# Research Methodology for Trade Facilitation Audit

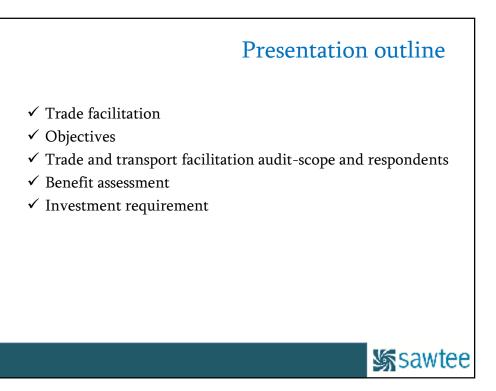
### Presented at

Inception meeting of the projects Trade and Transport Facilitation Audit in South Asia and Promoting Micro, Small and Medium Enterprises (MSMEs) for Inclusive, Equitable and Sustainable Development in South Asia

<u>Organized by</u> SAWTEE and UNDP APRC with support of AusAID 1-2 October 2013, Kathmandu

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Posh Raj Pandey Executive Chairman South Asia Watch on Trade Economics and Environment

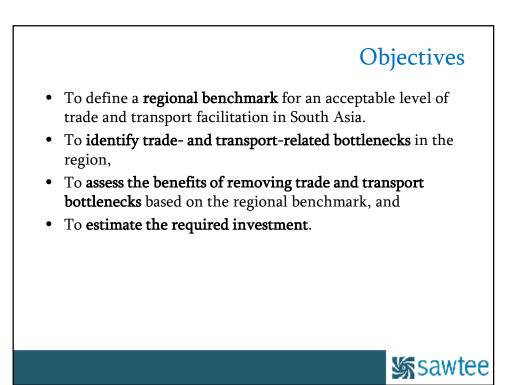


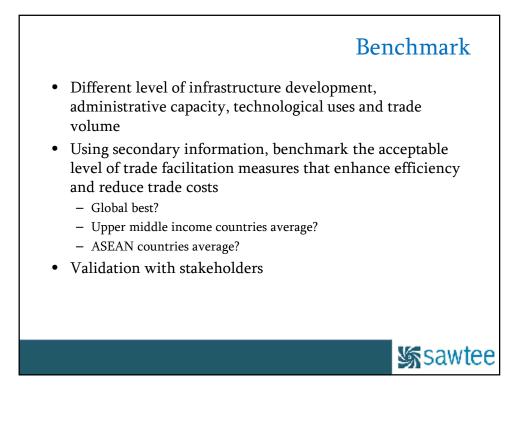
## Defining trade facilitation

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- No consensus on the standard definition and the components of trade facilitation,
- In narrow sense, trade facilitation is associated with the reduction of on-the-border transaction costs other than tari cuts, which essentially involves the simplification and standardization of customs formalities and administrative procedures related to international trade. (e.g. WTO)
- In broad sense, trade facilitation not only includes at-theborder issues, but also beyond-the-border issues, dealing for instance with the business environment, the quality of infrastructure, transparency, and domestic regulations. (e.g. UNCTAD, APEC, OECD etc.)











# Trade and transport facilitation audit (3) <u>Scope</u>

### B. Rules and procedures for import and export

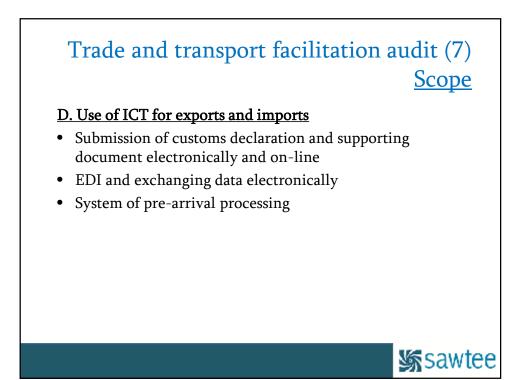
- Flexibility in working hours
- Number of documents submitted for export/ import
- Time taken to prepare export/import documents
- Time taken to clear export/import shipment and to ship the consignment
- System of advance ruling
- Use of risk management
- Transparency in border procedures
- Use of single window
- Percent of physical inspections
- Percent of post clearance audit
- Customs valuation system
- Duty drawback, export refund and temporary admission regime
- Review and appeal procedures: its independence and time of verdict
- Irregular payments and bribe



# Trade and transport facilitation audit (5) Scope C. Trade related infrastructure and services <u>Cost of infrastructure services</u>

- Port charges
- Airport charges
- Road transport rates
- Warehousing/ trans-loading service charges
- Telecommunication infrastructure and IT services
- Agent fees







### Trade and transport facilitation audit (10) Respondents

- Forwarder/ Agent/ Broker / Multimodal Transport operator
- Exporter
- Importer
- Ship line and ship's agents
- Road carrier
- Airline operators
- Railway
- Port Authority
- Airport authority
- Border crossing point
- Customs
- Chamber of Commerce

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### Trade and transport facilitation audit (11) Methodology

- Structured questionnaire will be prepared and interviewed with the representatives of private and public sectors engaged in the trading process.
- Respondents shall be asked to rate either in ordinal form in the scale of 1-5 (e.g. 1-very low, 2-low, 3-average, 4-high and 5- very high) or assign cardinal numbers (e.g. number of documents, number of days, percentage of physical inspection)
- Respondents shall be identified based on purposive sampling from various customs points (covering minimum of two-third of regional trade in total) and at least one sea/dry ports
- No of respondents: 30-50 at each of the interview point and central level.
- An index shall be constructed using principal component analysis (PCA) for each of the dimension of Trade Facilitation.

