SISNERLING INDONESIA:
A Glimpse of Environmental-Economic Compilation in Indonesia

By: Etjih Tasriah

Head of Sub-directorate, Regional Production Account Consolidation.
Directorate of Production Accounts. BPS – Statistics Indonesia

BPS-Statistics Indonesia has started compiling natural resources accounts since 1990’s, which is called Integrated System of Environmental-Economic Accounts (SISNERLING). It covers the asset accounts of timber, energy and mineral resources.

In order to broaden the coverage of SISNERLING, Indonesia had been selected as one of pilot countries for compiling SEEA for Agriculture, Forestry, and Fisheries (SEEA-AFF) in 2014-2015. In December 2015, WAVES program concept for Indonesia was approved by World Bank.

The implementation of SEEA-CF in Sisnerling Indonesia began in 2016. At that time, BPS-Statistics Indonesia managed to compile land accounts for Sumatera after learning from Australian Bureau of Statistics (ABS). BPS-Statistics Indonesia also published a book entitled “Green Economy” which contained the results of indepth study in 17 provinces regarding Environmental Protection Expenditure Accounts (EPEA) and Environmental Goods and Services Sectors (EGSS).

The indepth study for Green Economy in the remaining 17 provinces continued in 2017. The coverage of land accounts was also extended to all of Indonesian area. In the same year, BPS-Statistics Indonesia started to compile flow accounts. With the technical assistance from UNSD, BPS-Statistics Indonesia has managed to compile physical flow accounts for energy and air emission.

Currently, SISNERLING Indonesia already covers asset accounts for land, energy and mineral resources, and timber resources. While the land accounts was only available in physical terms, the energy and mineral accounts as well as timber
resources was presented in both physical and monetary terms. The publication also includes the calculation of depletion-adjusted net domestic products as a proxy for Green GDP or environmentally adjusted GDP.

There are three ministries in Indonesia which have strong relationship with SEEA in terms of policy-making. These ministries are Ministry of National Development Planning, Ministry of Finance, and Ministry of Environment and Forestry.

At the moment, Ministry of National Development Planning is developing the next National Medium Term Development Plan (RPJMN) of Indonesia for 2020-2024. The mission is to make the RPJMN more environmental and low carbon friendly. Therefore, the policies intervention to maintain the balance between the targets of National Development, the “trade-off” between economic growth, poverty alleviation, and GHG emission reduction will be analyzed using system dynamics modelling. That system requires tabular and spatial data about natural capital stock and flow, one of Natural Capital Accounting (NCA) framework. BPS-Statistics Indonesia was expected to provide those information from SISNERLING. However, as the process to establish SISNERLING was constructed without a clear linkage with the development needs, at the moment, there was somewhat a “missing link” between development policy exercise and data, and the information provided by the SISNERLING. Efforts to develop a “bridge” of this missing link were implemented mostly on case by case basis, for example developing climate change policy through Intended Nationally Determined Contribution (INDC).

In line with WAVES Programme, Ministry of Finance plans to disclosure national capital in the consolidated report (asset accounts), as a follow-up action from fiscal transparency review by Supreme Audit Board and House of Representatives of Indonesia. In short-term, Ministry of Finance plans to conduct piloting of the valuation and reporting on mineral. Meanwhile, in the long-term, the report (asset accounts) of natural capital is expected to be integrated into the National Balance Sheet as non-produced assets. The coverage of natural capital
included in the report is in line with SISNERLING Indonesia and SEEA. BPS-Statistics Indonesia already provides the information of timber, energy and mineral resources in physical and monetary terms in SISNERLING Indonesia. However, the report still needs the information about land and soil resources, aquatic resources, water resources, and other natural capital, both in physical and monetary terms. Therefore, Ministry of Finance will ensure the method of valuation consistent with SISNERLING Indonesia and the SEEA, by establishing teamwork that includes line ministries including BPS-Statistics Indonesia.

Meanwhile, in 2017 Ministry of Environment and Forestry drafted Government Regulation on Economic Instruments for Environmental Protection and Management (PP IELH) as derived from Law No. 32/2009. Economic instruments for Environmental Protection and Management includes instruments for development planning and economic activities, environmental financing, and incentives and/or disincentives. Instruments for development planning and economic activities includes natural resources and environment accounts, depletion adjusted GDP, compensation/reward of environmental services between regions, and internalization of environmental costs.