UNNExT
United Nations Network of Experts for Paperless Trade in Asia and the Pacific

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Towards an Enabling Paperless Trade Environment

Insights from ESCAP's Trade Process Analysis Database

(Version 1.0; 2009-2014)

Trade facilitation has become a crucial area of focus for countries seeking continuous growth and development through trade. During the past two decades, import tariffs have decreased significantly and non-tariff measures aimed at further reducing international trade costs have gained more importance in promoting trade across countries.

Moving goods across borders requires meeting a vast number of commercial, transport, and regulatory requirements, which typically entail complex procedures and often a large number of documents. While most actors and regulators along the international supply chain are aware of the need to streamline import and export procedures, few, if any, have a complete understanding of the entire trade transaction process, making it difficult to identify the bottlenecks and to prioritize reforms.

UNNExT Business Process Analysis (BPA) of Trade Procedures[1] has proved to be an effective tool to provide detailed understanding of international trade transactions, and is regarded as the first step to be conducted before undertaking other trade facilitation measures. Over 50 import and export processes have been studied using BPA since 2009 by international organizations such as ESCAP, ECE, ADB, and their member states.

In order to record existing and future studies on trade processes and procedures in a systematic manner and further support evidence-based policy making, a Trade Process Analysis Database (TPAD) has been developed by ESCAP. This database enables users to search for information on a particular trade procedure they are interested in.

This brief presents key insights based on the import and export process analyses included in the TPAD. It provides an integrated view and performance information for a selection of 27 product-specific import and export process analyses conducted in Bangladesh, Cambodia, China, India, Indonesia, Japan, Lao PDR, Malaysia, Nepal, and Thailand from 2010 to 2014.

[1] More details are available at http://unnext.unescap.org/tools/business_process.asp.

UNITED NATIONS ESCAP
Economic and Social Commission for Asia and the Pacific

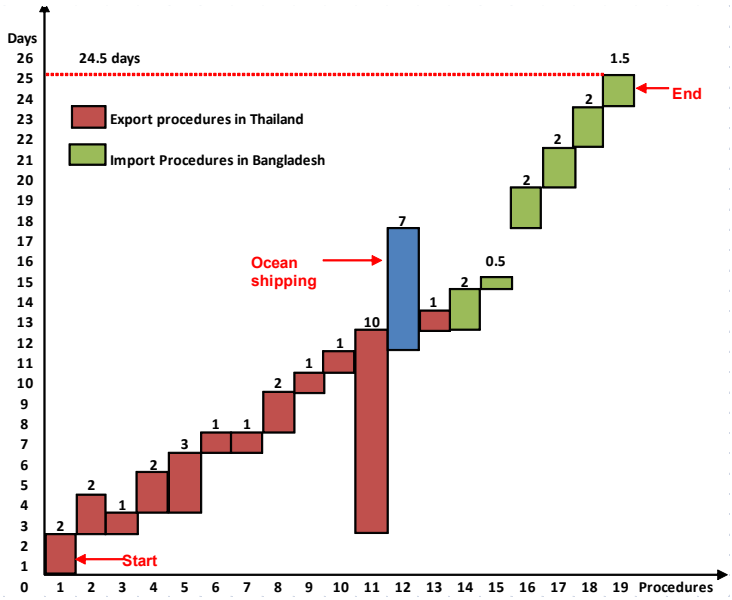
UNECE
United Nations Economic Commission for Europe

I. Key Features of Trade Process Analysis Database (TPAD)

As of the third quarter of 2014, TPAD features 19 BPA studies conducted by ESCAP, ECE, ADB and their member States between 2010 and 2014, encompassing 56 product-specific import and export processes in 13 developing Asian countries. Essential information from these studies such as the number of involved steps/ procedures, number and type of documents, time and cost of procedures, activity diagrams and time-procedure charts are included in TPAD (see, for example, Figure 1).

Most of the BPA studies included focus on agricultural products, followed by textile products, both of which are key to inclusive and sustainable development of the region. Typical procedures for import and export include customs clearance, arranging transport, concluding contract, and preparing documents for import/ export. Overall, the database contains information on a total of 50 unique export procedures and 32 unique import procedures.

