Proceedings

"Natural Resources, National Income and Planning in Bangladesh" 16 March 2016

Organised by

Bangladesh Institute of International and Strategic Studies (BIISS)

1/46, Old Elephant Road, Eskaton, Dhaka-1000



Bangladesh Institute of International and Strategic Studies (BIISS) with the support of South Asian Network for Development and Environmental Economics (SANDEE) organised a seminar on "Natural Resources, National Income and Planning in Bangladesh" on 16 March 2016 at the BIISS Auditorium. Mr. Muhammad Abdul Mannan, MP, honourable State Minister, Ministry of Planning and Finance, Government of the People's Republic of Bangladesh was the Chief Guest at the Seminar. Major General A K M Abdur Rahman, ndc, psc, Director General, BIISS chaired the seminar. Dr. Mahfuz Kabir, Senior Research Fellow, BIISS presented the keynote paper at the seminar on 'Valuation of Selected Subsoil Minerals in Bangladesh: Application of SEEA'. Scholars, academicians, policy makers, former and current government officials were present in the seminar and participated actively in the open discussion.

Address of Welcome

Major General A K M Abdur Rahman, ndc, psc, Director General, BIISS delivered the address of welcome. He said that energy is the prime ingredient for sustainable economic development of a country and economic development depends on effective management of natural resources. Bangladesh is an emerging economy of South Asia which has successfully maintained sustained economic growth of at least 6% over the last decade. This is creating growing demand of power every year.



He mentioned that though the main sources of energy in Bangladesh are natural gas and coal, at present the country almost solely depend on gas. However, Bangladesh government has drafted National Coal Policy 2010 to accelerate energy based growth and development of the country. Considering that coal will be the main fuel after 2015, government has finalised a plan to establish a number of coal-based power plants at Rampal, Matarbari, Maheshkhali and Payra with the financial assistance from India, Japan, China, Malaysia, South Korea and Singapore. He also mentioned about hard rock that has been discovered at Maddyapara in Dinajpur district by Geological Survey of Bangladesh (GSB). He commented that Bangladesh has a good potential for renewable energy also. He emphasised that national accounting measures of many countries tend to exclude "environment" and its distributional aspects. Because of this important omission, it is not possible to comprehend the impact of economic activities on environment. He suggested that a more environment-oriented policymaking without compromising the ongoing economic expansion in developing economies can be better conceptualized through Green National Accounting. Bangladesh also can apply this technique of national accounting.

Keynote Presentation

Dr. Mahfuz Kabir Senior Research Fellow, BIISS

In his presentation Dr. Mahfuz Kabir said that the traditional national income accounting is frequently criticized because Gross Domestic Product (GDP) is not a satisfactory measure of welfare. He stressed on quality of GDP. The GDP of a country may be big in monetary terms but in terms of quality it may be



poor due to environmental degradation. For example, the size of Chinese GDP is big but it is not of good quality due to severe environmental pollution. On the other hand though the size of GDP of Bhutan is small, its quality is good. In the traditional national income accounting, environmental factors are not accounted for and hence this way of GDP measurement has been heavily criticized in the last three decades.

He touched upon various methods of green accounting. He then described the System of Environmental-Economic Accounting (SEEA) Method and gave a short account of various methods of vaulation of minerals. He the elaborated the method of calculating depetion-adjusted resource rent and showed the resource rent of Bangladesh's gas, coal and hard rock calculated by him. According to his calculation, resource rent of both gas and coal of Bangladesh have risen over the period 2009 - 2014 but but the rate of increase is much higher for coal compared to gas. His calculation also showed that resource rent of hard rock has declided over the mentioned period.

