# Researching and Proposing of a List of Statistical Indicators for Sustainable Development for the Southwest Region<sup>1</sup>

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Abstract: In taking action on national strategic target in alignment with the implemention of the 2030 Agenda for Sustainable Development, a core list of sustainable development indicators for the Southwest region of Vietnam shall make a significant contribution. It is the basis for monitoring and evaluating the sustainable development of the Southwest region in relation to other economic regions and the whole country. The paper focuses on assessing the current system of the statistical indicators based on data disaggregation of each indicator related to sustainable development at regional, provincial/municipal levels; and thereby propose a list of statistical indicators for the Southwest region.

**Keywords:** Statistical Indicators, Sustainable Development Indicators, Agenda 2030, Southwest, Vietnam

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#### Introduction

United **Nations** Sustainable The Development Summit 2015 witnessed the agreement on the 2030 Agenda for Sustainable Development made by 193 member states, including Vietnam. The 2030 Agenda focuses on the integration and balance between three dimensions of sustainable development, namely the economic, social, and environmental. The Agenda is also seen as a global orientation with 17 goals and 169 targets, based on which each country shall localize and implement its goals in accordance with its own context. At the same time, countries should decide how to implement and mainstream the global targets for sustainable development into their processes of planning and development of strategies and policies. A global indicator framework has been also formed in Resolution 48/101 of the United Nations Statistical Commission in order to monitor and evaluate the implementation of the 2030 Agenda's sustainable development goals (SDGs) at the global level.

Vietnam, at the national level, has been carrying out numerous activities following the 2030 Agenda. The National Action Plan for the Implementation of the 2030 Agenda promulgated by the Prime Minister's Decision 622/QD-TTg dated May 10, 2017 suggests 17 goals and 115 targets, which are tailored based on the global goals and targets as well as Vietnam's practical conditions and periodical development priorities. Accordingly, Ministry the of Planning and Investment issued its 03/2019/TT-BKHDT Circular dated January 22, 2019, introducing Vietnam's Set of Sustainable Development Indicators (aka SDG indicators) with 158 specific indicators.

Among regions in Vietnam, the Southwest has a crucial role to play for socio-economic development and national security and defense. The region possesses great potentialities for tropical agriculture, food production, aquaculture and fisheries that could help ensure the national food security and the competitiveness of Vietnam's sustainable farm produce. The sustainable development of the Southwest is therefore closely engaged with the sustainable development of other regions and the country as a whole.

The formation of a statistical database on the Southwest's sustainable development, of which the core is the regional SDG would better indicators. serve supervision, monitoring, and evaluation of the SDGs implementation in the region. The construction of such indicators is considered an initial step in forming a comprehensive database on the Southwest's SDGs implementation, with the data continuously updated, in order to allow data-based decision and policy making, planning, and strategy development at both macro and micro levels.

## 1. Overview of SDG indicators and SDGs performance of the Southwest

Sustainable development aims at integration and balance of the economic, social and environmental dimensions. The authors therefore focus on reviewing the relevant SDG indicators of the Southwest which are synthesized from the national set of SDG indicators, the provincial system of statistical indicators (issued under the Prime Minister's Decision 54/2016/QD-TTg dated December 19, 2016), and other statistical systems.

Initial findings are as follows:

a) For Vietnam's SDG indicators, 104 out of 158 indicators are disaggregated to

regional or provincial/city levels, of which 57 indicators are applicable and comparable between regions throughout the country and 47 indicators are not applicable for regions and provinces/cities. It is because the data that serve the calculations of those 47 indicators have not been integrated and disaggregated from existing sources such as statistical surveys and reports. As a result, there will an absence of the data for the 2020 indicators. Meanwhile, the implementation of those indicators is following Schedule B which starts in 2025 and their publication is required for every five or ten years.