Figure 1: Time Procedure Chart of Trade in Sugar from Thailand to Bangladesh



Sr. No	Process	Days	Sr. No.	Process	Days
1	Buy	2.00	11	Prepare documents required by importer	10.00
2	Obtain export permit	2.00	12	Ocean shipping	6.00
3	Obtain goods movement permit	1.00	13	Verify accuracy/ authenticity of exported cargo	1.00
4	Obtain cargo insurance	2.00	14	Collect and endorse documents for import	2.00
5	Arrange transport	3.00	15	Provide customs declaration online	0.50
6	Provide customs declaration	1.00	16	Handling cargo at port	2.00
7	Collect empty container from yard	1.00	17	Clear goods through customs	2.00
8	Stuff a container	2.00	18	Transfer goods to importer's premise	2.00
9	Clear goods through customs	1.00	19	Pay	1.50*
10	Handle container at terminal and stow on vessel	1.00		Total	24.50*

*According to Thailand exporters, it takes 1 day to get payment from Bangladesh.
** Total time becomes 23.50 days if we take 1 day to receive payment from the importer in Bangladesh.
Source: ARTNeT Working Papers 93 and 103.

Source: ESCAP (2011), Trade Facilitation in Asia and the Pacific: An Analysis of Import and Export Processes, Trade and Investment Studies No. 71, ESCAP. United Nations

II. Insights from the TPAD Data

1. Quantitative Indicators

Following a review of the completeness and quality of the data of the various BPA studies included in TPAD, 17 export processes in Bangladesh, Cambodia, China, Lao PDR, Myanmar, Nepal, and Thailand (see table 1), and 10 import processes in Bangladesh, Cambodia, China, Lao PDR, Myanmar, and Nepal (see table 2) were selected and further analyzed to develop insights on trade procedures in developing countries of the region.

Export processes listed in table 1 show that eight to 15 procedures are necessary to complete the export processes, while import processes involve five to twelve procedures. Overall, on average, export processes actually involve 25 per cent more procedures than import processes. This is explained in part by the fact that many of the BPAs included in TPAD relate to agricultural and food exports, and that many documents have to be prepared by traders as part of the export process so that all relevant information is available for import clearance - and payment by the buyer.

The number of documents for both import and export processes appear to vary significantly across the different countries and products studied. The number of documents (including copies) prepared as part of export processes ranges from 10 in the case of maize exports from the Lao PDR to Thailand, to 75 for exports of

shrimp from Bangladesh to Japan. The number of documents prepared as part of import processes ranges from 19 in the case of raw sugar imported from Thailand to Bangladesh, to 61 documents for imports of palm oil from Malaysia into Myanmar.

Table 1: Complexity, Time and Cost of Export Processes in Developing Asia

Export Process In	Product Exported	Country of Destination	No. of Business Procedures	No. of Documents Needed (Including Copies)	Time (Days)	Cost (USD)
Bangladesh	Woven garments	India	12	68	40	1015
Bangladesh	Shrimp	Japan	12	75	37	500
Bangladesh	Jute Hessian bag	India	12	33	30	316
Cambodia	Cassava	China	13	60	5	741
Cambodia	Maize	China	13	60	5	741
Cambodia	Rice	France/Italy/Germany	12	51	26	1029
Cambodia	Cashew nut	India	11	36	23	1129
Cambodia	Silk	Germany	10	54	21	270
China	Garments	Japan	11	26	9	440
China	Electronics	Thailand	13	31	22	298
Lao PDR	Maize	Thailand	8	10	17	702
Myanmar	Rice	Ivory Coast/Burkina Faso	10	42	12	124
Myanmar	Mango	China	8	23	11	1492
Nepal	Cardamom	India	9	38	13	2052
Nepal	Vegetable ghee	India	14	48	42	1076
Nepal	Vegetable ghee	China	8	48	11	833
Thailand	Jasmine rice	USA	15	72	15	129
Total			191	775	337	12887
Average			11	46	20	758
Coefficient of Variation			0.19	0.40	0.59	0.68

