



## Turkmenistan Training Program for Supporting the Monitoring of Sustainable Development Goals (SDGs) 2030

SDG Indicators under FAO Custodianship - Goal 2 Indicator 2.4.1



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## **INDICATOR 2.4.1**

Proportion of agricultural area under productive and sustainable agriculture

## Goal 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture

2 ZERO HUNGER Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

 Indicator 2.4.1: Proportion of agricultural area under productive and sustainable agriculture (Tier II)

## Milestones

Year	Month	SDG process for Indicator 2.4.1
2015	October	2nd meeting of IAEG-SDG: Various interpretations on the definition of sustainable agriculture and how to measure it
2016	March	47 <sup>th</sup> UN-SC endorses FAO's proposal on SDG 2.4.1
	March-Dec	Literature review: building on exiting frameworks
	December	Technical expert meeting (FAO) – First draft methodology
2017	February	First proposal submitted to GS-SAC - Refining the methodology
	April	Multi-stakeholder Expert Group Meeting at FAO: Drafting detailed methodology
	Oct-Jan	Desk piloting in selected countries
	November	6 <sup>th</sup> meeting of IAEG-SDG. Request finalizing country pilot
2018	Jan-May	Preparation of revised methodology
	May-October	Country testing for methodology and farm survey questionnaire
	October	Presented to FAO Committee on Agriculture (COAG)
	November	Reclassified as Tier II at the 8 <sup>th</sup> meeting of IAEG-SDG
2019	Jan-October	Refinements in bio-diversity sub-indicator carried out with informal group of countries – Revised proposal submitted to the IAEG-SDG in October for endorsement within 2020 Review Process, where it was accepted

## Steps to develop the indicator

- 1. Determining the scope
- 2. Determining the dimensions to be covered (sustainability)
- 3. Choosing the scale
- 4. Selecting the data collection instrument(s).
- 5. Selecting the themes to be covered, choosing a sub-indicator for each theme.
- 6. Developing the criteria to assess sustainability performance for each sub-indicator
- 7. Deciding the periodicity of monitoring the indicator
- 8. Developing modality of reporting the indicator

## Characteristics of Indicator 2.4.1

Indicator 2.4.1 is defined as the "Proportion of agricultural area under productive and sustainable agriculture", which is expressed by the following formula:

 $SDG2.4.1 = \frac{Area under productive and sustainable agriculture}{Agricultural land area}$ 

- It reflects the **multiple dimensions** of sustainability
- It captures the main issues as they are expressed in the SDG target 2.4: resilience, productivity, ecosystem maintenance, adaptation to climate change and extreme events, and soils
- It is measured at farm level
- It allows measurement of progress towards more productive and sustainable agriculture

## **Denominator of Indicator 2.4.1**

Land use classes		Aggregated	land classes	
1.Land under temporary crops				
2.Land under temporary meadows	Arable			
and pastures	lands	Crop		
3.Land temporarily fallow		land	Agricultural land	Land used
4.Land under permanent crops				for agriculture
5. Land under permanent meadows				
and pastures				
6. Land under farm buildings and				
farmyards				
7. Forest and other wooded land				
8. Area used for aquaculture				
9. Other area not elsewhere classified				

## Scope

### Included within the scope

- Crop and livestock production systems
  - Non-food crops and livestock (example crops such as tobacco, cotton, and livestock raised for non-food products like sheep for wool).
  - Crops grown for fodder or for energy purposes.
- Agro-forestry (trees on the farm).
- Aquaculture, to the extent that it takes place within the agricultural area. For example, rice-fish and similar systems.
- Both intensive and extensive production systems (including subsistence agriculture).

### Excluded from the scope

- State and common land used commonly by several agriculture holdings.
- Production from gardens and backyards.
- Production from hobby farms.
- Land used exclusively for aquaculture.
- Forest and other wooded lands.
- Food harvested from the wild.

