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Response by official statistics to the Sustainable Development Goals

Initiatives for sustainable development monitoring – the case of Poland

Note by the Central Statistical Office of Poland

Summary

The paper presents the experience of the Central Statistical Office of Poland in monitoring sustainable development, enhancing public awareness of sustainable development and promoting the use of statistics to monitor sustainable development. The paper will also present the Polish experiment of defining indicators for green economy and their relation with sustainable development.

The paper is presented for discussion to the first session of the Conference of European Statisticians’ seminar “Response by official statistics to the Sustainable Development Goals”.

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I. Introduction

1. Over the previous years, the concept of sustainable development has become anchored in global consciousness. This awareness clears the path to reprogramming the previously implemented policies in order to ensure economic growth which will not adversely affect the natural environment.

2. A few decades from signing the Stockholm Declaration\(^1\), and hence noticing the issues of sustainable development, and upon expiry of the Millennium Development Goals, the focus is shifting even more towards sustainable development. The need to address issues of sustainable development appears to be more pronounced and more clearly acknowledged than before.

3. Considering the many unprecedented societal challenges and problems, a special focus reaching from the natural environmental to social aspects is justified. Often human problems affect the surrounding environment. A matter of concern is the rapidly ageing societies in a considerable number of highly developed countries, and, on the other hand – the significant growth in share of young people in the overall population of countries with low level of development. In some regions of the world, fight against hunger is an issue requiring immediate corrective actions; in other regions such issues include respect for human rights or predatory exploitation of the natural environment. Additionally, the global crisis almost a decade earlier contributed to intensification of such negative phenomena as unemployment and poverty. The diversity and complexity of the issues to be tackled in the societies and economies and some negative developments creating risks for future generations, require undertaking firm, long-term measures. This all calls for reliable data for its monitoring.

II. Statistical support for the monitoring process of development policies, including sustainable development

4. Considering the idea of sustainable development in practice means establishing the specific assumptions and goals to be achieved. In Poland, the basis for strategic programming of local development was to determine prospective, medium-term and long-term challenges, reflecting the essence of sustainable development. This process has started with developing the necessary strategic management system. To increase transparency of the planning process and improve the effectiveness of the management system, a decision was made to limit the number of strategic documents, as well as to coordinate activities and monitor the achieved results. The most important for the success of this process are reliable and objective data, on the basis of which the situation is assessed and the decisions are made. The data allows for monitoring of the degree of implementation of scheduled operations. The key role in the process of development strategy monitoring has been entrusted to the Central Statistical Office (CSO). Having high-quality information at its disposal, but also knowledge, experience and methodological basis for compiling the necessary indicators, CSO provides statistical support at every stage of the strategic management process in the government.

\(^1\) Stockholm Declaration – in other words, Declaration of the United Nations Conference on the Human Environment, is one of the vital guidelines, worked out in June 1972, during the Stockholm Conference of the UN. The Declaration contains 26 principles and is considered to be the basis for international environmental protection regulations.
5. The procedure relating to development management in Poland is regulated by law and is based on the system of strategic documents, divided according to the time horizon and focus area. The primary document, with the longest possible time horizon, is The Long-Term National Development Strategy – Poland 2030, which presents the long-term direction of changes. The medium-term development policy is included in the National Development Strategy 2020 (the Polish equivalent of the Europe 2020 Strategy). In order to cover all areas significant from the point of view of development of the country, nine integrated strategies were adopted. Additionally, taking into account the need to monitor the development at regional level, strategic documents for voivodeships were prepared. Considering the unique character of areas exceeding the territorial division patterns, a set of superregional strategies was also adopted. Such set of documents allows for ensuring cohesion of activities undertaken at different levels of management.

6. The Polish statistics derive the models with regard to programming of sustainable development from the achievements of international institutions and organizations. On the level of the European Union, statistical information has been already used for many years to support development management. The role of official statistics was expressly emphasized in the Europe 2020 Strategy. Achievement of the goals of this strategy is to be monitored by means of statistical indicators in the given timeframe. The economic development remains the primary goal of the Europe 2020 Strategy, however, the nature of this development was specified as balanced, smart and stimulating social integration.

