About SEEA

The System of Environmental-Economic Accounting (SEEA) is a satellite system of the United Nations System of National Accounts (SNA) used for compiling statistics linking environmental statistics to economic statistics.

It allows for the analysis of different patterns of sustainable production and consumption, as well as the economic consequences of maintaining a certain environmental standard.

Parts

The **SEEA-CF** describes the interactions between the environment and the economy, as well as the stocks of environmental assets.

The **SEEA Applications & Extensions** contains various monitoring and analytical approaches that the SEEA can be used to inform policy analysis.

The **SEEA-EEA** describes the measurement of ecosystems in physical terms, and the valuation of ecosystems.

Scope

Flows of materials and energy

This refers to the flows of materials and energy through the economy, e.g., fuels, natural resources, chemicals, including emissions (air emissions, water pollution or waste).

Environmental and economic statistics

This includes investments and expenditures in the area of environmental protection, environmental-related subsidies and taxes, and environmental-related employment.

Stocks of natural resources

These accounts deal with the monetary valuation of natural resources, the physical quantities and the qualitative aspects that do not have any market monetary value, e.g., the value of outdoor recreation and biodiversity.

Relevance

The SEEA can provide **summary information** that can be applied to issues and areas that are the focus of policy decision-makers.

Detailed information from the SEEA can be used for a richer understanding of policy issues

The data contained in SEEA **can be used to assess** national and international economic environmental effects of different policy scenarios within a country, between countries and at a global level

Policy Applications

The accounts produced from the SEEA can produce indicators which are instruments to relay information to policy-decision makers. Below are some of the indicators that contribute to informed policymaking:

Volume of Natural Capital

This concerns the physical stocks of environmental resources. Monitoring of these stocks is important for the valuation of these assets and determination of sustainable production and consumption

Value of Natural Capital

This can be added over all resources to provide with an indicator of the total natural capital in the country. This indicator may be compared to the value of the country's manufactured capital.

Total Capital Manufactured and Natural Capital

The total value of capital, both manufactured and natural, gives an indicator of the state of the country's wealth. This is helpful to policy-making as economic sustainability requires that national wealth should not be decreasing over time.

Shares of Natural and Manufactured Capital Over Time

Comparison of natural and manufactured wealth is also vital not only in determining *total wealth*, but also in indicating the *diversity of wealth*--a feature important for economies dependent on sensitive commodities.

Value of Rent Generated

The recovery of resource rent is necessary for a more equitable and sustainable use of resources. Some of the critical policy issues concerned include how much rent is generated, is it able to promote sustainability, and are there other objectives like equity and employment creation.

Rent Recovered through Taxes

The principle of resource rent for extractive industries, like forestry and mining, means that taxes must cover the full economic rent and that it should be reinvested in activities promoting sustainable development.

Subsystems

To elaborate on specific vital sectors, the SEEA has four subsystems. These are:

SEEA Energy (SEEA-E)

This subsystem of the SEEA is still under development. It aims to provide agreed concepts, definitions, classifications, tables, and accounts for energy and energy-related air emission accounts

SEEA Water

SEEA-Water is similar to the SEEA-E, and elaborates the guidance on accounting in the International Recommendation for Water Statistics (IRWS)

Land & Ecosystems

This provides for the better understanding of the provision of market and non-market goods by ecosystems and what attributes of the ecosystems are crucial for maintaining the flows of these goods and services.

Agriculture, Forestry and Fisheries

The SEEA-Agriculture is a statistical system that enables the description and analysis of the relationship between the environment and the economic activities of agriculture, forestry and fisheries.

Philippines and the SEEA

In the Philippines, the SEEA framework has been utilized in effort to monitor the country's bountiful resources and contribute to informed policy decision-making concerning the environment. The following are the main efforts that use the SEEA framework:

PEENRA

The Philippine Economic-Environmental and Natural Resources Accounting (PEENRA) utilizes the SEEA for the compilation of vital environmental statistics. It has produced the Compendium of Philippine Environmental Statistics (CPES) and other publications on the state of the country's water, land and soil resources.

WAVES

The Wealth Accounting and Valuation of Ecosystem Services (WAVES) is an initiative of the World Bank. It focuses on the country's mineral resources– specifically: gold, nickel, chromium, and copper. Presently, the project also aims to evaluate the ecosystem services in Laguna Lake and Southern Palawan.

Sources:

Lange, G. M. (1999) *Policy uses of the PSEEA. Draft*

PEENRA in the Philippine Statistics Authority website *(https://psa.gov.ph/peenra/about/framework)*

System of Environmental-Economic Accounting-Central Framework. 2012

SEEA in United Nations Statistics Division website *(http://unstats.un.org/unsd/envaccounting/seea.asp)*

SEEA in Wikipedia *(https://en.wikipedia.org/wiki/System_of_Integrated_Environmental_and_Economic_Accounting)*

WAVES-Philippines *(https://www.wavespartnership.org/en/philippines)*