Food and Agriculture Organization
of the United Nations

SDG Indicator 2.4.1 – *Data Collection and Reporting the indicator*

Session – 3

07-10 October, 2019
Regional Capacity Development Workshop
Cairo, Egypt

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Data collection instruments

- Farm survey is the preferred instrument for data collection.
- Suggested periodicity: 3 years.
- Options considered by FAO for enhancing data collection at country level:

1. Standalone survey questionnaire
2. Integration in AGRIS/50x2030 and national agricultural surveys
3. Use of alternative data sources

Option 1: Survey questionnaire

- Questionnaire designed as a module that contain the minimum set of questions needed to assess 2.4.1.
- These questions can be integrated into existing farm surveys.
- Can be complemented with contextual information from other data sources.

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 vising 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.

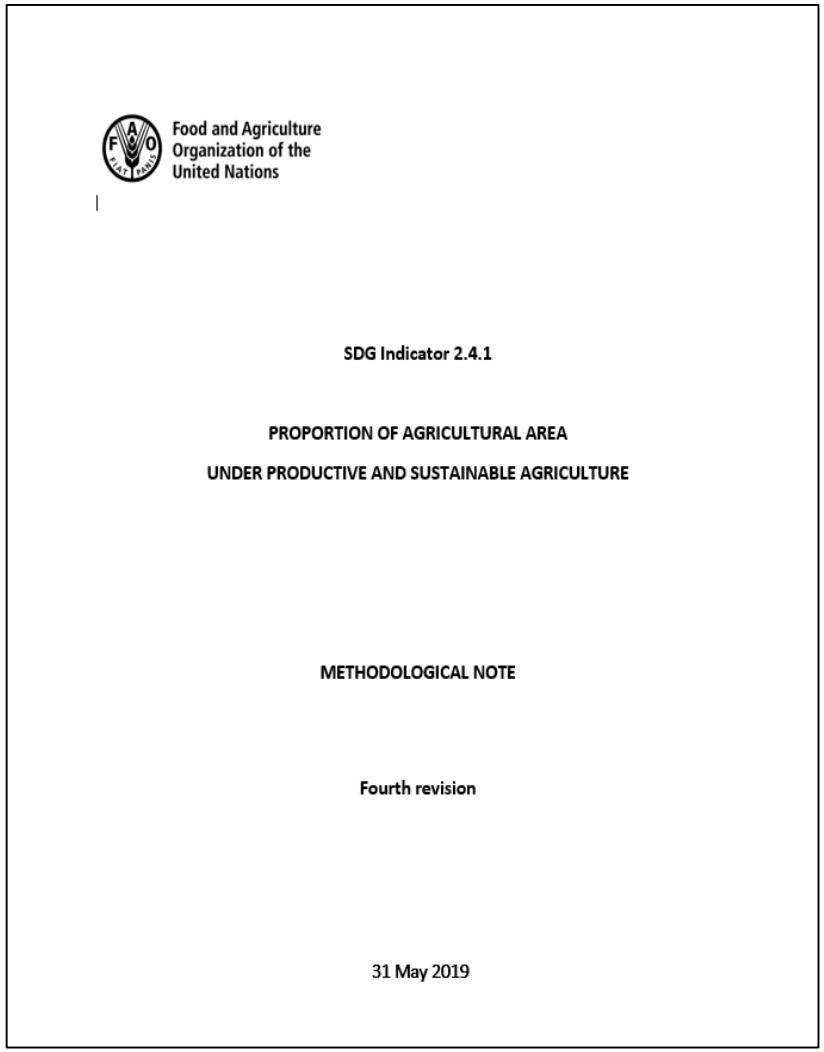
I.1 Record the following information about the respondent

