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Economic picture doesn't include environmental costs

The gross national product has become the national and international yardstick of economic welfare. We use the GNP to evaluate our nation's economic well-being, and our economic policies are designed to increase the GNP. International planners often use GNP as a guide to decide which foreign aid projects should be funded.

Despite its importance, the GNP has some glaring and dangerous shortcomings. Originally devised during World War II to assess a country's potential for manufacturing war materials, the GNP only indicates present economic activity. It does not indicate the potential for continued economic prosperity.

GNP is especially deceptive as an economic measure because it does not account for ecological losses. "The accounting methods used to produce GNP ignore the destruction of forests, soil, water supplies and other natural assets," wrote Sandra Postel of the Worldwatch Institute. "A country can be on the brink of ecological bankruptcy and still register GNP growth and thus appear to be making progress."

Ecological losses come back to haunt us, usually in the form of lost economic activity. For example, when highly erodible land is farmed, only the price of the harvest is calculated into GNP. The loss of topsoil and the associated loss of future productivity of the land is not entered

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into the GNP equation. The same is true for unsustainable logging; while the price of the lumber is added to the GNP, the loss of soil and wildlife is not subtracted from GNP.

An important regional example is the loss of tourism potential in the lead mining areas of southeastern Missouri. Although mining generates economic activity for a short time, the hazardous tailings left behind afterward destroy the area's future tourism potential. Environmental costs are real costs, whether they are accounted for or not.

The United Nations has developed its own index of welfare — the Human Development Index, or HDI. Rated on a scale of 0 to 1, this index contains three factors: gross domestic product, adjusted for purchasing power; the adult literacy rate; and life expectancy.

The HDI also accounts for the distribution of wealth within a nation. "In Sri Lanka, for instance, while per capital GDP is only \$2,053, the HDI is 0.79. But in Brazil, where GDP is twice as high, the HDI is 0.78, slightly lower," noted Lester Brown, also of the Worldwatch Institute. "This is because wealth is rather evenly distributed in Sri Lanka, whereas in Brazil it is largely concentrated among the wealthiest one-fifth of the population."

Thus HDI is a much better method for assessing average quality of life. However, like the GNP, it doesn't account for environmental losses.

The Index of Sustainable Economic Welfare, or ISEW, is a comprehensive economic measure that accounts for ecological losses in addition to distribution of wealth and productivity.

Developed by Herman Daly and John Cobb, the ISEW calculation factors in environmental costs of production, such as air and water pollution, depletion of non-renewable resources, soil erosion, loss of wetlands and ozone depletion.

The ISEW for the United States peaked in 1979 and has been declining ever since, while U.S. GNP continues to rise. "Economic welfare has been deteriorating for a decade," wrote Daly and Cobb, "largely as a result of a growing income inequality, the exhaustion of resources and the failure to invest adequately to sustain the economy of the future."

Unfortunately, the data required to calculate ISEW is available for only a few countries. For example, most developing countries do not collect comprehensive data on air and water pollution or topsoil loss.

It is clear that we must begin to factor ecological losses into our economic picture. As congresswoman Claudine Schneider put it, "Destroying or deteriorating the quality of our air, water, soils, forests and other natural resources will exact huge costs sooner or later ... we are borrowing from tomorrow's environmental bank accounts."

If you have a suggestion for a column, a gripe, a success story or whatever, write it down and send it to me, care of the Columbia Daily Tribune, PO Box 798, Columbia, Mo., 65205.