

THE DEVELOPMENT OF THE INDONESIA STATISTICAL DATA ON ENVIRONMENT: A Country Report

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I. Introduction

Economic development despites spur the economic growth and promote quality of life, it also includes the decrease of the environment quality. Industrialization has exploited some natural resources to supply raw materials. Other than that, industrialization also produced pollutant for air and water which decreasing quality of life. Even though optimal management of environment has been applied, the global climate change may influence the quality of environment.

Indonesia is the rich endowment country with many various resources and minerals mining potential. Oil and gas were dominated Indonesian economy, but now this country reached net-oil importer. Thousands of islands, marine and coastal, cover most natural resources that are potentially used as raw materials for economic activity. Forestry is also a significant resource in Indonesia. However, some of them have not been maintained properly, few of them suffer serious damage.

Some of the natural resources have been exploited, and some other remains in the earth as wealth of nature. In terms of the Gross Domestic Products (GDP), the exploitation of natural resources absolutely increased the magnitude of the economy. However, it was not easy to separate the negative impact possibility of environment degradation.

Coal mining in some part of Indonesia, mainly in South Kalimantan and East Kalimantan, pushed the GDP through exports, but there will be air pollution and the deterioration of road quality that needed by people as means of transportation.

Considering the concept of economy, exploitation of natural resources should increase value added which significant additional component factors for the GDP. However, it also caused some environment degradation. An optimal point should be reached. To achieve the point, statistical data of environmental management should be produced.

The Inter-Secretariat Working Group on National Account: The United Nations and in collaboration with International Monetary Fund, the World Bank, Organization for Economic Co-operation and Development, and Commission of the European Communities – Eurostat have constructed a System of National Accounts 1993, and also the latest-system version has been issued. In the national accounting system, the environment account has been included. In terms of sustainable development, the calculation of GDP should include the depletion of environment as the cost of the development. When the depletion and the degradation of environment were calculated as the subtraction of the “brown

GDP”, it is equal “Green GDP” or Environmentally Adjusted Domestic Product (EDP) or Net Domestic Product 2 (NDP-2).

The problem to construct Green GDP is the available data source and also the valuation. Even though as if a static data, natural resources data is actually very dynamic. The new invention of a natural resource should be included to existing resources. On the other hand, the calculation of the depletion is not that simple, and the stock data is not simple to be estimated.

II. Statistical Data

BPS–Statistics Indonesia has been trying to compile environmental data from various surveys conducted by BPS, and other related institutions. In 2008, BPS has been released three publications, and one study for concept development of Environment Quality Index, such as:

1. Indicators of Sustainable Development 2008
2. Statistics of Marine and Coastal Resources 2008
3. Environmental Statistics of Indonesia 2008
4. A study of Environment Quality Index

Indicators of Sustainable Development 2008

The Indicators of Sustainable Development 2008 is the fifth similar publication published by BPS-Statistics Indonesia since 2002. Indicators which is presented in the publication based on an *Indicator of Sustainable Development* 3rd edition (2007) by UN Department of Economic and Social Affairs (DESA).. However, the indicators remain on the environment aspect.

It is expected that the 2008 publication can be used both by the central or local government for planning, monitoring, and evaluating sustainable development in Indonesia. It is also expected that the publication can be useful for students and researcher who is interested on environment issues in giving input to the government for their policies and development programs.

Statistics of Marine and Coastal Resources 2008

The Statistics of Marine and Coastal Resources is the compilation of primary and secondary data collected by BPS-Statistics Indonesia and related to central/regional institutions having data associated with marine and coastal resources. It is the fourth publication, following the framework developed by the Ministry of Marine Affairs and Fisheries on Academic Document Coastal Region Management and the need of the 2004-2009 Mid-Term National Development Plan.

The publication covers current picture of marine and coastal condition of Indonesia. It is expected that the publication can be used as source of information for the planners, researchers, academicians, and others to manage and to develop better and sustainable marine and coastal area.

Environmental Statistics of Indonesia 2008

The Environmental Statistics of Indonesia is published based on A *Framework for the Development of Environment Statistics (FDES)*-UNEP in

accordance with Indonesia environment data condition. Divided by Natural Environment, Man-made Environment, and Social Environment..

The publication covers pressure, impact, and response from each environment division above. Thus, it is expected that the publication can be used as a source of information either for planners or researchers.

Index of Quality Environment

To study what is the quality of environment in a certain region, data and information are needed. It will be serially and spatially compared. The serially comparison shows us that there is an increase or the decrease of environment quality, while spatially comparison pointed us the quality comparison of environment among places.

In line with the need of quality environment information, BPS-Statistics Indonesia is trying to construct the Index of Quality Environment (IQE), and in the first publication the information comprise the environment condition of the 30 provincial capital cities. The capital city of Riau Archipelago, West Sulawesi (Celebes), and West Papua are not included yet. Those are the provinces in Indonesia, but the data were not available yet.

The last three provinces are “the new” provinces established in 2001 as a result of decentralization era.

III. Statistical Information -- SEEA

The comprehensive environmental data – including social and economic affairs – are really rare, due to the reasons that have been mentioned above. However, BPS-Statistics Indonesia always develop various studies referring the supply of environmental information. In terms of economic GDP statistic, BPS has developed studies, especially in Satellite System for Integrated Environmental and Economic Accounting (SEEA).

The construction of SEEA is absolutely referred to Chapter 21 Part D from the United Nations, the System of National Accounts (SNA) 1993. It comprised the framework of basic accounts, human-made and natural resources, economic and non-economic effected to the stock of resources, and also the relation to GDP constructions. When the account is constructed completely, it can be detected the effects of the environmental degradation to the whole economy.

In the reality, not all natural resources and its degradation quality factors can be calculated because of available data.

In the case of Indonesia, BPS has already constructed the depletion for some mining commodities and forestry but it does not take into account the environmental degradation. Other institution, i.e Ministry of Planning, once to study environmental degradation but the result is still very preliminary and unpublished.

IV. The Initiation for Providing Environmental Data

The availability of environmentally data is inevitable to support the analysis in terms of avoiding negative impact of mismanage environment. Mismanagement of environment could cause socially and economic loses.

Considering the importance environmental management, statistical data are very urgent to be supplied. Indicators of Sustainable Development 2008, Statistics of Marine and Coastal Resources 2008, and the Index of Quality Environment are publications those initiating the supply of environmental data.

By conducting other surveys and scrutinized some other secondary data, BPS-Statistics Indonesia pushed the availability of environmental data.

V. The Goal Which Will be Achieved

Applying the principle of official statistics, BPS-Statistics Indonesia elaborates internally as well as externally data to support environmental analysis. In terms of economic, this institution really wants to produce a complete Green GDP with all condition satellite accounts. The institution is also really wants to serve socially data of environment. With both, socially and economic – quantitative and qualitative data, BPS has obsession to serve comprehensive environmental data.

VI. Conclusion

Some conclusion in the environmental data support can be mentioned as follows.

1. The availability of environmental data is inevitable.
2. Until now, the availability of environmental data is not really complete.
3. BPS-Statistics Indonesia is willing to take active participation in collaboration with other institutions in relation to support environmental data. The 10-Fundamental Principle of Official Statistics should be applied to compile various data from various sources.
4. SEEA may be completed to support national economists in analyzing environment in relation to the economic growth.

VII. Recommendation

The comprehensive environmental data should be compiled not only by BPS, but also by other institution to apply 10-Fundamental Principles of Official Statistics.

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