

# International trade analysis: ideas and tools

With a case study of Nepal-Bangladesh trade

Prepared and presented by

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# Overview

- International trade: concepts and paradigms
- Trade Analysis: tools and tips
- Case study: Nepal-Bangladesh trade

# Why should a country prioritize international trade?

- Export allows for the expansion of market—creates employment, increases income.
- Import allows for the sourcing of many items at affordable prices—increases consumer welfare, allows for expanding exports through the import of quality raw materials and intermediate goods.
- Trade enhances economic growth, employment, consumer welfare, and reduces poverty.

The fundamental guiding paradigm of modern international trade post-WTO (mostly)

**Non-discrimination**

**Predictability and transparency**

**Fair competition**

**Special and differential treatment for the less developed countries**

# Proliferation of Trade Agreements: PTAs/RTAs/FTAs

- What are TAs?
- Nepal's FTAs?
- Rules of Origin in FTAs
- Trend towards deeper FTAs

# Increasing services trade and digital trade

## Modes of cross-border services supply

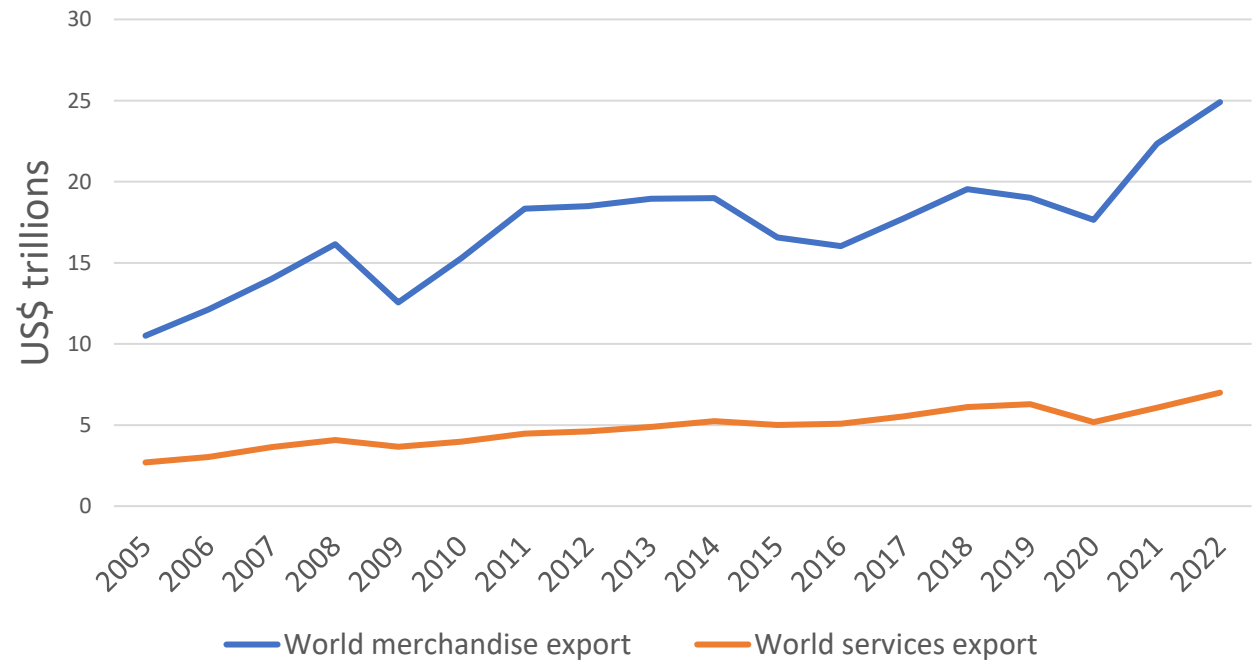
Mode 1: Cross-border

Mode 2: Consumption abroad

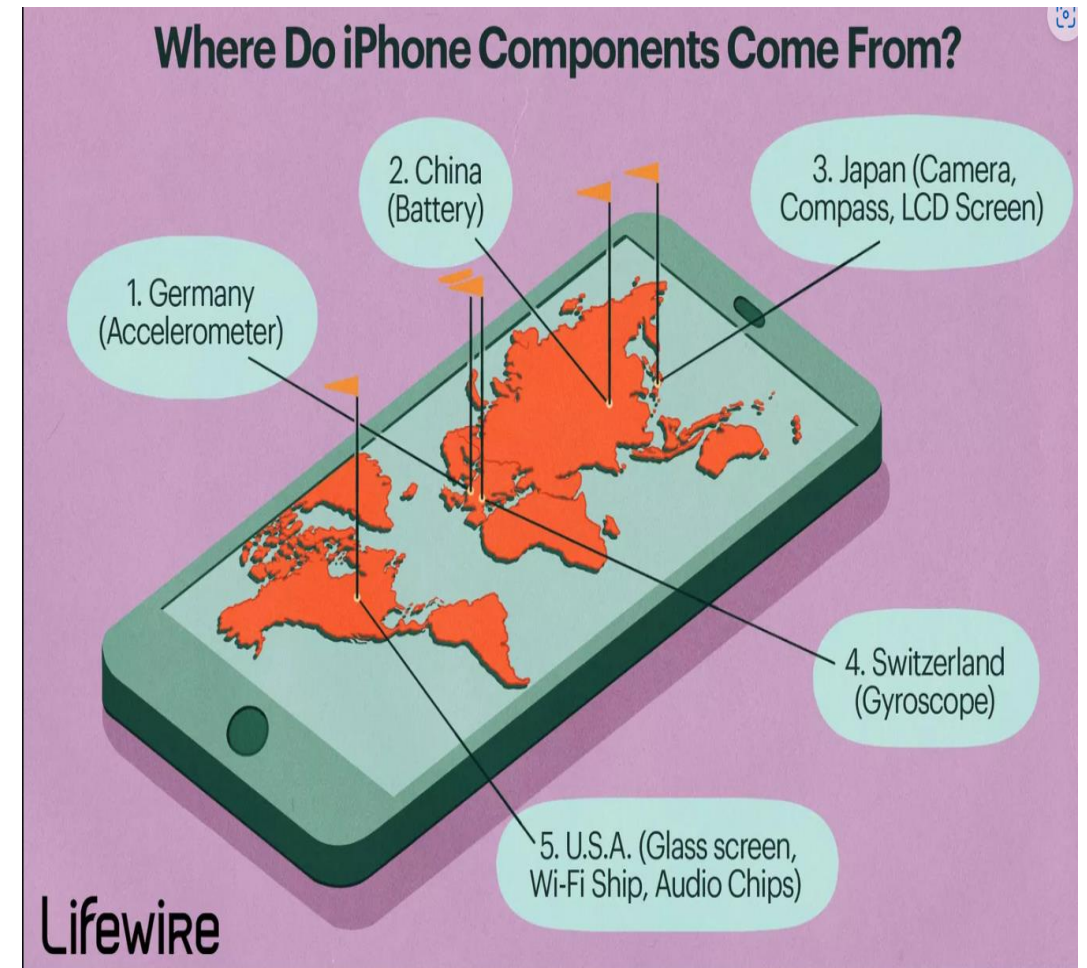
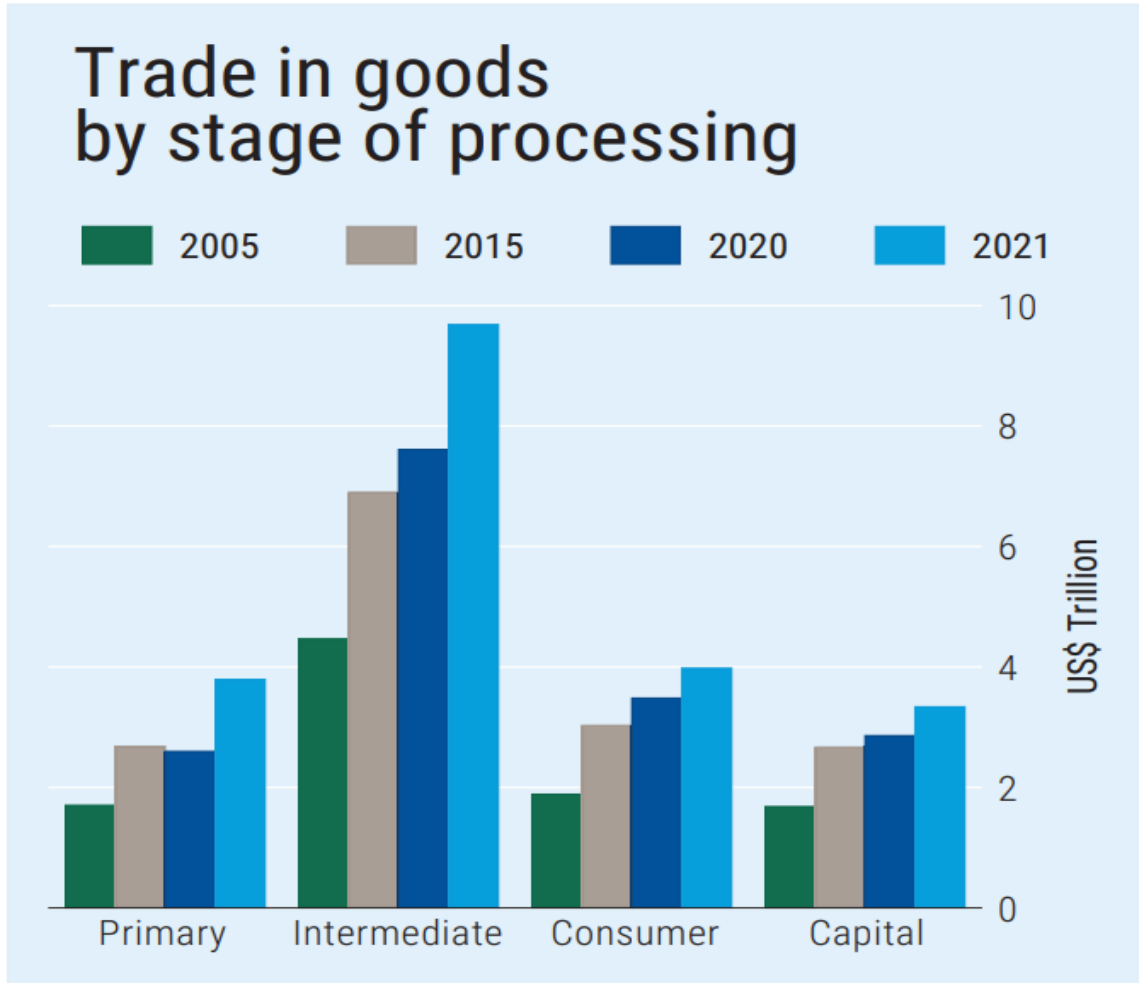
Mode 3: Commercial Presence

Mode 4: Movement of natural persons

## Fast growing services trade



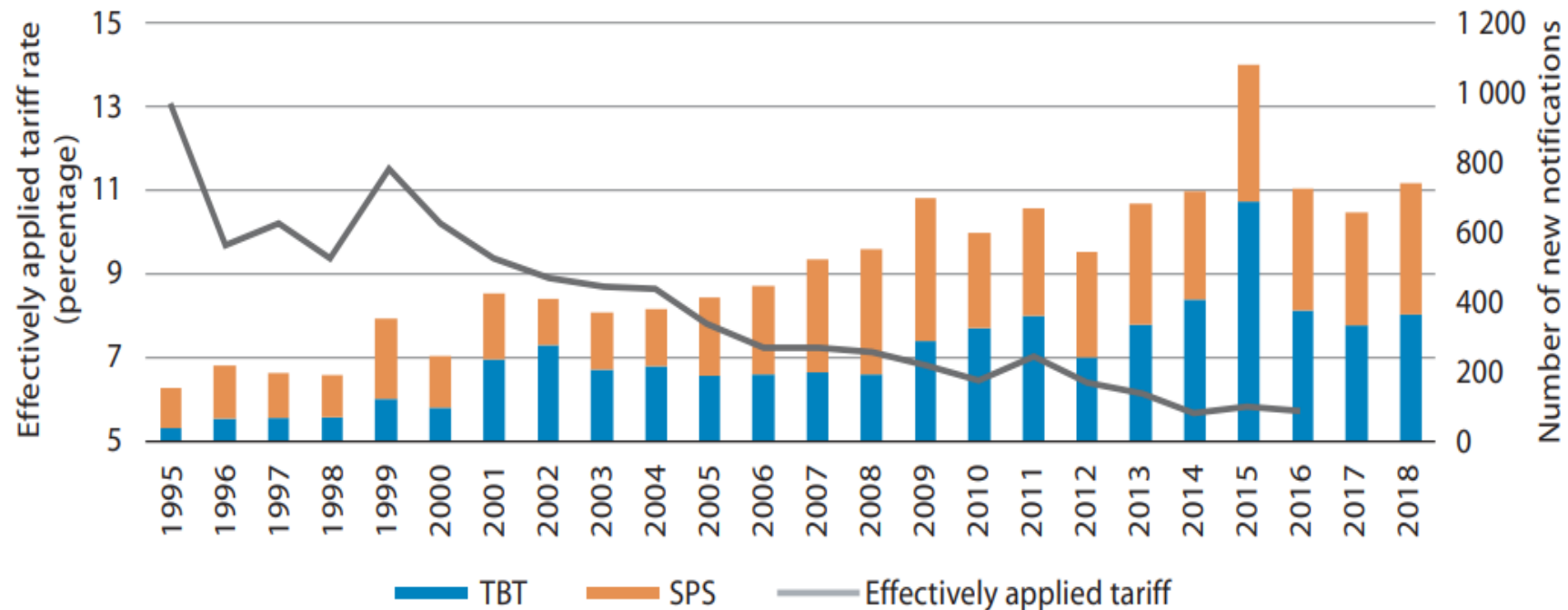
# Increasing trade of the intermediate goods and the rise of GVCs



