



Food and Agriculture
Organization of the
United Nations



SDG INDICATOR 2.4.1 – *DATA COLLECTION INSTRUMENTS*

Virtual Training (April – November 2021)

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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
 - Assess if the questions are sufficient and fully understood
- Extended tests in Bangladesh to:
 - Collect data 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

- 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

<http://www.fao.org/sustainable-development-goals/indicators/241/en/>

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.

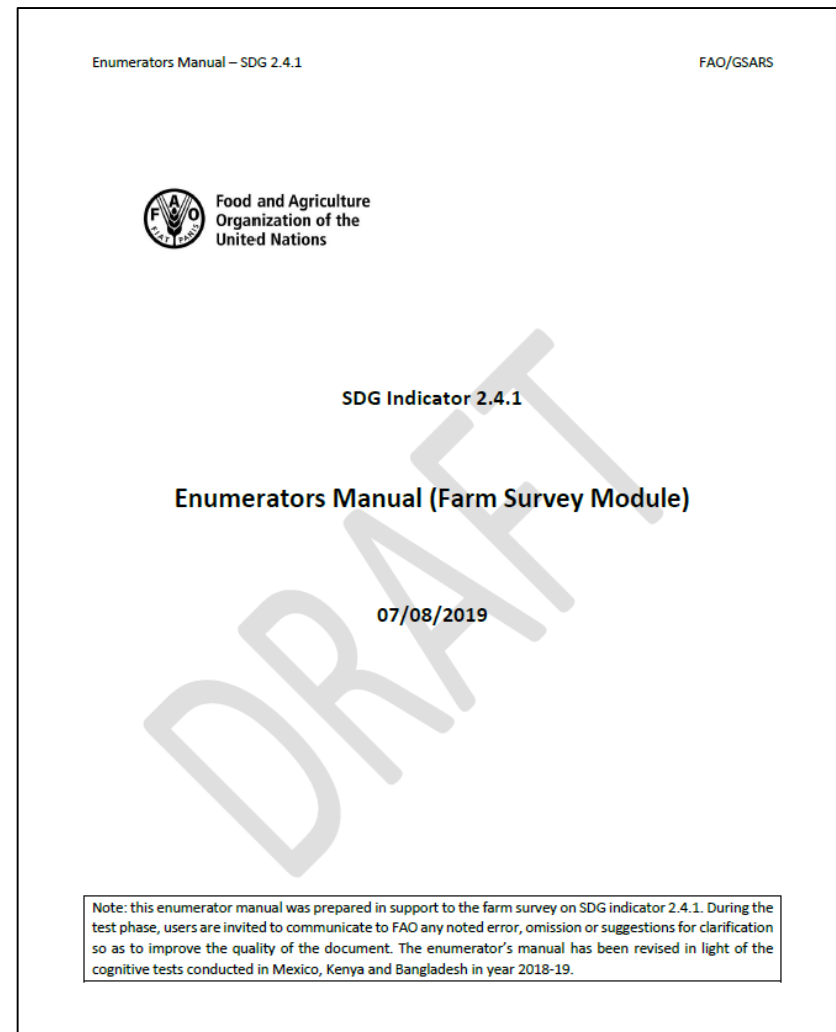
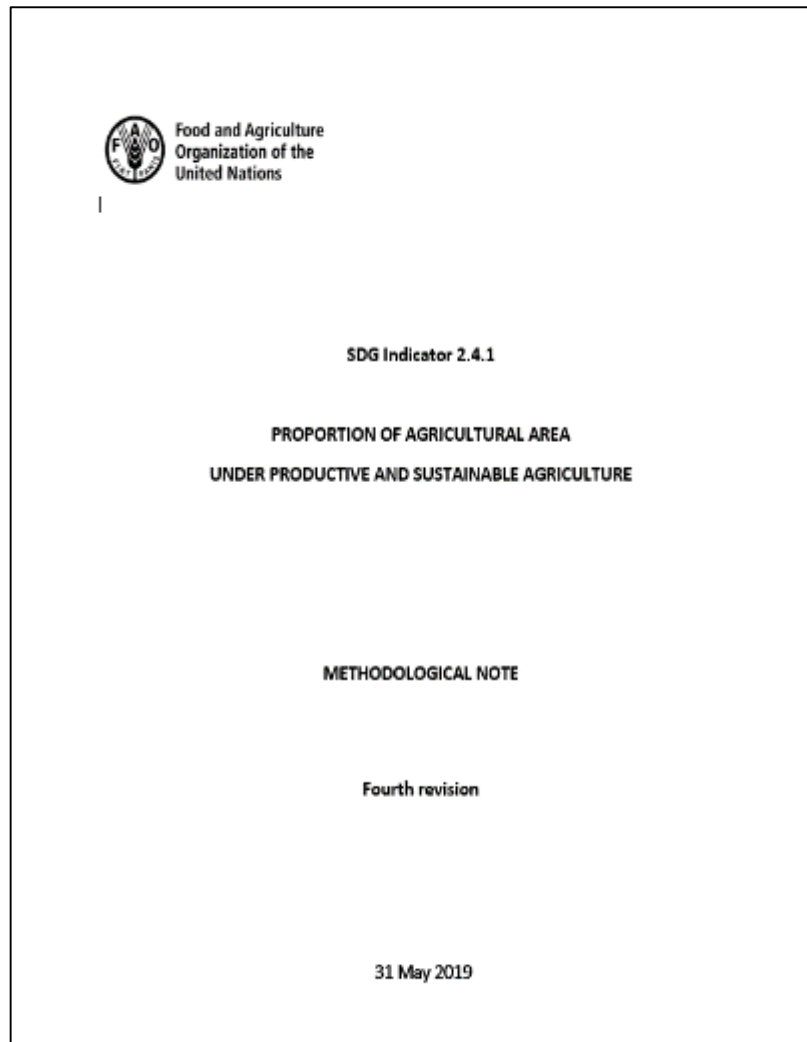
OPTION 1: STANDALONE SURVEY QUESTIONNAIRE

- **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



OPTION 1: SUPPORTING DOCUMENTS




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SDG Indicator 2.4.1

**Guidelines for
Data Entry Operations and Data Analysis**

10/09/2019




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Sampling guidance

11/06/2019

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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.