7. The recognition of the importance of sustainable development in Poland is underlined by the fact that the need for economic development in line with sustainability was included in the Constitution of the Republic of Poland – the supreme legal act of Poland. The sustainable development goals are reflected in the national system of strategic documents. Each aspect relating to the idea of sustainable development (in the economic, social and environmental sense) finds its equivalent in these documents and is monitored by a broad range of indicators which are based on the official statistics system.

8. Identification of the priority problems and making an adequate diagnosis of the current situation, as well as ensuring good quality measures reflecting the result of the undertaken activities requires provision of relevant indicators. Therefore, it is necessary to base the monitoring system on official statistics and include its representatives in the process of policy programming from the beginning. Poland can take pride in good practices in this respect – close cooperation between statistics and the institutions responsible for particular documents allowed for mutual understanding of expectations, opportunities and constraints. This cooperation contributed to determination of the proper set of measures, but simultaneously allowed for identifying the public statistics as a significant partner in the process of strategic planning and management.

9. The results of such co-operation include, among others, preparation of the development policy monitoring system STRATEG (available at: strateg.stat.gov.pl). It is a publicly available system, dedicated, in particular, to public administration responsible for creating the development policy, both at the national as well as regional level. The system was created in order to support the development management process, and one of the areas of STRATEG was devoted to the issues relating to sustainable development. The primary purpose of the implementation of this system was gathering in one place a set of information about measures, helpful in the process of development programming and evaluation of the assumed goals. It constitutes a comprehensive source of information, gathering data from the public statistics system, as well as provided by specialized agencies or institutes. Building and providing access to the STRATEG system is one of the elements comprising the
realization of the priority goals of the public statistics set forth in the directions of the Polish public statistics development until 2017 – i.e. support of the process of programming and monitoring of the development policy at the national and regional level. The publicly accessible system STRATEG also constitutes an important element of statistical education about sustainable development, by strengthening social consciousness in this area.

III. Set of indicators for monitoring sustainable development in Poland

10. In order to integrate and bring together a complete set of information concerning sustainable development, the Polish official statistics undertook an initiative aiming at developing a set of indicators for monitoring sustainable development at the national level. Selection of indicators was preceded by a detailed analysis on the elements that pertain to socio-economic life and relate to natural environment that should be subject to measurement. The analysis was based on identification of the principles of sustainable development of the European Commission, focusing on the areas important for research on sustainable development. The analysis also covered the national strategic documents referring to sustainable development. On this basis, the term of integrated approach was formulated and key aspects were identified as social, economic, environmental and institutional-political. These aspects define the areas which sustainable development policies should address.

11. The integrated approach developed by CSO determines the general system for measuring sustainable development in Poland and refers to a coherent (consistent) and simultaneous co-existence of the aspects of sustainable development (Figure 1):

- social (sustainable social development), identifying strategic goals and measures, as well as projects aiming at improvement in social life;
- economic (sustainable economic development), determining the strategic goals and measures generating effective socio-economic development;
- environmental (sustainable environmental protection), formulating conditions and strategic goals of protection and rational shaping of the natural environment, aiming at consolidation of sustainable ecological development (eco-development);
- institutional-political (separated from the social order to highlight the institutional frameworks of sustainable development), concerning global partnership and good management.
12. A system of strategic goals forms the structural basis for the integrated approach on sustainable development. The selected indicators of sustainable development will then help to monitor the achievement of sustainable development goals in each area in the given time-frame.

13. The following criteria were followed when selecting the indicators of sustainable development at the national level:
   - presence on the list of indicators for monitoring the implementation of the European Union Sustainable Development Strategy;
   - international comparability;
   - availability of data;
   - credibility of data sources.

14. One of the principles was also that the aim, if possible, should be to suggest also measures pertaining to more than one of aspect of sustainable development.

15. As a result of a screening of possible indicators, in total 77 indicators were selected, constituting the system for the monitoring of sustainable development in Poland. The relevance of the indicators on the national list is subject to regular monitoring. Availability of previously selected indicators is regularly assessed and new sources of information are explored to enrich and improve the information coverage.