# The proliferating role of NTMs

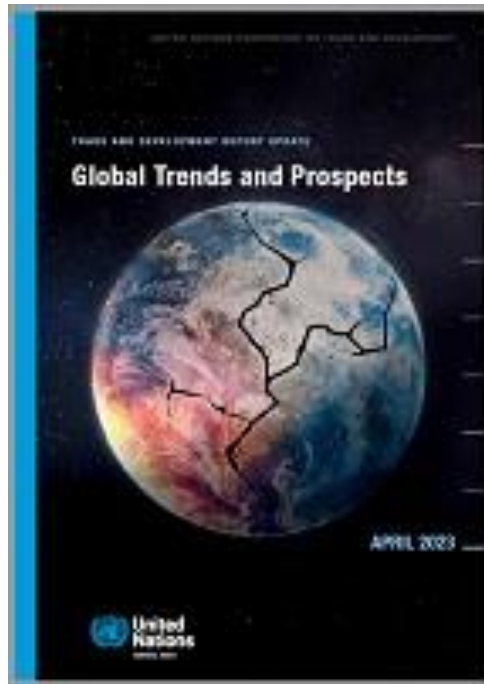


**Average applied tariffs and annual new notifications to WTO of SPS and TBT measures in the Asia-Pacific region**

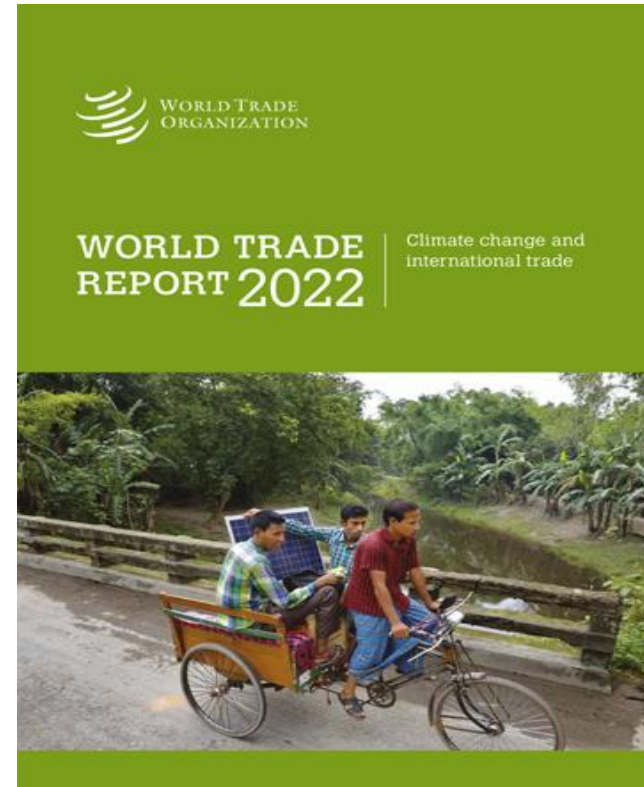




# International Trade updates



Trade and Development  
Report (Annual), UNCTAD



World Trade Report (Annual), WTO

# Trade Analysis

## 1.1 Obtaining and cleaning trade data

# Sources

Nepal's trade data sources	Global trade data sources
Department of Customs	UN COMTRADE
Trade and Export Promotion Centre	World Integrated Trade Solution (WITS)
	ITC Trade Map (also includes mirror trade map)
	ITC Market Access Map
	IMF Direction of Trade statistics
	UNCTAD STAT
	BACI (CEPI)

# Example: UN COMTRADE

## What are you looking for?

Type of Product

Goods

Services

Frequency

Annual

Monthly

Classifications ⓘ

HS

SITC

BEC

As Reported

## Refine your search

HS (as reported) Commodity Codes



TOTAL x



Reporters



Nepal x



Trade Flows



Exports x



Periods (year, month)



Recent periods x



Partners



Bangladesh x



Mode of Transports



TOTAL modes of transport x



2nd Partner



World x



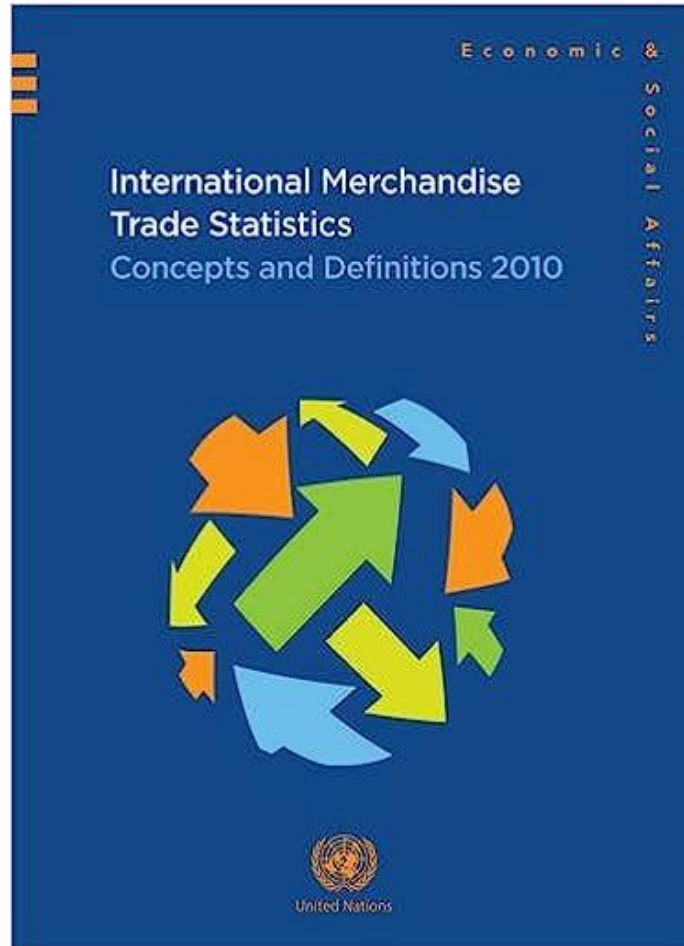
Customs Code



TOTAL customs procedure codes x



# More on the nitty-gritty of merchandise trade statistics



# Trade Analysis

## 1.2 Converting raw data into meaningful trade indicators

# Trade indicators

## 1. Trade and economy

Trade dependence (total trade/GDP)

Export propensity (exports/GDP)

Import penetration (total import/domestic demand)

## 2. Trade Performance

Trade trends

Growth rate of exports

Normalized trade balance (trade balance/total trade)

Export/import coverage (total exports/total imports)

## 3. Trade share statistics

Trade share in a country/region (e.g. intra-regional trade share)

Trade intensity (e.g. Nepal's trade intensity w/ India)

## 4. Sectoral analysis

Total exports by category

Competitiveness index (share in world export)

Sectoral Hirschmann

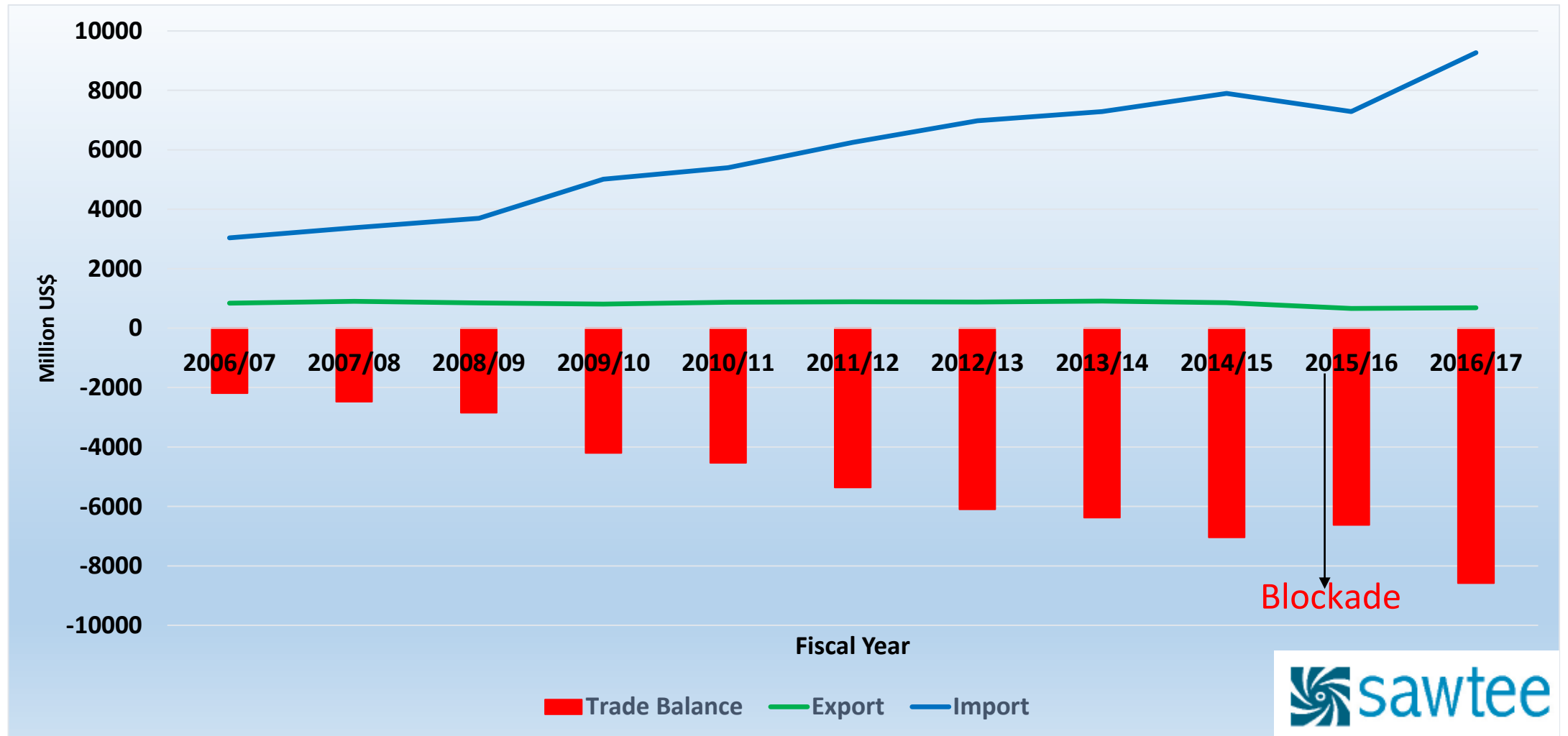
Revealed comparative advantage (RCA)

Michelaye index (alternative RCA)