# Criteria for the choice of themes and sub-indicators

- Policy relevance
- Universality
- International comparability
- Measurability
- Cost effectiveness
- Minimum cross-correlation



## Sub-indicators

- Impact/outcome indicators that record what the state or change in state of factors and associated flows of benefits or costs.
- Awareness indicators record the level of awareness and knowledge in relation with a give sustainability issue.
- **Behavior** indicators capture the attitude of a given stakeholder in relation with a given sustainability issue.
- **Practice** indicators that record the type of agricultural practices and processes that a farm is undertaking.
- Perception indicators that record views of various stakeholders about different aspects of sustainability.

## Sub-indicators

No.	Theme	Sub-indicators
1	Land productivity	Farm output value per hectare
2	Economic sustainability	Net farm income
3	Resilience	Risk mitigation mechanisms
4	Soil health	Prevalence of soil degradation
5	Water use	Variation in water availability
6	Fertilizer risk	Management of fertilizers
7	Pesticide risk	Management of pesticides
8	Biodiversity	Use of agro-biodiversity-friendly practices
9	Decent employment	Wage rate in agriculture
10	Food security	Food insecurity experience scale (FIES)
11	Land tenure	Secure tenure rights to land

## 11 sub-indicators to reflect the multidimensional nature of the indicator

	Theme	Sub-indicators	Туре
nic	Land productivity	Farm output value per hectare	Outcome
Economic	Economic sustainability	Net farm income	Outcome
Eco	Resilience	Risk mitigation mechanisms	Mix
_	Soil health	Prevalence of soil degradation	Outcome
Environmental	Water use	Variation in water availability	Mix
onm	Fertilizer pollution risk	Management of fertilizers	Practice
invir	Pesticide risk	Management of pesticides	Practice
	Biodiversity	Use of agro-biodiversity-supportive practices	Practice
_	Decent employment	Wage rate in agriculture	Outcome
Social	Food security	Food insecurity experience scale (FIES)	Outcome
	Land tenure	Secure tenure rights to land	Outcome

## Assessing sustainability levels

## **RED: 'unsustainable'**

## YELLOW: 'acceptable'

**GREEN: 'desirable'** 

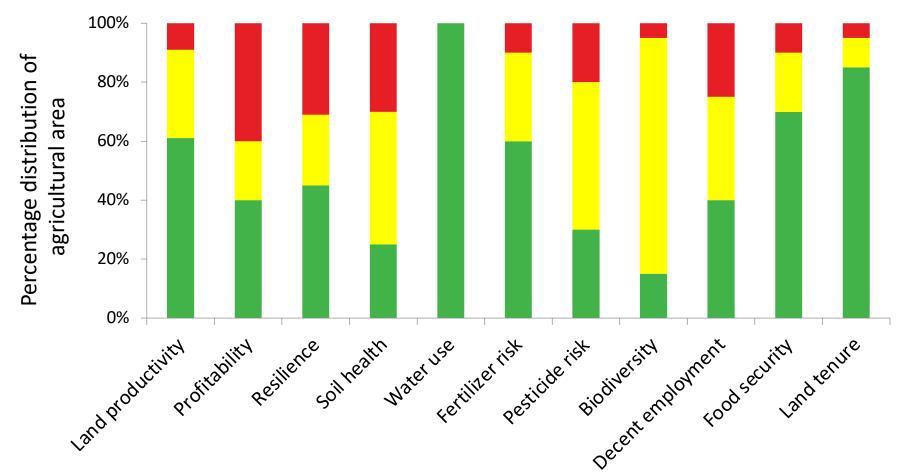
## Steps to calculate the 11 sub-indicators

### Steps to calculate the 11 sub-indicators

### Dashboard approach

- 1. Classify the sustainable (not sustainable) farms and its associated agricultural area, as per established criteria for each sub-indicator.
- 2. Once farms and its agricultural area have been classified for a given subindicator, calculate the total agricultural area according to its sustainability status.
- 3. Each sub-indicator is finally derived by calculating the proportion of agricultural area by sustainability status (i.e. **desirable**, **acceptable** and **unsustainable**) in total agricultural area.