He presented the physical and monetary asset account of the three most important non-renewable natural resources of Bangladesh namely natural gas, coal and hard rock by adopting SEEA, which has not yet been carried out in Bangladesh. He informed that in SEEA method, the monetary asset value of coal is about eighteen times higher than that of natural gas even though the latter is regarded as the most important subsoil mineral in Bangladesh. In the traditional method, contribution of natural resources including natural gas, coal and hard rock remain undervalued and there is a need for adopting SEEA for integrating environment and ecosystem services with the national income accounting of Bangladesh. The rate of GDP growth of Bangladesh would increase if SEEA is adopted in the system of national accounting.

Discussion on the Paper

Mr. Abul Kalam Azad

Director, National Accounting Wing Bangladesh Bureau of Statistics (BBS)

Mr. Abul Kalam Azad said that the method of calculating Gross Domestic Product (GDP) must have a global standard and that is why Bangladesh is following the standard method called System of National Accounts (SNA) formulated by United Nations Statistics Division (UNSD). The broad



objective of the SNA is to provide a comprehensive conceptual and accounting framework for compiling and reporting macroeconomic statistics for analyzing and evaluating the performance of an economy. Bangladesh Bureau of Statistics (BBS) is currently following the 2008 SNA,

which is an updated version of the 1993 SNA. The 2008 SNA addresses issues brought about by changes in the economic environment, advances in research methodology and the needs of users. BBS is working to shift from traditional GDP to Green GDP.

He agreed that System of Environmental-Economic Accounting (SEEA) provides a broadened framework for the SNA to incorporate environmental concerns in economic analysis. In SEEA, SNA aggregates are amended to treat natural resources as capital in the production of goods and services, record the cost of depletion and degradation of those resources and calculate the implicit transfers needed to account for the imputed cost and capital items. He noted that according to the calculation of Dr. Mahfuz, stock value of coal is higher than gas. He raised the question whether it would be so if the environmental damage caused by coal is incorporated in the valuation process.

He mentioned that many economic activities and large projects may not be allowed if the environmental losses for those projects are calculated and that is the main challenge to follow SEEA in national accounting system. That is why BBS is looking to the policy makers for the decision whether SEEA should be adopted in national accounting system. He informed that India once used SEEA method but later abandoned it. Australia did not publish the result after using SEEA in national accounting. He urged the audiences to come up with new ideas and suggestions to upgrade and update the activities of BBS.

Discussion on the Paper

Professor Dr Badrul Imam

Department of Geology, University of Dhaka

Professor Dr Badrul Imam said that years back, some vested interest groups propagated that Bangladesh is floating on natural gas. That it is not true is proven by now. Today we talk about gas shortage. However, at present another propaganda is going on



which says that Bangladesh will run out of natural gas very soon. This is also not true. There is possibility of getting a huge reserve of natural gas in the sea within the maritime boundary of Bangladesh which has not been explored yet. He informed that in developed countries, people are using advanced technologies to find unconventional gas pockets to extract natural gas. We have not yet used this technology. We are exphasising more on depletion rather exploration. It is very important to conduct fresh survey to explore new gas fields.

He said that when natural gas is depleted, coal is considered to be the alternative which has degrading effect on environment. In this perspective calculating GDP taking into account the environmental degradation is essential.

He commented that Bangladesh's present energy policy is coal based. The government of Bangladesh are undertaking different development initiatives with a view to produce 24,000 MW electricity by 2021 and 40,000 MW electricity by 2030 and many of these initiatives are coal based. At present Bangladesh extract only one million ton coal per year. If even half of the projected demand of electricity is to be produced by coal, the country will have to extract 60 million tons per year.

Then Professor Imam emphasised on the environmental aspect of coal mining and stated that environmental issues had been neglected in case of Boropukuria coal mine. The impact of coal mining is prevalent there. Land subsidence is occurring and water contamination is suspected as there is doubt about the extent of water purification done by the mines. He also shared his personal field experience on India's largest coal mine situated in Raniganj. He commented that environmental degradation is inevitable in case of coal based power plants. Those who claim that environmental degradation can be avoided while extracting and using coal are far from ground reality. While considering use of coal, people have to decide how much environmental degradation they will permit and this degradation should be taken into consideration in calculating GDP.