I.1.1 First name | | | | | | | | | | | | | | | | | |

I.1.2 Surname | | | | | | | | | | | | | | | | | |

Survey questionnaire

Option 1: Supporting documents



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SDG Indicator 2.4.1

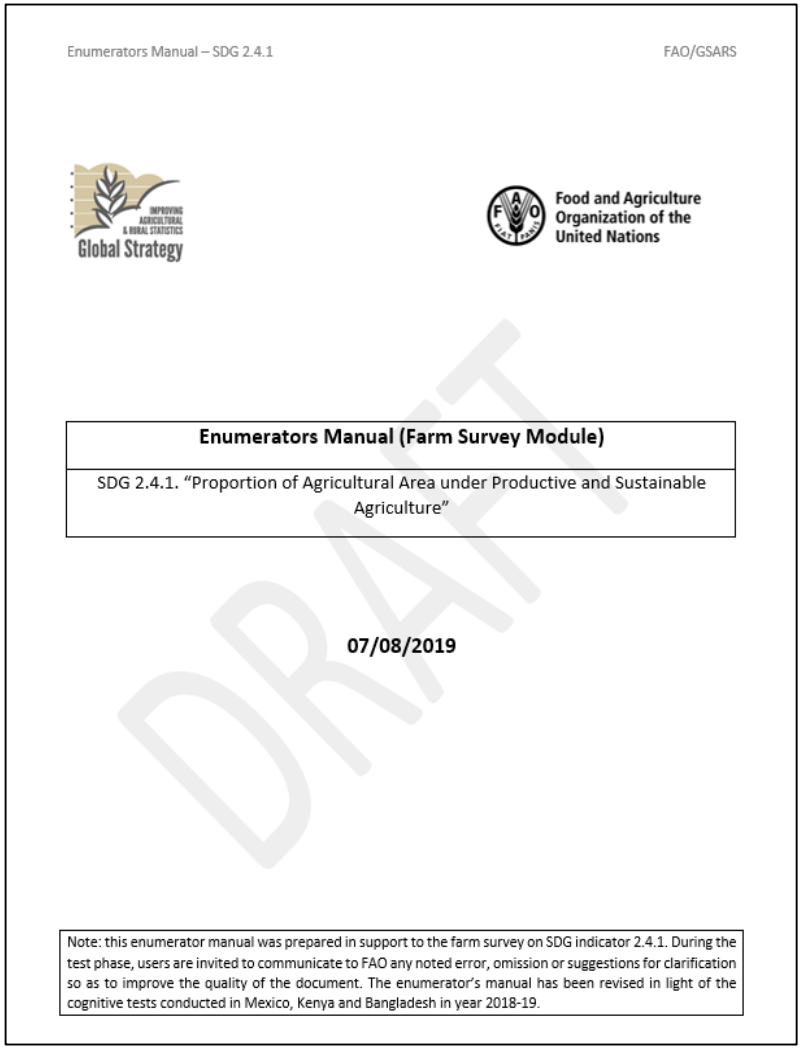
PROPORTION OF AGRICULTURAL AREA

UNDER PRODUCTIVE AND SUSTAINABLE AGRICULTURE

METHODOLOGICAL NOTE

Fourth revision

31 May 2019



Global Strategy

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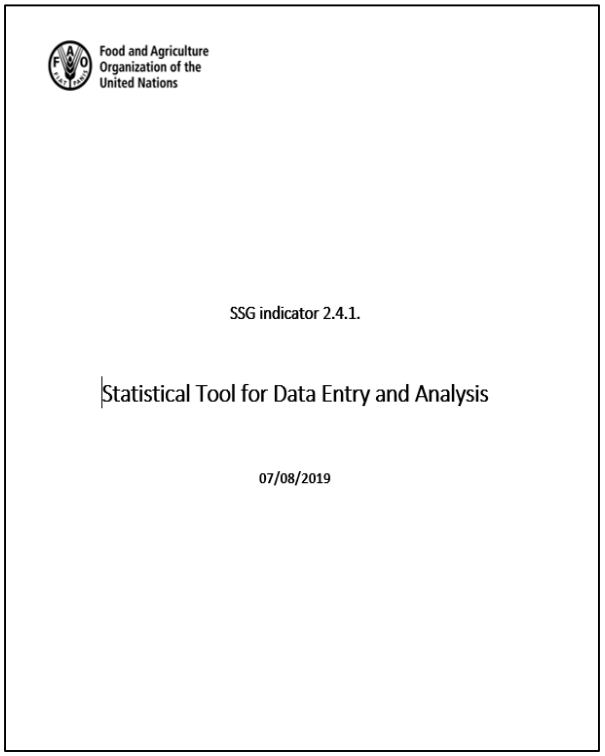
Enumerators Manual (Farm Survey Module)

SDG 2.4.1. "Proportion of Agricultural Area under Productive and Sustainable Agriculture"

07/08/2019

Note: this enumerator manual was prepared in support to the farm survey on SDG indicator 2.4.1. During the test phase, users are invited to communicate to 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



