

Measuring NTM Restrictiveness in South Asia

Prabir De

Background

- Removal of non-tariff measures (NTMs) is found to be important in easing a region's economic isolation.
- NTMs are policy instruments which are applied by countries on imported goods having an economic effect on trade in goods, changing quantities traded, or prices or both (UNCTAD, 2013).
- Our paper deals with two basic components of NTMs: SPS and TBT
- Based on primary survey data, our objective is to assess the restrictiveness of NTMs in South Asia.

Selection of Products

Sr. No	Product	Exporter	Importer
1	Agro Processed Food (APF)*	Bangladesh	India
2	Jute Bag (JB)	Bangladesh	India
3	Readymade Garments (RMG)	Bangladesh	India
4	Pharmaceutical Raw Materials (PRM)	India	Bangladesh
5	Cardamom	Nepal	India
6	Medicinal and Aromatic Plants (MAP)	Nepal	India
7	Tea	Nepal	India
8	Pharmaceuticals	India	Nepal

Selection of Samples

India and Bangladesh

HS Code	Product	Bangladesh		India		Total
		Firms (number)	Share (%)	Firms (number)	Share (%)	Firms (number)
19, 20	Agro Processed Food	24	22.02	30	28.04	54
630510	Jute Bag	20	18.35	20	18.69	40
61, 62	Readymade Garments	15	13.76	35	32.71	50
29, 30	Pharmaceutical Raw Materials	50	45.87	22	20.56	72
	Total	109	100.00	107	100.00	216

India and Nepal

HS Code	Product	Nepal		India		Total
		Firms (number)	Share (%)	Firms (number)	Share (%)	Firms (number)
90830	Cardamom	10	10.00	14	15.05	24
121190	Medicinal and Aromatic Plants	35	35.00	30	32.26	65
90240	Tea	25	25.00	19	20.43	44
30	Pharmaceuticals	30	30.00	30	32.26	60
	Total	100	100.00	93	100.00	193

Survey Location

Country	City
Bangladesh (2)	<ul style="list-style-type: none">• Dhaka• Chittagong
India (11)	<ul style="list-style-type: none">• Delhi• Mumbai• Kolkata• Siliguri• Guwahati• Shillong• Silchar• Gorakhpur• Hyderabad• Ahmedabad• Pune
Nepal (5)	<ul style="list-style-type: none">• Kathmandu• Jhapa• Ilam• Jhapa• Nepalgunj

NTM Restrictiveness Index: Methodology

- Computation of the ANR is based on successive aggregations of the scores from the indicator level.

$$ANR\ Score_k^c = \sum_{i=1}^N \frac{\left(\frac{\sum_{j=1}^n X_{ij}}{n} \right)}{N}$$

- Primary survey data: 409 firms
- NTM refers SPS and TBT
- UNCTAD classification
 - 18 categories for SPS / TBT
- Two country-pairs with 4 trade items on each pair
- Perceptions marked in a scale of 1 to 5 where 1 being easy (no difficulty) and 5 being hard (most difficulty).

where k stands for product, c is country, X is NTM indicator, i is firm and j is type of NTM

Categorisation of barriers

SPS	TBT
A1 Prohibitions/restrictions of imports for SPS reasons	B1 Prohibitions/restrictions of imports for objectives set out in the TBT agreement
A2 Tolerance limits for residues and restricted use of substances	B2 Tolerance limits for residues and restricted use of substances
A3 Labelling, marking and packaging requirements	B3 Labelling, marking and packaging requirements
A4 Hygienic requirements	B4 Production or post-production requirements
A5 Treatment for elimination of plant and animal pests and disease-causing organisms in the final product (e.g. postharvest treatment)	B6 Product identity requirement
A6 Other requirements on production or post-production processes	B7 Product-quality or - performance requirement
A8 Conformity assessment related to SPS	B8 Conformity assessment related to TBT

NTM Restrictiveness Score: Import

Flow	Product	Reporter	Partner	Aggregate Restrictiveness	
		Importer	Exporter	Score	Rank
Import	Pharma	Nepal	India	2.31	1
Import	APF	India	Bangladesh	2.28	2
Import	PRM	Bangladesh	India	1.70	3
Import	MAP	India	Nepal	1.53	4
Import	RMG	India	Bangladesh	1.22	5
Import	Cardamom	India	Nepal	1.13	6
Import	JB	India	Bangladesh	1.08	7
Import	Tea	India	Nepal	1.05	8

NTM Restrictiveness Score: Export

Flow	Product	Reporter	Partner	Aggregate Restrictiveness	
		(Exporter)	(Importer)	Score	Rank
Export	Tea	Nepal	India	3.49	1
Export	Cardamom	Nepal	India	2.45	2
Export	MAP	Nepal	India	2.16	3
Export	Pharma	India	Nepal	1.66	4
Export	APF	Bangladesh	India	1.63	5
Export	PRM	India	Bangladesh	1.52	6
Export	JB	Bangladesh	India	1.17	7
Export	RMG	Bangladesh	India	1.12	8

Product-wise NTMs Applied

Product	NTM Type	Bangladesh	Nepal	India
Cardamom	SPS		6	4
MAP	SPS		4	2
Tea	SPS		7	5
Pharma	TBT		13	10
PRM	TBT	11		10
APF	TBT	10		6
Jute bag	TBT	9		5
RMG	TBT	10		5
Average		10	8	5

Does Ease of Meeting Standards Lead to Rise in Export?

- First, labelling (A31) in Nepal, marking requirements (B32) and inspection requirement (B84) in Bangladesh and marking requirements (B32) in India have appeared as statistically significant variables in the estimation, indicating these are the key NTM barriers negatively affecting trade flow in the perception of the exporters and importers. These NTM barriers affect the export significantly.
 - Removal or rationalizing these NTMs may lead to rise in export of tea from Nepal to India, RMG from Bangladesh to India and pharmaceuticals from India to Nepal.
- **Certification requirement (B83) on export of JB from Bangladesh to India** and **packaging requirements (B33) on India's export of pharmaceuticals to Nepal** have come out as statistically significant NTMs, suggesting positive relation with export flow. In the perception of exporters and importers, these NTMs have facilitated the export.

Most Restrictive NTMs in India and Nepal

Nepal

Inspection requirement
(A84)

Testing requirement (A82)

Certification requirement
(A83)

India

Product registration
requirement (B81)

Authorization requirement
(B14)

Testing requirement (A82)

Certification requirement
(A83)

Concluding Remarks

- **Exporters and importers in Bangladesh have to comply with higher number of NTMs, compared to India and Nepal.** Among these measures, **testing requirement (A82) and certification requirement (A83)** are common in both India and Nepal.
- **Labelling (A31) in Nepal, marking requirements (B32) and inspection requirement (B84) in Bangladesh and marking requirements (B32) in India** are the key NTM barriers affecting trade flow in the perception of the exporters and importers.
- While traders in **Nepal** have identified the **inspection requirement (A84)** as one of the major restrictive measures, traders in **India** have identified the **product registration requirement (B81) and authorization requirement (B14)** are most restrictive NTMs
- NTMs constitute a substantial portion of trade restrictiveness for Bangladesh, India and Nepal and these measures are assumed to provide more trade restrictiveness than tariffs.
- Regulatory convergence across products and countries must.