transaction Costs (banking, operational cost of doing formal trade)</li> <li>• Easy Access and Availability</li> <li>• Proximity of the local market</li> </ul>
Socio-Cultural Linkages
<ul style="list-style-type: none"> <li>• Cultural, social and ethnic relations</li> </ul>
Policy Factors
<ul style="list-style-type: none"> <li>• Customs, procedural, and administrative hassles (refer to clearance at customs, paperwork and corruption)</li> <li>• Prevalence of standards and testing related barriers</li> <li>• High tariffs and duties</li> <li>• Quick realisation of payments in informal trade</li> <li>• Absence of formal border point</li> </ul>
Economic Factors
<ul style="list-style-type: none"> <li>• Lower Price</li> <li>• Longevity of specific variety (related to seeds)</li> <li>• Productivity (related to seeds and fertilisers)</li> <li>• Low cost of post-harvest management (related to seeds)</li> </ul>
Knowledge
<ul style="list-style-type: none"> <li>• Lack of knowledge about availability of agriculture inputs</li> </ul>

attended schools is higher in Nepal as compared to Bihar. Most of the interviewed farmers were least educated or uneducated, and thus have minimal job opportunities. This causes them to largely depend on informal trade practices. For them, this is an easy way of making money for their livelihood. The average annual income of an Indian farmer in the border areas of Bihar is INR68,913 and the same is INR89,115 for the farmer in the selected border area of Nepal.

The selected farmers used informally traded wheat seeds in Bihar and potato and paddy seeds in Nepal. Farmers from Bihar state, bordering Nepal, mostly import *Gautam* and *NL297* varieties of

wheat seeds informally from Nepal. However, on the otherside of the border, Nepalese farmers' import *Sona Mansuli* paddy seed and vegetable seeds (particularly potato seeds) informally from India. Informal trade of DAP fertiliser and spray machines is also notable from India to Nepal. It is to be noted that livelihood of the majority of people staying in the border areas depend on the informal trade happening between India and Nepal.

### 3.1.1 Regional Profile

Farmers in the border areas of Bihar and Nepal are small or marginalised, with small land holdings. Majority of the farmers in these areas



do farming to meet their own needs. They earn agricultural income from supplying the surplus output, after self-consumption, into the local market. Average land holding size in borders of Bihar and Nepal is about three acres. These farmers are not concerned about the quality of the produce in terms of health and environmental issues. They are only anxious about the quantity of the produce, which fetches them food and money. It is natural that illegal or informally traded agriculture inputs have lower price (major factor), and sometimes these products also have quality advantage in comparison to the products available locally.

In Nepal, farmers' dependency on Indian market is much higher for chemical fertilisers. According to farmers in Kaptangunj, in Sunsari district, they purchase 70 per cent to 90 per cent of the required fertilisers from India, which includes Urea, DAP, potash, etc. They can easily procure these fertilisers from the Indian markets at a cheaper price and in abundance. Similarly, they quoted that small machinery items, such as spray machines are also purchased from the Indian market, where they are available at cheaper prices and are of better quality.

In the Dhanusha district of Nepal, almost on 75 per cent of the farmers grow informally traded *Sona Mansuli* paddy seeds. These seeds are banned in Nepal due to its susceptibility to ailments, but farmers prefer it because of its high yield. As per their perception, on an average, 30 kg of paddy seed are required to cultivate an acre of land and paddy is available at INR50 per kg from India, informally. The availability and the differences in prices of the seeds, in Nepali and Indian markets, are the biggest drivers influencing informal trade of the agricultural inputs in these areas.

In case of Sunsari district, farmers use large quantity of potato seeds for sowing. On an average, 2600 kg potato seeds are required to cultivate an acre of land in Kaptangunj and farmers in the district procure potato seeds at INR3.50 per kg informally from India, while the same is available formally at INR5.14 per kg in Nepal. Nepalese farmers use large quantities of fertilisers to grow crops and most of those fertilisers

are purchased from India. From India, DAP can be procured at INR22.5 per kg, while in Nepal it is available at INR28.75.

On the Indian side, in Bihar, farmers mentioned the use of informally traded seeds from Nepal for more than ten years. Although the trade and transport treaty between India and Nepal allows free access to Indian market for Nepalese goods and free movement of people across countries – there are some restrictions and stringent regulations in formal trade, as discussed in chapter 2, which makes it difficult for the traders to do business easily. On an average, farmers in the border areas of Bihar use around 70 kg of wheat seed to cultivate an acre of land. Per kilogram of *Gautam* seed is available at INR37.25 in Nepalese market.

### 3.1.2 Drivers of Informal Trade between India (Bihar) and Nepal

Based on the information gathered from field this section points out the specific drivers which influence informal trade between Bihar and Nepal. Table 3.2, gives detailed information about the drivers influencing informal trade between India and Nepal.

#### *Cultural, social and ethnic relations*

As the referred countries share strong historic, cultural, social and ethnic ties, this acts as one among the many factors to drive cross-border informal trade. People in border areas of Bihar still have land holdings on the other side of the border, which enable them to have access to the markets of both India and Nepal.

The ethnic relations and common agricultural practises influence them to inadvertently practise informal trade across the borders. Almost 75 per cent respondents reported that they are involved in informal trade of agricultural input products because of social and ethnic linkages with Nepal.

#### *Easy access, availability of products and proximate markets across border*

India and Nepal share a long border with no razor-fence, thus allowing the local inhabitants to cross borders easily. Free movement of people across the border, facilitates them to get access to local markets in the border areas of Bihar and

Table 3.2

Drivers Influencing Informal Trade in Agricultural Input Commodities between India and Nepal				
Category	Drivers	Bihar	Nepal (Seeds)	Nepal (Fertilisers and Machinery)
Easy Accessibility	<ul style="list-style-type: none"> <li>• Lower transportation costs (distance of formal is high and increasing transportation costs)</li> <li>• High transaction costs (banking, operational cost of doing trade)</li> <li>• Easy access and availability or produced locally across border</li> <li>• Proximity of the local market</li> </ul>	✓	✓	✓
Socio-cultural Linkages	<ul style="list-style-type: none"> <li>• Cultural, social and ethnic relations</li> </ul>	✓	✓	✓
Policy Factors	<ul style="list-style-type: none"> <li>• Custom procedural and administrative hassles (refer to clearance at customs, paperwork and corruption)</li> <li>• Prevalence of standards and testing related barriers</li> <li>• High tariffs and duties</li> <li>• Quick realisation of payments in informal trade</li> <li>• Absence of formal border point</li> </ul>		✓	
Economic Factors	<ul style="list-style-type: none"> <li>• Lower Price</li> <li>• Longevity of specific variety</li> <li>• Productivity</li> <li>• Minimal cost for post-harvest management</li> </ul>	✓	✓	✓
Knowledge	<ul style="list-style-type: none"> <li>• Lack of knowledge about availability of agriculture inputs locally</li> </ul>			

Source: Primary Survey conducted by CUTS International in 2016-17

Nepal, allowing them easy access to products. Easy access and availability of products is another main influencing factors driving informal trade. In addition, the geographical proximity of the markets is also one of the important reasons for informal trade.

It was reported that for farmers in Sunsari district it is easier to access the Indian market than Nepalese market. The cost incurred to reach the

Nepalese market is higher than the cost incurred to reach the Indian market.

#### *Longevity, productivity and post-harvest management*

The quality and reliability of seed are also some of the common factors influencing the volume of informal trade. It was observed that farmers were not happy with the local varieties of seeds, both in the borders of Bihar as well as in Nepal. Farmers

**Farmers of Bihar go directly to Nepal and bring bulk amounts of seeds in India to meet their demands and to sell the surplus to other farmers. They purchase these seeds informally from dealers, local brokers, traders and government corporations located in the markets of the border areas of Nepal**

said the quality of locally available seeds is inadequate and their productivity is low, while the ones brought from the other side of the border have high productivity and longevity. Post-harvest ease is also one of the factors that drive informal trade.

Other than these common drivers that influence informal trade, the following are some product specific drivers that have also been captured:

#### *Sona Mansuli*

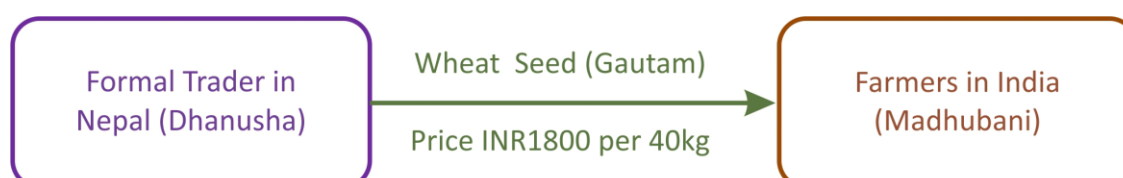
This variety of paddy seed is banned in Nepal as it is suspected to result in various ailments in Nepal. However, it is highly preferred by the Nepalese farmers as the output of the seed is higher as compared to other varieties, which are locally available. As they cannot buy *Sona Mansuli* paddy seeds in their local markets they have to depend on Indian markets, from where they bring the seeds into Nepal informally.

