

# Sustainable Rice Platform Standard on Sustainable Rice Cultivation

Version 2.0 January 2019 www.sustainablerice.org

# © Sustainable Rice Platform

This work is published by the Sustainable Rice Platform under a Creative Commons Attribution-Non Commercial-Share Alike 3.0 License. It should be cited as follows:

SRP (2019). The SRP Standard for Sustainable Rice Cultivation (Version 2.0), Sustainable Rice Platform. Bangkok: 2019. Available at http://www.sustainablerice.org

## **Authors**

This document has been prepared by the Sustainable Rice Platform (SRP) team led by UN Environment, International Rice Research Institute (IRRI) and Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), and supported by the SRP Working Group on Farmer Support, Performance Measurement, and Assurance, following extensive consultation with SRP members, external stakeholders, and ad hoc working groups focusing on specific topics.

# **Disclaimer**

The views expressed in this document are those of the authors and may not in any circumstance be regarded as representing an official position of the organizations involved.

# **Transition rules**

SRP Standard Version 1.0 will be phased out by 31 December 2019.

# The Sustainable Rice Platform (SRP)

SRP is a global multi-stakeholder alliance launched in 2011 and led by UN Environment, IRRI and GIZ, comprising over 90 institutional stakeholders, including public and private sector stakeholders, research, financial institutions and NGOs. SRP promotes resource-use efficiency and climate change resilience in rice systems (both on-farm and throughout value chains) and pursues voluntary market transformation initiatives by developing sustainable production standards, indicators, incentive mechanisms, and outreach mechanisms to boost wide-scale adoption of sustainable best practices throughout rice value chains. SRP's goal is to minimize environmental impacts of rice production and consumption while enhancing smallholder incomes and contributing to food security.

# **Contact details**

For further details contact Wyn Ellis, SRP Coordinator:

Tel: +66 2 288 1801

Email: Secretariat@sustainablerice.org

Web: www.sustainablerice.org

# BACKGROUND AND ACKNOWLEDGEMENTS

The Sustainable Rice Platform (SRP) Standard for Sustainable Rice Cultivation is the world's first voluntary sustainability standard for rice.

Drawing on the experiences of other agri-food sustainability initiatives, the SRP Standard was developed over a two-year period with broad stakeholder participation. The first public version of the SRP Standard (Version 1.0) was released for field-testing in October 2015. SRP members and external stakeholders conducted pilots using the SRP Standard (Version 1.0) with farmers in diverse agro-ecological contexts over a period of one to two crop seasons. Data and farmer feedback from these field pilots provided invaluable guidance in refining the Standard.

In 2017, SRP launched a review and revision process, in compliance with the ISEAL Standard-Setting Code of Good Practice. The objective of the revision was to improve the clarity, consistency, and utility of Version 1.0 to respond to common issues identified during field-testing. SRP held a Standard and Performance Indicator Revision Workshop in Bali, Indonesia during August 2017, followed by an open online public consultation from September to November 2017 to identify areas for potential revision and proposed changes. Inputs were assessed and incorporated during December 2017 to November 2018, in consultation with members of the SRP Working Group on Farmer Support, Performance Measurement, and Assurance, and other experts. The SRP Standard (Version 2.0) was published during the SRP 8th Plenary Meeting and General Assembly in Siem Reap, Cambodia in January 2019.

Review of the SRP Standard (Version 2.0) is expected to take place by 2022, while minor changes may be announced in the interim at SRP's discretion to reflect new scientific knowledge and best practice. Version 1.0 is expected to be phased out by 31 December 2019.

The SRP Secretariat wishes to express its gratitude to the following individuals and organizations for their support during the SRP Standard revision process.

Sarida Khananusit, GIZ, who led and coordinated the revision process throughout, and members of the SRP Working Group on Farmer Support, Performance Measurement, and Assurance: Peter Sprang, SRP Secretariat; Arif Hamid Makhdum, WWF Pakistan; Astari Widya Dharma and Thomas Jaekel, GIZ; Christ Vansteenkiste, Rikolto; Diederik Pretorius, Ebro Foods; Henk Verschoor, Van Sillevoldt Rijst; Ignacio Antequera, GLOBALG.A.P.; Johann Zueblin, PRIME Agri; Kazuki Saito, Africa Rice Center; Kee Fui Kon, Syngenta; Louke Koopmans, Mars Food; Margaret Williams, Winrock; Siang Hee Tan and Keith Jones, Croplife Asia; and Simon Mahood, WCS Cambodia.

IRRI technical experts: Cecilia Acuin, Olivyn Angeles, Sarah Beebout, Peter Brothers, Matty Demont, Martin Gummert, Buyung Hadi, Joel Janiya, Hung Van Nguyen, Estela Pasuquin, Ranjitha Puskur, James Quilty, Bjoern Ole Sander, Grant Singleton, Alex Stuart, Reiner Wassmann and Sudhir Yadav.