Diversification index

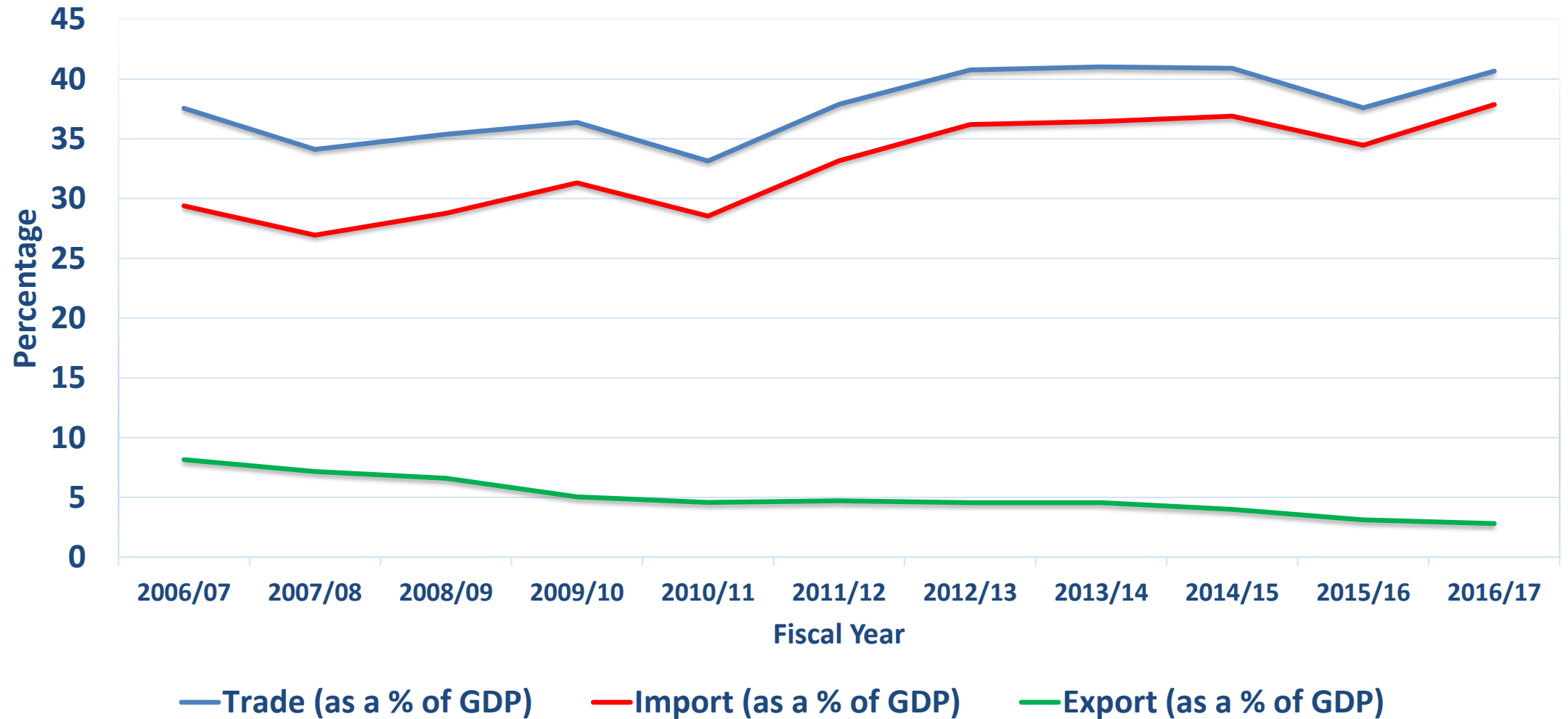
Complementarity index

# Presenting trade data(1): exports and imports trends

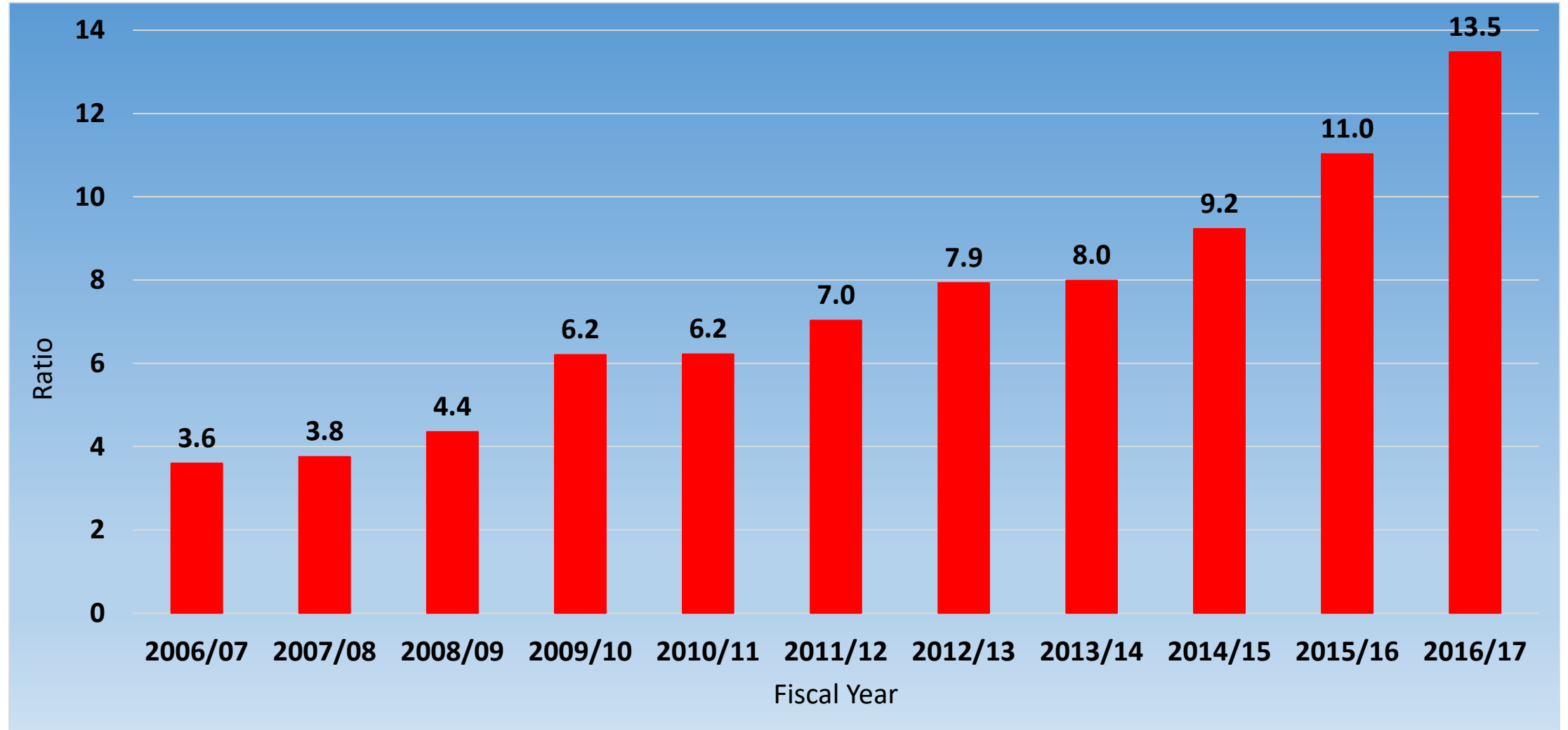




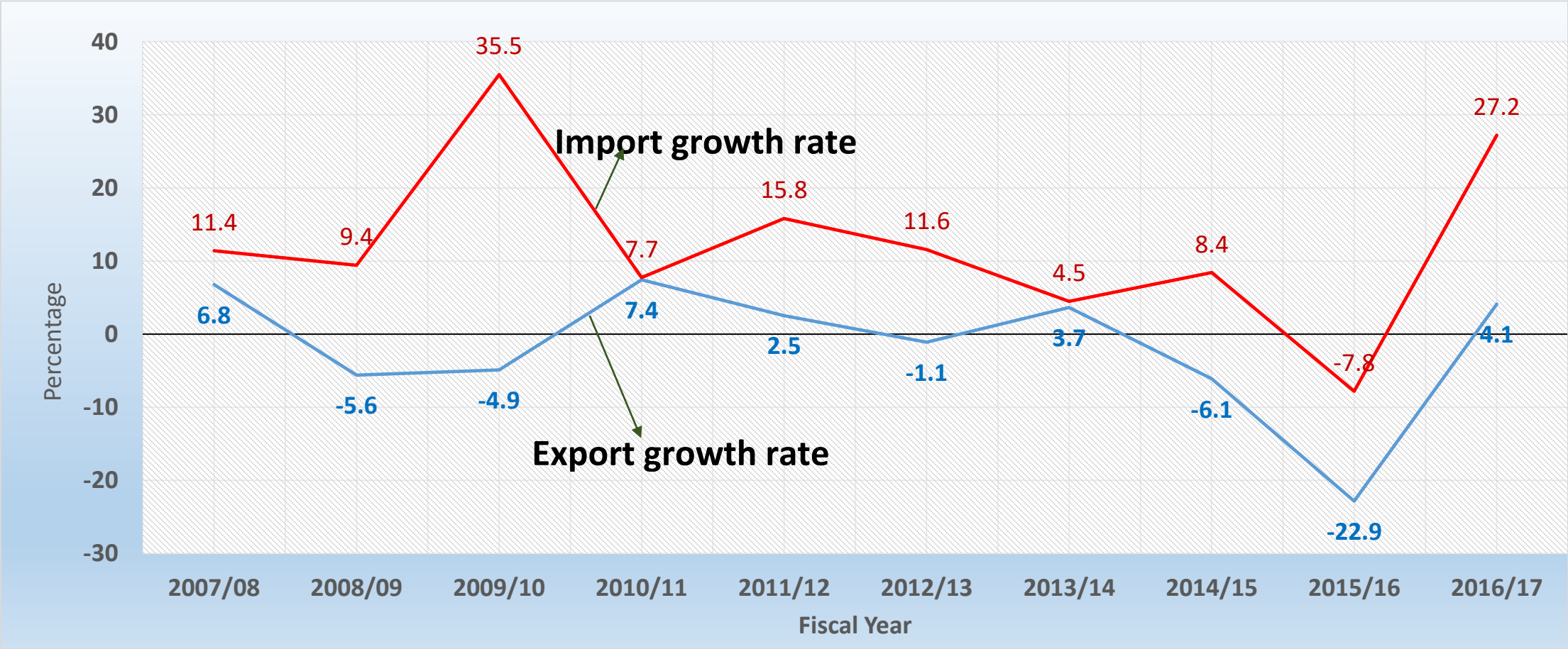
# Presenting trade data (2): trade dependence