In case of fertilisers, they are imported informally from India to Nepal at cheaper rates. This is mainly because Indian fertilisers are available at subsidised price. Also, the Nepalese farmers mentioned that through informal channel, they can make payments for procuring the fertilisers easily. Paperwork is not required at all in informal trade, which makes the procedure very easy.

### 3.1.3 Flow of Informally Traded Agricultural Inputs

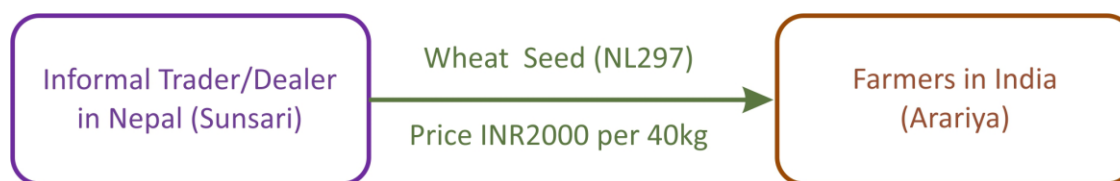
Informal trade across India-Nepal border is conducted with the support of border officials in certain cases.<sup>9</sup> The main motive of informal trade is to gain more profits by avoiding high tariffs/duties, regulation of rules of origin, and procure the subsidised low price goods from other country and sale it at higher market price or use it for agricultural activity. The respondents involved in informal trade activities have also admitted that although the cost of risk associated with informal trade is too high, they still find it profitable.

Figure 3.1: Informal Flow of Wheat Seeds from Nepal to India  
(Dhanusha to Madhubani)



Source: Primary Survey held in the year, 2016-17

Figure 3.2: Informal Flow of Wheat Seeds from Nepal to India  
(Sunsari to Arariya)

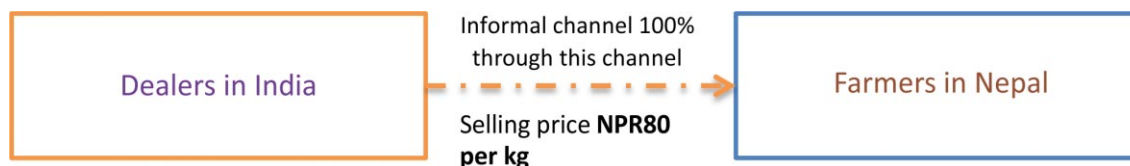


Source: Primary Survey held in the year, 2016-17

Figures 3.1 and 3.2 show the supply chain of informally traded agricultural inputs, *Gautam* wheat seed and *NL297* wheat seed, from Nepal to India. Figure 3.3 and 3.4 show the supply chain of informally traded *Sona Mansuli* paddy seed and potato seed from India to Nepal. Figure 3.5 shows the supply chain of DAP from India to Nepal.

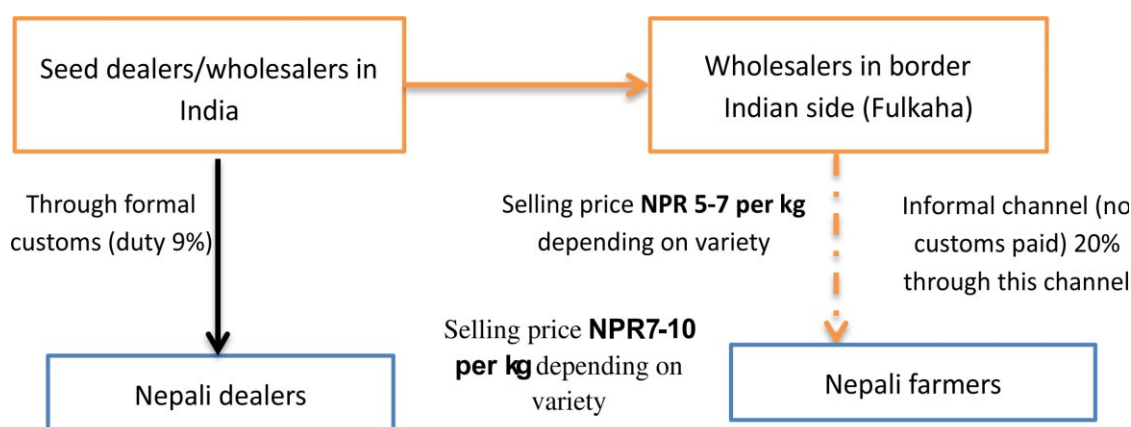
Indian and Nepalese farmers not only interact and have friendly relations amongst themselves, but also exchange agricultural seeds for better productivity and output. Mostly, formal traders and agents in the Nepalese side sell seeds and other agricultural input commodities to the Indian farmers. It is important to note that while bringing the seeds on the Indian side,

Figure 3.3: Informal Flow of *Sona Mansuli* Paddy Seeds (India to Nepal – Giddha)



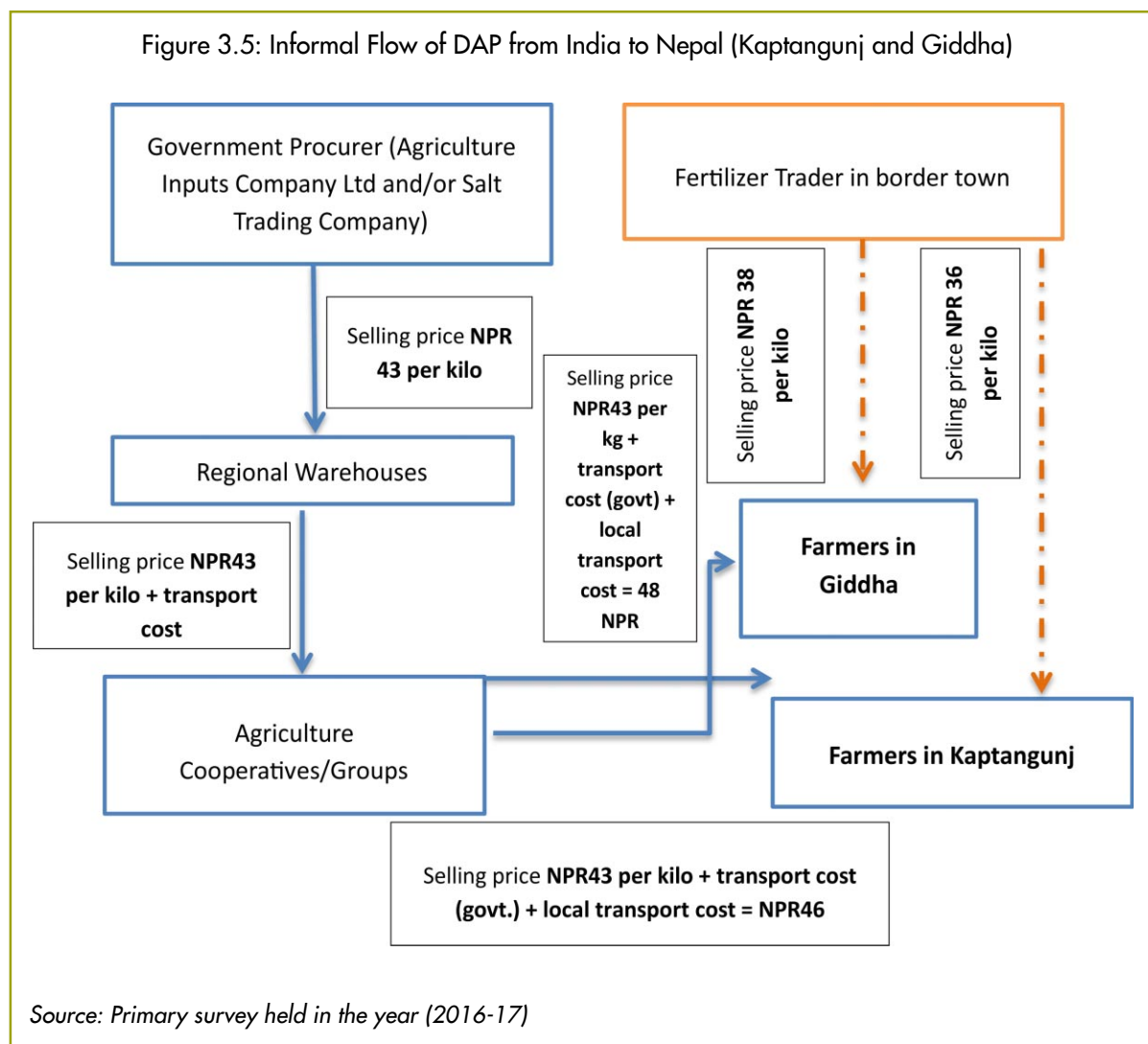
Source: Primary Survey held in the year, 2016-17

Figure 3.4: Informal Flow of Potato Seeds from India to Nepal (Kaptangunj)



Source: Primary survey held in the year 2016-17

Figure 3.5: Informal Flow of DAP from India to Nepal (Kaptangunj and Giddha)



sometimes, the farmers unpack those seeds and carry them in ordinary plastic bags or ordinary sacks, so that border forces allow them to carry these products to the other side of the border. Indian farmers purchase the Nepalese seeds informally at lower prices as compared to the original price of the seeds.