- b) Regarding the provincial systems, key statistics on socio-economic situation have been developed and reflected through 15 indicators on land, population, labor, and so forth. Among those, 13 indicators are calculated based on the data collected at three levels of nation, region, and province/city and two indicators with data of two levels only as indicated in the following table.
- c) As for other relevant statistical indicators, there have been 34 indicators identified in relation with the Southwest's sustainable development that are listed in the table below:

### 2. Construction principles and suggestion of SGD indicators for the Southwest

2.1. Principles for indicator identificationand construction

There are fundamental principles that the construction of statistical indicators must adhere to in order ensure their feasibility and significance to the true nature of the studied subjects.

Generally speaking, principles are rules and standards that form the ground for a work or consideration. Accordingly, the principles for selection and development of SDG statistical indicators are regulations, rules and standards for the selection and development of SDG statistical indicators. The authors, backed with statistical practices, thus propose the following principles for the identification and construction of SDG indicators for the Southwest:

- a) The selected indicators must inform about the sustainable development situation of the Southwest region with fundamental information as follows:
- Background information of the Southwest regarding land, population and labor force which would help deliver an overall picture of the regional development in comparison with the other regions as well as the whole country.
- SGD information of the Southwest, including Vietnam's SDG indicators which are aggregated to region or province/municipality level. These indicators must be feasible and comparable among regions.
- Other relevant information such as poverty situation and social equality.
- b) The selected indicators must be consistent, compatible and comparable among regions while meeting the actual conditions and the need for a sustainable Southwest.
- c) The selected SDG indicators must be feasible and consistent with other statistical systems like the national and provincial statistical systems, Vietnam's SDG indicators, and other ministerial and sectoral systems. This principle is only possible when these indicators are identified with their definitions, calculation methods, forms of information collection, and data sources.
- d) The identification and selection of each indicator must follow the OECD's S-M-A-

| No. | Indicator                      | Provincial-<br>level code | Level of data |        |          |  |  |
|-----|--------------------------------|---------------------------|---------------|--------|----------|--|--|
|     |                                |                           | Nation        | Region | Province |  |  |
| 1   | Land area                      | T0101                     | 1             | 1      | 1        |  |  |
| 2   | Land structure                 | T0101                     | 1             | 1      | 1        |  |  |
| 3   | Population                     | T0102                     | 1             | 1      | 1        |  |  |
| 4   | Population density             | T0102                     | 1             | 1      | 1        |  |  |
| 5   | Crude birth rate               | T0104                     | 1             | 1      | 1        |  |  |
| 6   | Total fertility rate           | T0105                     | 1             | 1      | 1        |  |  |
| 7   | Crude death rate               | T0106                     | 1             | 1      | 1        |  |  |
| 8   | Natural population growth rate | T0107                     | 1             | 1      | 1        |  |  |
| 9   | Overall population growth rate | T0107                     | 1             | 1      | 1        |  |  |
| 10  | In-migration rate              | T0108                     | 1             | 1      | 1        |  |  |
| 11  | Out-migration rate             | T0108                     | 1             | 1      | 1        |  |  |
| 12  | Net migration rate             | T0108                     | 1             | 1      | 1        |  |  |
| 13  | Life expectancy at birth       | T0109                     | 1             | 1      | 0        |  |  |
| 14  | Labor force                    | T0201                     | 1             | 1      | 1        |  |  |
| 15  | Number of employed people      | T0202                     | 1             | 0      | 1        |  |  |

R-T principle, that means they are simple (to use and to analyze) (S), measurable (easy to find the appropriate data and to reproduce as well as indicating clear trends) (M), accessible (able to be monitored periodically, effective, and consistent) (A), reference (to respond directly to the agreed issues or goals) (R), and timely (to inform early about potential problems) (T).

In addition, some other important features that need to be considered while selecting indicators also. They should be applicable to all stakeholders, appropriate to existing international frameworks, globalized, action-oriented, explicit and consistent in definitions, and easily adaptable to systematic information. The indicators should as well be built from reliable data sources and, if possible, be able to classify

and synthesize. It is necessary to indicate the agency responsible for data collecting and the functions, duties, and authorities of relevant units and to make sure of the data availability for each indicator.

