

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 Procedures¹ 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.

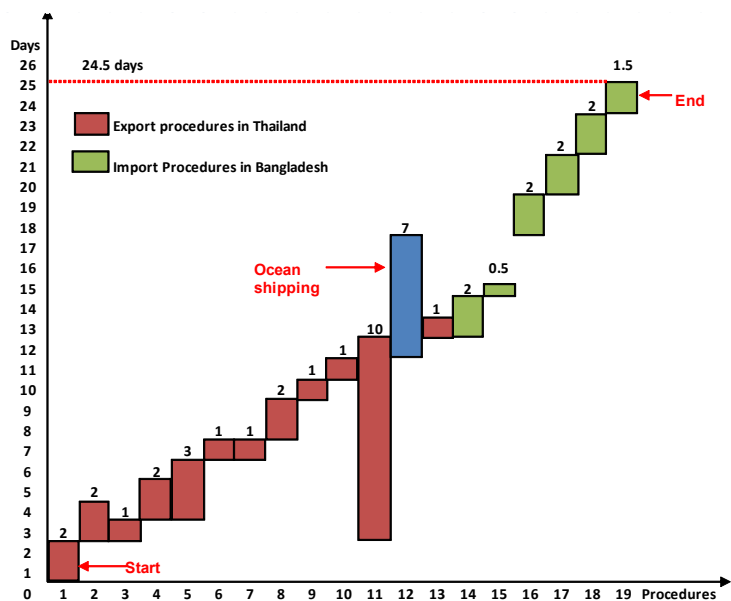
¹ More details are available at http://unnex.unescap.org/tools/business_process.asp.

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](#)

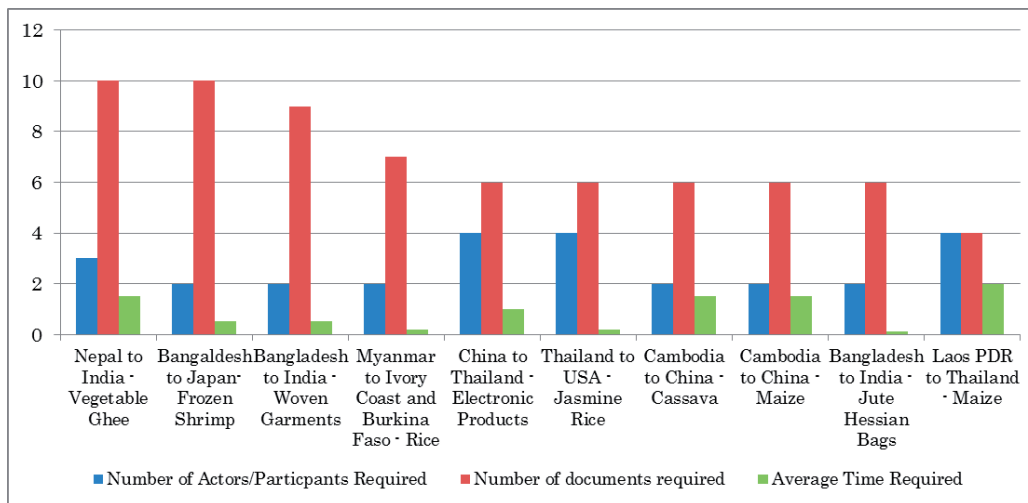
Table 2: Complexity, Time and Cost of Import Processes in Developing Asia

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](#)

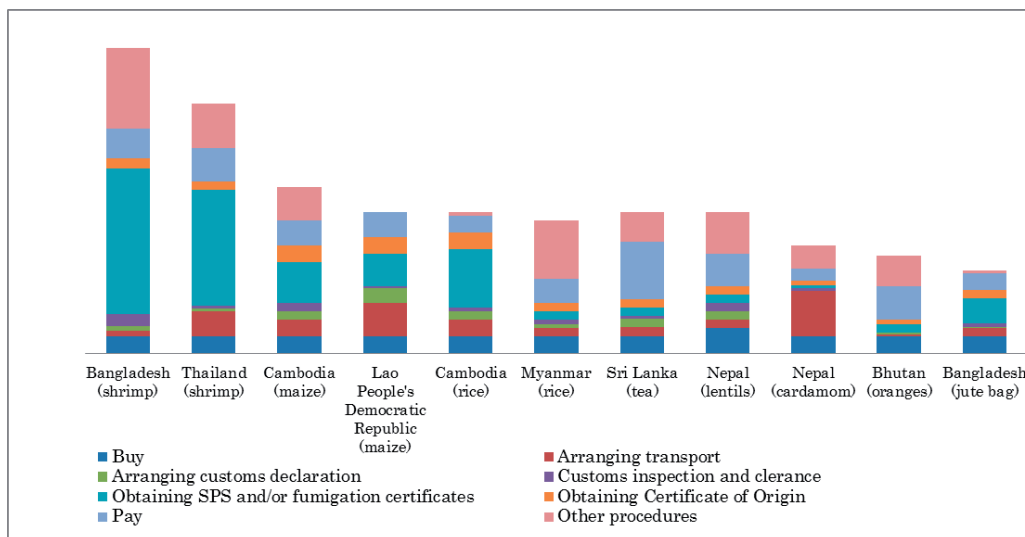
Overall, on average across all the BPA studies included in this specific analysis, the number of documents required at the various stages of export processes exceeds that required for imports – by about 20 percent. Data from TPAD enables the comparison of the same or similar trade procedure across different 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 obtaining 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.