In the case of *NL297* wheat seed, Indian farmers buy seed from informal traders or dealers from Nepal side. This is because *NL297* seeds are not easily available in the market. Those farmers, who are cultivating *NL297* on the Nepal side, also sell the seed directly to the Indian farmers or via informal traders.

Most of the farmers buy paddy seed directly from the Indian traders who are not authorised to sell

these inputs to the farmers of the other country. The main reason of informal trade in paddy is the ban imposed by the government of Nepal on import of *Sona Mansuli* variety.

While in the case of potato seeds, only 20 per cent of seed came informally as shown in Figure 3.4. This is because the surveyed year was not a profitable year for sowing potato as one year prior the prices of potatoes were very low. Thus, farmers had purchased fewer amounts of seed for potato plantation.

### 3.1.4 Informal Trade and its Livelihood Impact on Indian and Nepalese Farmers

Informal imports of agriculture inputs from India is a lifeline for Nepalese farmers. The farmers not only get access to agriculture inputs on time

but also at cheaper rates. With informal supply of Indian fertilisers, the farmers do not have to rely on the unpredictable domestic supply. Some of the farmers even say that without cross-border access they would have not been survived.

As Indian inputs are available at cheaper price because of the government subsidies applied on them for domestic farmer's support, the amount of money saved from informally trading them is immense. They feel that the money saved through such informal transactions is worth the hassle and abuse that is faced by them on the way while transporting the fertilisers or the machines informally. To understand the impact of informal trade on the livelihood of the people living in the border areas, following assessments have been reported:

#### *Income assessment*

The data collected from the survey reveals that informal trade practices significantly contribute to the income of the respondents. It has been estimated that around 20-30 per cent of their total income comes from informal trade practices. Since, the collected information does not take into account the real change in income but if we assume same level of prices then one can easily interpret that informal trade activities have contributed directly in the level of income of the respondents and indirectly into their economic well-being. Moreover, there are no procedural hassles in informal trade.

#### *Socio-Economic assessment*

Respondents have also mentioned that with an increase in the income of the respondents, there are improvements in terms of housing, sanitation, healthcare facilities, education, among others. The living standard of the respondents in the rural areas has improved over the period of time. Many of them have shifted to brick house (*Pucca Ghar*) and some of them have added to their inherited land holding.

Respondents mentioned that their children go to school and some of them are even attaining higher education in the urban cities. At present, most of the houses have got electricity connections. The households possess tube-lights,

bulbs, fans, televisions, refrigerators, mobile phones, and other basic gadgets. Some of the respondents also have their own motor cycles.

It is challenging to state that all the positive change experienced by the people living the border areas is only due to trade of informal trade, as there are many welfare schemes, run by government. For instance, in India for the development of houses for the rural households, *Pradhan Mantri Awaas Yojana-Gramin* has been initiated. For hygiene and better sanitation facilities, the government has introduced 'Clean India Mission', where the Indian government is trying to make toilets for every household. The schemes, such as *Sarva Shiksha Abhiyan* and *Mid-day Meal* are introduced to provide education to all.

Similarly, in Nepal there are various developmental schemes that are operational for the development of the rural households. In addition, there is positive change in the livelihood because a substantial number of youth from the country have found jobs in other developed countries from where a good amount of remittance money comes into Nepal.

### 3.2 Case of India-Bangladesh: Survey Findings

To understand the extent of informal trade in agricultural input products along the India-Bangladesh border, a total of 120 farmers, traders and dealers were interviewed in two districts of Bangladesh, Rangpur and Rajshahi, and three districts of West Bengal in India, namely, Cooch Behar, Malda and South Dinajpur, who are involved in informal agricultural trade activities. Out of total respondents, male-female ratio was 9:1 in Bangladesh, while it was 1:1 in West Bengal.

It was observed that women's role in farming or informal trade activities is secondary. They work as helpers to assist the male members of the family. Through group discussions in West Bengal, it was found that women are dominated by men, even if she is the main earning member of the family.

India-Bangladesh border is marked by a high degree of porosity and consequently estimating the extent of informal trade, and illegal cross-border activities was a major challenge. In West Bengal, when attempts were made to record the responses of traders and seed/fertiliser dealers involved in informal trade, the same could not be done owing to two major reasons – some of them denied their involvement in informal trade and others who agreed requested not to record their responses officially. It is important to mention that those traders who denied their involvement in informal trade channels provided the information related to the supply chain, which was later verified from other sources before they are being admitted as authentic survey findings.

The selected agro-products, which are informally purchased in Bangladesh from West Bengal are *Swarna* paddy seeds and *Rocky* tomato seeds. For West Bengal, they are *BIRI28/29* paddy seeds, *BB11/BR11* paddy seeds, *Hira-2* paddy seeds, *Sathi* herbicide, and Chinese pump sets. Data analysis and discussions are presented in the following four sub-sections.

Most of the stakeholders in this belt have primary education. Less opportunities for jobs in the region build a situation of higher dependence on informal trade activities. People in the border areas of

Bangladesh believe that cross-border informal trade is a way to maintain a sustainable livelihood because it provides livelihood to the unemployed.

The numbers of respondents who have university degree are three in Bangladesh while zero in West Bengal, which represents the poor educational scenario of rural West Bengal. The average yearly income of a farmer (respondent) in Bangladesh is INR81,845 (97,396 BDTaka), while the same is INR71,475 in West Bengal.

### 3.2.1 Regional Profile of India and Bangladesh

It was learned during the survey that almost all the farmers in Bangladesh are small or marginalised, with land holding of less than 5 acres. They cultivate their land with informally procured seeds depending on the variety of seed that they sow. In Bangladesh, farmers use 14.61 kg per acre of paddy seed to cultivate an acre of land.

In the border rural areas of Bangladesh, most of the agricultural inputs are of Indian origin. They use tomato seeds – *VL642* and *Rocky* varieties; maize seeds – *Super-45*, *V-30*, and *Pioneer-92* varieties; mustard seeds; paddy seeds – *Swarna* variety. It was mentioned that use of informal products is higher in Bangladesh because it is difficult to buy locally produced seeds in the

## Box 1: Fencing at Bangladesh-India Border

It is important to understand the fencing pattern between India and Bangladesh, and how it impacts the livelihood of farmers. In general, zero point marks the exact border point that separates two countries, fencing is generally done at a distance of 150 metre away from the zero point. While in some cases the distance between the fencing and the zero point is less than 150 meter, in some places, the distance is nearly 600 metre. The fencing has not only divided the two countries but in some cases, it has separated a farmer from his agricultural land. There are many instances where a farmer's residence and his agricultural land lay on other sides of the border. Such farmers play the most crucial role in facilitating informal trade in agricultural inputs between India and Bangladesh.

There are entry and exit points through which these farmers are allowed to cross the fence to cultivate their agricultural lands. These entry and exit points are closely guarded by the army personnels and they check the bags and the materials that these farmers carry while entering the other side of the fence. Beyond the fence, both Indian and Bangladeshi farmers not only interact with each other but also exchange agricultural inputs. Farmers take these inputs either for self-use or to sell the product in the local market or to other fellow farmers. To carry these products (usually seeds) back to their home country, farmers unpack the packets and carry them in ordinary plastic bags.



Table 3.3

Variation in Prices of Informally Traded Paddy Varieties Based on Distance from the Nearest Market		
Distance	Name of Paddy Variety	Price per Kg (in INR)
1 Km-5 Km	<i>BIRI-28/29</i>	60/
	<i>Hira-2</i>	250/
5 Km-more than 10 Km	<i>BIRI-28/29</i>	90/
	<i>Hira-2</i>	300/

Source: Field Survey, CUTS 2017

border areas where as getting access to Indian seeds is easy, and the quality of locally produced seeds is not good – use of which does not satisfy farmers' requirements. This study has focussed on *Swarna* paddy seed in Rangpur and *Rocky* tomato seed at Rajshahi districts of Bangladesh.

