The tree of life bears costly fruit

Pavan Sukhdev and Clement Feger say that India should take lead in implementing the Green GDP concept

Unpredicted events often make us open black boxes and sometimes challenge us to question what they contain. World economists were quick to estimate Japan’s economic losses following the earthquake and tsunami that ravaged the country on the 11th March. Ten days later, the World Bank claimed that these events would cost Japan up to $235 billion and that the archipelago may need up to five years to be rebuilt. People would be tempted to unquestioningly believe in these apparently authoritative, but rather optimistic, calculations.

However, something sounds rather disturbing. Japan has experienced one of the world’s most dramatic natural disasters, killing people, destroying infrastructures, disrupting supply chains and causing a nuclear catastrophe comparable to Chernobyl. Yet, Japan’s central bank and the World Bank believe that Japan may lose only one per cent of the GDP growth for 2011, will see a 2.9 per cent growth in fiscal 2012 due to reconstruction efforts, and is very likely to be just fine five years from now.

A popular joke says that a pessimist simply is an optimist who has been better informed. Confronted with the many images of Japan’s disaster visible on every media, anyone with an ounce of common sense would rather be a pessimist and look for the missing pieces of information that could make these economic predictions closer to the real dimensions of the catastrophe that the country is still experiencing.

This missing piece of information hides in what economists and accountants leave out when they usually measure national wealth and when they come up with predictive GDP growth scenarios. The current national accounting system is well developed when it comes to measuring the short-term effects of industrial infrastructural damage and their consequences on production.

However, the long term costs of a nuclear disaster on people’s health and the impact on communities and families of lost lives and livelihoods, as well as losses to the country’s precious marine and terrestrial ecosystems, fish stocks, agricultural soils and freshwater quality are left out. Indeed, if such information on Japan’s “natural and human capital” were visible in the country’s national wealth accounts, there is no doubt that the predictions of Japan’s central bank and the World Bank would have been less optimistic.

This rationale is not limited to catastrophic events and specific situations, but should in fact be applied to every country in their business-as-usual way to measure national wealth. India’s high GDP growth that reached more than eight per cent in 2010 is regarded as a very positive trend for the country’s well-being and as a good indicator that India will be increasingly able to lift its poor population out of misery. However, while the country’s GDP steadily increases, so is India’s loss of natural areas, its ecosystem degradation and the related problems of increasing freshwater scarcity, increasing soil erosion, declining water and soil quality and biodiversity losses.

Why does it matter and how is it related? Recent studies have shown that the national economies largely benefit from these “ecosystem services” that nature provides for free to society. A forest, for instance, provides economic services such as industrial infrastructural damage and their consequences on production.

One solution to this problem is Green Accounting, which consists in pricing these environmental assets and adjusting the national accounts in a way that they reflect their value. According to leading results in this field produced by the Green Accounting for Indian States Project set up by the Green Indian States Trust (GIST), every year, Indian forests...
facilitate groundwater recharge, prevents agricultural soil nutrient loss and avoid flood damages. And every year, India’s forest depletion leads to a partial loss of these services. In 2003, this loss was equivalent to 1.10 per cent of India’s GDP. The data can also be calculated by sector and by state and the results are astounding. For instance, water quality in Uttar Pradesh’s rivers is now so bad that restoring it would alone take off about 17.5 per cent from the state’s GDP.

By expanding the scope of what is measured as a constituent of national wealth to ecosystems, education, health and so on, Green Accounting gives some credibility to the definition of economics as the science of well-being, its measurement and its management. It can provide Indian policy makers with the additional information they need to be a bit less optimistic, but in the end, make the decisions that will further improve India’s development prospects while ensuring that enough money is also invested into the conservation of its environmental assets.

Green Accounting is already on India’s political agenda, as Jairam Ramesh, the Minister for Environment and Forests, has personally supported the implementation of a Green GDP, where he expresses the need to factor the use of natural resources in India’s economic growth estimates by 2015. If that happens, India would be among the first countries to officially implement such a Green Accounting framework. Furthermore, India has launched a nation-wide study – The Economics of Ecosystems and Biodiversity – aimed at accelerating the development of a new economy in which the values of natural capital are reflected in public and private decision-making. The first results of these initiatives should be available in October 2012, as India will host the eleventh Conference of Parties to the Convention on Biological Diversity, the most comprehensive international agreement that addresses the conservation and sustainable use of ecosystems.

India could, thus, lead the way towards the implementation of an international Green Accounting framework, one that may require important efforts to better understand the contribution of nature to our well-being, but that would eventually provide countries with the additional information needed to make more accurate economic predictions and sustainable development choices.

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