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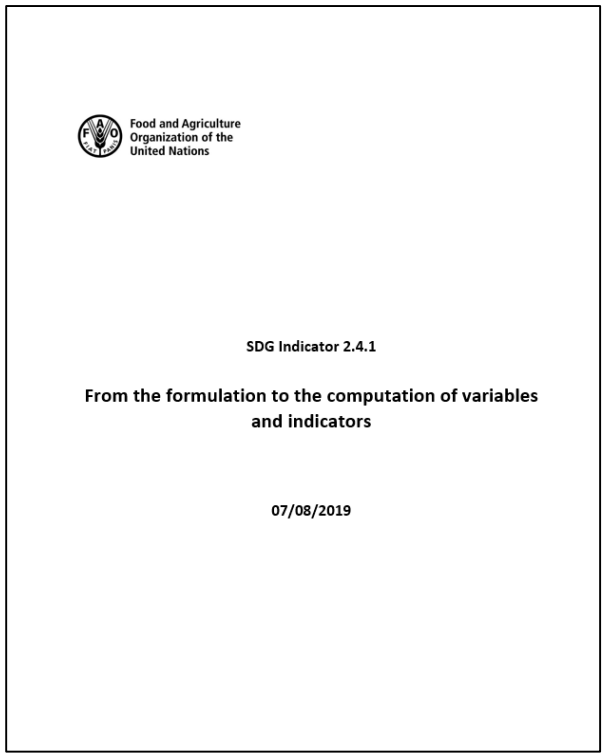
SSG indicator 2.4.1.

Statistical Tool for Data Entry and Analysis

07/08/2019



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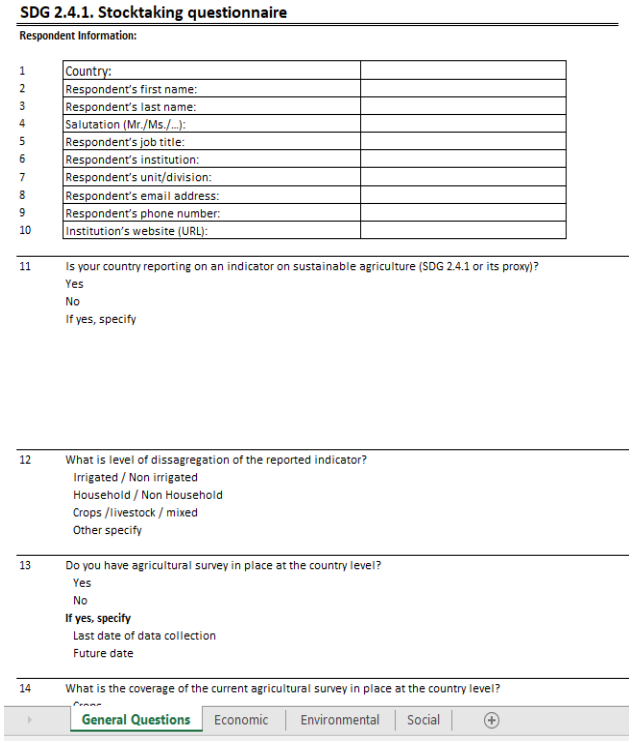
SDG Indicator 2.4.1

From the formulation to the computation of variables and indicators

07/08/2019



SDG 2.4.1. Stocktaking questionnaire

Respondent Information:

1	Country:	
2	Respondent's first name:	
3	Respondent's last name:	
4	Salutation (Mr./Ms./...):	
5	Respondent's job title:	
6	Respondent's institution:	
7	Respondent's unit/division:	
8	Respondent's email address:	
9	Respondent's phone number:	
10	Institution's website (URL):	

11 Is your country reporting on an indicator on sustainable agriculture (SDG 2.4.1 or its proxy)?
Yes
No
If yes, specify

12 What is level of dissagregation of the reported indicator?
Irrigated / Non irrigated
Household / Non Household
Crops /livestock / mixed
Other specify

13 Do you have agricultural survey in place at the country level?
Yes
No
If yes, specify
Last date of data collection
Future date

14 What is the coverage of the current agricultural survey in place at the country level?

General Questions | Economic | Environmental | Social

Option 2: Enhance national data prod

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.

a) **Core module of AGRISurvey with 2.4.1. questions:** Allowing for 2.4.1 data collection in one single year.