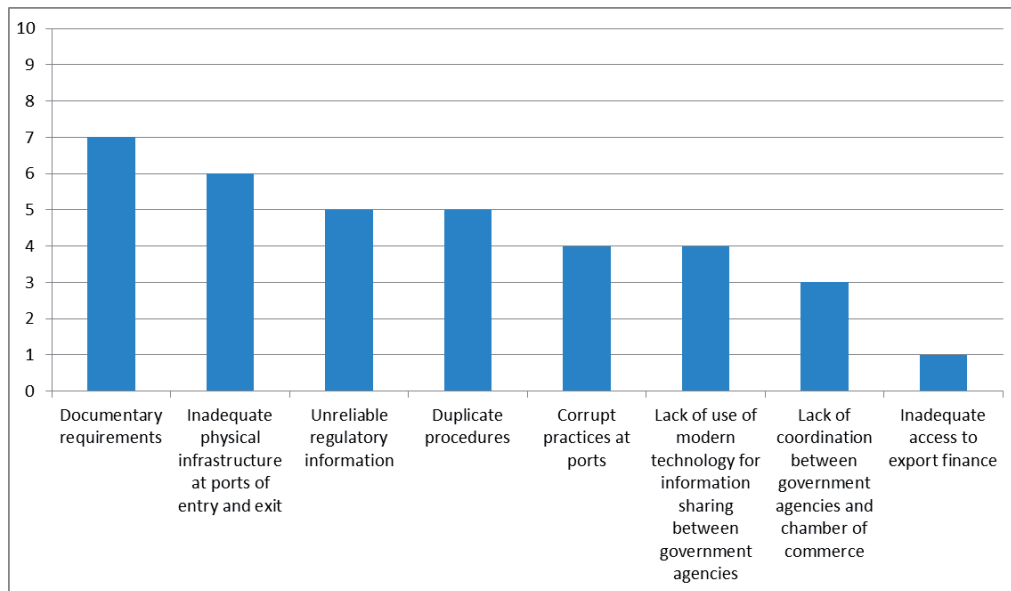
In Nepal, Cambodia, Myanmar and Sri Lanka, only one day is required to obtain the SPS certificate for different products. Delays in certification are typically related to both the nature of the SPS requirements for a particular product and the availability and efficiency of product testing facilities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

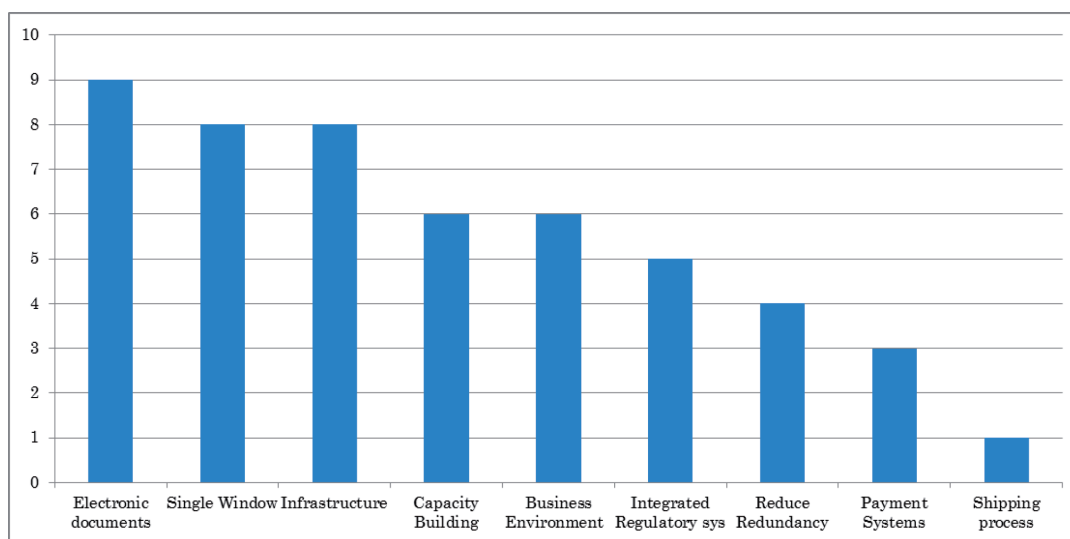
The inadequacy of physical infrastructure at ports of entry and exit is the second most identified obstacle to trade, compounding the effects of often complex documentary and inspection procedures. Unreliable information concerning regulatory rules, laws, and trade leads is also a major barrier to trade. 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, inter alia, 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 ports. This recommendation is often accompanied with one on the need for building human and institutional capacity to modernize operation of customs and other border agencies, including through the alignment and harmonization of documents that are to be presented to customs authorities and other agencies for clearance of good at entry and exit ports.