## Reporting through a dashboard



Example of results for country X in year Y

Note: This dashboard is only a simulation and is not from real data

## **Pros & Cons of Dashboard**

### Pros

- 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

## Cons

- 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/subindicator level
- **Demand careful readability** to understand the sustainability status

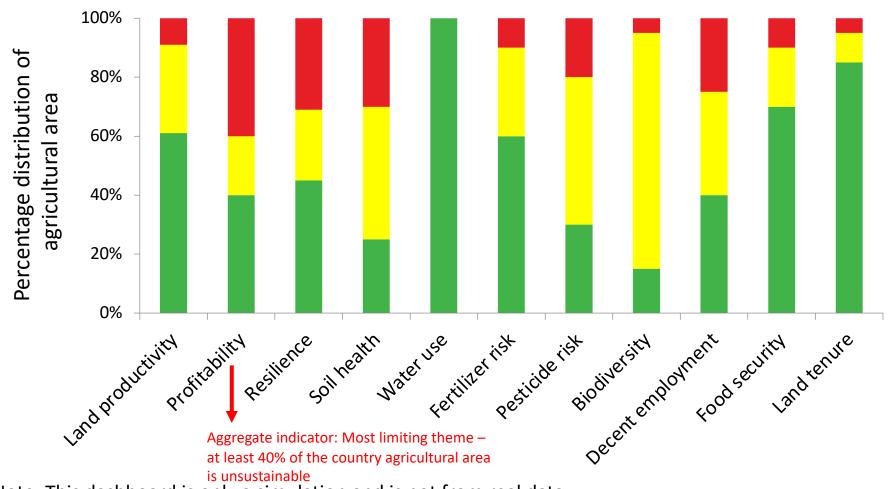
# Aggregate indicator (at national or other levels)

S

$$SDG241_{d} = \min_{n:1-11} (SI_{d n})$$
$$SDG241_{a+d} = \min_{n:1-11} (SI_{d}+SI_{a})_{n}$$
$$SDG241_{u} = \max_{n:1-11} (SI_{u n}) = 1 - SDG241_{a+d}$$

- SDG241<sub>d</sub> = proportion of agricultural land area that have achieved the 'desirable' level
- SDG241<sub>a+d</sub> = proportion of agricultural land area that have achieved at least the 'acceptable' level
- SDG241<sub>u</sub> = proportion of agricultural area that is 'unsustainable'

## Reporting through a dashboard



### Example of results for country X in year Y

Note: This dashboard is only a simulation and is not from real data

## Preferred instrument for data collection

- Preferred instrument for data collection is a farm survey
- Aligned with efforts supported by FAO to develop farm surveys as the most relevant instrument for agricultural data
- Standalone survey questionnaire designed as a module that contain the minimum set of questions needed to assess 2.4.1.
- It can be administered independently or attached as a separate module or integrated at appropriate places within existing farm surveys.
- Can be complemented with contextual information from other data sources (especially for environmental indicators)
- Suggested periodicity: 3 years

## **OPTION 1: Standalone survey questionnaire**

- FAO has developed the following support documents to accompany the survey questionnaire:
  - Guideline for data entry operations and analysis
  - Enumerator's manual
  - Guidelines on "From raw data to computation of the indicator"
  - 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**

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:									
Start time of the survey:     Date:     Date:       hour     minutes									
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 for	llowing information about the respondent									
1.1.1	First name									
1.1.2	Surname									

