

General welfare measurement and specific green economy metrics

Talking Points at the Inaugural Conference of the Green Growth Knowledge Platform
Mexico City, 12-13 January 2012

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Importance of measurement: measurement is to know how we are doing and how we could do better. A familia example is the measurement of our health status. This can be done at our annual physical checkup or when we go see a doctor for a specific complaint. Extending this to policy, measurement is to let us know how we are doing in the health of our economies, social relations, and the environment in general or as consequences from specific policy interventions.

Welfare measurement: The effort to measure welfare, well-being or wealth has been going on for a long time independent from the recent global green economy movement. We more or less know the kinds of things that are meant to be covered in this measurement. The related indicators generally show the state of things at a given point in time. They are typically presented without having to connect with the factors that might have given rise to the state of affairs expressed by the indicators. The connection is left to analysts to find out. The indicators are similar to those on one's medical report from an annual physical checkup. One does not necessarily have to have any specific complaint when going for a checkup. Even when one does, the range of indicators tested is usually broader than what is needed to address the complaints. These comprehensive indicators are typically generated in laboratories, not your family physician's clinic.

Green economy metrics

- a. In a green economy context, we usually start with known problems such as climate change, loss of biodiversity, poverty, unemployment, etc. and a green economy implies a shift in public policy in response to the problems. The shift may include, for example, increasing public spending on R&D, redirecting public investment to green and inclusive activities, leveraging private capital, reforming perverse subsidies, charging a carbon price, issuing and enforcing emission standards, removing barriers to trade in environmental goods and services (EGS), greening public procurement, banning the use of plastic bags, etc. There could be green economy "input" indicators to show such interventions, similar to the dosages of the medicines taken for known illnesses.
- b. Policy interventions lead to some intermediate results, such as the amount of private capital redirected to green activities, the number of patents in clean technologies, the length of railways, the number of rural households using improved stoves, etc. There could be indicators that show these intermediate results from policy interventions. They do not necessarily show the ultimate effects from taking the medication.
- c. Ultimately, we are interested in the sustainable development outcomes of green economy interventions, per the agenda of Rio+20. Although policy interventions have dynamic interactions across economic, social, and environmental domains, the green economy "outcome" indicators can be discrete and specific. These are similar to the specific health indicators used for the initial diagnosis and for measuring progress after the prescribed medication has been followed. Many of these indicators may be generated in your physician's clinic, but some may have to done in laboratories, depending on the illnesses.

Three sets of outcome indicators

- a. Economic: changes to GDP, including the value added of EGS per statistical standards provided by the System of Environmental-Economic Accounts, but also more, because the clean technology that comes with the EGS has economy-wide effects; changes to employment including the creation of green jobs; effects on the general price level; effects on fiscal balance; and effects on balance of payments (driven by related changes to trade and capital flow).
- b. Environmental: changes to aggregates such as carbon emissions, particular matters, the earth's biophysical capacity expressed through, for example, ecological footprint, as a result of green economy policy interventions across sectors; and sector specific indicators such as stocks of natural resources such as water, forests, and fisheries, amount of waste recycled, reused or remanufactured, and energy/material/resource efficiency indicators.
- c. Social: aggregate social indicators such as the level of educational and health services could be relevant if social policy interventions are considered and included as part of the green economy policy interventions. Otherwise, they can be covered under the effort to measure welfare generally. The remaining social indicators that are connected with green economy policy interventions may include poor people's access to critical resources such as clean/renewable energy, water, and sanitation, food security, reduced health risks, decent work conditions in affected sectors, all of these with gender differentiation as appropriate and feasible.

Challenges: There is a general confusion between the broad measure of welfare and the specific measurement of green economy policy interventions. A distinction is therefore needed, even though some overlaps between the two need to be recognized and made consistent. When the focus is on measuring specific green economy policy interventions, the challenge is the generally inadequate national capacity to follow related international standards, collect related data, and conduct related analyses. A priority for GGKP could be to support national efforts to measure specific green economy policy interventions with a strong component of strengthening national statistical and analytical capacity.