Professor Imam highlighted the issue of Rampal Power Plant and said that Rampal will destroy the Sundarbans. He emphasised on face to face deliberation between policy makers and environmentalist in this regard. He opined that it would be extremely disastrous for the country if we destroy the Sundarbans for the sake of 1320 MW power plant. He expressed his optimism about the success of Bangladesh's power generation after 10 years and hoped that Bangladesh can be compared with developed countries then.

Discussion on the Paper

Professor Dr. Rashed Al Mahmud Titumir

Department of Development Studies, University of Dhaka

Professor Dr. Rashed Al Mahmud Titumir said that Green Accounting is not only a theoretical or accounting issue or an issue of planning national economy but it is an issue which has strategic importance. In national income accounting a critical question is how to measure depletion and resource rent of natural resources into national income. If one country has mineral



resources of high value, then it will add value to GDP. Obviously GDP will be higher in that case. But if environmental depletion related to extraction of these resources is incorporated, the figure of GDP will not raise so much. In this regard we should be aware of "resource curse" of which Nigeria is a good example among many others.

He highlighted that measurement of GDP is an important issue because it can win support for or topple down a government. Reduction in inequality figure gives credibility to a government and increased inequality erodes its credibility. As a result, politics is also related with these measurements.

He observed that if any country is planning for future, for sustainable development or for intergenerational equity then environmental accounting is an important issue. India has done this but still there are problems at theoretical level as well as accounting level.

He expressed doubt about the authenticity of the statistics provided by Bangladesh Bureau of Statistics (BBS). He said that although BBS is supposed to be an autonomous body, it is often influenced by the politicians. He noted that it is not only a Bangladeshi phenomenon; rather it is an international phenomenon. He quotes Nobel Prize winner Angues Deaton who said "number is politics".

However, he hoped that ministry of energy and ministry of planning will take care of the issues discussed in the seminar because these are very important issues not only for the present generation but also for the future generation to come.

Open Discussion

Following the key note presentation and discussion of three panellists, a lively open discussion took place.

Ambassador Dr. Afsarul Qader commented that of the total gas used in Bangladesh, 46 per cent is well utilised and 54 per cent is wasted as heat resources. He further opined that one of the best uses of gas is CNG in transport sector. In 1990s Dhaka's air was too much polluted. If it continued, a good



number of people would have left Dhaka city by now. But government has taken a very good initiative by introducing CNG in Dhaka city. That helped the city to control its air pollution. That's why to withdraw CNG driven vehicle from Dhaka will not be reasonable.



Major General (retd.) AMSA Amin observed that corruption does not enter into calculation of GDP or NDP.

Dr. Narayan Chandra Nath raised a question on how to include depreciation and depletion into national accounting system. He commented that to avoid this calculation SNA is used worldwide. He suggested that BBS should find a procedure to bridge between SNA and SEEA.



In response to his question, **Dr. Mahfuz Kabir**, discussed three major issues regarding depletion and depreciation and how those issues can be incorporated to GDP. He said that, in case of natural resources the issue of depletion is more important than depreciation. Depletion in case of non-renewable resource is also very important. Then he highlighted the issue of Input Output (IO) table and Social



Accounting Matrix (SAM). According to him, now the SEEA in the central framework provides the outline of environmentally adjusted IO and SAM. In the SAM, there is a kind of satellite account. To obtain these numbers a comprehensive kind of survey is required. The SAM and IO can be constructed. The third very important issue is water valuation. Bangladesh is blessed with both underground and surface water. Now the government has the policy of giving emphasis on using surface water. But still the country does not have adequate number of prices for valuation of

both underground and surface water. Even though Bangladesh has the bottled water but it does not represent a price which can be transmitted into the national accounting system. These are some of the important issues that Bangladesh Bureau of Statistics can consider.