In West Bengal, visits across the villages of *Kishamatdash-gram* (Krishamat-karala I), Bamonhat, Jaigopalgunj, South Kalmati, Sakadaha, Razia Bibi, etc. under Dinhata-II block in the Cooch Behar district revealed that during the 'boro' season, farmers predominantly use paddy varieties viz. *BIRI 28, 29* and *Hira*, which are generally coming in from Bangladesh. At Malda and South Dinajpur, dominance of Bangladeshi seeds and herbicides as agricultural inputs, was revealed to a large extent.

The farmers across the villages of Manikchak, Bidyanandapur, Nehalur, Malatipur and Galimpur at Malda articulated that during the *khari* season, they use paddy varieties viz. *Bangabandhu-11* (*BB-11*), which is arguably originated from Bangladesh, although packaged and marketed by Indian companies.

Another popular Bangladeshi paddy seed variety found in South Dinajpur is *Jeera Shaal*. Moreover, farmers at Malda and South Dinajpur are using various herbicides (Sathi, MIXT, Sirius, among others), varieties from Bangladesh that enter the Indian markets informally through the unfenced border areas in and across Hili (South Dinajpur).

Chinese CD pumps also enter Indian market through this route, from Bangladesh. In West Bengal region, the price of informally procured

paddy seeds increase with increase in distance as the number of people engaged increases. This increases the price of informally traded seeds. Table 3.3 demonstrates the price differences.

In Dinhata-II Block, there are a total of 12 *gram panchayats* (GPs), the village councils, and out of these 12 GPs, 7 GPs are adjacent to the Bangladesh border where some of the Indian residents also live on the other side of the fencing. Bamonhat II is one of those GPs where more than 10 per cent of the Indian residents live on the other side of the fence.

The GP has approximately 4,000 families and each of the families own 10 *bigha* of agricultural land, on an average, while some of them own more than 20 *bigha* of land as well. Out of these 4,000 families, approximately 80 per cent of the families cultivate Bangladesh Paddy varieties (*BIRI-28/29*) on 5 *bigha* of land during boro season. Majority of the farmers have reported that they use 2 kg of *BIRI-28/29* variety paddy seed for every one per acre land.

### 3.2.2 Drivers of Informal Trade between India (West Bengal) and Bangladesh

Informal trade between India and Bangladesh is decades old. Various factors that trigger such informal trade between the countries could be long standing cultural and ethnic ties, the geographical proximity (for some villages in India, markets in Bangladesh is nearer as compared to Indian markets), price and currency differential that encourage arbitrage, difference in quality of a product, among others.



In this regard, one of the key objectives of the study was to identify the factors that lead to informal trade in agricultural input between India and Bangladesh. This section discusses in details major drivers of informal trade between the two countries. Table 3.4, portrays the list of drivers responsible for influencing informal trade in agricultural input commodities between India and Bangladesh.

#### *Easy accessibility, Low Transportation Cost and Proximity of Markets across borders*

As India and Bangladesh used to be one country, main markets have been established in such a way that for Indian farmers it is easier and cheaper to access the market in Bangladesh and for some Bangladeshi farmers it is easier to access the Indian market. It was noted that the local seed shops in the vicinity of the farmers do not cater to their requirements, which results in informal trade through markets available on the other side of the border.

For Indian farmers in South Kalmati and Kishamat Karala in West Bengal, procuring Bangladeshi variety of seeds becomes even easier as the fellow Indian farmers who reside in remote areas act as middlemen who provide door-to-door delivery service of these seeds. Although, the price charged for these seeds is slightly more than the market price, farmers prefer procuring seeds this way, avoiding unnecessary hassles that they might face.

#### *Productivity, longevity and post-harvest management*

It has been noted that productivity and longevity of seeds acts as major factors towards influencing

informal trade between West Bengal and Bangladesh. It is also reported that post-harvest management of the informally procured seeds is easier than that of the locally available seeds. It is perceived that these seeds have higher resistance to extreme temperature and pest attacks as compared to the locally available varieties.

Bangladeshi varieties of herbicides are also preferred more in India as the farmers have a perception that these herbicides are more effective (productive) and are used in less quantity when compared with the locally available fertilisers.

#### *Cultural, social and ethnic relations*

Common cultural and traditional linkages which are ages old, act as one of the reasons among others for informal trade between India and Bangladesh. Similar agricultural practices and climatic conditions, and even friends and family

#### Reasons for Preferring Indian Rice Seeds in Bangladesh

- Productivity of informally traded seeds is found to be better as compared to their formally available counterparts
- Lack of supply of suitable alternatives
- When the same seed is procured formally, the price of the seed is much higher than the one procured informally
- Reduced need for use of pesticides on informally traded seeds

## Box 2: Dependence on Tomato Seeds from India

The major reasons influencing Bangladeshi farmers to rely on informally traded VL-642, a variety of tomato seed, from India are:

- These seeds have better yield as compared to those available through formal channel in Bangladesh
- These seeds are highly productive and are available at competitive price – making it cost effective for use
- Availability of these seeds is higher than the local seed varieties in local markets of Bangladesh
- These tomato seeds are said to yield tomatoes that have relatively harder outer shell. As a result, this reduces post-harvest losses (i.e. makes post-harvest management easier). It has been reported that these tomato seeds (VL-642) are less prone to crop diseases and pest attacks

Table 3.4

Drivers Influencing Informal Trade in Agricultural Input Commodities between India and Bangladesh				
Category	Drivers	Bangladesh (Seeds)	West Bengal (Seeds)	West Bengal (Fertilisers and Machinery)
Easy Accessibility	<ul style="list-style-type: none"> <li>• Lower transportation costs (means distance of formal is high and increasing transportation costs)</li> <li>• High transaction costs (banking, operational cost of doing trade)</li> <li>• Easy access and availability or produced locally across border</li> <li>• Proximity of the local market</li> </ul>	✓	✓	✓
Socio-cultural Linkages	<ul style="list-style-type: none"> <li>• Cultural, social and ethnic relations</li> </ul>	✓	✓	✓
Policy Factors	<ul style="list-style-type: none"> <li>• Custom procedural and administrative hassles (refer to clearance at customs, paperwork and corruption)</li> <li>• Prevalence of standards and testing related barriers</li> <li>• High tariffs and duties</li> <li>• Quick realisation of payments in informal trade</li> <li>• Absence of formal border point</li> </ul>		✓	
Economic Factors	<ul style="list-style-type: none"> <li>• Lower Price</li> <li>• Longevity of specific variety</li> <li>• Productivity</li> <li>• Minimal cost for post-harvest management</li> </ul>	✓	✓	✓
Knowledge	<ul style="list-style-type: none"> <li>• Lack of knowledge about availability of agriculture inputs locally</li> </ul>			

Source: Primary Survey conducted by CUTS International in 2016-17

living across the border unintentionally influence them to practise informal trade. At times, when they visit a relative's family on the other side of the border, they get seeds and other agricultural commodities from that country as gifts.

Furthermore, similar consumption habits and farming disciplines created a reasonable belief in exchanging and mutually sharing agricultural inputs and knowledge since decades, which also results in informal trade of herbicides and other agricultural input commodities.

### *Lack of Knowledge*

Lack of knowledge, plays a significant role in promoting informal trade. It was observed that most of the respondents are not aware about the local varieties and brands. This is mostly because these local brands do not market and advertise their product, thus, people are not aware of their availability and utility.

Besides, on account of some previous bad experiences, their perception about using the local varieties has changed completely, and they rely more on the seeds that are procured from the other side of the border.

It was reported that some of the farmers purchase agricultural inputs, seeds and fertilisers from other side of the border or through local dealers, mainly because they have heard that those products are of good quality and more productive than those available locally.