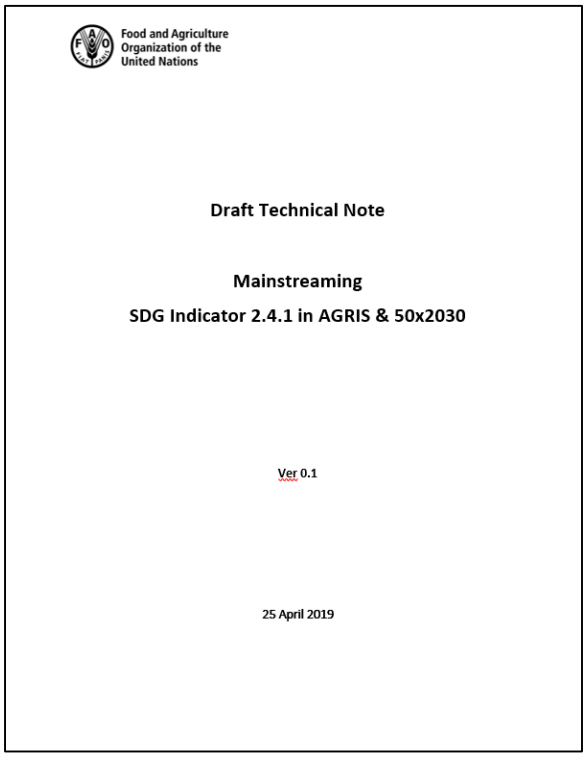
b) **Different modules of AGRISurvey :** Allowing for 2.4.1 data collection in two consecutive years. Questions for sub-indicators in the social and economic dimensions are integrated in the core module, while questions on environmental sub-indicators are integrated with the Production Methods and Environment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

c) **50x2030 with 2.4.1. questions:** Allowing for 2.4.1 data collection in one single year through PME module.

15 countries are expected to receive capacity development on 2.4.1 data collection through the AGRISurvey programme and 50X2030 in 2019-21.

Additional 35 countries will come on board in a phased manner between 2020 and 2030.

Option 2: Supporting documents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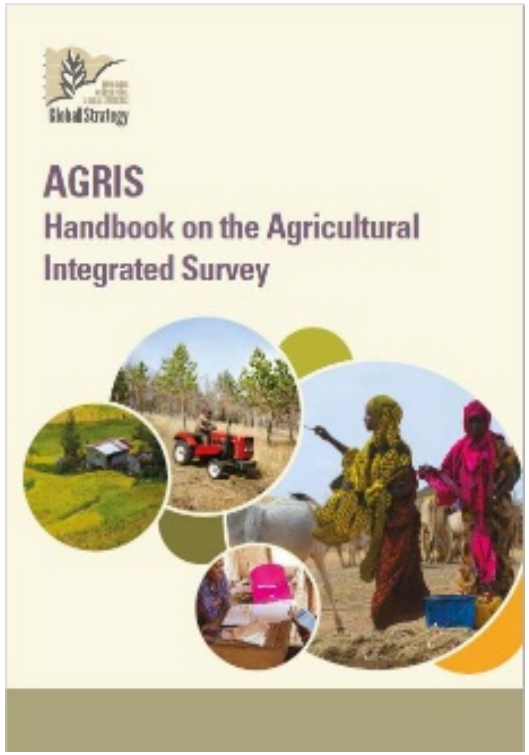
Draft Technical Note

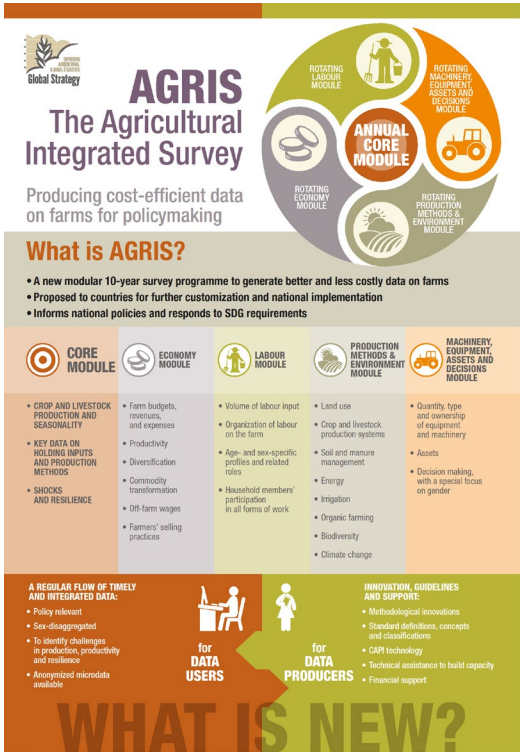
Mainstreaming

SDG Indicator 2.4.1 in AGRIS & 50x2030

Ver 0.1

25 April 2019





Option 3: Use of alternative data sources

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	
2	Net farm income		X	X			X	
3	Risk mitigation mechanisms	X					X	X
4	Prevalence of soil degradation				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		
9	Wage rate in agriculture	X		X			X	X
10	Food insecurity experience scale (FIES)						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: Using alternative data sources

