

Green national accounting in Bangladesh: Valuation of Subsoil Minerals using SEEA Framework

Green national accounting aims to incorporate natural resource depletion and pollution into national income accounts. The UN have designed the System of Environmental-Economic Accounting (SEEA) to facilitate the integration of environmental and economic statistics.

Approach

In a study supported by SANDEE¹, Dr Mahfuz Kabir, Acting Research Director at the Bangladesh Institute of International and Strategic Studies (BISS) in Dhaka, reviewed the three most important exhaustible natural resources in Bangladesh -natural gas, coal and hard rock. This is the first exercise of its kind in Bangladesh.



¹ Mahfuz Kabir (2017). Valuation of Subsoil Minerals: Application of SEEA for Bangladesh. *SANDEE Working Paper-124*.

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Author

Mahfuz Kabir


Coordinator

Neesha Pradhan

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The study applies the net present value method for natural resource accounting and prepared physical and monetary balance sheets for each of the three resources for the most recent accounting years.

Results –physical balance sheet

A physical balance sheet shows that the stock of natural gas in Bangladesh is gradually depleting due to high extraction and small discoveries during the period of FY11 and FY14. The reserve of coal shows a marginal declining trend mainly due to small annual extractions from one coal field, Barapukuria. Import from India contributes to keep the closing stock almost same level in the period under review. The reserve of hard rock has also been declining though there are fluctuations in annual extraction due to unpredictable domestic demand.

Results –monetary balance sheet

The share of GDP from subsoil minerals turns out to be much higher than that of traditional SNA. Contrary to popular perceptions, the stock value of coal is about eight times higher than that of natural gas. However, this does not take into account the pollution emitted by coal.

Recommendations

Green accounting is difficult for the developing countries like Bangladesh due to lack of sufficient and comprehensive data. It also requires extensive preparation. Nevertheless, it is important to understand the status of natural resources of the country and the long-term impact of the extortion of the natural resources. As a stepping stone, green accounting of a critical sub-sector or product that has profound implications on other sectors of the economy may be started. The current exercise also demonstrates that it could be replicated for renewable natural resources like forestry and fisheries.

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SANDEE | P.O. Box 8975, E.P.C 1056 | Kathmandu, Nepal
Street address: c/o ICIMOD, Khumaltar, Lalitpur, Nepal
Tel: 977 1 5003222, Fax: 977 1 5003299
Email: info@sandeeonline.org Website: www.sandeeonline.org