In response to the accusation that BBS's data is politicised, Mr. Abul Kalam Azad defended that it is not true. If that was the case, BBS would not have shown inflation figure of 12-13 per cent. He reminded that the GDP in an average figure of the country. He claimed that at present statistical system of Bangladesh is much improved than before. If anyone finds any mistake or any faulty information, he is welcomed to share it with BBS. He further informed that

BBS is following the international guideline of SNA (following the trend of 2004-2005) in determining the GDP of the Bangladesh. He also stated that to adopt SEEA, BBS needs technical support viz. working papers on how to do that. If academicians could provide such papers, it will be helpful for BBS.

Major General (Retd.) Jibon Kanai Das, former DG of BIISS stated that while doing any economic activity, there can be an environmental effect. It does not mean that the country should not do anything but rather it is needed to consider how to minimize or how to mitigate it. In regard to natural resources, he stated that Bangladesh has largest reserve of sub-soil water. And the country is using the sub-soil water for



drinking purpose. He wanted to know whether Bangladesh is taking the issue into consideration, in terms of accounting green GDP.



Sheikh Maksud Ali, former member of planning commission, commented that now-a-days people of even developed countries are more concerned about environment which is a problem for capitalism. He observed that in neoclassical economics, human show optimising behaviour, there is no place for *human being* in neoclassical economics.

He highlighted that we should include value in capitalism.

Professor Dr. Rashed Al Mahmud Titumir talked about Satellite Accounting and System of Environmental-Economic Accounting (SEEA). He noted that there are still series of problems in those systems. He also added that there remains a huge debatable issue of how to transform use value and exchange value.



Address of the Chief Guest



Mr. Muhammad Abdul Mannan, MP, Honourable State Minister, Ministry of Planning and Finance, Government of the People's Republic of Bangladesh delivered his speech as the Chief Guest of the Seminar. He said that a balance between development and environment protection is required as the government has promised the citizens to develop the country. It is the moral responsibility of the politicians to implement the promises given to the citizens of the country. There are many factors working along with the government to progress the development process in the country. In spite of having many problems the government is working for the development of the country and it needs support from all segments of the society to continue the progress. He mentioned that the people of Bangladesh is eating better, feeding better, dressing better and moving better and it would continue.

Concluding Remarks by the Chair



The Chair of the Seminar, **Major General A K M Abdur Rahman, ndc, psc** at the outset of his speech highlighted two things. He said that, decision making regarding use of natural resources like coal and gas in a country like Bangladesh is not an easy job. We often see lots of hue and cry from different segments of the society regarding government's decision on use of natural resources. He opined that coal is the only option we are left with in the future after natural gas. But there are lots of objections from the environmentalists that coal will damage environment. So it is not an easy job to take decisions.

Major General Rahman informed that at present only half million metric ton coal from Barapukuria is used to produce 250 MW of power. If we go for 10,000 MW from the same coal

mine, we need only 1,000 million metric ton coal. Thus, we can produce 10,000 MW of power for 50 years. But, it would be very difficult for the government to take any decision on that issue.

Major General Rahman observed that, we always say natural gas of Bangladesh is going to be depleted within 14 or 15 years. But now, there is a new hope. We have a huge gas reserve in our maritime boundary which has not been explored or discovered. There is pressure from the business for not using gas for domestic purposes. He informed that counties like Japan, Germany and Australia are producing 70-80 per cent of their energy from coal. China and India are still the highest users of coal in total energy production. But when the question of Bangladesh comes, many countries talk about the environmental degradation. Thus, there are international pressures as well as local pressure. So, in a country like Bangladesh, making a decision about this kind of issues is very challenging for the government.

He also supported Professor Imam's viewpoint of arranging discussion between policy makers and environmentalist regarding use of natural resources especially coal. He said that people who are speaking in favour of and people who are speaking against using coal need to sit together. There should be some platform where they can sit together and discuss those issues. Major General Rahman expressed his optimism to make BIISS a venue for such open discussion.