# Presenting trade data (3): Import to exports ratio

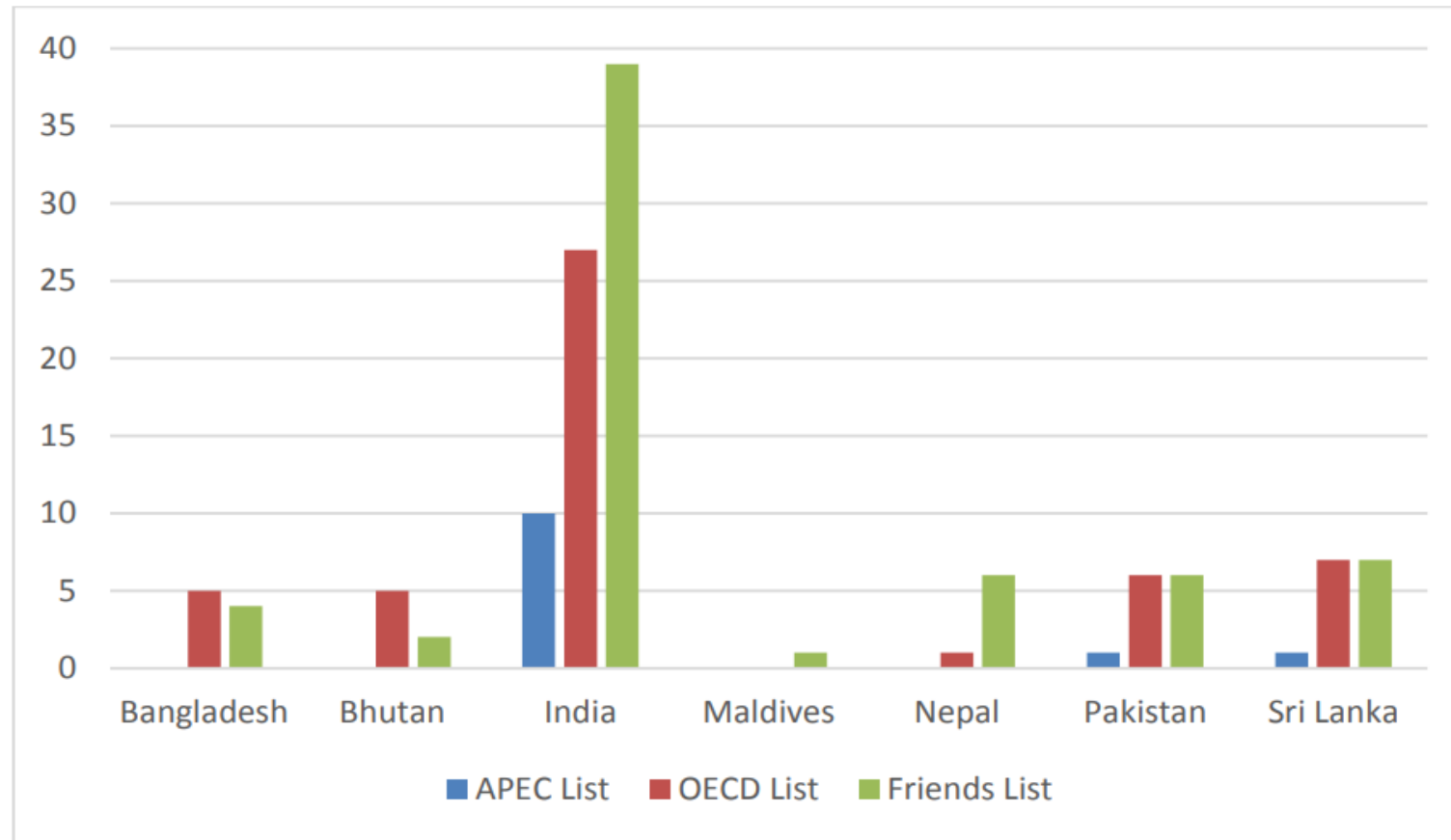


# Presenting trade data (4): export and import growth



# Presenting trade data (5): RCA

**Figure 6: Number of EGs with RCA>1 in South Asian EG exports in 2016**

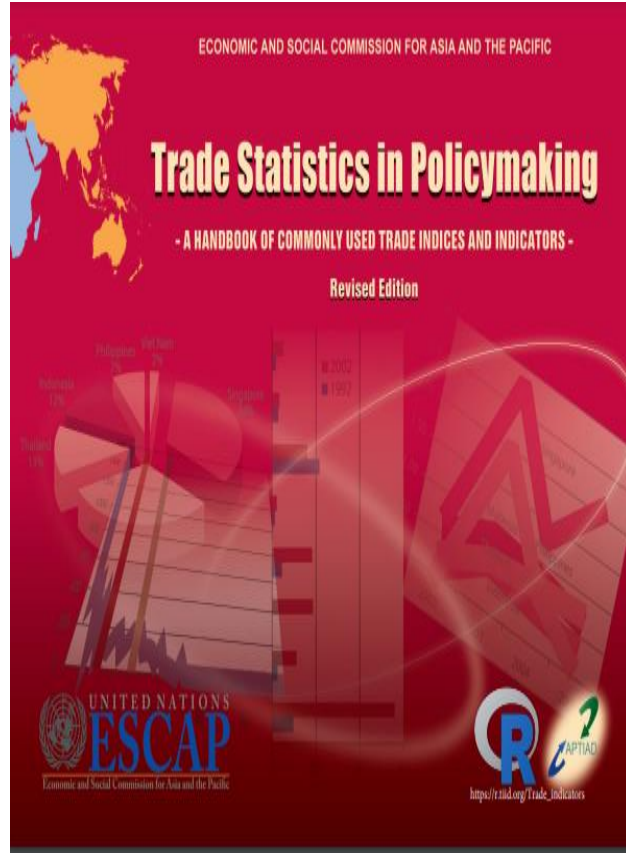


# Simple suggestions for reporting

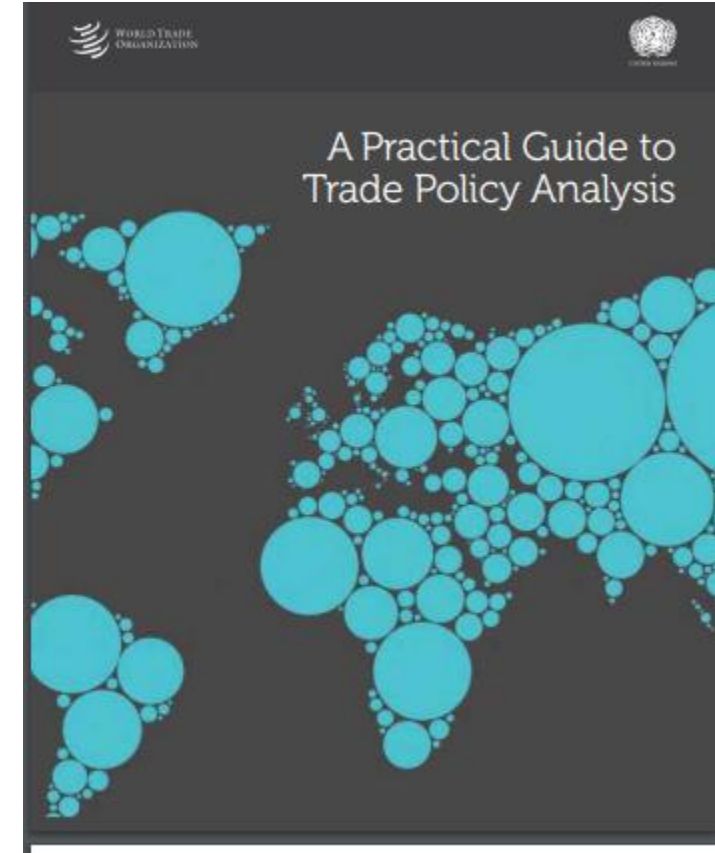
- Simple trade indicators (including graphical representation) instead of trade values

<b>The export of commodity X increased from NRs. 50 million to NRs. 60 million.</b>	<b>The export of commodity X increased by 20 percent at the end of the current fiscal year compared to an average annual compounded growth rate of 15 percent over the last five years.</b>
Nepal's export is low—it exported goods of NRs 200 billion in FY 2078/79.	Nepal's export, while increased from NRs. 141 billion to NRs. 200 billion in FY 2078/79, is still severely low. Nepal's export to GDP at 4.12% of GDP is one of the lowest in the world.
Nepal has a comparative advantage in product X.	Nepal's competitiveness in exporting product X is indicated by its RCA of 5.

# Using data to conduct trade policy analysis



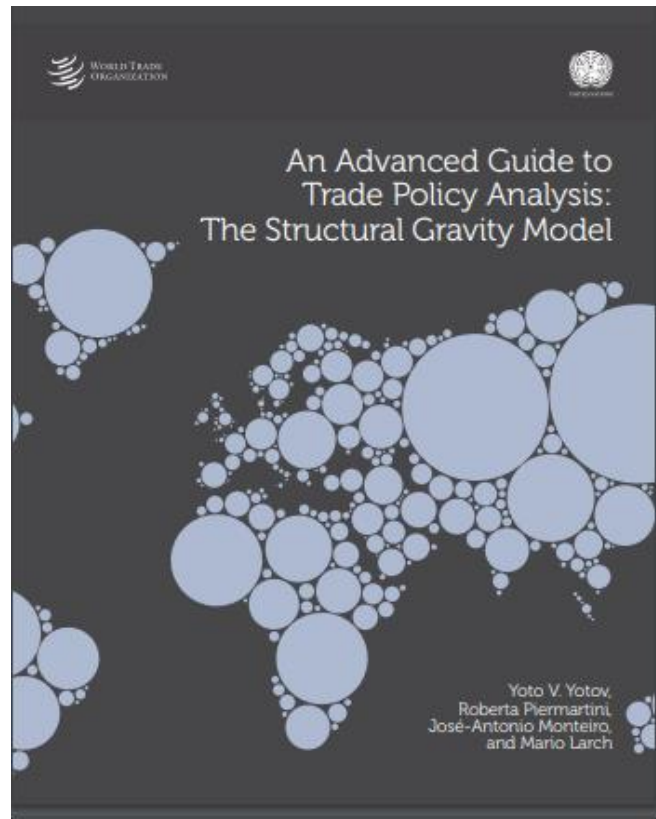
Trade Statistics in Policymaking: A handbook of commonly used trade indices and indicators (UN ESCAP)



A Practical Guide to Trade Policy Analysis (WTO and UNCTAD)

# More advanced trade analysis

## Gravity models



An Advanced Guide to Trade Policy Analysis  
(UNCTAD and WTO)

## Computable General Equilibrium (CGE) models

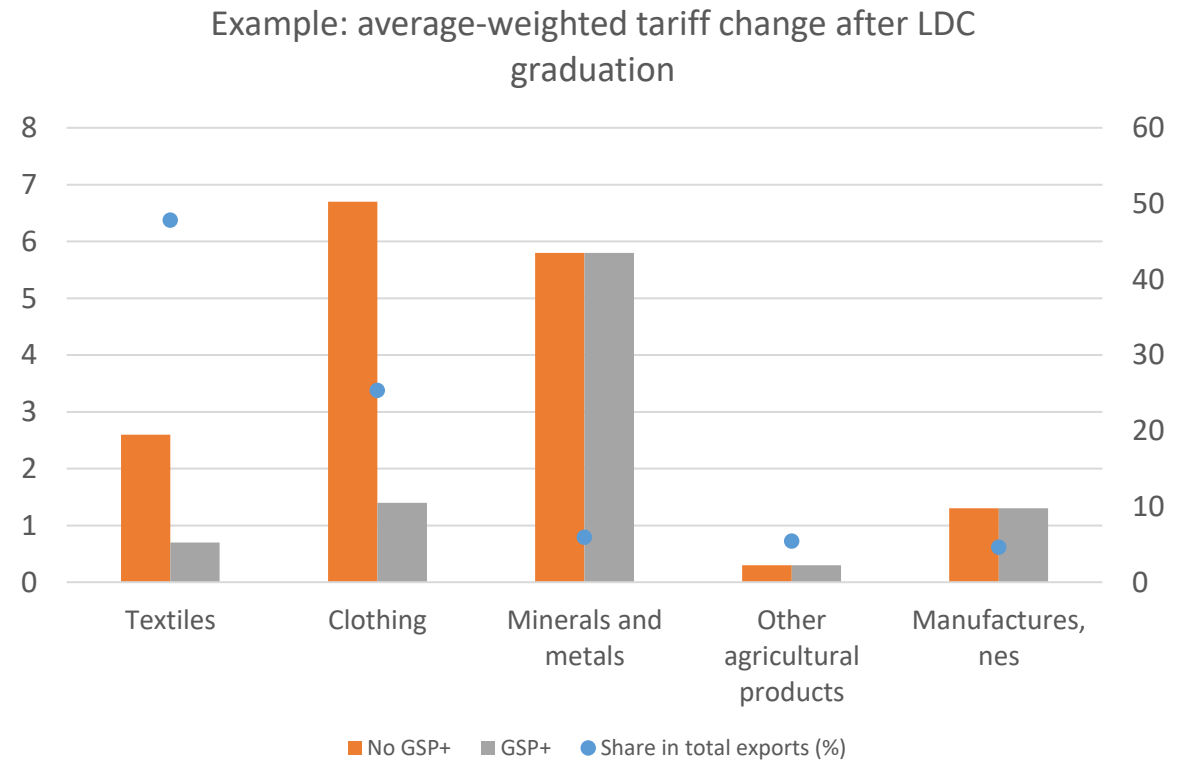
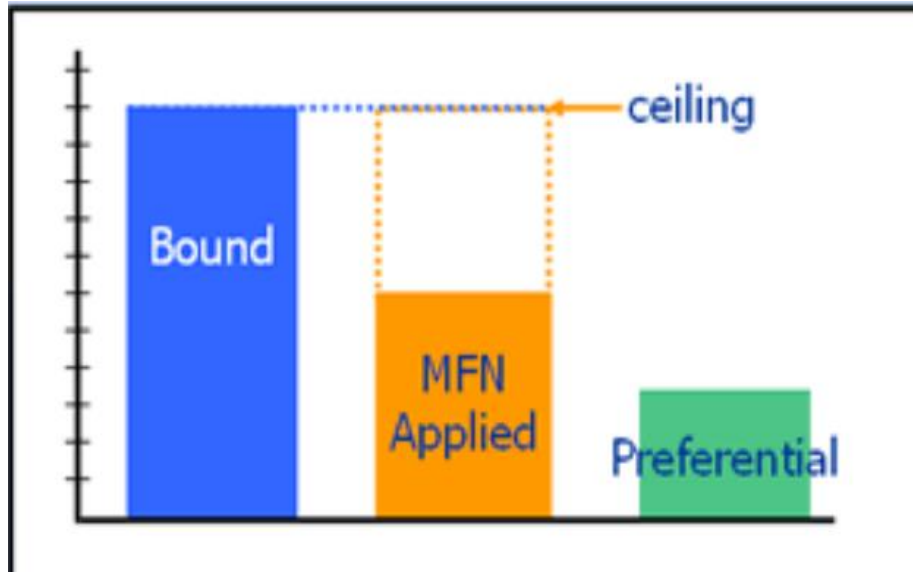
# Trade Analysis

## 1.3 Barriers to trade



# Tariff

- Bound vs MFN vs Effectively Applied



- Data Sources: WTO Integrated Database, WTO Tariff Download Facility, MarketAccess Map, WITS, etc.

# Para-tariff

- “Charges on imports that act as a tariff but are not included in country's tariff schedule. Examples include a statistical tax, stamp fees, etc.” (WITS)
- “**Para-tariffs** means border charges and fees, other than "tariffs", on foreign trade transactions of a tariff-like effect which are levied solely on imports, but not those indirect taxes and charges, which are levied in the same manner on like domestic products. Import charges corresponding to specific services rendered are not considered as para-tariff measures.” (Law Insider)

# Non-tariff measures

“NTMs are policy measures other than ordinary customs tariffs **that can potentially have an economic effect** on international trade in goods, changing quantities traded, or prices or both”—UNCTAD

Chapter A.	Sanitary and phytosanitary measures .....	1
Chapter B.	Technical barriers to trade .....	10
Chapter C.	Pre-shipment inspection and other formalities .....	17
Chapter D.	Contingent trade-protective measures .....	18
Chapter E.	Non-automatic import licensing, quotas, prohibitions, quantity-control measures and other restrictions not including sanitary and phytosanitary measures or measures relating to technical barriers to trade .....	23
Chapter F.	Price-control measures, including additional taxes and charges.....	32
Chapter G.	Finance measures.....	36
Chapter H.	Measures affecting competition.....	39
Chapter I.	Trade-related investment measures .....	41
Chapter J.	Distribution restrictions .....	42
Chapter K.	Restrictions on post-sales services.....	45
Chapter L.	Subsidies and other forms of support .....	46
Chapter M.	Government procurement restrictions .....	52
Chapter N.	Intellectual property .....	65
Chapter O.	Rules of origin .....	70
Chapter P.	Export-related measures .....	80

# Non-tariff barriers and non-tariff measures

Not all NTMs are NTBs!