- 2.2. Proposed SDG indicators for the Southwest
- a) List of the proposed SDG indicators The review of existing SDG indicators and the construction principles allows the authors to suggest a list of 121 indicators for the Southwest's sustainable development, including:
- 15 indicators for fundamental information at the provincial level (as listed above);
- 57 indicators from Vietnam's set of SDG indicators which are disaggregated to regional level, feasible and comparable among regions (as listed above). They include:

| No. | Indicator  | Statistical period | In-charge institution             | Level of data |        |          |  |
|-----|--|--------------------|-----------------------------------|---------------|--------|----------|--|
|     |  |                    |                                   | Nation        | Region | Province |  |
| 1   | Poor household rate  | 2 years            | GSO                               | 1             | 1      | 1        |  |
| 2   | Cost of living index by area   | Yearly             | GSO                               | 0             | 1      | 1        |  |
| 3   | Spending per capita per month at current prices  | 2 years            | GSO                               | 1             | 1      | 1        |  |
| 4   | Average floor area per capita  | 2 years            | GSO                               | 1             | 1      | 1        |  |
| 5   | Gini index   | 2 years            | GSO                               | 1             | 1      | 0        |  |
| 6   | Number of households with<br>decreased or unchanged living<br>standards in comparison with five<br>previous years by households' self-<br>assessment in percentage | 2 years            | GSO                               | 1             | 1      | 0        |  |
| 7   | Number of married women aged 15-49 with modern contraception in percentage   | Yearly             | GSO                               | 1             | 1      | 1        |  |
| 8   | Number of health facilities under provincial Department of Health  |                    | DOH<br>with GSO<br>collaboration  | 1             | 1      | 1        |  |
| 9   | Number of students attending school at the right age for upper secondary school in percentage  | Yearly             | DOET<br>with GSO<br>collaboration | 1             | 1      | 0        |  |
| 10  | Number of high school graduates in percentage  | Yearly             | DOET                              | 1             | 1      | 1        |  |
| 11  | Number of students moving from lower to upper secondary school in percentage   | Yearly             | DOET                              | 0             | 0      | 0        |  |
| 12  | Number of children aged 3-5 in kindergarten in percentage  | Yearly             | DOET<br>with GSO<br>collaboration | 0             | 0      | 1        |  |
| 13  | Household structure by waste disposal practices  | 2 years            | GSO                               | 1             | 1      | 0        |  |
| 14  | Number of communes having waste-collecting cooperatives/units in percentage  | 2 years            | GSO                               | 1             | 1      | 0        |  |
| 15  | Actual soil erosion  | Yearly             | DONRE                             | 0             | 0      | 0        |  |
| 16  | Standardized precipitation index (SPI < 1.5)   | Yearly             | DARD                              | 0             | 0      | 0        |  |
| 17  | Number of industrial parks with standardized solid waste and waste water treatment in percentage   | Yearly             | DONRE                             | 1             | 1      | 0        |  |
| 18  | Number of households with clean water in percentage  | 2 years            | GSO                               | 1             | 1      | 1        |  |