- Respects the stratification (farm type, agricultural areas, etc.).
- Captures the same phenomenon as the proposed farm survey.
- At least same quality as the farm survey.
- Compliant with international/national standards and classifications systems internationally comparable.
- Data available at the same level of territorial disaggregation as the farm survey.
- Reference year and periodicity homogenous across the sub-indicators.

Reporting

REPORTING THE INDICATOR

- Based on the threshold values for each sub-indicator the farms and its agriculture areas are assigned sustainability status and using the traffic light approach are presented as follows:

  - **Green:** 'desirable' Meets desirable sustainability criteria
  - **Yellow:** 'acceptable' The sub-indicator meets the minimum sustainability criteria, but still below desirable level: significant progress still possible
  - **Red:** 'unsustainable' The sub-indicator doesn't meet the minimum sustainability criteria: major challenges must be overcome

- The sub-indicators by its sustainability status are then expressed as percentage of total agricultural area at the national or sub-national level
- Finally the 11 themes/sub-indicators are reported separately in a dashboard

DISSAGREGATION

The set of sub-indicators are presented in the form of a dashboard. The dashboard described above offers a response in terms of measuring sustainability at farm level and aggregating and reporting it by:

- National/sub-national level
- Different holdings types:
  - Household/non-household
  - Crops/livestock/mixed
  - Irrigate/non-irrigated

AGGREGATION (AT NATIONAL OR OTHER LEVELS)

$$SDG241_d = \min_{n:1-11} (SI_{d\,n})$$

$$SDG241_{a+d} = \min_{n:1-11} (SI_d + SI_a)_n$$

$$SDG241_u = \max_{n:1-11} (SI_{u\,n})$$

$SDG241_d$ = proportion of agricultural land area that have achieved the 'desirable' level

$SDG241_{a+d}$ = proportion of agricultural land area that have achieved at least the 'acceptable' level

$SDG241_u$ = proportion of agricultural area that is 'unsustainable'

EXAMPLE BANGLADESH 2018-19 (PILOT TESTS)

Sustainability status	SI-1	SI-2	SI-3	SI-4	SI-5	SI-6	SI-7	SI-8	SI-9	SI-10	SI-11
Desirable	55.9	237.5	286.3	259.8	443.0	240.0	102.9	0.0	501.3	486.8	437.0
Acceptable	93.7	250.0	148.9	147.0	11.3	108.7	123.6	425.8	0.0	17.2	58.0
Non-sustainable	360.1	22.3	74.6	103.0	55.5	161.0	283.2	83.9	8.5	5.8	14.7
Total agricultural area	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8	509.8