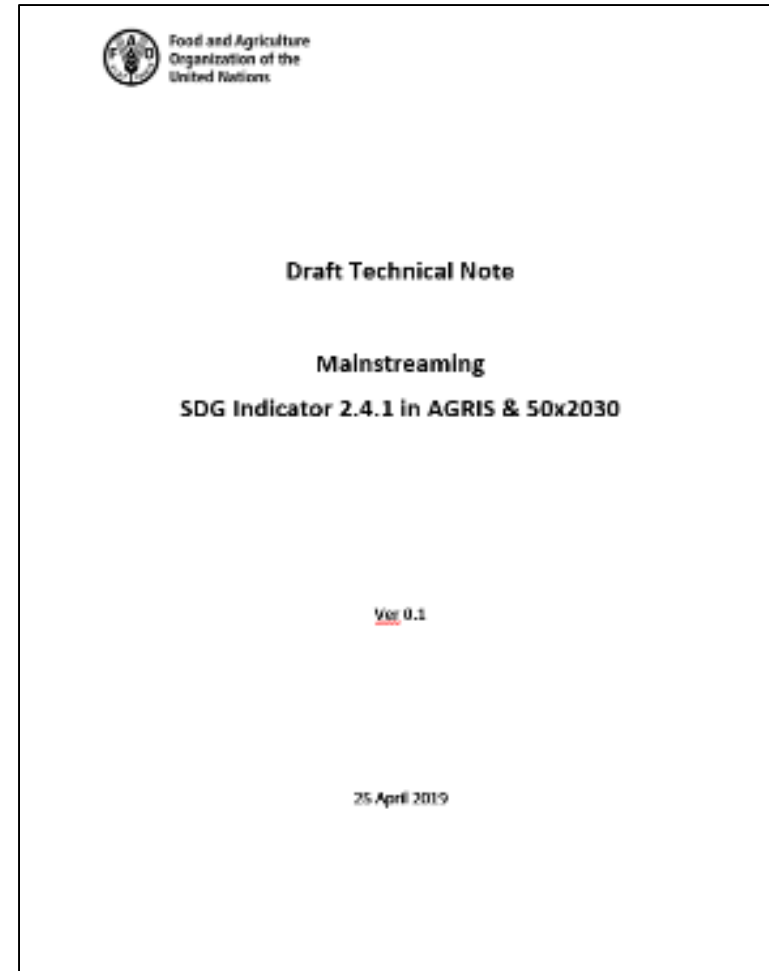
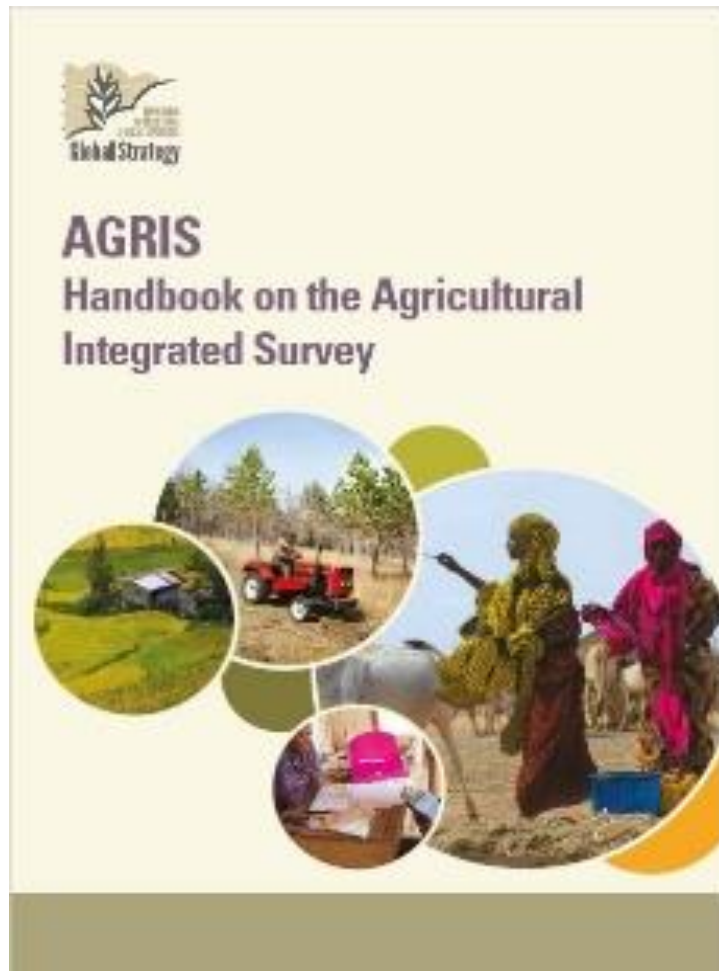
AGRISurvey programme:

- **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.

OPTION 2: SUPPORTING DOCUMENTS



OPTION 3: USE OF ALTERNATIVE DATA SOURCES

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

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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