## **OPTION 1: Supporting documents**

	Enumerators Manual – SDG 2.4.1	FAO/GSARS
Food and Agriculture Organization of the United Nations	Food and Agriculture Organization of the United Nations	
SDG Indicator 2.4.1		
PROPORTION OF AGRICULTURAL AREA UNDER PRODUCTIVE AND SUSTAINABLE AGRICULTURE	SDG Indicator 2.4.1 Enumerators Manual (Farm Survey Mo	odule)
	07/08/2019	
METHODOLOGICAL NOTE		
Fourth revision		
31 May 2019	Note: this enumerator manual was prepared in support to the farm survey on SDG in test phase, users are invited to communicate to FAO any noted error, omission or sug so as to improve the quality of the document. The enumerator's manual has bee cognitive tests conducted in Mexico, Kenya and Bangladesh in year 2018-19.	gestions for clarification

## **OPTION 1: Supporting documents**

10/09/2019 10/09/2019 11/06/2019 11/06/2019	Guidelines for     From Raw Data to comp       Data Entry Operations and Data Analysis     SDG Indicator 2.4.1	Indicator 2.4.1
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## Use of alternative data sources

Note: Environmental monitoring systems include soil sampling, river flows records, and groundwater abstraction records. GIS/RS includes models.

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		а	а		а	а	
2	Net farm income		а	а			а	
3	Risk mitigation mechanisms	а					а	а
4	Prevalence of soil degradation				а	а		
5	Variation in water availability	а			а	а		а
6	Management of fertilizers	а		а	а	а		
7	Management of pesticides	а		а	а			а
8	Use of biodiversity-supportive practices				а	а		
9	Wage rate in agriculture	а					а	а
10	Food insecurity experience scale (FIES)						а	а
11	Secure tenure rights to land	а					а	

# Conditions for 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 subindicators





# Sub-indicator Sheets

## 1. Farm output value per hectare

Theme: Land Productivity

Coverage: All farm types

**Description:** The sub-indicator is described as farm output value per hectare (crops and livestock).

Farm output value per hectare Volume of agricultural output x relative prices

Farm agricultural land area (hectare)

- Green (desirable): Sub-indicator value is ≥ 2/3 of the corresponding 90th percentile of the distribution
- Yellow (acceptable): Sub-indicator value is ≥ 1/3 and < 2/3 of the corresponding 90<sup>th</sup> percentile
- Red (unsustainable): Sub-indicator value is < 1/3 of the corresponding 90th percentile

## 2. Net Farm Income

**Dimension:** Economic

Coverage: All farms types

**Description:** The sub-indicator measures if the farm is consistently profitable over a 3-year period.

**Profitable** means that  $NFI > CR + Y_k - OE - Dep + \Delta In$ 

- **NFI** = Total Net Farm Income
- **CR** = Total farm cash receipts including direct program payments
- $Y_k$  = Income in kind
- **OE** = Total operating expenses after rebates (including costs of labour)
- **Dep** = Depreciation
- **Δ Inv** = Value of inventory change.

## 2. Net Farm Income

Value of output = Total farm cash receipts + Direct program payments + Income in kind +	Cost = Operating + Fixed cost + depreciation			
Change in inventory				
• Total cash receipts= Quantity X Prices	<ul> <li>Operating Expenses:</li> </ul>			
- Crops	<ul> <li>Labor (Cash wages + in kind)</li> </ul>			
- Livestock	- Fertilizers			
<ul> <li>Other on-farm activities / products</li> </ul>	- Pesticides			
<ul> <li>Direct program payments</li> </ul>	- Fuel			
<ul> <li>Income in kind (self consumed)</li> </ul>	- Electricity			
Value of inventory change	- Seed			
	- Feed			
	- Irrigation			
	- Taxes			
	- Depreciation			
	- Others			

## 2. Net Farm Income

Dimension: Economic

Theme: Economic Sustainability

Coverage: All farms types

**Description:** The sub-indicator measures if the farm is consistently profitable over a 3-year period.

- Green (desirable): above zero for past 3 consecutive years
- Yellow (acceptable): above zero for at least 1 of the past 3 consecutive years
- Red (unsustainable): below zero for all of the past consecutive years

## 3. Risk mitigation mechanisms

Dimension: Economic

Theme: Resilience

Coverage: All farms types

**Description:** This sub-indicator measures the incidence of the following mitigation mechanisms: *Access to credit*; *Access to insurance*; *On farm diversification* 

Access to credit and/or insurance is requires the holder to have enough means to obtain the service (i.e. the required documents, collateral, etc.).