| 19 | Number of households with hygienic toilets  | 2 years | GSO | 1 | 1 | 1 |
|----|---|---------|-----|---|---|---|
| 20 | Structure of households by types of house (permanent, semi-permanent, temporary and others) | 2 years | GSO | 1 | 1 | 1 |
| 21 | Number of communes having automobile road(s) to the commune PPC in percentage               | 2 years | GSO | 1 | 1 | 0 |
| 22 | Average distance from a hamlet without automobile road to the nearest automobile road(s)    | 2 years | GSO | 1 | 1 | 0 |
| 23 | Number of hamlets with banking facilities in percentage                                     | 2 years | GSO | 1 | 1 | 0 |
| 24 | Labor force   | Yearly  | GSO | 1 | 1 | 1 |
| 25 | Number of employed people   | Yearly  | GSO | 1 | 1 | 1 |
| 26 | Number of female workers in non-agriculture in percentage                                   | Yearly  | GSO | 1 | 1 | 0 |
| 27 | Travel revenue  | Yearly  | GSO | 1 | 1 | 1 |
| 28 | Area of water for aquaculture   | Yearly  | GSO | 1 | 1 | 1 |
| 29 | Number of fishing vessels with a capacity of 90 C1 and up                                   | Yearly  | GSO | 1 | 1 | 1 |
| 30 | Total capacity of marine fishing vessels of 90 CV and up                                    | Yearly  | GSO | 1 | 1 | 1 |
| 31 | Aquatic production  | Yearly  | GSO | 1 | 1 | 1 |
| 32 | Fishery catch   | Yearly  | GSO | 1 | 1 | 1 |
| 33 | Marine fish catch   | Yearly  | GSO | 1 | 1 | 1 |
| 34 | Aquaculture production  | Yearly  | GSO | 1 | 1 | 1 |

Note: GSO - General Statistical Office of Vietnam; DOH - Department of Health (provincial level); DOET - Department of Education and Training (provincial level); DONRE - Department of Natural Resources and Environment (provincial level); DARD - Department of Agriculture and Rural Development (provincial level).

- 40 indicators with names and components unchanged;
- 9 indicators with similar components based on available data;
- 8 indicators which are combined or

separated into new indicators to ensure the alignment with the S-M-A-R-T principle. For example, the indicator for "the number of people with social security, health insurance, and unemployment insurance"

is divided into three indicators of (i) the number of people with social security, (ii) the number of people with health insurance, and (iii) the number of people with unemployment insurance.

- 34 indicators related to other SDG issues (as listed above).
- b) Structure of the proposed indicators 121 SDG indicators suggested for the Southwest are classified into 11 groups.
- Group 1: Land and population (17 indicators)
- Group 2: Poverty, social welfare, living standards (18 indicators)
- Group 3: Health (13 indicators)
- Group 4: Education and training (13 indicators)
- Group 5: Gender equality (4 indicators)
- Group 6: Protection of natural resources and environment (13 indicators)
- Group 7: Access to housing, power, clean water, hygiene, communication (10 indicators)
- Group 8: Labor, employment, sustainable economic growth (15 indicators)
- Group 9: Transportation (4 indicators)
- Group 10: Social order and safety, justice and institution, transparent governance (6 indicators)
- Group 11: Agriculture and fisheries (8 indicators)
- c) Availability of data

Data for 121 indicators have been examined and identified from the major following sources:

- GSO's statistical yearbooks
- GSO's household living standard survey
- GSO's labor and employment survey
- GSO's annual report on Vietnam's socioeconomic situation
- GSO's 2016 Report on Informal Employment in Vietnam

- GSO 2018's Gender Statistics in Vietnam 2016
- Provincial statistical yearbooks
- Sectorial statistical yearbooks for health
- Sectorial statistical yearbooks for education
- Portal of Ministry of Labor, Invalids and Social Affairs (MOLISA)
- Satisfaction Index of Public Administration Services (SIPAS)
- Committee for Ethnic Minority Affairs (CEMA) and UNICEF 2015's Multidimensional Child Poverty of Ethnic Minority Children

The review of data availability shows that:

- National data available for 101/121 indicators
- Regional data available for 76/121 indicators
- Provincial data available for 63/121 indicators
- No data available at national, regional and provincial levels for 17/121 indicators
- No data available at regional and provincial levels for 23/121 indicators
- No data available at the provincial level for 35/121 indicators

#### 3. Conclusion

critical is and significant supervise, monitor and assess the SDGs implementation in the Southwest. Serving the purpose, a list of regional SDG indicators should play a key role. It is also necessary to assign an agency to be in charge of data and information collection. By reviewing the existing SDG indicators, the authors have selected and proposed a list of 121 SDG indicators tailored for the Southwest that provides a solid scientific ground for continuing the data collection in order to form a regional database on the Southwest's sustainable development

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