Source: Data from TPAD

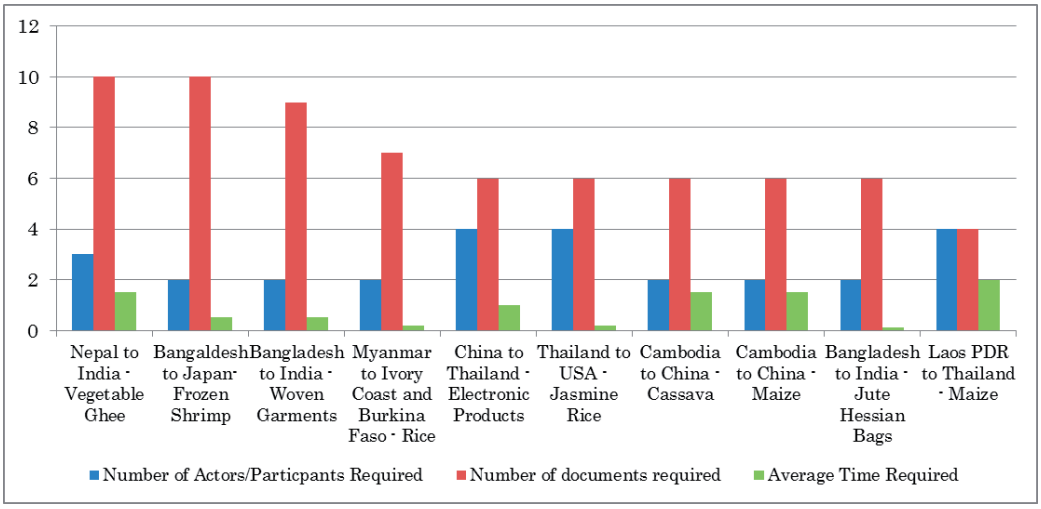
Table 2: Complexity, Time and Cost of Import Processes in Developing Asia

Import Process In	Product Imported	Country of Origin	No. of Business Procedures	No. of Documents Needed (Including Copies)	Time (Days)	Cost (USD)
Bangladesh	Wheat	India	12	49	27	183
Bangladesh	Cotton fabric	India	6	28	8	415
Bangladesh	Raw Sugar	Thailand	6	19	10	525
Cambodia	Pharmaceuticals	Indonesia	7	25	22	200
China	Textiles	Japan	8	37	9	440
China	Auto-parts	Japan	8	37	12	440
Lao PDR	Animal feed	Thailand	10	33	15	500
Myanmar	Palm oil	Malaysia	11	61	11	185
Nepal	Rice	India	11	49	18	960
Nepal	Textiles	India	5	25	5	320
Total			84	363	136	4168
Average			8.40	36.30	13.64	416.81
Coefficient of Variation			0.29	0.36	0.50	0.55

Source: Data from TPAD

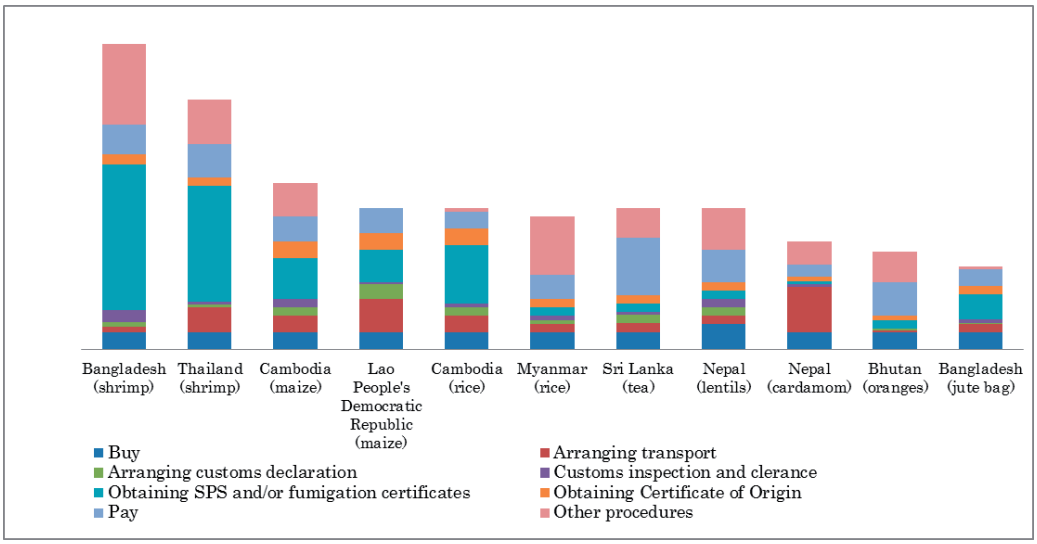
Overall, on average across all the BPA studies included in this specific analysis, the number of documents required at the various stages of export processes exceeds that required for imports – by about 20 percent. Data from TPAD enables the comparison of the same or similar trade procedure across different trade processes. As shown in figure 2, export declaration to customs are associated with varying amounts of actors/participants, time and documents. Comparisons, such as this one, may provide useful starting point for countries to identify procedural weaknesses and to explore how to address them, looking in particular at the procedures of other countries and products included in TPAD.