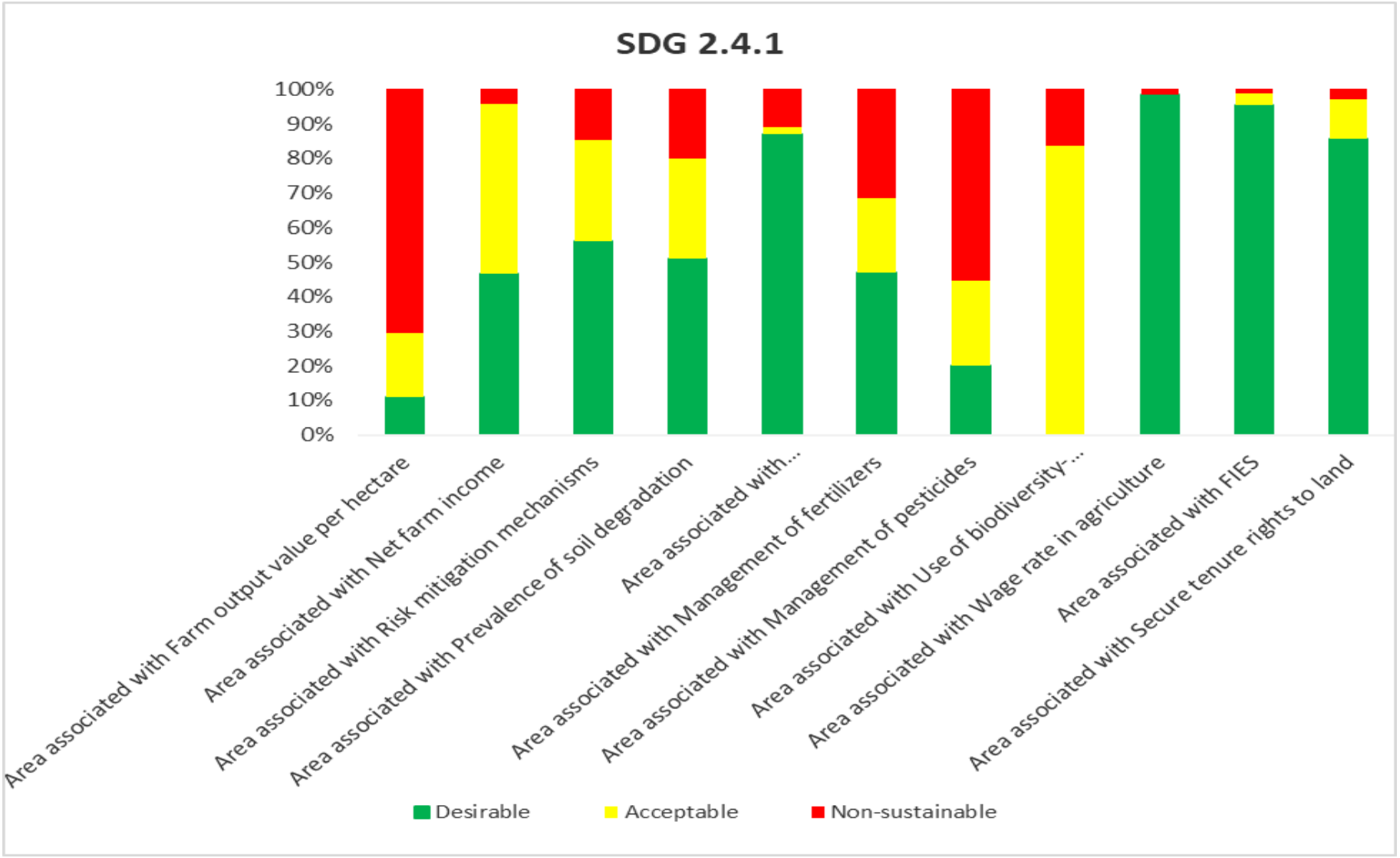
Source: farm survey (pilot study), Bangladesh 2018-19

EXAMPLE BANGLADESH 2018-19 (PILOT TESTS)

Sustainability status	SI-1	SI-2	SI-3	SI-4	SI-5	SI-6	SI-7	SI-8	SI-9	SI-10	SI-11
Desirable	11%	47%	56%	51%	87%	47%	20%	0.00%	98%	95%	86%
Acceptable	18%	49%	29%	29%	2%	21%	24%	84%	0%	3%	11%
Non-sustainable	71%	4%	15%	20%	11%	32%	56%	16%	2%	1%	3%