### *Lower price*

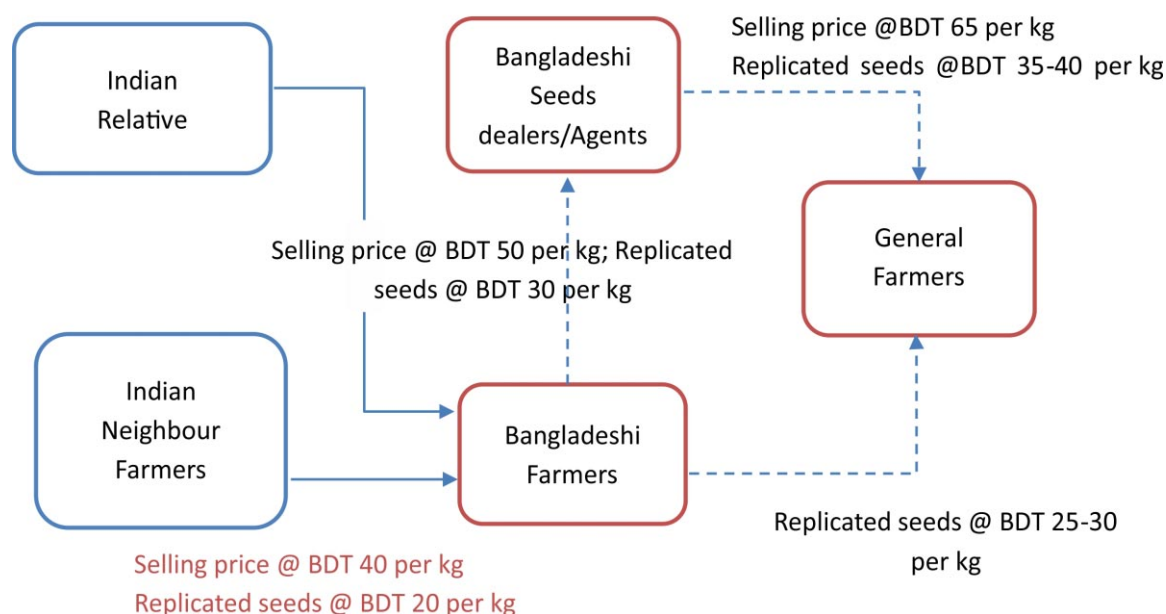
Farmers on both the sides have noticed that the prices of agricultural input commodities on the other side of the border are lower than the prices of those commodities which are available locally.

Therefore, in order to save money, most of the respondents prefer purchasing products from the other side of the border. For instance, Indian fertiliser is available at INR3.80 per gram, while the same fertiliser in Bangladesh is available at INR1.60 per gram. Both varieties are used in same quantity in an acre of land. Therefore, Indian farmers prefer Bangladeshi variety of fertilisers instead of the Indian variety. Same factor also works for the informal supply of Chinese water pump sets from Bangladesh to West Bengal, India.

### *Lack of formal border points*

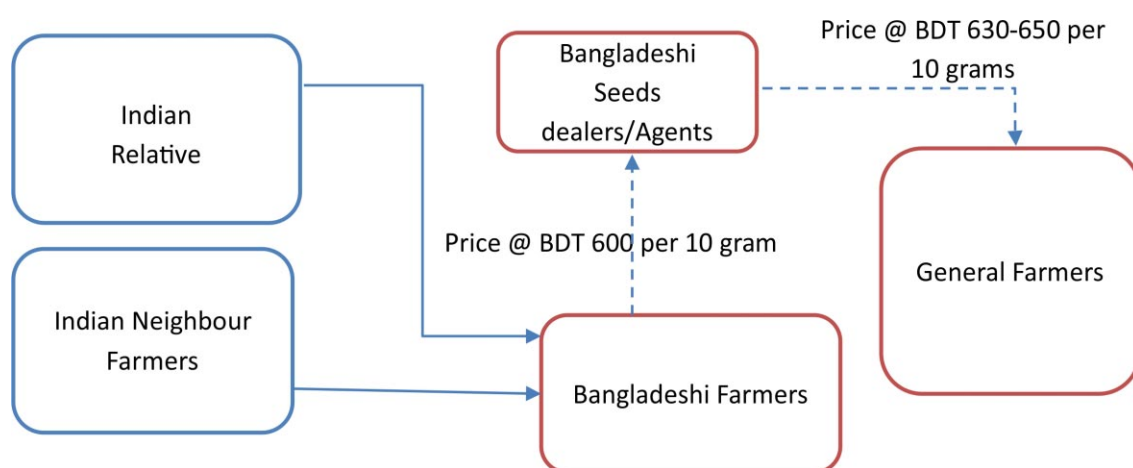
Due to lack of formal entry and exit points, local inhabitants informally cross the border to get necessary supplies. People who have houses on both sides of the border act as informal traders. They get goods from both the markets of the respective countries and sell it informally to the farmers of other country. In addition, the businessmen who bring informally traded agro-inputs from India or Bangladesh usually sell those to local shopkeepers, who then sell these to the end consumers.

Figure 3.6: Informal Flow of Swarna Rice Seeds from India to Bangladesh



Source: Primary Survey held in the year, 2016-17

Figure 3.7: Informal Flow of Rocky Tomato Seeds from India to Bangladesh



Source: Primary Survey held in the year, 2016-17

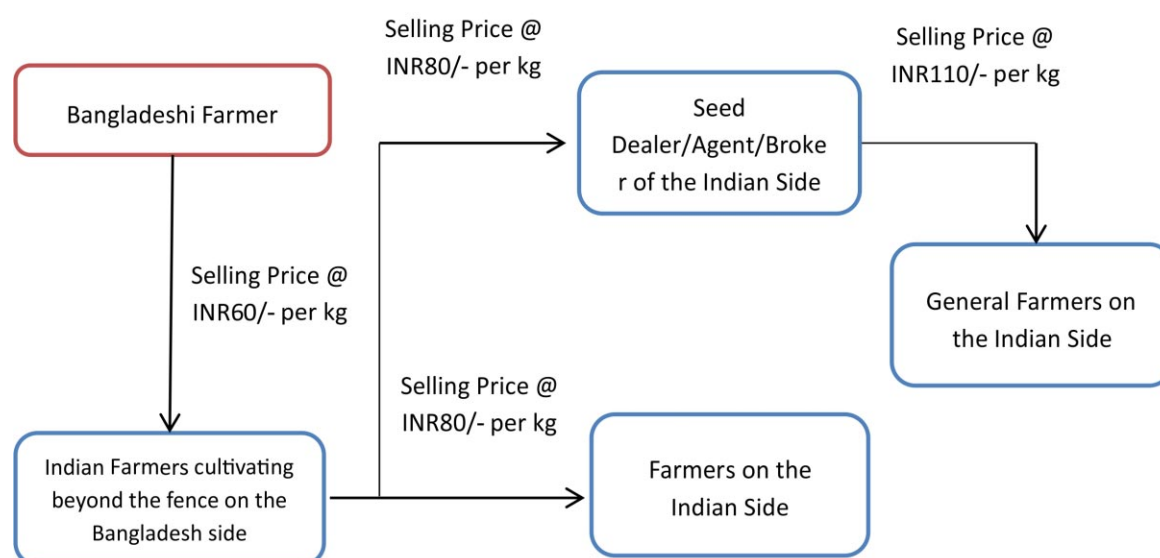
### 3.2.3 Flow of Informally Traded Agricultural Inputs

From India to Bangladesh, *Swarna* rice seeds are informally traded between Coochbehar, West Bengal in India and Rangpur in Bangladesh as the farmers in Bangladesh feel that the Indian variety of rice seeds are available at lower price, involves low transportation cost, easy accessibility, with better productivity and easier post-harvest

management. Flow of seeds from Coochbehar to Rangpur is given in Figure 3.6.

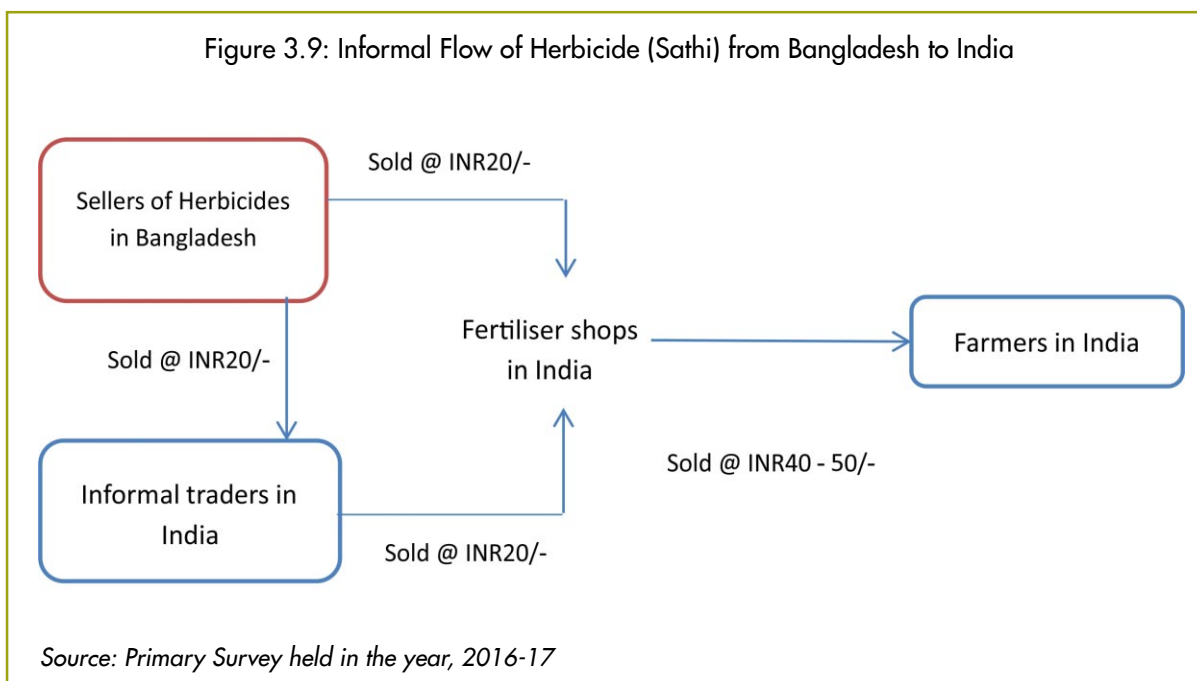
On the Indian side, Indian farmers procure the *Swarna* rice seed at BDT35 per kg and the same are sold at BDT40 per kg to Bangladeshi farmers living in the border areas. These seeds are then sold to Bangladeshi seed dealers at BDT50 per kg, which are then sold to the general farmers at