# Are these NTMs NTBs?

The use of polyvinyl chloride films for food packaging is restricted

Maximum limit for pesticides residue in vegetables

---

A test on a sample of vegetable imports is required to check against the maximum residue level of pesticides

---

Commodity X need to be cleared at a designated customs office for inspection

---

# Obtaining NTM data

## Regulatory requirements <sup>①</sup>

For product 09083110 – Cardamoms, neither crushed nor ground : Wrapped/canned upto 2.5 kg

Exported from **Nepal** to **Bangladesh**

HS revision: **HS Rev.2012**

NTM Classification: **NTM rev. 2012**

NTM year: **2019**

Source: **ITC (Market Access Map)**

Import requirements applied to this product	Total measures 20 ^
A140 - Special Authorization requirement for SPS reasons <sup>①</sup>	2 ▼
A150 - Registration requirements for importers <sup>①</sup>	1 ▼
A190 - Prohibitions/restrictions of importsfor SPS reasons not elsewhere specified. <sup>①</sup>	1 ▼
A210 - Tolerance limits for residues of or contamination by certain (non-microbiological) substances <sup>①</sup>	2 ▼
A310 - Labelling requirements <sup>①</sup>	2 ▼
A410 - Microbiological criteria of the final product <sup>①</sup>	1 ▼
A420 - Hygienic practices during production <sup>①</sup>	1 ▼
A820 - Testing requirement <sup>①</sup>	2 ▼
A830 - Certification requirement <sup>①</sup>	2 ▼
A840 - Inspection requirement <sup>①</sup>	1 ▼
B310 - Labelling requirements <sup>①</sup>	2 ▼
B852 - Processing history <sup>①</sup>	1 ▼

Market Access Map

## NTM usage by country

NEPAL ▼

### Nepal

Frequency Index 22%

Coverage Ratio 44%

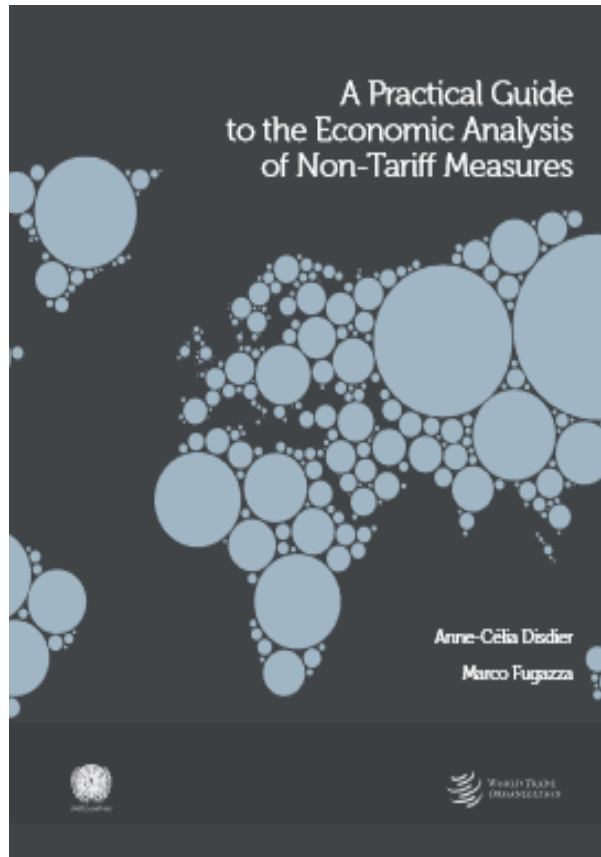
Prevalence Score 0.4

BY SECTOR

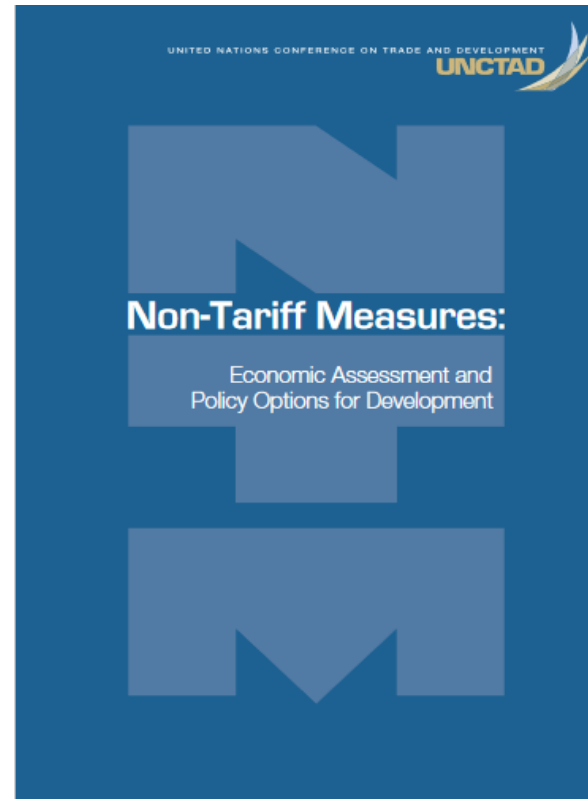
BY MEASURE

UNCTAD

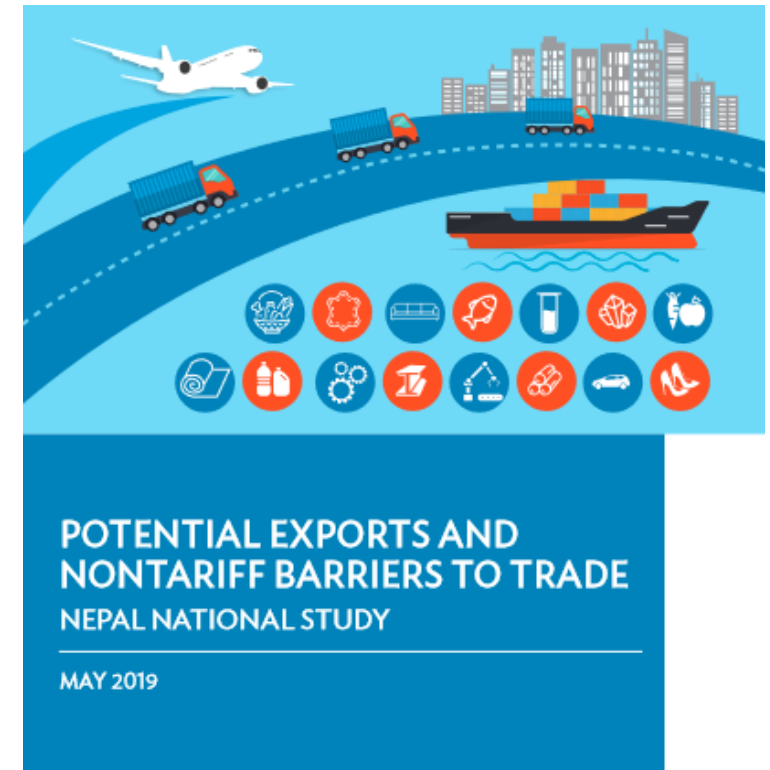
# Deeper analysis of NTMs



A Practical Guide to the Economic Analysis of Non-Tariff Measures (UNCTAD and WTO)



Non-Tariff Measures: Economic Assessment and Policy Options for Development (UNCTAD)



Potential Exports and Nontariff Barriers to Trade: Nepal National Study (ADB)

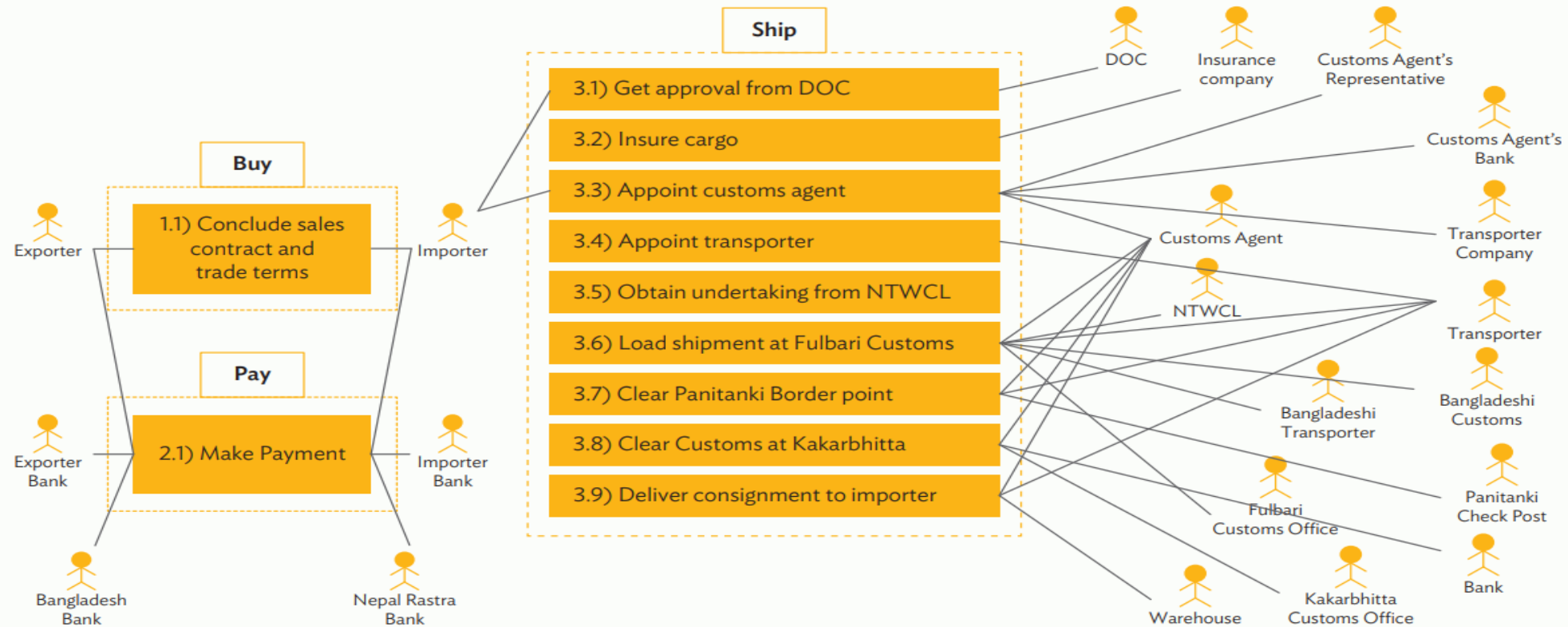
# Procedural obstacles

- Closely related to NTMs and NTBs
- High time and cost involved in obtaining test certificates
- Cumbersome documentation requirements
- Arbitrary implementation of rules



# Business Process Analytics

**Figure 4.12:** Use Case Diagram for Import of Fabrics



DOC = Department of Commerce, NTWCL = Nepal Transit and Warehousing Company Limited.

Source: Prepared by the project team.