16. The outcome of previous work that considered a national set of indicators of sustainable development is presented in the publication: *Polish Sustainable Development Indicators*.

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In order to enrich data presentation, a separate database of sustainable development indicators is being built. The database will provide a presentation of indicators in a graphic form (including charts and maps).

Establishing a dedicated system for the purposes of monitoring sustainable development is strongly justified. The previously mentioned STRATEG system aims at monitoring the development and cohesion policy (including sustainable development as one of the priority areas of the cohesion policy). A separate database dedicated to the monitoring of sustainable development indicators (SDI) provides a detailed presentation of the indicators in three modules: national (the country, the EU member states), regional (NUTS 1, NUTS 2), and local (NUTS 4). These indicators are grouped according to the four aspects of sustainable development. The SDI database will also contain a set of metadata, including the so-called indicator metrics, such as definitions, methodological explanations, importance for sustainable development, monitored goals and the thematic areas corresponding to the frame for monitoring sustainable development in the European Union.

The newly established database and indicators may need to be adjusted to the monitoring of the Post-2015 Development Agenda. CSO takes account of these developments and data needs in the final set of indicators at global, regional and national levels. Therefore, CSO is analysing the possibility of expanding the current SDI database in order to include any additional indicators related to the monitoring of the Post-2015 Development Agenda.

IV. The concept of measurement of the green economy in Poland

Sustainable development is in many ways connected with the green economy, understood as the new path of socio-economic development which effectively executes the sustainable development goals. Environment, economy and society form the three basic pillars of both sustainable development and green economy. However, in the case of green economy, the social aspect is included in a narrower way, only in the part which is directly associated with the environment or the economy. This is further reflected in selecting the Polish official statistics focusing mostly on the natural environment and the production of goods and services (economy).

To enable monitoring of development towards green economy, CSO defined the areas of green economy using the experience of OECD. The definition takes account of national conditions and relations between the elements of green economy: environment, economy and society.
In the course of the work, four areas were distinguished as the key elements of green economy:

1. **Natural capital**

   This group includes indicators describing the state of the natural environment which constitute the basis for the functioning of the economy and society. It can be described by indicators of natural capital. Natural capital includes the stock of renewable and non-renewable resources, and plays a fundamental role in the concept of green economy, since the pressure for its use unavoidably grows and, as a result, makes it impossible to maintain the present path of economic growth. Constant land use may result in irreparable losses and create imbalance in this capital. Green economy is supposed to provide supply of renewable and non-renewable resources, as well as other ecosystem services, sufficient for economic development, with a simultaneous minimizing of the adverse environmental impact, which is related to acquisition, use and processing of the natural capital. Therefore, from this point of view, it is considered important to monitor the state and the direction of changes of various kinds of resources, e.g.: minerals, fauna, flora, fresh water.

2. **Environmental efficiency of production**

   This area includes indicators used for describing the interrelations between the natural environment and the economy. The production processes use the environmental resources, as well as work and capital in order to generate goods and services. The side effects of their production are contamination and waste, which cannot be stored in the environment. The main priority in the process of greening of
economy is improvement in effectiveness of the use of the natural environment in order to sever the link between economic growth and the increased use of natural resources. This efficiency is measured with the use of indicators falling under the group environmental efficiency of production, presenting the productivity of energy, greenhouse gases, balance of nutrients, water and waste management.

3. **Environmental quality of life of the population**

25. The environmental quality of life of the population gathers the indicators used for monitoring the relations between the natural environment and the society. It is associated with regulatory, life space, cultural services, which the natural environment provides to people, as well as with the general state of the natural environment. The quality of the environment is a key factor affecting the general well-being of people and other living creatures. The level of environmental pollution directly affects the quality of living of the population, as a result of the impact on the health condition of the society. As part of this group of indicators, the following will be monitored, among others: level of air pollution, noise, public sewage treatment, access to drinking water, green areas.