Figure 3.8: Informal Flow of Paddy Seeds – BR28/29 from Bangladesh to India



Source: Primary Survey held in the year, 2016-17

Figure 3.9: Informal Flow of Herbicide (Sathi) from Bangladesh to India



BDT65 per kg. The prices differ in the case of second generation seeds.

Similarly, *Rocky* tomato seeds are traded informally from Malda in West Bengal (India) to Rajshahi in Bangladesh. On the Indian front, *Rocky* seeds are available at INR400 per 10 gram packets, which is almost BDT480. Supply chain of *Rocky* tomato seeds is depicted in figure 3.7, with the cost break-up.

The product is sold to Bangladeshi farmers on the border at BDT550 per 10 gram packet. They then sell it to local dealer or agent at BDT600 and then further to Bangladeshi farmers at BDT630 to BDT650 per 10 gram.

The supply chain along with cost breakup for *BR 28* and *BR 29* variety of paddy seeds, which are brought from Bangladesh to India has been graphically depicted in Figure 3.8. Price of the product increases along with the distance from the market where it will be sold.

Additionally, it was observed that there are some other channels too, which operate for the supply of seeds from Bangladesh to India, like throwing sacks across borders, using *daangis* (seesaw system) to send commodities from one side of the border to the other. However, these

are done at a more organised level and respondents declined to comment on such operations.

Similarly, there are some fertilisers (herbicides), like *Sathi*, which are bought in the Indian market from Bangladesh through Hilli. Figure 3.9 explains the supply chain of such herbicides from Bangladesh to India.

### 3.2.4 Informal Trade and its Livelihood Impact on Indian and Bangladeshi Farmers

Informal trade in agricultural inputs between India and Bangladesh play crucial part in the lives and livelihood of the people living in close proximity to the international border. The study has revealed that the impact of informal trade is visible among all towns and districts that are almost 100 km away from the border.

Irrespective of the distance, informal trade have a significant impact on the lives and livelihood of the farmers, local traders, dealers and others who either practise cultivation, trade or are involved in the supply chain of the informally traded agricultural inputs. Farmers choose informally traded agricultural input products because these add to their income. It is majorly because of the enhanced productivity, longevity of the produce, lower purchase price of the product, and easier and cheaper post-harvest management. These factors

result in increased income, thus enabling the farmers to invest in improving the quality of life and also to spend more on healthcare and education. Respondents informed that their involvement in informal trade had been ongoing for more than ten years.

To understand the livelihood impact of informal trade on the local economy, the analysis has been done on the basis of the following two assessments:

#### *Income Assessment*

It has been already mentioned that local households feel that they gain by participating in informal trade, whether it is through procuring goods at cheaper price or by better and improved outputs of their produce. Percentage increase in the income of the respondents varies with the intensity of their involvement in informal trade. Most of the respondents have mentioned that their livelihood has improved while practising informal trade, although it is difficult to estimate the exact increase in income due to informally traded agro-input products. For instance, in India various schemes, such *Sarva Shiksha Abhiyan*, *Swachh Bharat*, National Rural Health Mission, etc. are being implemented, which are to bring positive impact on the livelihood of rural India.

Similarly in Bangladesh some of the ongoing interventions are Social Safety Net Programmes (SSNPs) implemented by the Ministry of Agriculture (MoA) (for example, Agricultural Rehabilitation

Programme, under which, farmers are provided with seeds, fertilisers and subsidies in different agricultural inputs). Second Crop Diversification Project (SCDP) implemented by the Department of Agricultural Extension (DAE) aims to promote high value crop production. Second Phase of the National Agriculture Technology Programme (NATP-II) implemented with a view to increase the agricultural productivity of small farm holders, and improving their access to markets, among others.

#### *Socio-Economic Assessment*

The increased income has also helped in expanding the businesses, land holdings, housing facilities of the local households. Some of the respondents reported that with more income they were able to purchase machinery that can be used for agricultural activities.

It was observed that with increased income, local farmers are able to meet basic needs of hygiene and livelihood like better housing facility, improvement in sanitation facilities, among others. These observations show that the livelihoods of people living in these areas, particularly those who are engaged in informal trade practices, have been improving but have not improved substantially.

The farmers have admitted that their lives have improved remarkably in the last decade, and they have been able to spend more money on education and healthcare facilities for the family members. Moreover, their overall lifestyle has improved as many of them have shifted to concrete brick and mortar house, and have added to their inherited land holdings.

**As women are also involved in informal trade activities and obtaining gains from it, it is important to note that their extra income has no significant impact on betterment of their position in the family**

## Chapter 4

## Conclusion and Recommendations

### 4.1 Conclusion

Cross-border trade in Eastern South Asian countries is strongly influenced by a range of factors that include geographical, similar value systems, social, culture and ethnic linkages. The long open porous border has enabled easy exchange of goods, movement of people and free flow of water across borders despite the political boundaries. The existing bonding between the people on both sides of the borders acts as a catalyst to growth of cross-border trade among the South Eastern countries.

The formal cross-border trade in this region is very low as compared to the potential total formal trade of the region. A significant portion of formal trade is diverted to informal channels thereby undermining the potential opportunities of formal trade. Considering this, the present study has made an attempt to understand the dynamics of informal trade in the Eastern part of South Asia. It focussed on two key issues that include drivers of informal trade and their linkages with livelihood of local people.

Cross-border informal trade in the Eastern South Asian region becomes a natural activity due to deep rooted social and cultural linkages. It is an uphill battle to gather data on exact volume of

cross-border informal trade in the region. However, a number of studies argued that cross-border informal trade in Eastern South Asian is higher than the current state of formal trade.

One of the most striking features of cross-border informal trade in Eastern South Asian region is that it is concentrated mainly in agriculture products that include rice, wheat, food and fertilisers. This is due to high dependence of local economy (farmers, traders and agents) living in border regions on agriculture, and it has abiding impacts on socio-economic transformations.

There are number of policy and non-policy related factors that come into play and are considered to be important factors in thriving cross-border informal trade in the region. Trade policies of Eastern South Asian countries are restrictive.

Many agriculture products are not open for trade and require prior approval from the Government. Restrictive trade policies encourage the people to buy agricultural products through informal channels. In addition, tariffs on agriculture inputs are very high; therefore, undermining the potential of trade through formal channels. As a result, significant amount of trade in the Eastern South Asian region gets diverted into informal trading.



The prevalence of NTBs is also considered as an important factor that influences cross-border informal trade in the region. Barriers arising due to divergent SPS and TBT regulations propel traders and agents to buy products through informal channels. This allows them to avoid regulatory and administrative checks.

In addition, ineffective trade and transport facilitation augments trade transaction costs and makes formal trade unviable for small traders. Therefore, a large volume of trade, therefore, takes place through informal channels.

Complex and cumbersome trade procedures, inefficient customs operation, inaccessible testing laboratories and financial institutions at border points lead to large transaction cost in formal trade. Moreover, other factors, such as quick realisation of payments, no paperwork, no procedural delays and lower transportation cost are strong drivers behind cross-border informal trade between India-Bangladesh and India-Nepal.

Policy induced distortions are common in Eastern South Asian countries. The Governments of these countries have formulated many policies that have aimed to distribute certain essential commodities to marginalised sections of the society. These policies often lead to price difference across borders and make cross-border informal trade profitable. The most critical aspect is that such distortions are not addressed at multilateral and regional-level. Inadequate regional policy framework in the Eastern South Asian countries has contributed to the consistent rise in such distortions in the region.

