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Environmental Surcharge for heavy polluters in Bangladesh

A Case Study on the newly introduced fee



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Disclaimer

Scope of the Study

- ▶ Based on a recently passed regulation that is undergoing implementation hiccups.
- ▶ Deviations occurred from the submitted abstract, due to data unavailability – *the list of entities covered under surcharge are still not finalized.*
- ▶ Predictive analysis based on limited data and number of assumptions
- ▶ Presentation deals mostly on the policy aspects of using ad valorem tax versus taxing direct discharge

Industrial Effluent Discharge Scenario



- ▶ Around 90,000 m³ of industrial wastewater dumped every day
- ▶ Many factories have no ETPs, and a good number of factories do not make them operational
- ▶ ETPs have been established in only 812 manufacturing units (June 2014).
- ▶ Command & Control approach of regulations can't keep up with growing number of emitters

Environmental Surcharge Rules



Finance Minister during his budget speech for fiscal year 2014-2015

- ▶ Came as a surprise to many
- ▶ The intention is “to encourage the owners of the industries, which causes excessive pollution to the environment, to set up effluent treatment plants (ETP) and to make an endeavor to make them aware of the harmful effect of the environment”.
- ▶ To realize this intention, he proposed a “1 (one) percent ‘Environment Protection Surcharge’ or ‘Green Tax’ to be imposed on ad-valorem basis on all kinds of products manufactured in Bangladesh by the industries which pollute the environment.”



Environment Safety Surcharge Collection Rules, 2014



- ▶ Starts from 1st July 2014 for certain production facilities to be identified (clause 3 of 168-AIN/2014/713-Vat).
- ▶ The National Board of Revenue (NBR) has been assigned the authority to collect the surcharge
- ▶ The facilities will be identified by the Department of Environment (DoE), and it was initially estimated that 2500 industrial polluters will be covered under this surcharge
- ▶ The DoE will keep reviewing this list and add more factories if they find them to be non-compliant or drop existing ones if found to be compliant.

Current situation of surcharge collection

- ▶ Compiling a list of firms who will come under this surcharge rule has become a controversial process.
- ▶ First list compiled by DoE included names of 2,498 factories.
- ▶ Lobbying for exclusion from the list is also on-going, especially from export-oriented manufacturing units and the government is also not keen to tarnish the image of the industry
- ▶ As of December 2014, the draft list has 757 entities but it has not been gazetted and made public, and no collection has been made as list is not finalized

Methodology

- ▶ The study aims to explore whether a 1% surcharge is adequate for a listed firm to install and operate ETP.
- ▶ Since textile is the major industry in Bangladesh, the analysis was conducted based on survey of 20 factories of various production capacities.
- ▶ Value of produced goods (price) varies by product within a factory and was unavailable even though NBR can access it for VAT and other duties during L/C opening
- ▶ Annual revenue served as proxy for calculating surcharge
- ▶ The micro-economic options for an average textile factory was analyzed to compare the cost of installing an Effluent Treatment Plant (ETP), the cost of operating an ETP, and the surcharge itself.

Results

	Surcharge Amount (Tk.)	Cost of Operating an ETP (Tk.)	Cost of Installing a standard ETP (Tk.)
Weighted average of 20 factories	63,133,979	78,190,524.63	1,17,00,000.00 * *

- ▶ In case the facility has no ETP, the cost of installing one is significantly higher than average surcharge.
- ▶ The average cost of operating ETP significantly outweighs the average amount of surcharge imposed. To be articulate average cost of operating an ETP is actually 23.85% higher than surcharge amount.

Evaluating elements of the policy

What is making the policy difficult to implement?

- ▶ Relation with existing environmental standards

How are entities being listed or de-listed? Against what standard?

- ▶ Specificity

Policymakers are treating all sorts of pollution in the same manner.

- ▶ Coverage & efficacy

What percentage of adoption of ETP leads to lesser pollution?



Evaluating elements of the policy

What is making the policy difficult to implement?

▶ Linkage

Difficult to fathom the relationship between value of produced goods and their pollution load.

▶ No uniformity

Price of produced goods differs between different industries, different products and even different enterprises producing the same product. The marginal damage of a cheaper product can be higher than the damage of an expensive product.

▶ Jumping straight to the fee without reduction targets

Effects of pollution are space and time bound, and therefore the fee rate can only be determined if there is a reduction target.

Lessons Learned

Instead of concluding the study, it poses further questions for research -

- ▶ Who should impose & collect the surcharge?
- ▶ What should be the scope of a surcharge policy?
- ▶ Should the surcharge be on direct emissions or imposed indirectly through a good proxy?
- ▶ Can an environmental surcharge work without a daily load allowance discharge standard?

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