Figure 2: Customs Declaration for Export, Relevant Indicators



Source: Data from TPAD

Figure 3: Days required for export of agricultural products



Source: Data from TPAD

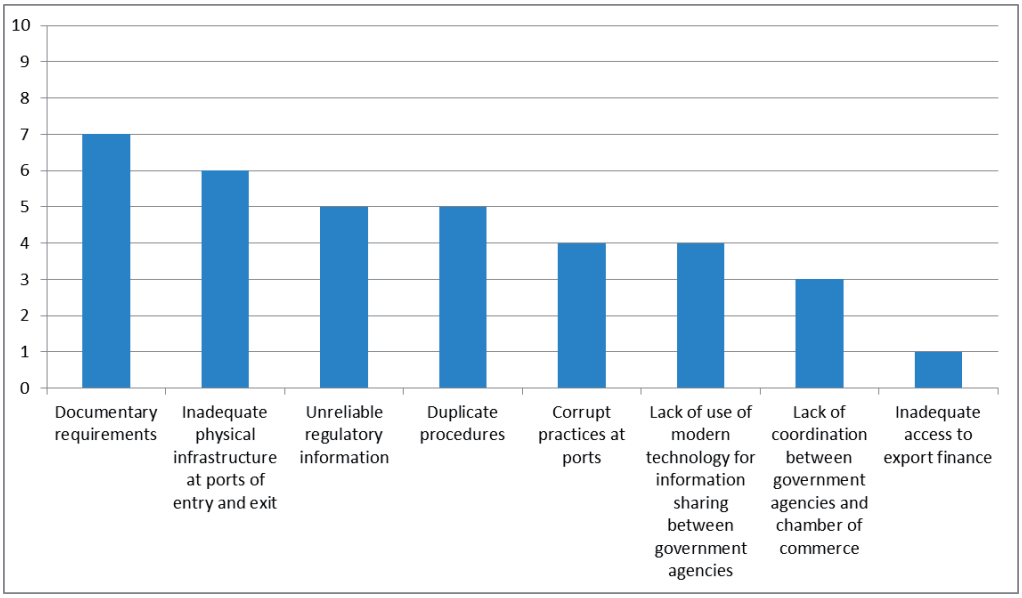
Data from TPAD indeed enables the users to compare trade processes in more details. As shown in figure 3, the export processes of shrimp from Bangladesh and Thailand require the obtainment of SPS certificates which take up to 17.5 and 14 days to acquire in each country, respectively. This specific procedure accounts for more than half of the total time required to complete the entire export process within these two countries. In Cambodia, it takes between 5 to 7 days to complete the same procedure for rice.

In Nepal, Cambodia, Myanmar and Sri Lanka, only one day is required to obtain the SPS certificate for different products. Delays in certification are typically related to both the nature of the SPS requirements for a particular product and the availability and efficiency of product testing facilities and the overall quality infrastructure.

2. Common barriers for trade facilitation

TPAD also highlights the most recursive and potentially hindering barriers to trade (see figure 4). Cumbersome documentary requirements are identified as the top barriers to trade. Processes and procedures with a higher number of documentary requirements are found to be less predictable as documents not only take time to prepare but may also be rejected by controlling agencies for various reasons (inconsistency, incompleteness, need for originals...) at different stages of the process.