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• Use of augmented Gravity Equation ((Moise and Sorescu (2013), Bergstrand et. al (2013), Portugal-Perez and Wilson (2012), De (2011) Wilson et. al (2005) Duval and Utoktham (2012), Khan and Kalirajan (2011), Chen and Novy 2011). Anderson and Wincoop (2004)).

### Trade impact

```
\ln(x_{ij}) = \beta_0 + \beta_1 \ln(GDP_i, GDP_j) + \beta_2 \ln(POP_i, POP_j) + \beta_2 \ln(distance_{ij})
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+ \rho_4(contiguity_{ij}) + \rho_5(anguage_{ij} + \rho_4(Trade Agreement_{ij})
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+\beta_{3}\ln(1+t_{y})+\beta_{3}iandlocked_{i}+\beta_{10}(avgTFI_{3b})+\beta_{11}(avgTFI_{i})
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+ \beta_{12}(avgTFI_p) + \beta_{13}(avgTFI_{12}) + \beta_{14}(avgTFI_r)
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 $+\beta_{18}TFI_{ironsil}(1-canatignity_{il})++\beta_{18}SAARC_{il}$ 

+ (country pair dummics)  $+ c_{ij}$ 





In(cost,	$) = \beta_{q} + \beta_{1} \ln (distance_{q}) + \beta_{2} (continuity_{q}) + \beta_{3} language_{q}$
	+ $\beta_4$ (trade Agreement <sub>u</sub> ) + $\beta_5$ tariff <sub>u</sub> + $\beta_6$ ln(LSCI <sub>u</sub> ) + $\beta_7$ ln(LCI <sub>u</sub> )
	$+\beta_{0}(avgTFI_{00})+\beta_{2}(avgTFI_{i})+\beta_{10}(avgTFI_{P})+\beta_{11}(avgTFI_{12})$
	+ $\beta_{12}(avgTFI_{p}) + \beta_{12}TFI_{transit}(1 - contiguity_{ij}) + \beta_{12}SAARC_{ij}$
	+ (country pair dominies) + $\epsilon_{ij}$
	When
	<ul> <li>cout<sub>i</sub><u>i</u><u>i</u> bilateral made come between from i co  .</li> </ul>
	<ul> <li>distance <sub>j</sub> is the dimance between i and j</li> </ul>
	• $contignity_N$ is a domary which is unity if $i$ and $j$ share a common burder and zero otherwise
	<ul> <li>language up to a furning which is unity if i and j share a common language and zero otherwise</li> </ul>
	<ul> <li>Trade Agreeword <sub>th</sub> is dummy which is unity if i and ) are in a bilascal trade agreement and zero otherwise</li> </ul>
	<ul> <li>Tarriff the generatic symplectic period in the start in t</li></ul>
	<ul> <li>LSCI<sub>0</sub> is a geometric overage of (liner shipping connectivity index) of country i and j</li> </ul>
	• $ICT_{ij}$ ig the geometric swarge of no. Of internet users per 100 inhibiterits in both countries i
	<ul> <li>ougTFI<sub>st</sub> is the geometric average of experies and importer 191 on editionary in bound clearance process</li> </ul>
	<ul> <li>ungTFI<sub>1</sub> is the geometric average of exponent and importer TFI on quality of inflations are</li> </ul>
	<ul> <li>avgTFI<sub>p</sub> is the geometric symage of separat and importer TFI on competitively priori transport and cargo services</li> </ul>
	<ul> <li>avgTPI<sub>15</sub> is the geometric average of exposes and imposes TFI on componence and quality of logistic pervices.</li> </ul>
	<ul> <li>OUgTFl<sub>T</sub> is the geometric strange of apportant and important TE1 on transparency</li> </ul>
	<ul> <li>avgTTP<sub>sympt</sub> is the promotion average of expositer and importer TEI on treatment of growh in transit</li> </ul>
	<ul> <li>Note that, the germatric everage of experier and import TTI i.e. evgTH<sub>i</sub> = <sub>v</sub>TH<sub>i</sub>, TH<sub>i</sub></li> </ul>
	<ul> <li>SAARC<sub>1,0</sub> a dummy which is unity if caponer and importers are SAARC members and zero otherwise.</li> </ul>

