Rice GAPfinder

A tool to collect data on the Sustainable Rice Platform Standard and Performance Indicators

Rice sector sustainability is critical to future global food security and a sustainable food system. Wide-scale adoption of globally recognized science-based standards and indicators is vital to enable the transformation.

The Sustainable Rice Platform (SRP) was originally co-convened by the International Rice Research Institute (IRRI), the United Nations Environment Programme (UNEP) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). It is now an independent member association with a multi-stakeholder alliance of more than 100 institutional members for transforming the global rice sector. SRP released the world’s first rice sustainability standard and performance indicators in 2015, and a revised version was released in 2019.

The SRP Standard for Sustainable Rice Cultivation offers a normative framework that can support claims to sustainability performance in rice supply chains (Fig. 1).

The 12 SRP Performance Indicators are quantitative indicators to monitor the impacts of adopting climate-smart best practices and other field interventions (Fig. 2).

Over time, international development organizations and projects have adapted the Standard and Performance Indicators and used them to monitor the impact of training on good agricultural practices for rice cultivation. However, they often used paper-based data collection

**Figure 1. SRP Performance Indicators for Sustainable Rice Cultivation**

- **FARM MANAGEMENT**
  - Crop calendar
  - Record keeping
  - Training

- **PREPLANTING**
  - Heavy metals
  - Soil salinity
  - Land conversion and biodiversity
  - Invasive species
  - Leveling
  - Pure seed quality

- **INTEGRATED PEST MANAGEMENT**
  - Weeds
  - Insects
  - Diseases
  - Mollusks
  - Rodents
  - Birds

- **HARVEST AND POSTHARVEST**
  - Timing of harvest
  - Harvest equipment
  - Drying time
  - Drying technique
  - Rice storage
  - Rice stubble
  - Rice straw

- **WATER USE**
  - Water management
  - Irrigation system at community level
  - Inbound water quality
  - Groundwater extraction
  - Drainage

- **NUTRIENT MANAGEMENT**
  - Nutrient management (organic and/or inorganic)
  - Organic fertilizer choice
  - Inorganic fertilizer choice

- **HEALTH AND SAFETY**
  - Safety instructions
  - Tools and equipment
  - Training on pesticide applications
  - Personal protective equipment
  - Washing and changing
  - Applicator restrictions
  - Re-entry time
  - Pesticide and chemical storage
  - Pesticide disposal

- **LABOR RIGHTS**
  - Child labor
  - Hazardous work
  - Education
  - Forced labor
  - Discrimination
  - Freedom of association
  - Wages

**Figure 2. Themes and requirements in the SRP Standard for Sustainable Rice Cultivation**

- Economic
  - Profitability
  - Labor productivity
  - Water productivity and quality
  - N and P use efficiency

- Social
  - Worker health and safety
  - Child labor and youth engagement
  - Women empowerment

- Food safety
  - Greenhouse gases
  - Biodiversity

and entered data after all the interviews were completed. This process is time- and labor-consuming.

What is Rice GAPfinder?

Recently, Africa Rice Center (AfricaRice) developed ‘Rice GAPfinder’ based on Survey Solutions, which is free software developed by the Data Group of The World Bank.

Rice GAPfinder is used for recall interview survey by extension agents and agricultural development projects with farmers to collect data on the SRP Standard and Performance Indicators using Android phones and tablets.

Some features of this tool are:

► Supervisor and enumerator: Supervisor manages enumerators, who collect data in the field immediately after rice harvest.

► Off-line: Enumerator can conduct interviews without an internet connection. After data collection, data will be sent to the server when the enumerator synchronizes in their office.

► Efficient data quality control: Supervisor of the survey can immediately review data once it has been submitted by enumerators. If data needs to be retaken, the supervisor can request additional data collection without direct interaction with enumerators. Then, enumerators can call or visit farmers to ask questions again and then resubmit.

► Multiple languages: At present, English, French, Swahili and Burmese are available. Additional languages can be easily included.

► User friendly interface: Shows progress in interview in different colors, i.e. blue – uncompleted topics; green – completed topics; red – errors or rejected.

► Provides a question-and-answer tree for each requirement of SRP Standard: This helps farmers to understand and answer questions (Fig. 3).

► Calculates performance indicators and SRP Standard score (Fig. 3): Provides an alert during interview if the values are outside acceptable limits.

► Provides advice: For example, on key improved practices to individual farmers.

How to access Rice GAPfinder

Currently, the tool is not publicly available. But may be shared for free on request.

Various functions of this tool are being upgraded, including automation of data processing and visualization.

Figure 3. SRP Standard questionnaires, score and Performance indicators: screenshots of Rice GAPfinder