A ‘Green’ GDP

India plans to revise its GDP by taking into account the environmental fallout of economic activity.

Union Minister of State for Environment and Forests Jairam Ramesh recently announced that the government plans to release the first round of “green” gross domestic product (GDP) data for India by around 2015. While details on the methodology and data sources to be used in the proposed metric remain relatively sparse, the Central Statistical Organisation is reported to have started preparation of a national database to estimate the costs of environmental degradation associated with GDP growth.

The moment is overripe for calculating the negative impact of India’s growth. According to a “limited analysis” carried out by The Energy and Resources Institute (TERI) in its recent report, “Green India 2047”, eight lakh deaths and morbidity costs of up to 3.6% of GDP can be attributed every year to unclean air and water. TERI had earlier estimated that a reduction in timber value due to degradation of forests, depletion of water resources, shrinkage in agricultural productivity and health costs due to polluted water and air altogether cost India about 10% of its GDP in 1997. In another estimate, the Stern Review on the Economics of Climate Change of the United Kingdom had in 2007 stated that climate change will impose costs of 9% to 13% of GDP in India by 2100.

Thanks to the vagaries of conventional GDP calculation, not only do such environmental costs remain unincorporated in national output calculations, the output of economic activities that have such a negative impact is, in fact, computed as making a positive contribution to GDP. This is because GDP estimates do not include the costs of externalities from economic activity, except through the expenses incurred to cope with them. Thus, for example, a cement factory that emits lethal amounts of suspended particulate matter contributes to GDP through the net value of its production, but the costs of the asthma it induces in a child in its neighbourhood are only reflected in GDP through the fees paid to the local doctor and increased sales of steroid inhalers. From the perspective of GDP growth alone, therefore, cement sales and the suffering of the asthmatic child are both economic “gains”. Economic policies focusing on GDP indicators alone are thus prone to all kinds of wrong-headed reckoning.

These and the legion of other perversities that traditional national income accounts are heir to have been known to economists and statisticians from before the time these metrics were first introduced in post-Depression United States. Most recently, the Commission on the Measurement of Economic Performance and Social Progress (CMEPS), better known as the Stiglitz-Sen-Fitoussi report after its three chief authors, the economists Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi, advanced a comprehensive critique of such economic performance indicators, and made recommendations for developing alternatives. However, as the commission’s report argues, users of national income statistics, from policymakers to development economists to business journalists, are often blissfully unaware of GDP’s many limitations.

According to reports, India’s green GDP accounting exercise is expected to be based on an integrated environmental and economic accounting system developed by the United Nations Statistical Division as a satellite system to its System of National Accounts (SNA), which is the international statistical standard that guides national income accounting systems across the world. Comprising four kinds of environmental accounts, the System of Environmental and Economic Accounts (SEEA) 2003 is distinguished by the attention it pays to physical flow accounting, an aspect hitherto ignored in the SNA.

Although reports say that efforts are on in India to prepare a natural resource accounting (NRA) database with inputs from the states, it is unclear which elements this exercise will incorporate from the SEEA. Pilot studies have been undertaken for a number of states, including Goa, Karnataka, Tamil Nadu and Meghalaya, among others. Activists, social scientists and the media must also critically engage with the NRA to ensure that it is not derailed by vested interests in the polluting and extractive industries. There is a need to guard against the NRA becoming an academic exercise left to languish in forgotten corners of real or virtual libraries.

A cautionary tale exists in China’s much-heralded green GDP accounting exercise. After the publication of first-round 2004 estimates in 2006, China’s National Bureau of Statistics abruptly halted the exercise in 2007. The tab for environmental pollution in 2004 was put at 3.05% of China’s GDP, far below the expected 8-12% projected by international experts. In the blame game that followed between the coordinating agencies, it emerged that several key problems such as groundwater and soil contamination had been missed out in the calculations and others were underestimated. Soon after, the exercise was placed in indefinite abeyance citing technical difficulties. However, state officials whose incentive structure is linked to success in promoting GDP growth were known to have lobbied vehemently against the exercise. Indeed, some provinces found that by the new standards, they had scarcely grown over the previous two decades.

Given the political hazards of accounting exercises of this sort, civil society must ensure that India’s green GDP exercise does not go the way of China’s. It is a small step, but the initiative represents the only attempt to account for the costs that India’s growth inflicts on the quality of life.