Both farmers as well as non-farmers have responded that the drivers of informal trade are of three types: product level, operational level and cultural level. The product level drivers include the higher productivity and lower price of the informally traded goods. The operational level drivers are those drivers which provide ease in the informal trade at operational/ground level. These include easy accessibility and proximity of the markets across the borders. The cultural level drivers include the prevalence of common cultures, common religious rituals and common ethnicity across the borders. All these factors – product level, operational level and cultural level – are acting as

the facilitators of informal trade across the Indo-Nepal and Indo-Bangladesh borders.

The rise in informal trade practises has also helped the people living in areas adjacent to the Indo-Nepal and Indo-Bangladesh borders. Although there are many schemes by the government to uplift the lifestyles of poor people but the surveyed respondents have endorsed that their engagement in the informal trade has improved their livelihood and sanitation conditions in the form of availability of more income to spend on their children's education, healthcare facilities, modern home appliances and construction of new houses with proper sanitation facilities. Therefore, it can be stated that the informal trade has improved the overall lifestyle of the involved person as many of them have shifted to concrete brick and mortar house and also made additions to their existing land holding sizes.

Though, regional and bilateral agreements are aiming to increase the legal/formal trade among partner nations, still regional efforts are not sufficient to attract the involved people to trade through the formal channels. The driving factors of informal trade are the prevalence of restrictions in the form of SPS and TBT measures, and no trade permissions (negative list) for some formally traded commodities. These all incentivise the involved people to skip the formal platform and go through the informal platform.

## 4.2 Recommendations

Based on comprehensive secondary and primary data analysis, the following recommendations are suggested, which include common inextricably linked areas of reform where Eastern South Asian countries should make concerted efforts to shift cross-border informal trade into formal trade, so that the gains through such trade are inclusive across all sections of the society.

### Policy Recommendations

The study has identified few but relevant policy recommendations for addressing informal trade between India-Bangladesh, India-Nepal in particular and overall for the sub-region. It is



recommended that necessary actions should be taken by the governments and private sector to channelise informal trade into formal trade.

### Trade Policy Reforms

Trade policies in Eastern South Asian countries are restrictive which in turn, affect cross-border trade. As a result, local traders and agents tend to get into informal trading which is relatively easy, less cumbersome and less time consuming.

#### *Tariff Barriers*

Tariffs on most of the informally traded agricultural inputs are relatively high which magnify the cost of formal export and import. Considering this, it is important for the Eastern South Asian countries to emphasis on greater degree of tariff liberalisation in these products to facilitate cross-border trade. The reduction in tariffs and elimination of sensitive lists under the SAFTA could play an important role in this regard. Additionally, the possibilities can also be explored at bilateral basis to eliminate sensitive lists.

#### *Non-Tariff Barriers*

Trade in agricultural inputs, such as seeds, fertilisers, pesticides, chemicals, is more prone to SPS and TBT issues. Cross-border trade in these products face more barriers given their health, safety and quality concerns. Harmonisation of trade, technical and regulatory standards through Mutual Recognition Agreements (MRAs) and conformity assessment procedures could be an option to reduce the potential incidence of NTBs, which will further help the people and traders to move to formal channels of cross-border trade.

Research institutions, such as Indian Council of Agricultural Research (ICAR) in India, National Agricultural Research Council (NARC) in Nepal and Bangladesh Agricultural Research Council (BARC) in Bangladesh, should work on developing quality seeds and fertilisers together under the ambit of regional bodies, such as South Asian Regional Standards Organisation (SARSO). They should collectively come up with a plan to develop, produce and distribute these inputs in the local markets of the respective countries, in the markets of the border areas and thus to meet the regional demand.

High trade transaction costs due to inefficient customs clearance procedures, cumbersome export

and import formalities, absence of single window system (SWS) and Information and Communications Technology (ICT), encourage traders and local people to get involved into informal trading, which is efficient, less time consuming and involves no transaction costs. Therefore, it becomes imperative for governments of the three countries to create better infrastructure facilities, streamlined customs clearance procedures and SWS to reduce the operational costs.

#### Development of Formal Routes

Governments of these three countries should emphasis on identifying and developing more of formal border points while considering their cost benefit analysis. Moreover, it is important to upgrade the existing formal border points, known as, land customs stations, in terms of better road infrastructure, better internet facilities, and single window documentation system, risk management system for both exporter and importers.

#### Regional Policy Coherence

Domestic policies, such as subsidies to agricultural inputs, lead to price distortions across the markets of other country, thus providing incentives to local traders, agents and people to involve in informal trade practice. The government of these three countries should emphasise on promoting greater policy coherence in institutional and regulatory framework, so that the prevailing policy induced distortions can be addressed.

#### Setting up Regional Factories

Informal trade of fertilisers in the Eastern South Asian region can be addressed and channelised by setting up regional factories of fertilisers similar to those in South-East Asia. India, Nepal and Bangladesh can jointly pool financial resources for the establishment of regional factories which will significantly lower informal trade in fertilisers.

#### Development of Border *Haats*

It is being recognised that border *haats* have been instrumental in promoting trade between India and Bangladesh, and they have helped the people living in border areas in getting productive employment and positively impacted

their socio-economic transformation. It has been noticed that border *haats* have played an essential role in arresting and reducing informal trade in that area. Currently, there are only four border *haats* across the lengthy Indo-Bangladesh border, along the borders of Meghalaya and Tripura states of India. Considering their importance and impact, replication of border *haats* in the new locations will greatly help towards better local economic development, people-to-people connectivity and apprehending informal trade.

#### *Trade Capacity Building Programmes*

Countries should create more awareness generation programmes at local and regional level about trading through the formal routine or on the benefits that can accrue from regularising informal trade. Also, they need to be informed about the quality of the product that they are producing. They need to be educated regarding the bio-safety issues and environmental issues.

#### *Mandatory Education Schemes and Job Creation*

As people residing along the borders are mostly uneducated and lack job opportunities, governments of the respective countries should allocate some funds from the Border Area Development Programme<sup>10</sup> towards mandating compulsory education. Education will help them availing job opportunities which will lead to better livelihood, thus alleviating poverty. In Addition, governments should consider and focus upon creating jobs in the border areas resulting in employment opportunities for better livelihood.

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## Annexure 1

# Questionnaire for Household Survey on Informal Trade in Agricultural Input Commodities

**Objective:** This questionnaire is meant for a research project on cross border informal trade in agriculture inputs between India-Bangladesh and Nepal. The project aims to focus on understanding drivers, quantum of informal trade and the impact of cross border informal trade on impacts on livelihoods of farmers at those locations. The overall objective of the survey work is to understand the dynamics of informal trade between the three countries (India, Nepal and Bangladesh) to get the story right. It is promised that names of people involved in the survey work will be kept strictly confidential.

### Checklist

- Please remember the name of selected agriculture inputs for the location while asking the questions to farmers/traders/agents/retailers.
- It will be a scheduled interview and discussion will be held with farmers/traders/agents/retailers to ask their response on these questions rather than giving this questionnaire to them

### PART I

1. Gender:
  - a. Male
  - b. Female
2. Nature of Occupation:
  - a. Farmer
  - b. Dealer/Agent/ Formal Trader
  - c. Informal Trader
  - d. Other please specify
3. Level of Education:
  - a. No Schooling
  - b. Primary Certificate
  - c. Junior certificate
  - d. Secondary school certificate
  - e. University Degree
4. What is your annual agriculture income?

	Rabi Season	Kharif Season	Summer Season	Total
Income				

### PART II (Drivers of Informal Trade)

5. Please circle your choice from the following factors which influence you to engage in cross-border informal trade in Seeds Fertilisers/Chemical and Machinery  
(1=No Influence, 2= Low Influence 3= Moderately Influencing, 4= Influencing, 5=Highly Influencing, 6= Not Applicable)

S= SEED, F= Fertilisers, M= Machinery

S.No.	Drivers	Your Choice						
1	Lower Price	S						
		F						
		M						

2	Lower transportation costs (means distance of formal is high and increasing transportation costs)	S							
		F							
		M							
3	High transaction costs (banking, operational cost of doing trade)	S							
		F							
		M							
4	Easy access and availability or produced locally across border.	S							
		F							
		M							
5	Proximity of the local market	S							
		F							
		M							
6	Lack of knowledge about availability of agriculture inputs	S							
		F							
		M							
7	Cultural, social and ethnic Relations	S							
		F							
		M							
8	Custom procedural and administrative hassles (refer to clearance at customs, paperwork and corruption)	S							
		F							
		M							
9	Prevalence of standards and testing related barriers	S							
		F							
		M							
10	Longevity of specific variety (Only related seeds)	S							
		F							
		M							
11	Productivity (Only related seeds and fertilisers)	S							
		F							
		M							
12	Minimal cost for post-harvest management (Only related seeds)	S							
		F							
		M							
13	High tariffs and duties	S							
		F							
		M							

14	Quick realisation of payments in informal trade	S						
		F						
		M						
15	Absence of formal border point	S						
		F						
		M						

## PART III

## (Quantum and Prices related Factors of Informal Trade)

6. Please mention your land holding, seed and fertiliser/chemical consumption for the current year and month of purchasing seeds, fertilisers and chemical.