4. **Political responses and economic opportunities**

26. Political responses and economic opportunities include indicators describing the instruments influencing economy and society to create the desired development. Redirecting the economy from the traditional to green economy requires the application of many diverse instruments within various political activities. The public authority has access to different political tools, forcing specific behaviours of entities, aiming at greening the economy, such as: legal regulations, taxes or subsidies. They can support actions aimed at increasing the effectiveness in, e.g., utilization of the components of the natural environment, as well as provide incentives for the development of environmentally friendly models of production and consumption. Monitoring the use of instruments and actions, as well as of their effects, should become the focus of the decision-makers. At the same time, these instruments and actions create new economic possibilities for the development of specific types of activities, creating new jobs and stimulating economic growth. The group of indicators concerning political responses and economic opportunities includes, among others: ecological farms, green public orders, the Green Investments Scheme (GIS), green inventions and patents, outlays for environmental protection.

27. While analysing the conditions of greening the economy, we should keep in mind that the economy of a given country does not operate separately from the surrounding world. Therefore, in order to fully analyse the condition of greening the economy, it is necessary to also take into consideration the wider surroundings, which, in turn, creates the need for presenting contextual indicators allowing for diagnosing the socio-economic situation of the country.

28. To enable observation of changes, CSO developed a system of indicators for the monitoring of green economy. Due consideration to the national conditions required adding new, national indicators into the indicator set. They include the
percentage of green public orders and reduction in CO₂ emissions as a result of the execution of projects within the Green Investment Scheme (GIS).³

29. The preliminary assumptions show that the monitoring system of the greening status of the economy in Poland covers 55 indicators, including: within the group of natural capital – 12, environmental efficiency of production – 15, environmental life quality of the population – 14, political responses and economic opportunities – 14. Application of these measures will be possible only with cooperation of the official statistics with many national and international entities with datasets. In order to compare the situation of Poland with other states, the data will be used from, among others, Eurostat, OECD and the European Environmental Agency (EEA).

30. Issuing of the first report, presenting the condition of the green economy in Poland is planned for the end of 2015. It will contain selected data describing the condition of greening of the Polish economy.

V. Challenges faced by official statistics in the light of the Post–2015 Development Agenda

31. The project of preparing the Post-2015 Development Agenda creates new challenges for official statistical systems. Monitoring of the Post-2015 Development Agenda also requires developing a set of indicators on sustainable development goals. Provision of information and methodological support for the monitoring of the sustainable development goals was entrusted to national statistical offices.

32. Noticing the need for involvement of statistical offices at an early stage of the implemented project, CSO joined the Interministerial Consultative Team on intergovernmental negotiations regarding the Post-2015 Development Agenda. The works of the Team, coordinated by the Ministry of Foreign Affairs, are intended to coordinate the activities and develop a position on the Agenda. From the point of view of a statistical office, participation in these works allows learning about the process of agreeing on the Agenda and the sustainable development goals. However, this process needs to give consideration to a proper selection of measures that enables monitoring. Making sure that the list of indicators used for monitoring the sustainable development goals is as adequate as possible, CSO actively participates in the ongoing process, expresses its opinions on the indicators, such as the need to select indicators that represent the goals as precisely as possible, while at the same time have a sound methodological basis for their measurement.

33. Decision-makers are currently facing global challenges in the path towards sustainable development. They are undertaking a number of initiatives to fulfil this task. Therefore, a significant effort is needed to develop sufficient frameworks for monitoring this important global effort. The CSO experience has shown the necessity for official statistics to participate actively in the process of monitoring all development policies, including on sustainable development.

34. The changes occurring in the existing world, the abundance of issues and processes to be monitored, make the measurement an increasingly complex task. Monitoring of sustainable development, and the numerous related initiatives, is an

³ GIS is a system of financial support for investments related to the protection of climate and reduction of CO₂ emission by means of funds obtained from sales of surpluses of CO₂ emission units, the so-called AAU (Assigned Amount Units), on the international market, granted in the system of the UN under the Kyoto Protocol.
urgent challenge for the official statistical systems. This challenge requires going beyond measuring gross domestic product and analysing many areas affecting people’s well-being and the environment. Searching for and applying monitoring measures integrating the three basic pillars of sustainable development has a significant importance. To ensure reliable and comprehensive monitoring of sustainable development should be a priority for the development of official statistics.