Figure 4: Common Barriers for Trade Facilitation



Source: Data from TPAD

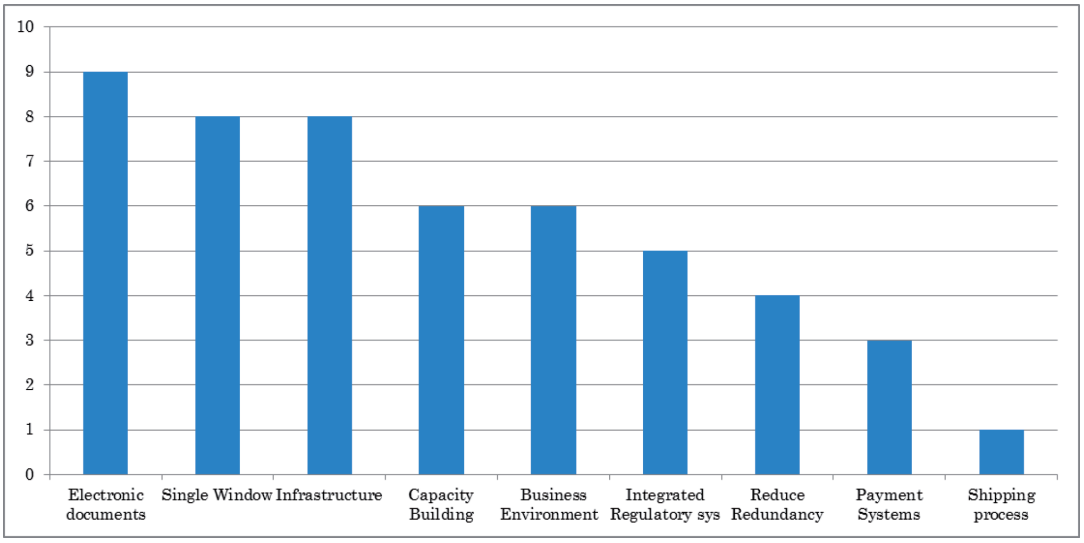
The inadequacy of physical infrastructure at ports of entry and exit is the second most identified obstacle to trade, compounding the effects of often complex documentary and inspection procedures. Unreliable information concerning regulatory rules, laws, and trade leads is also a major barrier to trade. In some cases, regulatory authorities issue confusing and overlapping instructions that add to the woes of traders in trying to find out which laws and regulations apply to them. Additionally, fulfilling duplicate procedures for the export of the same product adds to the cost and time of the trade process and causes unnecessary delays.

The lack of use of modern information and communication technology (ICT) for information sharing between government agencies is also identified as a frequent barrier to efficient trade, along with corrupt practices at ports of entry and exit and lack of coordination between public and private sector. Valuable time is often wasted in bringing paper documents and forms from one agency to another to get the relevant clearances and certificates. The lack of ICT use also makes it more difficult to monitor processes and trace and verify documents and shipments, facilitating the persistence of various illegal practices.

3. Common Recommendations

In general, the recommendations from the BPA studies included in TPAD emphasize the growing role of ICT in streamlining trade processes and procedures, in particular in terms of submission of documents. The most frequently mentioned types of recommendations in the studies are shown in Figure 5.

Figure 5: Top Recommendations from BPA Studies of Trade Procedures in Asia



Source: Data from TPAD

Electronic submission of documents and single window operations tend to be given highest priority by stakeholders, pointing to the importance of facilitating the flow of information and documents for reducing trade transaction costs. A prominent recommendation featured in most BPA studies was to introduce an electronic, national single window for trade operations - such facility allow data to be submitted electronically only once for use and processing by all trade control agencies; and have been found to be very effective in saving time and cost for both the public and private sector.

Upgrading of physical infrastructure is found to be the second most frequent recommendation across the BPA studies reviewed. This includes, interalia, the building of roads; linking bridges; improving testing facilities; launching public-private partnership projects for cargo-handling-infrastructure at ports; establishing additional entry and exit clearing points at borders; and enhancing physical storage capacity at dry