S. N.	Cultivated Land Holding in per acre	Seed Consumption on (Informally traded variety)	Fertilisers/ Chemicals (Informally trade)	Buying seasons/ Month	
1.				Seed	Fertilisers/Chemicals

7 Please mentioned the prices of seeds, fertilisers and machinery traded through informal channels.

2	Seed Prices	Quantity	Fertiliser Prices	Quantity	Machinery	Unit
Informal Channel						
Formal Channel						

## PART IV

## (Informal Trade and its Impact on Livelihood)

8. Do you feel that buying agriculture inputs through informal trade helps in improving the livelihood?

a. Yes

b. No

c. Do not know

9. Do you feel that buying agriculture inputs through informal channel is easier than formal channel?

a. Yes

b. No

c. Do not know

10. Do you think, earning through informal trade helps you in providing better education to children?

a. Yes

b. No

c. Do not know

11. Do you think, your spending on agriculture inputs have decreased due to availability of Bangladeshi/Nepal agriculture inputs?

a. Yes

b. No

c. Do not know

12 Do you think informal trade agriculture inputs are cheaper than purchased through formal channels?

a. Yes

b. No

c. Do not know



13. From whom you are buying agriculture inputs?  
 a. Dealer                      b. Local Broker                      c. Trader                      d) Any other person
14. Do you think informally traded agriculture inputs help in enhancing the productivity of crops?  
 a. Yes                      b. No                      c. Do not know
15. Would you prefer to buy informal traded agriculture inputs if they have available through formal channels  
 a. Yes                      b. No                      c. Do not know
16. What percentage of your total income is earned through informal trading? Please specify.  
 .....
17. How long have you been practising informal trading? Please specify.....(years)
18. Have your income increased after you have started informal trading?  
 a. Yes                      b. No                      c. Do not know
19. Please mention by what percentage your income has increased? Please specify.  
 .....
20. What have you been doing with the increased income?  
 .....
21. Please indicate whether your spending on the following items have increased/decreased/ remained the same
- a) Childs education [1. Increased 2. Decreased 3. Remained the same]  
 Please elaborate.....
- b) Access to better healthcare facilities [1. Increased 2. Decreased 3. Remained the same]  
 Please elaborate.....
- c) Housing 1. Moved from rented premises to own premises  
 2. Made *pucca* house from *kuchcha* house                      3. Purchased property]  
 Please elaborate.....
- d) Sanitation [1. Constructed own toilet 2. Not applicable]  
 Please elaborate.....
- e) Investment in existing practices/ trade/business  
 [1. Increased 2. Decreased 3. Remained the same]  
 Please elaborate.....

*(This question to meant to understand whether this had led to purchasing new agri implements, better practices, more products, etc. which in turn is helping farmers to make further profits)*

f) Use of kerosene for lighting/cooking purpose

[1. Increased 2. Decreased 3. Remained the same]

Please elaborate.....

g) Home appliances

[1. Increased 2. Decreased 3. Remained the same]

Please elaborate.....

## Annexure 2

### Questionnaire for Focussed Group Discussions and Key Informant Interviews

Q1. What factors persuade you to engage in cross border informal trade in selected agriculture inputs? List down specific factors and ask specific underlying reasons for informal trading these products.

Q2. Can you give us a rough estimate about quantum of informal trade taking place through this particular location? *Please be specific to selected agriculture inputs of the particular location.*

Q3. Do you think, policy related factors (tariff, non-tariff barriers, customs procedures, lack of formal trading points, and restrictions on trading) force you to indulge in informal trading in selected agriculture inputs? *Please be specific while asking to your selected agriculture inputs at each location.*

Q4 Do you think, cross border informal trade help in improving livelihood of the local people? (Better access to education, healthcare facilities, nutritious foods, etc.)

Q5 Do you feel earning through cross border informal trade help women traders/farmers improve their position in decision making in the family?

Q6. What are different channels of informal trade in agriculture inputs? How do you get these agriculture inputs? *(Ask whether agriculture inputs are supplied by dealers and agents or farmers directly from their relatives or any other persons)*

Q7. Have you ever faced quality related issues in agriculture inputs (mainly seeds and fertilisers) which come through cross-border informal channels? *(Ask for specific examples quality related concerns such adulteration)*

Q8 Do you think, your reliance on informal traded agriculture inputs has increased over the period of time? If yes, ask why?

Q9 Do you face supply related constraints of informal traded agriculture inputs? If yes, what are those constraints?

Q10. Do you face difficulties in selling final outputs of your agriculture inputs mainly seeds? *(this is important as many informal traded products are restricted category for formal trade and how the selling of final output is permitted)*

## Endnotes

- 1 Informal trade, concentrated along the border region, involves large number of local people, who individually transport small quantities of goods as head loads by cycles or rickshaws, also known as bootleg smuggling. While technical smuggling happens when trade of goods takes place through formal channel but their weight and quantities are under declared. Such smuggling involves various illegal practices like under invoicing, bribery of customs and other officials involved, etc., and occurs mainly at land borders.
- 2 Government of Nepal (2011), A Report on Value Chain Analysis of Vegetable seeds in Nepal, Ministry of Agriculture and Cooperatives.
- 3 Female Intensity of agriculture is calculated as the share of female agricultural employment in total agricultural employment. A share higher than 50 percent would suggest that the sector is female intensive sector. (FAO)
- 4 Note:- 1) For Agricultural Machinery, HS Codes added to estimate the figure are 8432, 8433, 8434, 8436, 8441, 8449, 8453, 8474, 8478. The addition is done at 6-digit level.  
2) For Seeds, HS Codes added to estimate the figure are 100111, 100210, 100310, 100410, 100510, 100610, 100710, 100810, 100821, 120110, 120923, 120925, 120910, 120921, 120922, 120930, 120929, 120999, and 120991.  
3) For Fertiliser HS code 31 was considered.
- 5 IBID
- 6 This technique is used to find the convergence between the responses gathered from the successive rounds of interviews of the same sample of respondents.
- 7 The domestic policy distortion happens when the government intervenes in market by using different kinds of instruments such as price ceilings, tax subsidies and price floors.
- 8 Ashok Gulati, 'From Plate to Plough: Twenty-five years of tinkering' 4th July, 2016 <http://indianexpress.com/article/opinion/columns/india-economic-reforms-indian-farmers-fertiliser-subsidy-union-budget-modi-govt-organic-farming-2892089/>
- 9 Here by border officials are informed, we mean that the officials know that products are taken informally, but only in small quantities, for personal use. Therefore, they allow people to carry those products across the border. We cannot call it, or relate it with, technical smuggling.
- 10 The main objective of the BADP is to meet the special developmental needs and well-being of the people living in remote and inaccessible areas situated near the international border and to saturate the border areas with the entire essential infrastructure through convergence of Central/State/BADP/Local schemes and participatory approach. Department of Border Management, Ministry of Home Affairs, Government of India, is implementing this programme. The Programme covers all the villages which are located within the 0-10 Km of the International Border, coming under 17 states of India, including Bihar and West Bengal.



## About Project

Bangladesh, India, and Nepal share ages-old history, culture, preferences, traditions, and economic linkages, but political boundaries have divided them. These political boundaries have created hurdles to transact and restricted the free movement of people. Despite these hurdles, the flow of resources and people has not stopped but adopted informal channels. Trade and transactions that are neither taxed nor monitored by the government, form the informal sector. Informal trade between these countries is claimed to be equal or greater than the cross-border formal trade, which calls for understanding the reasons for people's engagement in the informal sector. Informal trade in agricultural input products is particularly high in the border areas of India-Nepal and India-Bangladesh, which has huge implication in the livelihoods of farmers, both men and women.

This study analyses the informal nature of cross-border trade in agricultural input products, its drivers and its impact on the local economy of the region. Based on extensive primary research at specific locations in the borders of these three countries and secondary research, it brings in light the extent of dependence of farmers on informal trade practices for sustainable income and suggests a set of recommendations for reducing informal trade gradually in the region.

## CUTS International

Established in 1983, CUTS International (Consumer Unity & Trust Society) is a non-governmental organisation, engaged in consumer sovereignty in the framework of social justice and economic equality and environmental balance, within and across borders. More information about the organisation and its centres can be accessed here: <http://www.cuts-international.org>.



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