SDG Indicator 2.4.1 – Data collection instruments

Virtual Training
(September–October 2020)

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DATA COLLECTION INSTRUMENTS

Farm surveys:
1. Standalone farm survey questionnaire module
2. AGRISurvey programme and 50x2030 initiative

Alternative data sources:
1. EO (GIS / Remote sensing)
2. Administrative records
3. Household surveys
4. Monitoring systems
5. Census
OPTION 1: STANDALONE SURVEY QUESTIONNAIRE

• Designed as a module with minimum set of questions

• Flexible as it can be administered as an independent survey or attached as a module or integrated with existing national farm surveys.

• Cognitive Tests in Mexico, Bangladesh and Rwanda to:
  • Refine design, flow, comprehension, recall, respondent judgment
  • Asses if the questions are sufficient and fully understood

• Extended tests in Bangladesh to:
  • Collect date to test the sustainability criteria
  • Assess time of survey (50 minutes on average)
  • Revise the support documents
OPTION 1: STANDALONE SURVEY QUESTIONNAIRE

The survey questionnaire has 5 sections:

1. Introduction
2. Area of the holding
3. Economic dimension
4. Environmental dimension
5. Social dimension
OPTION 1: STANDALONE SURVEY QUESTIONNAIRE

Survey Module
SDG Indicator 2.4.1
Proportion of Agricultural Area under Productive and Sustainable Agriculture
Revision 6: 07 August 2019

QUESTIONNAIRE

SURVEY INFORMATION

Surveyor first name: ________________________________
Surname: ________________________________
Surveyor number: ________________________________

Start time of the survey: ______ hour ______ minutes Date: __________

Holding Identification Number: ________________________________

Section I: INTRODUCTION TO THE SURVEY MODULE AND IDENTIFICATION OF THE HOLDING AND HOLDER

TEXT TO READ:
Hello, my name is _________________. I work for the _________________. We collect data that the Government and other stakeholders use for planning purposes. I am visiting you to collect data on your farm. This is part of a worldwide exercise to measure progress in agriculture organised together with the Food and Agriculture Organization of the United Nations. The information you provide will be treated confidentially. It will only be used for statistical purposes and will be put together with responses from other farmers for use in the formulation of programmes and policies to promote more productive and sustainable agriculture. This interview should take approximately one hour. We appreciate your participation in answering these questions.

If you have any questions regarding this survey, you are welcome to telephone the number indicated on the visiting card of our organization that I leave for you here.
I express my gratitude for your participation in this survey in advance.

I.1 Record the following information about the respondent

I.1.1 First name ________________________________

I.1.2 Surname ________________________________

OPTION 1: STANDALONE SURVEY QUESTIONNAIRE

- Support documents:
  - Enumerators manual
  - Instruction Manual for data entry operations and analysis
  - Guidelines on data analysis to compute sub-indicators
  - Sampling guidance for 2.4.1
  - FAO statistical toolkit: comprised of a code book, tabulation plan, and modular STATA scripts to support data analysis

OPTION 1: STANDALONE SURVEY QUESTIONNAIRE

- Enumerators Manual
  - Training document for the enumerators
  - Define terms and concepts
  - Provide meaning behind the questions asked
  - How to use of SKIP and FILTER questions
  - Examples of instance where questions and responses may not be easy to administer and record respectively
OPTION 1: STANDALONE SURVEY QUESTIONNAIRE

• Instruction Manual on Data Entry Operations
  • Describe data entry operations
  • Procedures to code, clean and process the data
  • Assumes enumerators and data analysts are familiar with the survey questionnaire and the methodology for the SDG 2.4.1
OPTION 1: STANDALONE SURVEY QUESTIONNAIRE

- Guidelines on data analysis and reporting
  - Can be used by data producers and data users
  - Provide steps on how to generate data and statistics for calculating the sub-indicators
  - Calculation of thresholds and eventual reporting of the 11 sub-indicators as dashboard.
OPTION 1: STANDALONE SURVEY QUESTIONNAIRE

• Sampling guidance on SDG 2.4.1
  • Sample design: Sample size, sampling units and frame
  • Reporting units
  • Estimation domains
  • Sample design, estimator and stratification variable
  • Sample allocation in strata
  • And other issues related to SDG 2.4.1 sample selection etc.
OPTION 1: E-LEARNINGS

