

ENRA Sub-Programme

Accomplishment Report (1995 - 1997)

The implementation of the ENRA Subprogramme involved a step by step process taking into account the priority environmental concerns and the availability of data. The following presents the major outputs of the ENRA Subprogramme:

1. PSEEA framework and procedures established and operationalized

1.1. Operational Framework for PSEEA Developed

The Subprogramme adapted the UN System of Integrated Economic and Environmental Accounts (SEEA) framework to the Philippine setting. An operational framework, specifically for the Philippines, was developed taking into account the country's priority resource and environmental concerns. The operational framework, which was finalized after consultation with concerned environmental agencies, covered the compilation of:

(a) the asset account which shows the available stock of the country's resources and the changes that affect these resources;(b) the production account which integrates the cost of using the environment by the different economic sectors (i.e. agriculture, manufacturing, etc.) and

(c) the estimates of environmental protection costs borne by both the government and the private sectors.

1.2. Satellite ENRA in the System of National Accounts Piloted

The PSEEA compilation covering the five resources namely: fishery, forest, minerals, land/soil and water as well as selected economic activities in agriculture, fishery, forestry, mining, manufacturing, electricity and transport were completed. Given the resulting estimates on resource depletion and environmental cost of degradation caused by the different economic activities, the Net Domestic Product (NDP) which is Gross Domestic Product (GDP) less Depreciation was adjusted to arrive at an indicator of Environmentally Adjusted Net Domestic Product (EDP). Two concepts were used in integrating ENRA into the conventional accounts - the EDP_1 and the EDP_2 . The EDP_1 is computed by deducting the estimated resource depletion from the conventional NDP while the EDP_2 is computed by deducting from the EDP_1 the estimated environmental cost of degradation. The initial EDP estimates, which covered the period 1988 to 1994, the depletion of five resources and the cost of degradation due to selected economic activities.

1.3. ENRA System Piloted in Region VII

Region VII served as the pilot region of the ENRA Subprogramme to test the feasibility of operationalizing the PSEEA at the subnational level. The ENRA regional unit was established in the DENR and NEDA at Region VII. The sectoral TWG's were created which facilitated the compilation of the ENR Accounts covering four (4) resources namely: fishery, forest, minerals and land/soil and selected economic activities in agriculture, manufacturing and electricity. The estimation methodologies adopted were patterned from the national ENRA. The expected outputs were completed but still have to be presented to the Regional Steering Committee and others in the region for comments.

2. Capacity of the GO Personnel on the Compilation of the PSEEA Enhanced and Strengthened

The NSCB technical staff and ENRA TWG members from other agencies were trained on SNA, SEEA and other environment related topics conducted locally and abroad. The NSCB staff also participated in ENRA training courses abroad, specifically on:

- (a) Planning for Sustainable Development in Bangkok, Thailand;
- (b) Different Approaches of ENRA in Tokyo, Japan; and
- (c) Environmentally Sustainable Development Planning in Mumbai, India. In addition, a total of 25 NSCB project staff and almost 30 ENRA TWG members were locally trained on SNA and SEEA concepts and framework, environmental economics and ENRA valuation.

On the job training courses in the compilation of the asset accounts and the estimation of degradation of the different economic activities were also conducted particularly for the NSCB staff as compiler of the PSEEA.

3. PSEEA Information System Developed and Operationalized

3.1. ENRA Database Client/Server Installed

The ENRA Database, which facilitates the access and processing of ENRA data and the compilation of the ENRA, was installed. One Systems Analyst and one Database Administrator were hired full-time to develop the ENRA Information System. Accompanying hardware and software were also provided to fully install and operationalize the ENRA database.

3.2. ENRA Database System Operationalized

The ENRA Database was operationalized after the necessary hardware and software was installed at the NSCB. The System User's Manual on ENRA Database was also completed and presented to sectoral TWG's to solicit comments to improve the database. On the job training of the NSCB staff as compiler of the PSEEA was also done to provide the staff with the details on how to compile the ENRA using the computerized database.

4. PSEEA Procedures and Processes Documented

4.1. Sectoral Resource Accounts and Economic Activities Documented

Documentation on the ENRA compilation started with the write-up on the series of data assessment workshops wherein individual data assessment reports were proposed for each resource and economic activity. The documentation of the sectoral sources of data and estimation methodologies was done simultaneously with the sectoral estimation. An initial publication on "The Case Study on Fishery, Forest and Mineral Resources: A Compilation of Natural Resources in the Philippines" was published and disseminated in December 1996. Two other ENRA publications which are scheduled for release in June 1998 will include: a publication which will contain the technical reports for five resources covered and another publication which will contain the individual technical reports for the economic activities.

4.2. PSEEA Results Presented & Disseminated

Several presentations of the PSEEA results including the methodologies adopted were undertaken both in local and foreign fora. These presentations were aimed at disseminating the ENRA results as well as to solicit comments for the improvement of the estimates and methodologies. In international fora, PSEEA results were presented and disseminated in the following venues:

1. International Symposium on Integrated Environmental and Economic Accounting, March 5-8, 1996, Tokyo, Japan
Tenth Statistics Commission Meeting, March 1996, Bangkok, Thailand
Training on Environmental Accounting, April 29-May 17, 1996, UN University, Institute of Advanced Studies, Tokyo, Japan
Seminar on Environmental and Economic Accounting, May 1996, Tower Hotel, Seoul, Korea
International Training Course on Environmentally Sustainable Development for Asia-Pacific Region, April 7-18, 1997, Mumbai, India
2. Presentation to the Association of Senior Officials on Environment (ASOEN), September 9, 1997, Plantation Bay, Cebu City, Philippines

At the local level, PSEEA results were presented to data producers, possible users of PSEEA results, experts on environmental accounting, technical experts on sectoral resources/economic activities as well as members of the Steering Committee of the Philippine Council for Sustainable Development (PCSD).

4.3. Manual on the Sources and Methods Prepared

The preparation of a separate publication on the Manual on the Sources and Methods (MSM) for the PSEEA compilation is still on-going and will be finalized at the end of 1998. This manual documents the detailed sources of data, the estimation methodologies adopted and parameters used. For the meantime that this manual is not yet available, the documentation of the sectoral data sources and methods are provided in the individual technical report for each resource and economic activity. ENRA Writeshops conducted in September 1996 and in December 1997 was done by the NSCB to facilitate the documentation of the sectoral sources and methods for the technical reports.

4.4. Integrated PSEEA Report

An integrated PSEEA Report will be prepared to integrate the asset account of five resources and the economic activities. This report will incorporate some of the sectoral recommendations by the consultants and technical experts during the Presentation of the PSEEA Results conducted last January 15 to 16, 1998. This is expected to be completed by December 1998.

5. Use and Applications of PSEEA Identified

A Seminar Workshop on the Use and Applications of PSEEA was conducted last January 15 to 16, 1998 by Dr. Peter Bartelmus, ENRA Foreign Consultant from the UNDP. Participants to the workshop were data producers, possible users of PSEEA results, local experts on environmental accounting and members of ENRA TWG's. A paper entitled "Green Accounting for a Sustainable Economy - Policy Use and Analysis of Environmental Accounts in the Philippines" was also presented. In the said workshop, the comprehensive PSEEA results were also presented.