# Trade Analysis

Nepal-Bangladesh Trade

# Bangladesh as a potential market for diversification

## Features of Nepal-Bangladesh Trade

**Proximity:** Kakarvitta (Nepal)-Panitanki (India)-Fulbari (India)-Banglabandha (Bangladesh)

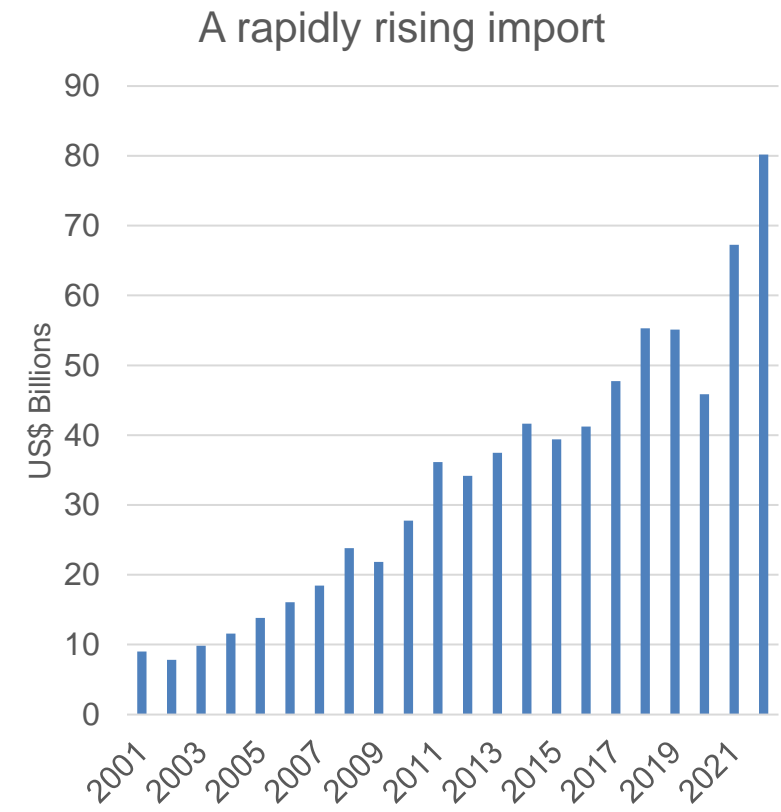
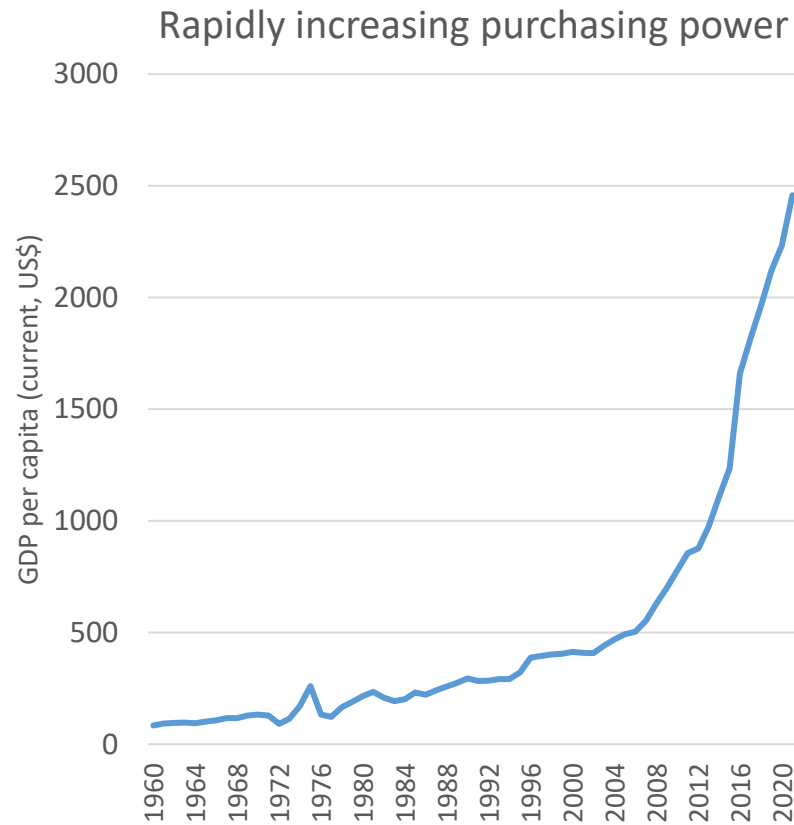
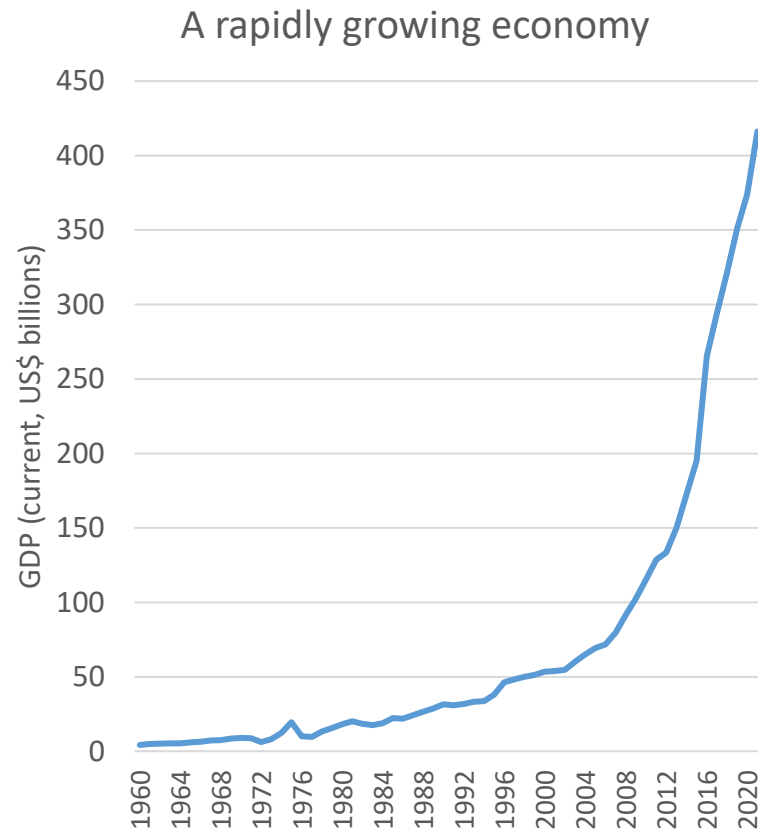
**A long history of cooperation:** seventh to recognize Bangladesh as an independent country; diplomatic relations started formally on 8 April 1972; Trade and Payments Agreement, 1976 and Transit Agreement, 1976

**Parties to a FTA:** SAFTA (since 2006)

**Partners in regional cooperation initiatives:** SAARC, BIMSTEC, BBIN

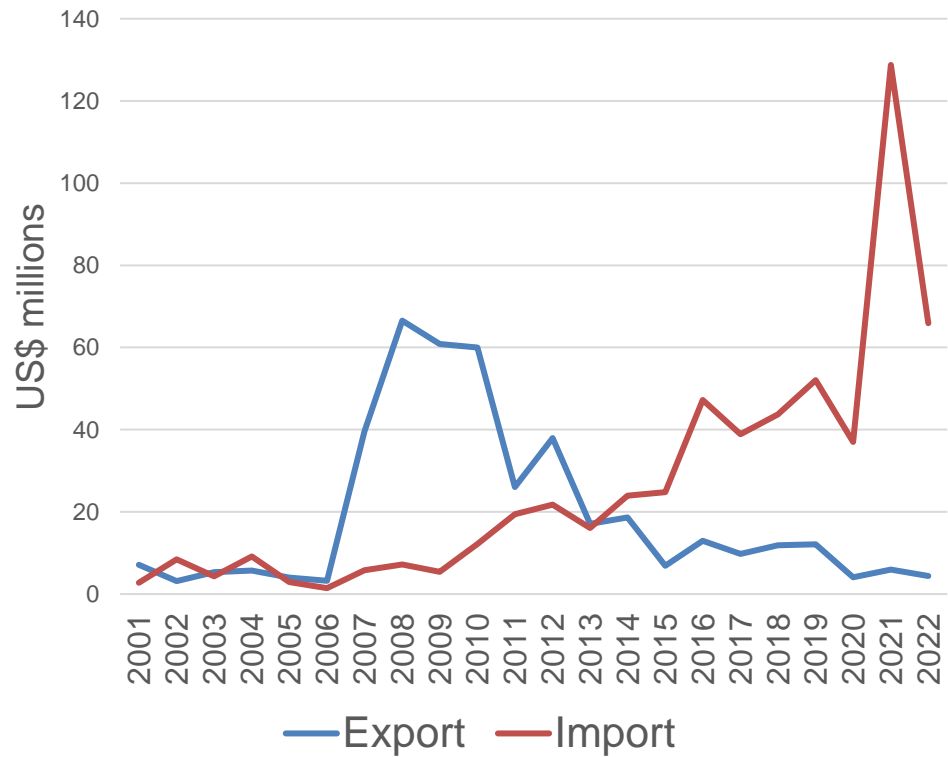
# Bangladesh as a potential market for diversification

A rapidly growing dynamic market → A high capacity to absorb imports

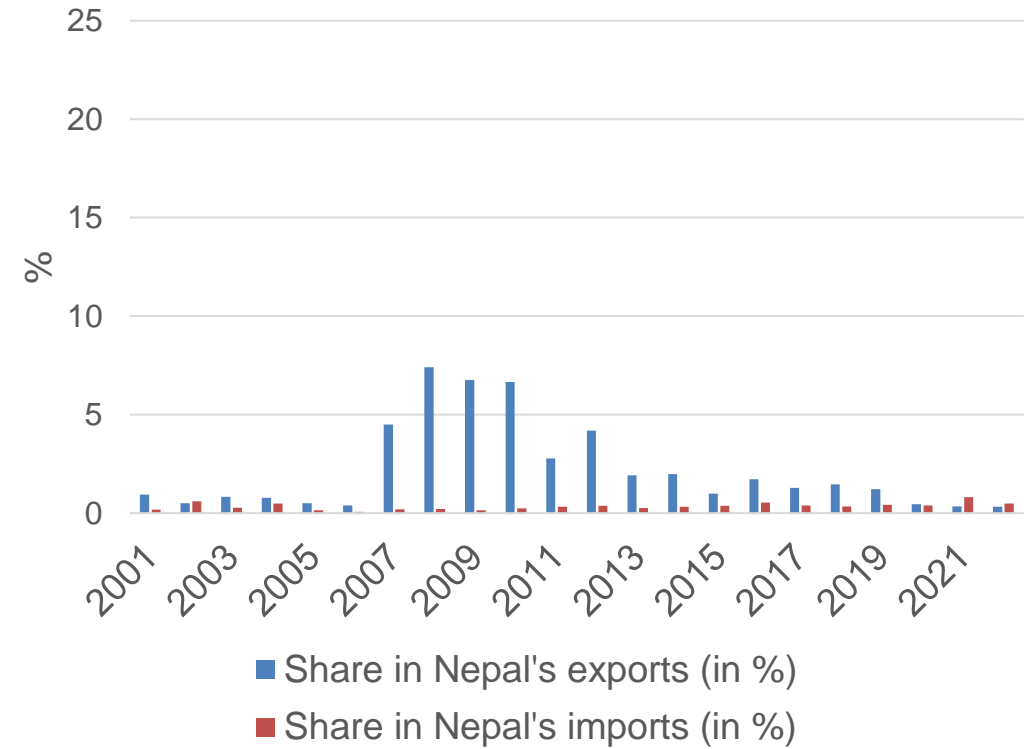


# Vastly unrealized trade potential

## Nepal-Bangladesh trade trends



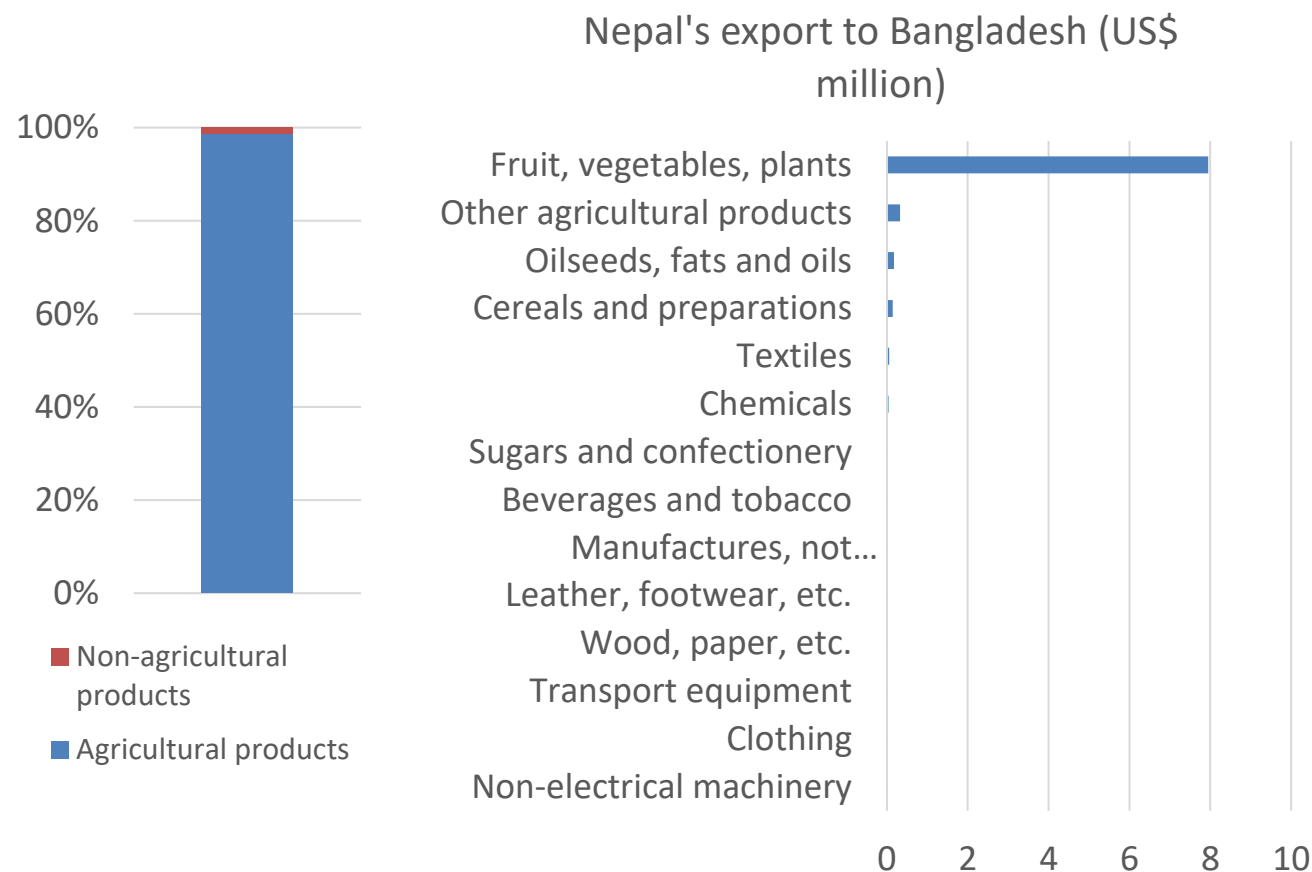
## Bangladesh's share in Nepal's total trade



# Nepal's export profile: narrow and concentrated

Top 10 exports to Bangladesh (5-year average):  
98.5%

HS6	Description	Average export (US\$ million)	Share in Nepal's export to Bangladesh (%)
071340	Lentils	7.83	89.52
230690	Oil-cake	0.17	1.93
230250	Bran, sharps and other residues	0.14	1.65
210690	Food preparations	0.14	1.65
121190	MAPS	0.10	1.11
050690	Animal products--bones and horn	0.08	0.91
230230	Bran, sharps and other residues; of wheat	0.06	0.64
091011	Ginger (sutho)	0.04	0.44
631010	Rags	0.03	0.35
320190	Tanning extracts of vegetable origin	0.02	0.26



Data source: ITC Trade Map

# Major pillars for analyzing Nepal-Bangladesh trade

- Identification of potential products
- Assessment of barriers
- How to enhance Nepal-Bangladesh trade
  - Solutions to non-tariff barriers
  - Solutions to tariffs/para-tariffs (PTA?)