- Green (desirable): Adoption of at least two of the above-listed mitigation mechanisms.
- Yellow (acceptable): Adoption of at least one of the above-listed mitigation mechanisms.
- Red (unsustainable): Absence of all of the above listed mitigation mechanisms.

## 4. Prevalence of soil degradation

Dimension: Environmental

Theme: Soil health

Coverage: All farms types

**Description:** The sub-indicator measures the extent to which agriculture activities affects soil health by causing any of the following phenomena: *Erosion; Reduction of fertility; Waterlogging; Salinization* 

- Green (desirable): The combined area affected by any of the four selected threats to soil health is negligible (less than 10% of the total agriculture area of the farm).
- Yellow (acceptable): The combined area affected by any of the four selected threats to soil health is between 10% and 50% of the total agriculture area of the farm.
- Red (unsustainable): The combined area affected by any of the four selected threats to soil health is above 50% of the total agriculture area of the farm.

Dimension: Environmental

Theme: Water use

Coverage: All farm types

**Description:** The sub-indicator captures the extent to which agriculture contributes to unsustainable patterns of water use.

- Green (desirable): does not use water for irrigating crops on more than 10% of the agriculture area of the farm, or water availability remains stable over the years
- Yellow (acceptable): uses water to irrigate crops on at least 10% of the agriculture area of the farm, does not know whether water availability remains stable over the years, or experiences reduction on water availability over the years, but there is an organisation that effectively allocates water among users.
- Red (unsustainable): in all other cases.

## 6. Management of fertilizers

Dimension: Environmental

Theme: Fertilizer risk

Coverage: All farm types

- **Description:** The proposed approach is based on questions to farmers about their adoption of precautionary measures in the use of fertilizer
- Management measures:
- 1. Follow protocols as per extension service or retail outlet directions or local regulations, not exceeding recommended doses
- 2. Use organic source of nutrients (including manure or composting residues) alone, or in combination with synthetic or mineral fertilizers
- 3. Use legumes as a cover crop, or component of a multi/crop or pasture system to reduce fertilizer inputs
- 4. Distribute synthetic or mineral fertilizer application over the growing period
- 5. Consider soil type and climate in deciding fertilizer application doses and frequencies
- 6. Use soil sampling at least every 5 years to perform nutrient budget calculations
- 7. Perform site-specific nutrient management or precision farming
- 8. Use buffer strips along water courses

Dimension: Environmental

Theme: Fertilizer risk

Coverage: All farm types

**Description:** The proposed approach is based on questions to farmers about their use of fertilizer,

- Green (desirable): The farm has organic certification (does not use synthetic or mineral fertilizers) or uses synthetic or mineral fertilizers and takes specific measures to mitigate environmental risks (more than four from the list provided)
- Yellow (acceptable): farmer uses synthetic or mineral fertilizers and takes at least one measure from the above list to mitigate environmental risks
- Red (unsustainable): farmer uses synthetic or mineral fertilizer and does not take any of the above specific measures to mitigate environmental risks associated with their use.

## 7. Management of pesticides

Dimension: Environmental

Theme: Pesticides

Coverage: All farm types

**Description:** The proposed sub-indicator is based on information on the adoption of precautionary measures on the use of pesticides on the farms

### Health measures:

- 1. Adherence to label directions for pesticide use (including use of protection equipment while applying pesticides)
- 2. Maintenance and cleansing of protection equipment after use
- 3. Safe disposal of waste (cartons, bottles and bags)