• Provide information on the keys aspects of the indicator
• Scope and coverage
• Dimensions, themes and sub-indicators
• Periodicity
• Data collection
• Reporting
OPTION 1: SUPPORTING DOCUMENTS

SDG Indicator 2.4.1
PROPORTION OF AGRICULTURAL AREA
UNDER PRODUCTIVE AND SUSTAINABLE AGRICULTURE

METHODOLOGICAL NOTE

Fourth revision

31 May 2019

Note: This enumerator manual was prepared in support to the farm survey on SDG indicator 2.4.1. During the test phase, users were invited to communicate by FAO any noted error, omission or suggestions for clarification so as to improve the quality of the document. The enumerator’s manual has been revised in light of the cognitive tests conducted in Mexico, Kenya and Bangladesh in year 2018-19.
OPTION 1: SUPPORTING DOCUMENTS

SDG Indicator 2.4.1
Guidelines for Data Entry Operations and Data Analysis
10/09/2019

SDG Indicator 2.4.1
Sampling guidance
11/06/2019

Indicator 2.4.1
From Raw Data to computation of the Indicator
10/09/2019
OPTION 2: EFFORTS TO ENHANCE NATIONAL DATA PRODUCTION

Leverage and capitalize on the AGRISurvey programme, soon to be scaled up into the 50X2030 initiative that aims to support 50 L/LMICs with a survey program by 2030.

AGRISurvey programme:
- **Core module**: Allowing for 2.4.1 data collection in one single year.

  - **Economy & PME modules**: Allowing for 2.4.1 data collection in two consecutive years. Questions for sub-indicators in the social and economic dimensions are integrated in the core module, while questions on environmental sub-indicators are integrated with the Production Methods and Environment Module (PME).

50X2030:
- **PME module with 2.4.1. questions**: Allowing for 2.4.1 data collection in one single year.

https://www.50x2030.org/
OPTION 2: SUPPORTING DOCUMENTS

Draft Technical Note

Mainstreaming
SDG Indicator 2.4.1 in AGRIS & 50x2030

Ver 0.1

25 April 2019
## OPTION 3: USE OF ALTERNATIVE DATA SOURCES

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-indicators</th>
<th>Admin data</th>
<th>Ag/livestock census</th>
<th>Ag surveys</th>
<th>Env. monitoring systems</th>
<th>GIS/remote sensing</th>
<th>Household surveys</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Farm output value per hectare</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>2</td>
<td>Net farm income</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>3</td>
<td>Risk mitigation mechanisms</td>
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<td>X</td>
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<td></td>
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<td></td>
<td>X</td>
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<tr>
<td>4</td>
<td>Prevalence of soil degradation</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>Variation in water availability</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>Management of fertilizers</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>7</td>
<td>Management of pesticides</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
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<td>X</td>
</tr>
<tr>
<td>8</td>
<td>Use of biodiversity-supportive practices</td>
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<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>9</td>
<td>Wage rate in agriculture</td>
<td>X</td>
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<td></td>
<td></td>
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<td></td>
<td>X</td>
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<td>10</td>
<td>Food insecurity experience scale (FIES)</td>
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<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>11</td>
<td>Secure tenure rights to land</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Note: Environmental monitoring systems include soil sampling, river flows records, and groundwater abstraction records. GIS/RS includes models.
OPTION 3: CONDITIONS FOR USING ALTERNATIVE DATA SOURCES

- Respects the recommended stratification (farm type i.e. sector, production system, etc.) i.e. data are available at the same level of territorial disaggregation as the farm survey.

- Captures the same phenomenon as proposed by the farm survey.

- Compliant with international/national standards and classifications systems to be internationally comparable.

- Reference year and periodicity homogenous across the sub-indicators.
COMPLEMENTING FARM SURVEY DATA

- Replace farm survey questions, when alternative sources of information are available and respond to the criteria.

- Complement farm survey questions, by providing additional contextual information helpful probe the right answers.
  - This can be done ex-ante or during the data collection by providing contextual information to the enumerators before going to the field.

- Crosscheck the farm survey results to identify any inconsistencies and to ensure its robustness
  - Ex-post information to triangulate and validate survey data after the data collection and analysis has been completed.
THANK YOU

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