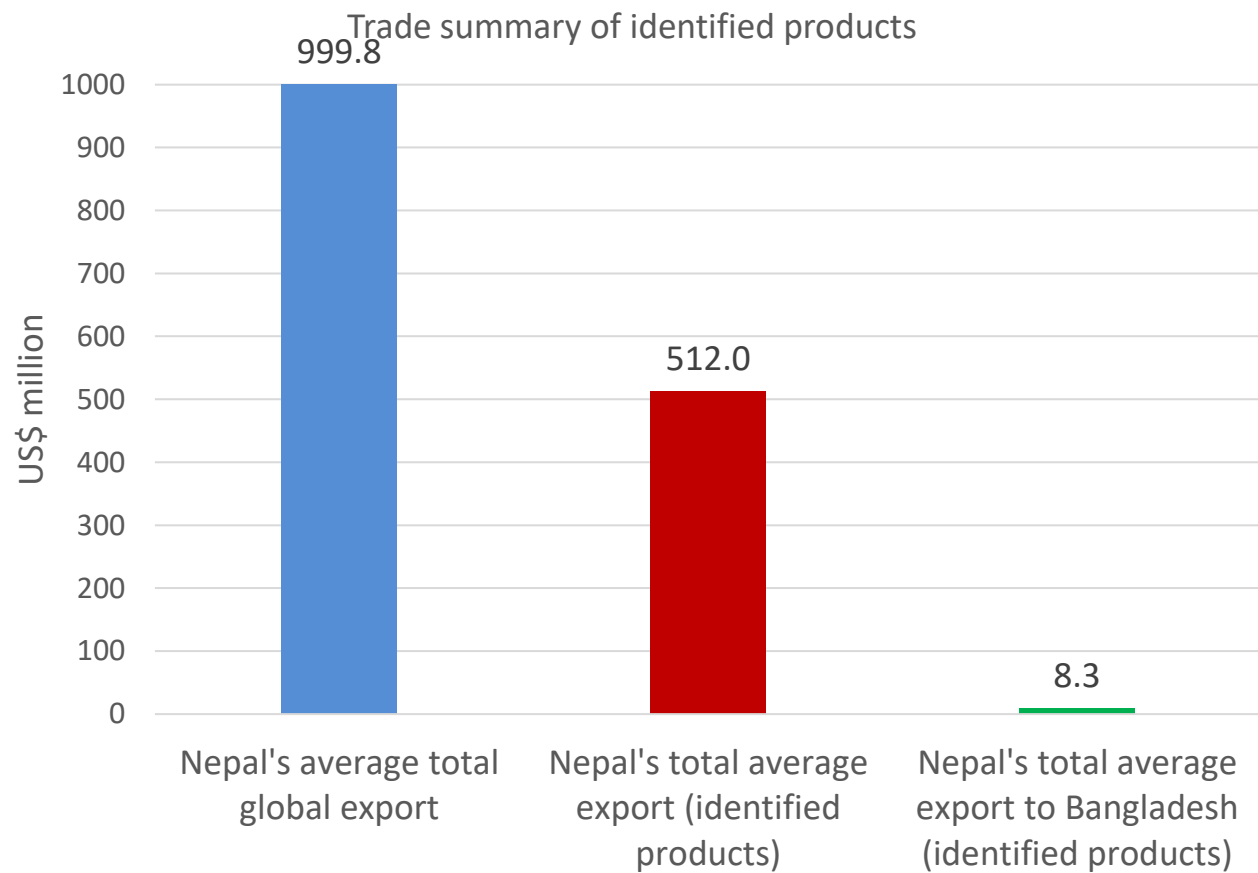
# Potential export products: study methodology

1. Compile trade data for 5 years (ITC trade map)
2. Remove products that have been exported by Nepal for only 2 years or less or imported by Bangladesh for 2 years or less
3. Average Bangladesh import of product (HS6) > US\$ 1 million
4. Nepal's average RCA > 1 and average export (HS6)>US\$ 100000
5. Remove products that have declining import in Bangladesh
6. Add products prioritized by the government and stakeholders



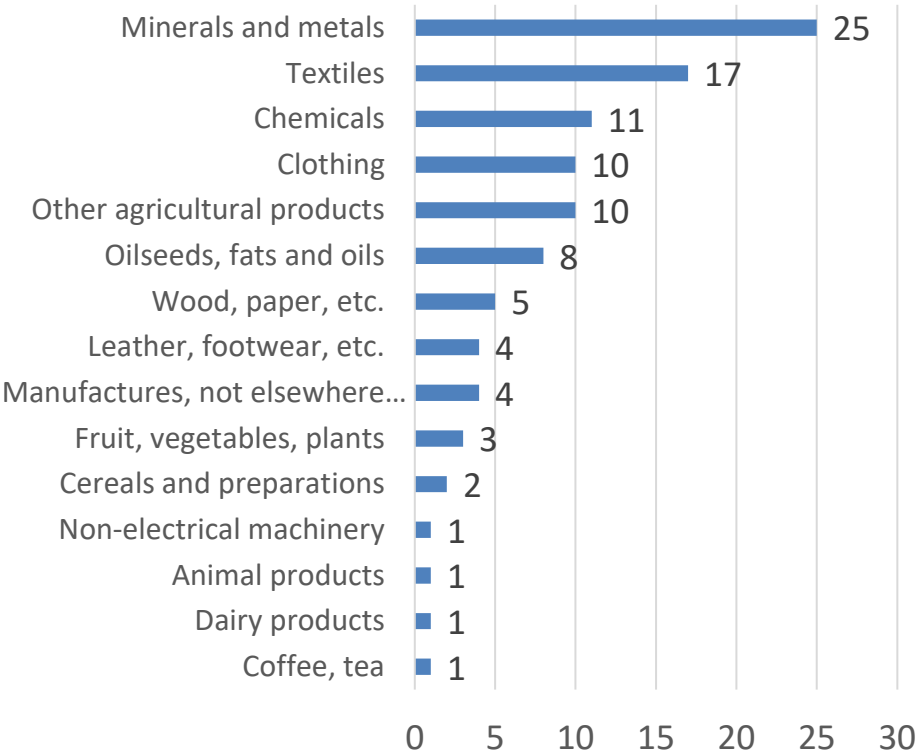
# Potential Export Products

- 103 products (at HS6 level)/164 products (at HS8 level) if 'declining imports' not accounted for

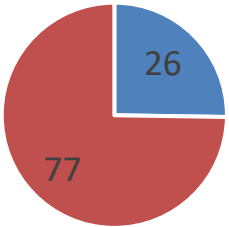
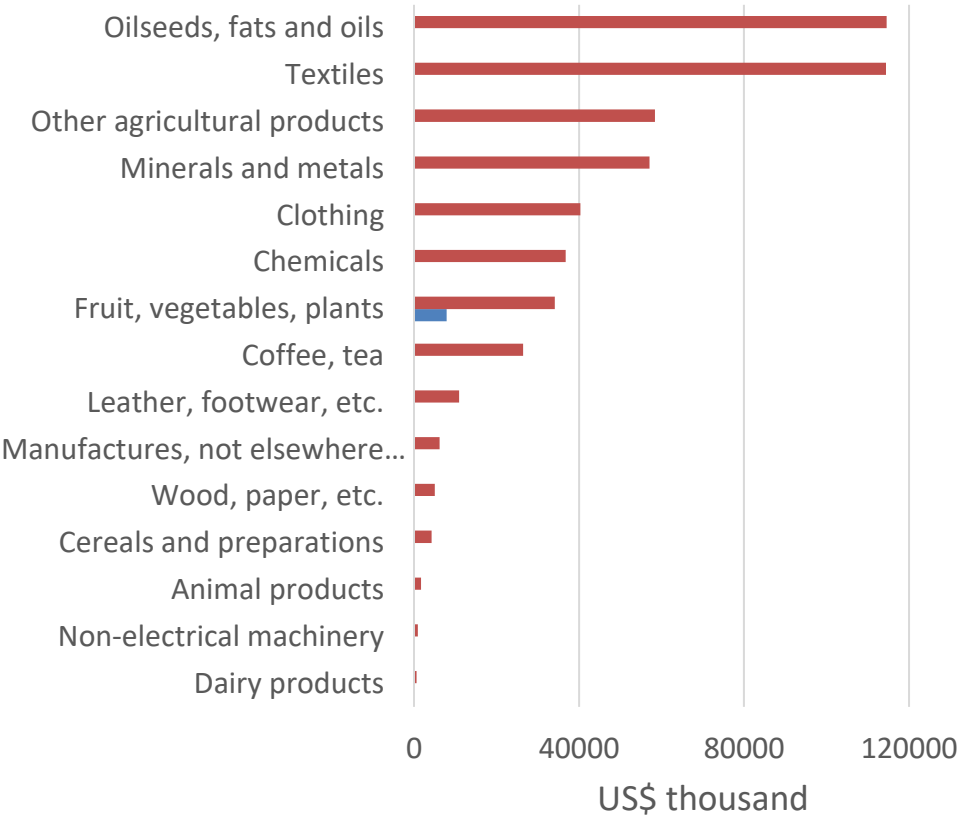


# Potential export products profile

Number of identified potential products



Nepal's average export of identified products



■ Agricultural products ■ Non-agricultural products

■ Nepal's average export ■ Nepal's average export to BGD

# Reasons for untapped export potential: trade barriers

- **Tariff barriers**

- Tariffs on several products restrictive/prohibitive (25% customs duty)
- Negative preferences due to Bhutan's duty-free plus para-tariff free access on some products (including agricultural products of export interest to Nepal, e.g. large cardamoms, ginger, vegetables, fruits and juice, etc.)

# Para-tariff barriers

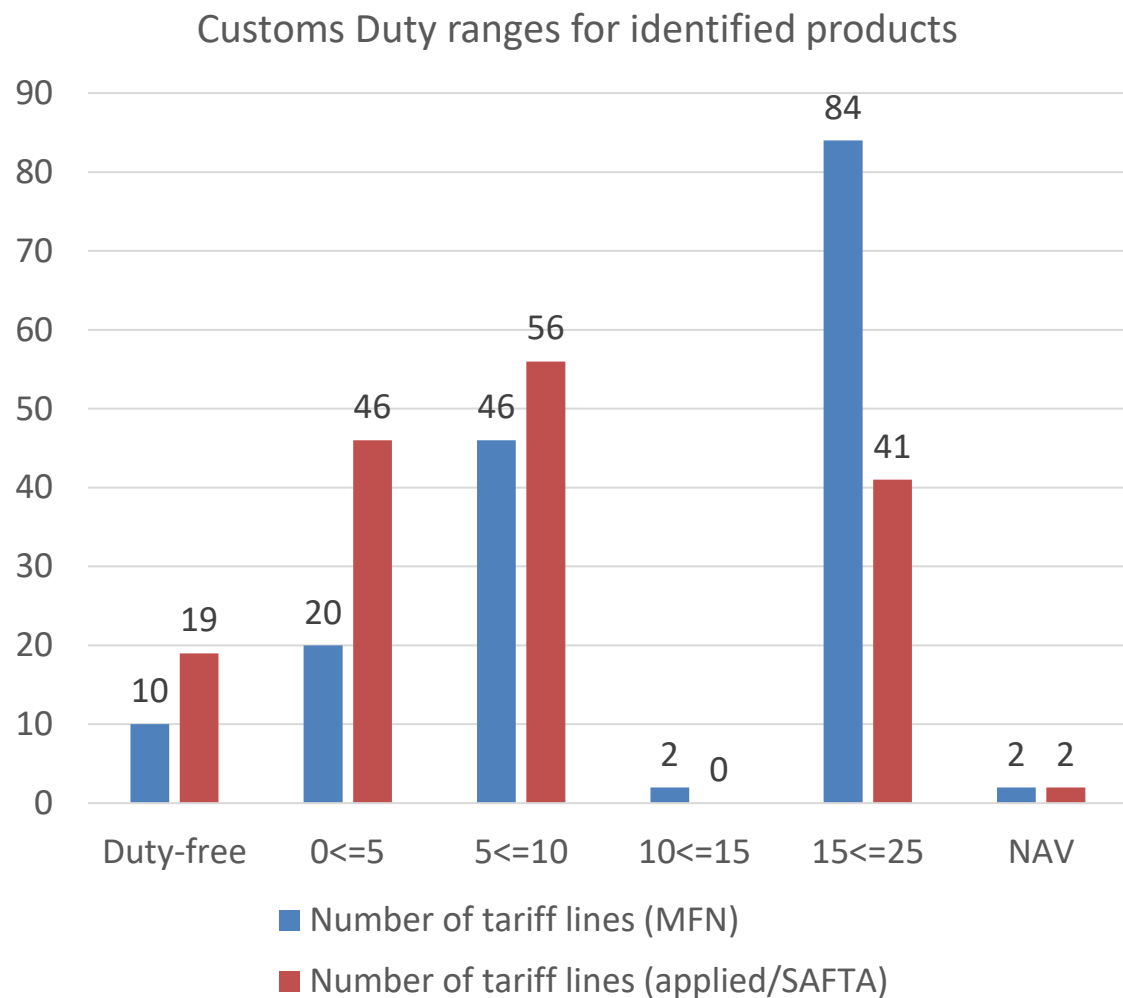
- Other duties and charges: Regulatory Duty (RD), Supplementary Duty (SD), Value Added Tax (VAT), Advance Income Tax (AIT), and Advance Trade VAT (AVAT) are collected at the Customs point
- Some charges such as regulatory duty (of mostly 3%) apply exclusively for imports and even apparently trade-neutral SD and VAT are para-tariffs in disguise as exemptions are granted for some domestic products (World Bank 2018)
- With the inclusion of para-tariffs, the simple average tariff (FY2016/17) almost doubles, from 13.3% to 25.6% (World Bank 2018)
- **High import taxes often identified as the sole reason for zero or low export by exporters**