### **Environmental measures:**

- 1. Adherence to label directions for pesticide application
- 2. Adopt any of the above Good Agricultural Practices (GAPs): adjust planting time, apply crop spacing, crop rotation, mixed cropping or inter-cropping
- 3. Perform biological pest control or use biopesticides
- 4. Adopt pasture rotation to suppress livestock pest population
- 5. Systematic removal of plant parts attacked by pests
- 6. Maintenance and cleansing of spray equipment after use
- 7. Use one pesticide no more than two times or in mixture in a season to avoid resistance

**Dimension:** Environmental

Theme: Pesticides

Coverage: All farm types

**Description:** The proposed sub-indicator is based on information on the use of pesticides on the farms

- Green (desirable): The farm has organic certification or does not use pesticides, uses only low risk pesticides, and adheres to all three health-related measures and at least three of the environment-related measures
- Yellow (acceptable): farmer uses only low-risk pesticides and takes some measures to mitigate environmental and health risks (at least two from each of the lists above
- Red (unsustainable): farmer uses highly hazardous pesticides or uses lowrisk pesticides but does not take specific measures to mitigate environmental or health risks associated with their use.

**Dimension:** Environmental

Theme: Biodiversity

**Coverage:** All farm types

**Description:** This sub-indicator measures the level of adoption of biodiversity-supportive practices by the farm

- Green (desirable): The agricultural holding meets at least two of the criteria established
- Yellow (acceptable): The agricultural holding meets one of the established criteria
- Red (unsustainable): The agricultural holding meets less than two of the established criteria

### Set of criteria for countries :

- 1. Leaves at least 10% of the holding area for natural or diverse vegetation. This can include natural pasture/grassland, maintaining wildflower strips, stone and wood heaps, trees or hedgerows, natural ponds or wetlands.
- 2. Farm does not use medically important antimicrobials as growth promoters.
- At least two of the following contribute to farm production: 1) temporary crops, 2) pasture, 3) permanent crops, 4) trees on farm, 5) livestock or animal products, and 6) aquaculture.
- 4. Practices crop or crop/pasture rotation involving at least 2 crops or crops and pastures on at least 80% of the farm cultivated area (excluding permanent crops and permanent pastures) over a period of 3 years. In case of a 2-crop rotation, the 2 crops have to be from different plant genus, e.g. a grass plus a legume, or a grass plus a tuber etc.
- 5. Livestock includes local livestock breeds.

Dimension: Social

Theme: Decent employment

**Coverage:** Not applicable to farms that employ only family labour.

**Description:** The sub-indicator measures the farm unskilled labour daily wage rate in Local Currency Units (LCU).

- Green (desirable): if the holding has fair labour certification or if the wage rate paid to unskilled labour is above the minimum national wage rate or minimum agricultural sector wage rate (if available).
- Yellow (acceptable): if the wage rate paid to unskilled labour is equals to the minimum national wage rate or minimum agricultural sector wage rate (if available).
- Red (unsustainable): if the wage rate paid to unskilled labour is below the minimum national wage rate or minimum agricultural sector wage rate (if available).

## **10. Food Insecurity Experience Scale (FIES)**

Dimension: Social

Theme: Food security

**Coverage: Only household farms** 

**Description:** The Food Insecurity Experience Scale (FIES) produces a measure of the severity of food insecurity experienced by individuals or households, based on direct interviews.

Sustainability criteria: Level on FIES scale

- Green (desirable): Mild or no food insecurity
- Yellow (acceptable): Moderate food insecurity
- Red (unsustainable): Severe food insecurity

Dimension: Social

Theme: Land tenure

Coverage: All farms types

**Description:** The sub-indicator measures the ownership or secure rights over use of agricultural land areas using a series of criteria.

Sustainability criteria: Level of security of access to land.