Almost all exporters and importers interviewed during the BPA studies showed concern about improving the overall business environment by reducing organizational and administrative requirements which, in most of the cases, lack coordination and overlap with each other. This has been highlighted by the traders whom advocate for the reduction of parties involved with inspecting cargoes and means of transport during the trade process. Informal payments are frequently raised as an issue as personnel ranging from traffic police, armed police, and revenue investigation departments check the cargo at different points along the route from the port of entry to the importer's warehouse.

Most traders place considerable importance on the availability of accurate and updated information on the existing legal and regulatory framework, including applied procedures, operational practices and guidelines, and information on the availability and quality of transport and logistics services. Legislative texts, for example, are important in cases of dispute and appeal. But reliable practical information – such as operating hours of border crossings, applicable fees and charges, and tariff schedules – are of even greater significance to many traders. On that basis, since trade regulations are issued and implemented by different agencies, a recommendation commonly found in the BPA studies is for all government agencies to work together to create an integrated regulatory environment, starting with providing all relevant information on regulations and procedures through a common portal or repository.

Several BPA studies also highlighted the need to improve international payment systems and trade finance services offered by banks. Various recommendations stressed increasing the capacity of banks (i.e., enhance the understanding of trade finance products for staff). Greater emphasis was placed on faster processing of letters of credit as well as the provision of more varied and flexible trade finance products. Trader communities also recommended that banks should further facilitate the access to finance on relaxed terms and conditions, and decrease cash margins on trade-related financial products.

III. Concluding Remarks

This brief highlights the key findings based on analysis of data from the Trade Process Analysis Database (TPAD), and demonstrates that TPAD can provide essential data to support evidence-based policy-making and decisions. One single BPA study generally produces a ‘snapshot’ of trade process(es) and procedures for a particular route, product or/and country. By collecting as many ‘snapshots’ as possible, TPAD enables the users to compare costs, time, number of documents, number of actors associated with different procedures to identify inefficiencies and bottlenecks, but also to see how a particular procedure has been designed or implemented in various countries or for different products.

Comparisons of overall export and import process time and costs across countries should be done very carefully as BPA studies included in TPAD have been conducted at different times and for different products, routes or modes of transport. Scope and coverage of TPAD will be expanded as more BPA studies are carried out. Countries may take full advantage of data and information of TPAD. At the same time, countries may also contribute to the expansion of TPAD by carrying out BPA studies of their trade processes on a regular basis. In this regard, the Trade and Transport Facilitation Monitoring Mechanism (TTFMM)², jointly developed by ESCAP and ADB, can serve as a useful guide.

² More details of TTFMM are available at <http://www.unescap.org/resources/towards-national-integrated-and-sustainable-trade-and-transport-facilitation-monitoring>.



This Brief was prepared by Tengfei Wang, Benjamin Jourdan, Faraz Mahmood and Frank Pei Zhao, under the guidance of Yann Duval, ESCAP. The note expresses the opinion of the authors and should not be construed to represent the opinion of the United Nations. For questions and comments on the specific details of the case, readers may write to wangt@un.org. The Brief was reviewed and published by the Trade Facilitation Unit of ESCAP on behalf of UNNEXt. It has been issued without formal editing.

We welcome your feedback as well as expressions of interest in our work on trade facilitation. For further information on UNNEXt, please write to Director, Trade and Investment Division, ESCAP.

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