SDG 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

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

Tier II
(Methodology established but data not regularly produced by countries)

FAO is the custodian agency for SDG indicator 2.4.1
WHAT ARE THE SDGS?

The Sustainable Development Goals (SDGs) are a set of 17 objectives, adopted by all United Nations Member States, aimed at ensuring by 2030 a peaceful, prosperous and sustainable future for all.

They call on all countries to act in a global partnership to end poverty and suffering, by adopting strategies that improve health and education, reduce inequality, and spur economic growth while safeguarding the planet.

WHAT IS AN SDG INDICATOR?

Each Goal includes Targets and Indicators. Targets embrace the specific conditions that must be satisfied in order to achieve the relevant Goal. Indicators, such as 2.4.1, are tools used to measure concrete progress towards the achievement of SDG Targets.

WHAT IS INDICATOR 2.4.1?

MEASURING PROGRESS TOWARDS PRODUCTIVE AND SUSTAINABLE AGRICULTURE

Agriculture plays an essential role in ensuring a better future for all. As a fundamental connection between people and the planet, it can help achieve multiple SDGs. Yet, to ensure enough food is produced for a population of nearly 10 billion by 2050 without critically degrading natural resources, we need a transition to sustainable agricultural systems.

FAO’s Sustainable Food and Agriculture (SFA) approach, articulated in five key principles, places people at the center, focusing on efficient use of economic resources and environmental protection.

By tracking the proportion of agricultural land area by its suitability status, SDG Indicator 2.4.1 provides an assessment of progress towards sustainable agriculture. In doing so, it supplies decision-makers with strategic information for evidence-based policies and action.

In particular, Indicator 2.4.1 assesses progress towards Target 2.4 of SDG2: “End hunger, achieve food security, improve nutrition and promote sustainable agriculture.”

The Indicator is expressed by the following formula:

\[
\text{SDG 2.4.1} = \frac{\text{Area under productive and sustainable agriculture}}{\text{Agricultural land area}}
\]
**HOW IS THE DATA COLLECTED?**

The scope of Indicator 2.4.1 is the agricultural holding and information is gathered primarily through farm surveys.

These surveys involve the use of questionnaires and provide a **systematic and cost-effective** way of obtaining information from respondents, delivering statistically analyzable data. Surveys are to be conducted **every three years**. In terms of ongoing data collection efforts, this would allow countries to generate a time-series with three data points before 2030.

By focusing on the agricultural holding and the agricultural land area associated with it, farm surveys offer the most relevant data collection tool for Indicator 2.4.1. This decision is in line with countries’ efforts supported by FAO to develop farm surveys.

Information is collected by different types of agricultural holdings, (household and non-household), production systems (crop, livestock, mixed) and by areas that are irrigated. Sub-national contexts are also taken into account.

**HOW IS THE DATA REPORTED?**

Indicator 2.4.1 reflects the multiple dimensions of sustainability: **economic, environmental** and **social**.

A set of 11 sub-indicators are defined, organised in themes, each mapped to one of the three dimensions:

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

Data collected from the agricultural holdings are aggregated at national level by sub-indicator, and reported via a **dashboard** using a traffic-light approach to indicate sustainability status. The dashboard allows countries to **easily visualize their performance** in terms of the different sustainability dimensions and themes, and therefore understand where their policy efforts may best be focused.

Using sustainability criteria and thresholds, the results for each sub-indicator are presented along a spectrum - **desirable** (green), **acceptable** (yellow), **unsustainable** (red).
WHAT IS THE SCOPE OF THE INDICATOR?

Included within the scope:
- Both intensive and extensive production systems
- Subsistence agriculture
- State and common land when used exclusively and managed by the holding
- Food and non-food crops and livestock products
- 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

Excluded from the scope:
- State and common land not used exclusively by the agriculture holding
- Nomadic pastoralism
- Production from gardens and backyards. Production from hobby farms
- Holdings focusing exclusively on aquaculture
- Forest and other wooded lands outside of an agricultural holding
- Food harvested from the wild

WHO DEVELOPED INDICATOR 2.4.1?

This Indicator is the result of a multi-stakeholder process facilitated by FAO and together with the Global Strategy to improve Agricultural and Rural Statistics (GSARS) and engaged countries, technical experts, international organizations, academia, civil society and the private sector.

To find out more about SFA, the SDGs and explore FAO publications, studies and research, visit: fao.org/sustainability


Have a look at the FREE e-learning courses on the SDG indicators under FAO custodianship https://elearning.fao.org/course/index.php?categoryid=84

Watch this video to learn more about the monitoring process https://www.youtube.com/watch?time_continue=2&v=CiaUQ1N08P0

Follow us @FAOSDGs
For more information, contact us at: SDG-Indicators@fao.org

Some rights reserved. This work is available under a CC BY-NC-SA 3.0 IGO licence