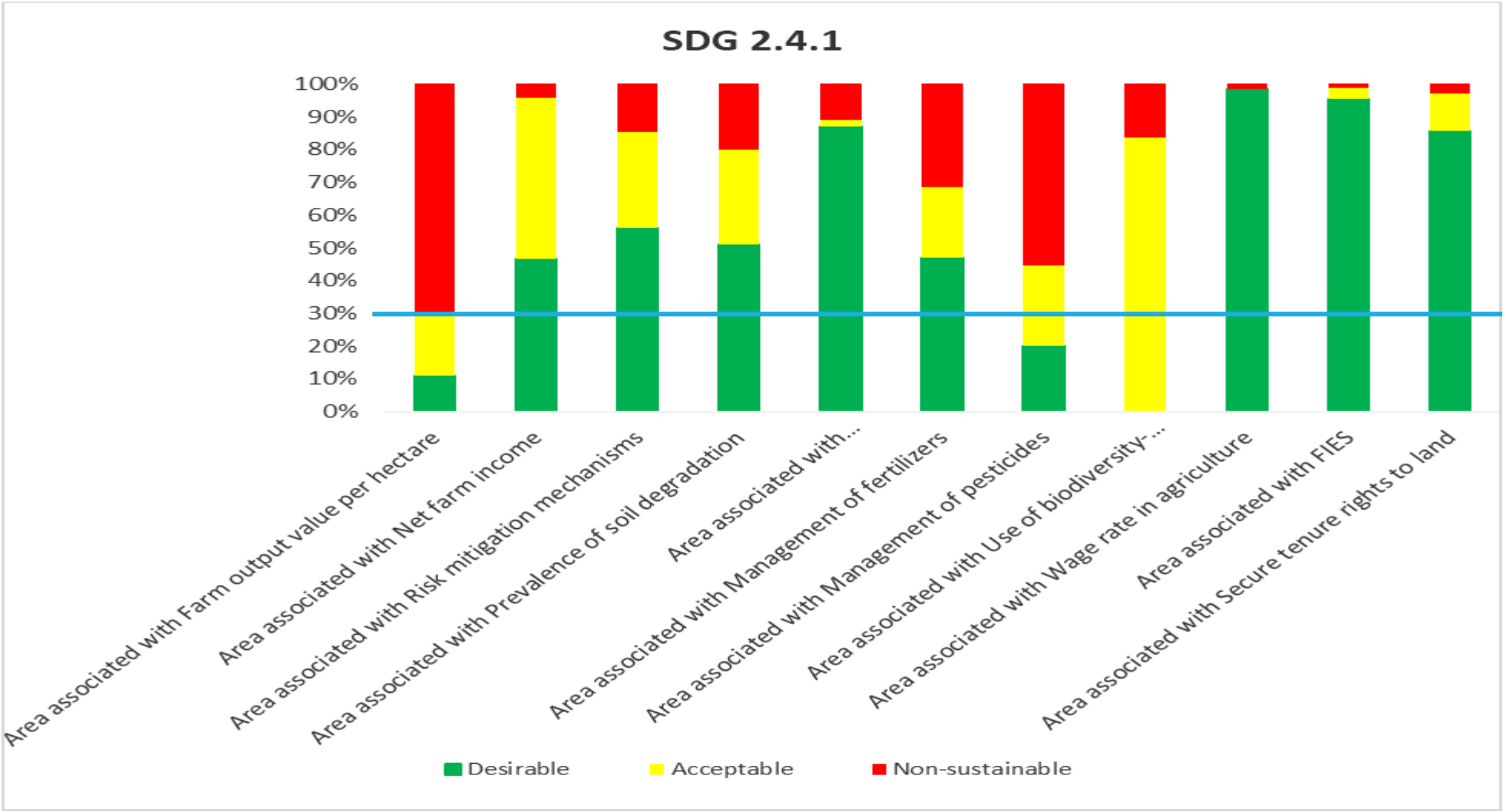
Source: farm survey (pilot study), Bangladesh 2018-19

DASHBOARD – EXAMPLE BANGLADESH (2018-19)



Source: Farm survey (pilot study), Bangladesh 2018-19

AGGREGATE INDICATOR – EXAMPLE BANGLADESH (2018-19)



Source: Farm survey (pilot study), Bangladesh 2018-19

THANK YOU

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PROS & CONS OF DASHBOARD

Pros	Cons
• Improve focus - allows quick evaluation of the results across selected themes/sub-indicators • Policy relevant – provide actionable information and clarity about the main issues of unsustainability of the country • Flexible – present the possibility to combine data from different sources	• Lack of simplicity – no single number to express sustainability • Progress over time for a country, comparison across countries and its ranking will be challenging unless done at the theme/sub-indicator level • Demand careful readability to understand the sustainability status

PROS & CONS OF AGGREGATE INDICATOR

Pros

- Simple and easy to understand
- Provide the possibility to rank countries
- Easy to monitor progress over time and across countries

Cons

- Multi-dimensionality of sustainability is compromised - hide the aspects of sustainability that countries needs to improve
- Cross country comparative analysis could be misleading - the same results could be triggered by completely different sustainability issues
- Interpretation of the results could be challenging

Option 3: Complementarities between data sources

- 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 to interpret the results.

- Crosscheck the farm survey results to identify any inconsistencies and ensure the robustness of the indicator. This validation exercise can be done ex-post or during the data collection by providing the external data to the enumerators before going to the field. In this way, the enumerators can probe whether the responses to the farm survey are consistent with the a priori external knowledge.