# Para-tariffs in Bangladesh

	<b>Tariff lines affected (%)</b>	<b>Rates, percent of affected tariff lines</b>
Regulatory Duty	45	3(99%), 15, 20
Supplementary Duty	22.6	20(61%), 45 (21%), 30(5%), 10(4%), 60(4%), and six other rates between 100% and 500%(5%)
Value added tax	10.8	15
Advance Income Tax	.	5
Advance tread VAT	.	5

Source: World Bank (2018) for RD, SD, and VAT and Bangladesh duty calculator for AIT and ATV other compilations

# Potential export products: tariff profile



Import duties summary (%)				
	Min	Median	Mean	Max
Customs Duty (MFN)	0	25	16.58	25
Customs Duty (applied)	0	5	9.636	25
Total Tax Incidence (applied/SAFTA)	0	34.6	46.65	131.2

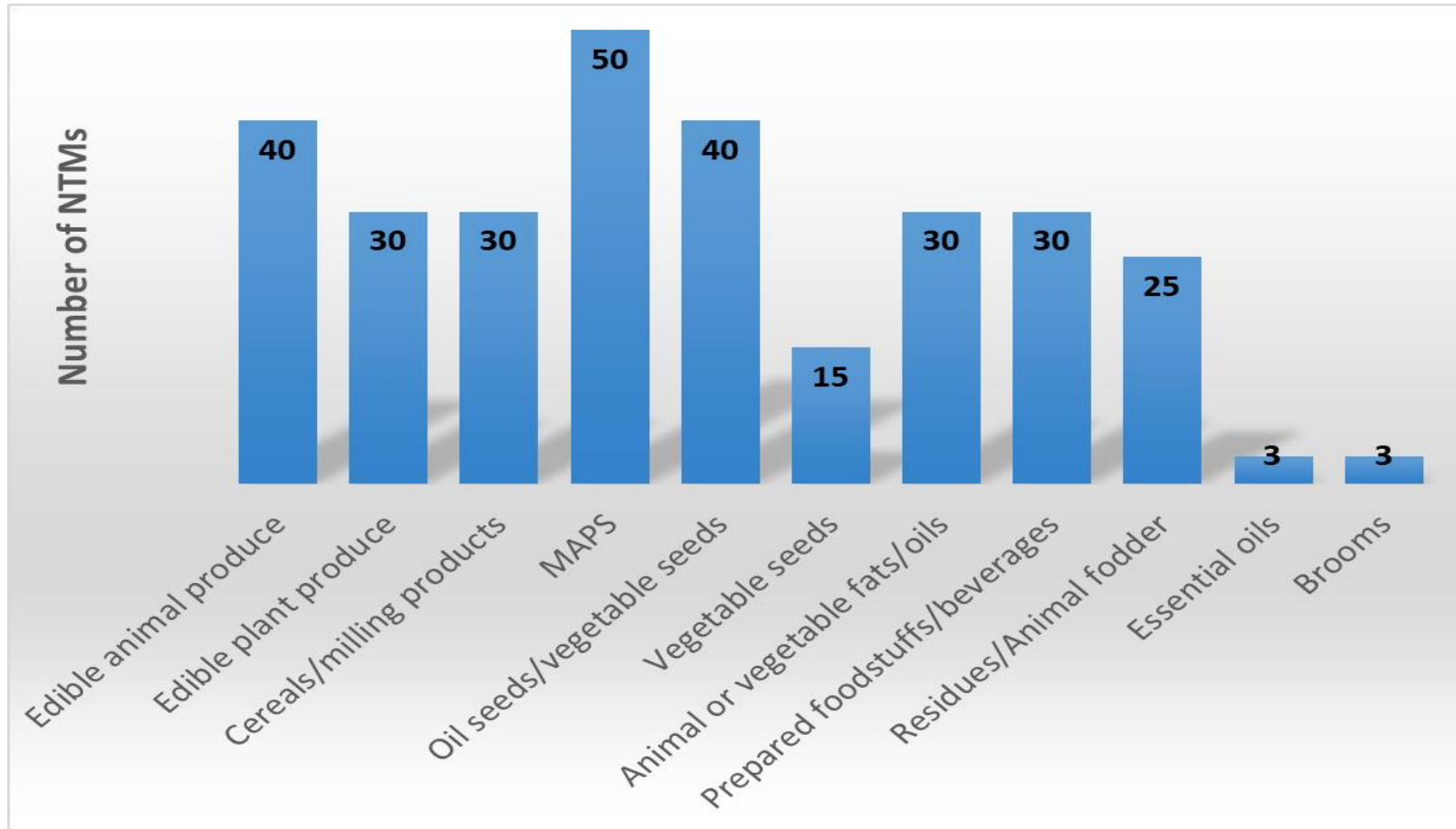
# Nepal-Bangladesh Preferential Trade Agreement to counter tariff/para-tariff barriers

- PTA in discussion for some time now
- PTA could enhance Nepal –Bangladesh trade (including currently dismal Nepal's exports to Bangladesh) against the backdrop of high tariffs and para-tariff barriers
- Some challenges
  - Removal of not only tariff (custom duty) but also para-tariffs
  - Unconditional MFN treatment to India (Nepal-India trade treaty)
  - Need to consider the impact on domestic industry, jobs, revenue loss (including revenue loss emanating from automatic preference granted to India)

Non-tariff measures and non-tariff barriers

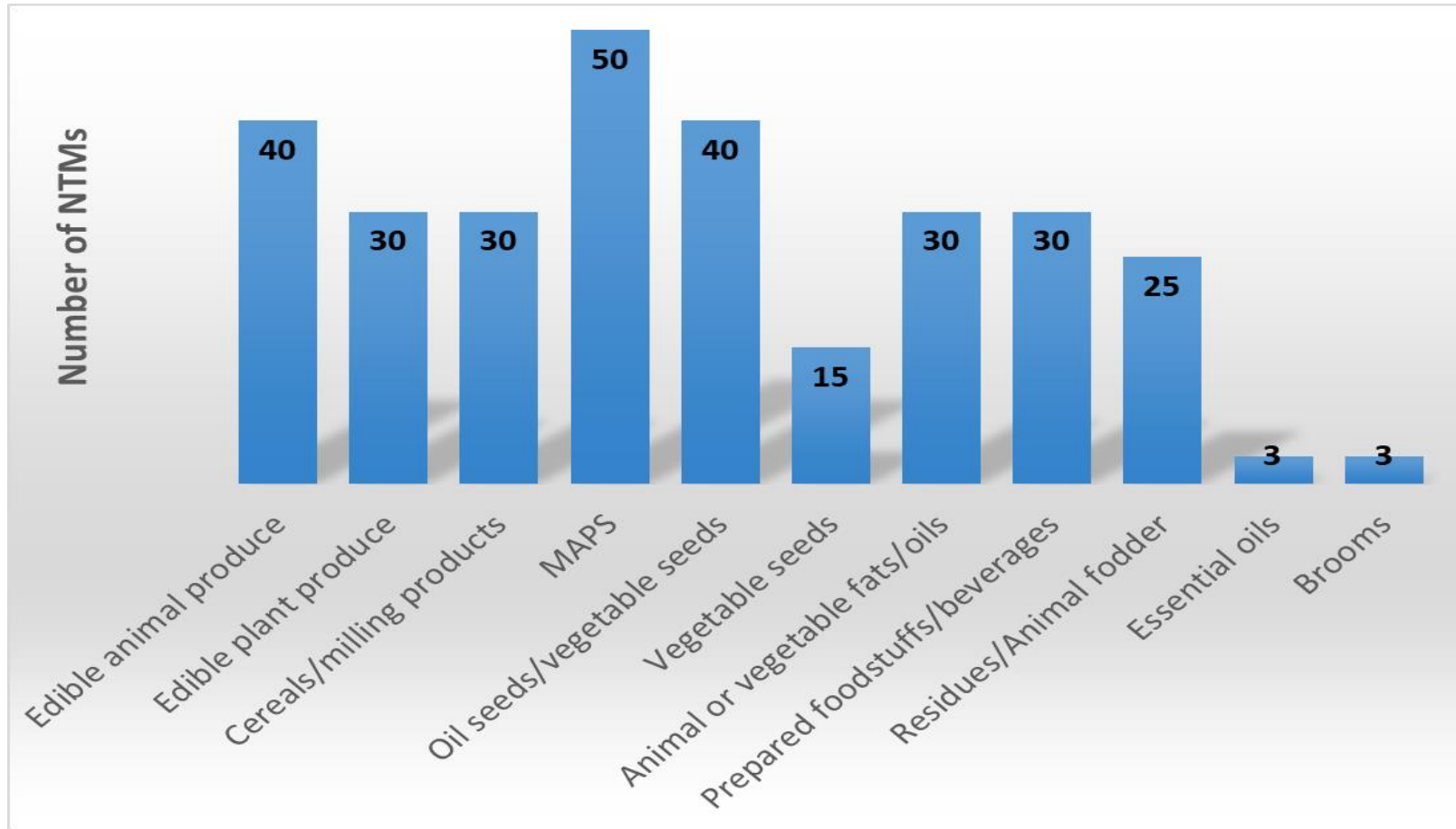


# High number of NTMs



However, most of the NTMs haven't transformed into non-tariff barriers (NTBs) according to traders/clearing agents.

# High number of NTMs



However, most of the NTMs haven't transformed into non-tariff barriers (NTBs) according to traders/clearing agents.

# Examples of some agricultural NTMs in Bangladesh

- **Radioactivity levels** : majority of food products
- **Free of Melamine**: dairy products
- **Free of certain antibiotic**- meat, meat products, and animal feed
- **Hormonal Treatment**- Cows/ buffaloes should not be treated with Estrogenic Hormones and Hormone Growth Promotants (HGPs)
- **Mandatory certification marks scheme**: BSTI standard mark mandatory for butter oil and ghee; honey; turmeric powder; curry powder; cumin powder; fruit juices; wheat atta; noodles; water; chewing gum; wheat bran
- **Authorization/registration requirement** for importers of animal, plant, and food products

# Some NTM related issues

- Although not a major issue while clearing customs, products like lentils encounter delay because of radioactivity reports, certification of fumigation.
- Need to overvalue customs valuation for certain goods at Bangladesh customs (E.g. Ginger valued by exporters at \$225 per tonne overvalued at \$900 per tonne; chiraito valued by exporters at \$1250 per tonne overvalued at \$1600 per tonne).

# Procedural barriers

- Harassment at Indian border
- Informal payments in both Bangladesh customs and Indian customs
- Although cited by reports and studies, traders and clearing agents do not feel documentation procedure is cumbersome.

# Payment issues

- Bangladesh doesn't allow their importers to send advance payment to Nepal [Nepal Rastra Bank allows Nepali importers to do so upto certain amount]
- Delays in releasing L/C payments citing quality discrepancies and documentation issues; sometimes reneging on agreed upon payments to obtain reduced price
- Mistrust of Bangladeshi importers because of incidence of payment frauds, payment delays, and payment renegotiations.

# Other issues raised

- Sub-optimal customs infrastructure: Sub-optimal warehousing facilities, customs infrastructure, and parking at Bangladesh customs
- Lack of information regarding SAFTA tariff concessions (e.g. large cardamoms, chirauti) and procedural requirements to export under SAFTA concessions, for e.g. how to obtain SAFTA COO). Goods that have reduced SAFTA duty being exported under MFN duty.
- Bangladesh offering duty free access to few Bhutanese products (including agricultural products such as large cardamoms, ginger, vegetables, fruits and juice, etc.) through Bangladesh-Bhutan bilateral trade agreement.
- Business visa to Bangladesh needs to be issued in Kathmandu and traders feel the visa duration is not sufficient and procedure is cumbersome.
- Export levy on some products (e.g. NPR 1 per kg of lentil) and NTWC charge of 0.4% on export valuation is exorbitant according to traders.

# Addressing issues to enhance Nepal-Bangladesh trade

- **Addressing tariff/para-tariff barriers:** Preferential Trade Agreement (PTA) that reduces/eliminates tariffs, inclusive of para-tariffs; better dissemination of information regarding SAFTA concessions and certificate of origin
- **Addressing NTBs and procedural obstacles:** Proactive engagement with Bangladeshi counterparts for better trade facilitation, elimination of NTBS, etc. (operationalization of BBIN MVA)



# Summary

- International trade: some stylized facts
- Analyzing international trade: tools and tips (future sessions for simple data cleaning and analysis exercises)
- Walking through the Nepal-Bangladesh trade study to provide idea about conducting trade analysis as well as to disseminate preliminary findings

# Thank You!

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