The world is reeling from two major crises, the financial/economic crisis and the crisis of climate change and ecological collapse. Both are a result of the same human error, a colossal misallocation of resources, financial capital in one case and natural capital on the other. A combination of counter-cyclical policies and time will eventually get us out of the financial mess. However, climate change and catastrophic environmental degradation threaten human civilization as we know it.

Many blame globalization and capitalism for the large-scale misallocation of resources. However, isolationism and socialism provide no alternative; we tried them for decades with disastrous results. A market-based system is clearly more efficient. The problem is not with the tools of capitalism but the failure to define its goals. The power of the markets is being harnessed to maximize the wrong paradigm.

The most commonly used paradigm for measuring human progress is provided by national income accounts and, more specifically, gross domestic product (GDP). Virtually all economic policy-making is oriented directly or indirectly towards maximizing GDP growth. It is so ubiquitous that people forget it is an entirely artificial construct created in the 1940s as part of the war effort.

Of course, rulers from ancient times have kept some record of economic activity for taxation purposes. National accounts as we know them were created during World War II by Richard Stone and James Meade, with support from John Maynard Keynes, as a way to keep track of war-time economic activity. Given the circumstances, their framework was necessarily ‘industrial’ in its essence, without space for niceties like environmental degradation and socio-demographic developments.

Post-war, this framework was adapted to create the GDP number now used. Unfortunately, the system remains an arbitrary way to measure value creation, especially in areas relating to externalities and natural capital. For instance, if we cut down a pristine rain forest we are destroying value in terms of biodiversity, watersheds, carbon sequestration, flood control, non-timber forest produce and so on. Yet, in the current system, destruction of value will show up as GDP growth from logging!

This does not mean the creators of GDP were unaware of its limitations. In his Nobel Memorial Lecture in 1984, Richard Stone stated, “The three pillars on which analysis of...
society ought to rest are studies of economic, socio-demographic and environmental phenomena.” He added that his work had focused mostly on economic accounting and he had not spent much time on environmental accounting even though “environmental issues, such as pollution, land use and non-renewable resources offer plenty of scope for accounting”. In short, the creators of GDP thought of it as work-in-progress. Unfortunately, the world has continued to focus much of its energy on maximizing an incomplete and out-of-date paradigm.

There are ways to adjust for the shortcomings of GDP. One is to create additional matrices for measuring progress. The Human Development Index and Carbon Footprint are concepts that can be used to enhance the raw GDP approach. Unfortunately, they have failed to gain a serious following beyond the world of activists and conferences because these measures lack the simplicity of a single GDP number.

The only real alternative then is to recalibrate GDP itself to reflect genuine value generation. This can be done by assigning monetary values to things like water pollution, deforestation, land degradation and other changes in the stock of natural capital. Similar adjustments can be made to account for changes in human capital stock (health, education etc). The result would be a new GDP number more closely reflecting true value generated by various human activities.

This approach has many advantages. First, GDP is understood by policy-makers and the general public. It's a single number simple to grasp and apply. The new GDP number would merely replace the current measure. Once national income incorporates these changes, the ‘development’ versus ‘environment’ debate will narrow.

Second, we have a whole range of tools and methodologies to value natural/human capital. These had not been developed when GDP was originally conceived. Incorporation of the new techniques will allow us to seamlessly adjust existing national accounts. Studies by the Green Accounting for Indian States Project have already demonstrated that it is possible to make these adjustments even for a large, complex developing country like India. The data can be calculated by sector and by state. The results are astounding. For instance, water quality in Uttar Pradesh's rivers is now so bad, it would alone take off 17.5 per cent from the state's GDP.

Third, all policy-making is about trade-offs. Often these are difficult trade-offs that compare apples with oranges: the benefits of building a dam versus those of retaining an existing forest or settlement. By assigning monetary values to creation/depletion of natural and human capital, the new GDP framework can effectively 'internalise' various externalities. For instance, it allows us to work out who compensates whom and by how much. In turn, this will allow for far more informed public debate.
GDP is not a God-given measure of development. The existing model of national accounts came out of World War II. There is every reason we should update it. When we say GDP grew by 8 per cent, we should really mean that we added 8 per cent more value.

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