- Green (desirable): has a formal document with the name of the holder/holding on it, or has the right to sell any of the parcel of the holding, or has the right to bequeath any of the parcel of the holding
- Yellow (acceptable): has a formal document even if the name of the holder/holding is not on it
- Red (unsustainable): no positive responses to any of the 4 questions above

## Data reporting processes

- **Short-term**: FAO to collect available national data by sub-indicator through a FAOSTAT-style questionnaire
  - Nov 2019 Jan 2020: Questionnaire sent to countries' focal points and data collected
  - Jan-Feb 2020: data analysis, gap filling, QA/QC processes
    - +new e-learning
  - > <u>Feb 2020</u>: Data is validated and if possible, reported at the global level
  - <u>2020-2030</u>: Repeat annual data collection, analysis and dissemination cycle

### • Medium-Long Term:

<u>2020-2030:</u> Implementation of farm-based surveys in countries supported by capacity development activities, including dedicated projects.

## Data reporting processes



Food and Agriculture Organization of the United Nations

### 2.4.1 - PROPORTION OF AGRICULTURE AREA UNDER PRODUCTIVE AND SUSTAINABLE AGRICULTURE - INSTRUCTIONS

#### **General Instructions**

and the set of the start of the set									
International standards and classifications	This questionnaire reflects SDG Indicator 2.4.1 Methodology (http://www.fao.org/sustainable-development-goals/indicators/241/en/). Definitions and classifications are aligned with the System of Environmental-Economic Accounting (SEEA) (https://unstats.un.org/unsd/envaccounting/seearev/) and also uses some definitions of the World Census of Agriculture 2020, Volume 1 (WCA) (http://www.fao.org/world-census-agriculture). Kindly refer, where possible, to the classification of temporary and permanent crops provided by these classifications.								
Calendar year	Kindly report your data with reference to the calendar year (January to December) indicated by column. If data are available for year(s) different from those specified, enter data but include an explanation under the "Notes" Column.								
Units	Data are to be expressed in hectares. If data are reported in a different unit of measurement, please indicate it in the "NOTES' column.								
Notation keys	<ul> <li>Included elsewhere. Please specify in 'notes' under which category or cell these data are included.</li> <li>No data available.</li> <li>Non-applicable. Data category cannot exist in your country (e.g. name sub-indicator)</li> </ul>								
Comments and additional information Please include any relevant information in the notes column available in each section. Relevant information may refer to differences in, among others: land use classification, define the methodologies, reference year, units used for data collection, status of reported data (e.g., preliminary, forecast), etc.									
Electronic version This questionnaire is provided in .xlsx format. The preferred option is to have it completed in this electronic version and returned by email.									
Structure of the guestionnaire									
Cover	Collects the contact details of the national focal point responsible for SDGs and provides the FAO contact details for sending the completed questionnaire or requesting information.								
Instructions	Provides general instructions on how to complete the questionnaire as well as an overview of its structure (this page). Users are kindly asked to read these instructions before filling in the questionnaire.								
Definitions	Provides definitions of the categories used in the questionnaire and their correspondence with other international standards.								
1. Economic Dimension	Collects data on 3 sub-indicators in the economic dimension (Farm output value per hectare, Net Farm Income, and Risk mitigation mechanisms).								
2. Environmental Dimension	Collects data on 5 sub-indicators in the environmental dimension (Prevalence of soil degradation, Variation in water availability, Management of fertilizers, Use of biodiversity-supportive practices)								
3. Social Dimension	Collects data on 3 sub-indicators in the social dimension (Wage rate in agriculture, Food Insecurity Experience Scale, Secure tenure rights to land)								
4. Metadata 4 → Instructions Definition	Collects metadata on completeness (country coverage) source of the data_original unit of measurement, frequency of data collection and dissemination media.         Is       1. Economic Dimension       2. Environmental Dimension       3. Social Dimension       4. Metadata       5. Feedback       +       •								

## Implementation of the National Sustainable Development Goals of Turkmenistan

### SDG indicator 2.4.1: included in the national list of indicators

National Focal Points	Indicator Value	<b>Reporting Entity</b>	Analytical Entity
Unknown	Unavailable	SSC	MAWR

For more detailed information on Indicators 2.4.1, please visit: http://www.fao.org/sustainable-development-goals/indicators/241/en/