SRP would also like to thank all participants at the Standard and Performance Indicator Revision Workshop (August 2017), all individuals and organizations who participated in the open public consultation, as well as the many other contributors, reviewers, and ad hoc dialogue partners for their invaluable contributions, and particularly Lea Las Pinas (SRP Secretariat) for enabling the timely release of this document.

# INTRODUCTION

The Sustainable Rice Platform (SRP) is a global multi-stakeholder partnership to promote sustainable rice cultivation. The SRP currently has over 90 institutional members, including UN Environment, the International Rice Research Institute (IRRI), Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), government agencies, private-sector actors, research institutions, and not-for-profit organizations.

SRP offers the global rice supply chain a proven set of instruments to facilitate wide-scale adoption of sustainable best practices in the global rice sector, including the following closely interlinked instruments:

- 1. SRP Standard for Sustainable Rice Cultivation
- 2. SRP Performance Indicators for Sustainable Rice Cultivation
- 3. SRP Assurance Scheme

The SRP Standard for Sustainable Rice Cultivation offers a normative framework that can serve as a basis for supporting claims to sustainability performance in rice supply chains. Following broad stakeholder participation, the SRP Standard (Version 1.0) was released in October 2015. During 2016 and 2017, the SRP Standard was field-tested by SRP members and external stakeholders with farmers in diverse agroecological contexts and under different production models. SRP reviewed the pilot results and revised the Standard during 2017 – 2018. The process included a stakeholder workshop (August 2017) and open public online consultation process (September – November 2017) in line with the ISEAL Standard-Setting Code of Good Practice. SRP released SRP Standard (Version 2.0) in January 2019, with 41 requirements structured under eight major themes.<sup>1</sup>

The SRP Performance Indicators for Sustainable Rice Cultivation allow for quantitative measurement and assessment of the sustainability impacts of adoption of recommended practices at farm level. The Performance Indicators enable researchers to collect benchmark data and communicate field-level outcomes in a consistent way using a set of 12 common indicators. The Performance Indicators (Version 1.0) were released in April 2015. SRP reviewed and revised the Performance Indicators during 2018 and released Version 2.0 in January 2019.<sup>2</sup>

The SRP Assurance Scheme allows rice value chain actors to demonstrate compliance with the SRP Standard, as well as impact as measured by the SRP Performance Indicators. The Scheme offers three assurance levels to accommodate a wide range of production modalities, and includes farmer registration in a central SRP database, self-assessments and verification of farmer groups through internal control systems. External verification and accredited certification are additional options. A globally-recognized Assurance Provider, will oversee and manage implementation of the Scheme. The SRP Assurance Scheme was launched in 2019 following an extensive development process in the SRP Working Group on Farmer Support, Performance Measurement, and Assurance.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> SRP Standard (Version 2.0)

<sup>&</sup>lt;sup>2</sup> SRP Performance Indicators (Version 2.0)

<sup>&</sup>lt;sup>3</sup> SRP AssuranceFramework (Version 1.0)

# THE SRP STANDARD FOR SUSTAINABLE RICE CULTIVATION (VERSION 2.0)

# Scope

The Standard applies to all farm-level processes in rice production, including postharvest processes under the farmer's control. The Standard can be applied by individual farmers, smallholder farmer groups, as well as larger farms, and focus on ensuring relevance, practicality and impact, especially for smallholder farmers in developing countries.

If applied by a smallholder farmer group, the Standard requires an internal control system (ICS) to support farmers in implementing the Standard, measuring results, and identifying measures for continuous improvement.4

It is important to protect the integrity and core principles of the SRP Standard while maximizing its relevance and practical applicability within diverse national contexts - including production systems, agroecological environments, socio-ecological circumstances and legal and regulatory frameworks. While the Standard offers normative guidance, practitioners need locally-relevant guidance on appropriate best practice recommendations that support the requirements of the Standard. National Interpretation Guidelines will therefore be developed to serve as a bridge between the global standard and local field application.5

# **Structure**

The Standard comprises 41 requirements structured under eight themes (see Figure 1).

Figure 1. Themes and Requirements in the SRP Standard for Sustainable Rice Cultivation								
FARM MANAGEMENT	<b>PREPLANTING</b>	<b>WATER USE</b>	× NUTRIENT MANAGEMENT					
Crop calendar     Decord leaving	Heavy metals     Sail colinits	Water management	• Nutrient management					
Record keeping     Training	• Soil salinity	Irrigation system at	(organic and/or inorganic)					
Training	Land conversion and     biodiversity	community level	Organic fertilizer choice     Inorganic fertilizer choice					
	<ul><li>biodiversity</li><li>Invasive species</li></ul>	<ul><li>Inbound water quality</li><li>Groundwater extraction</li></ul>	• Inorganic fertilizer choice					
	• Leveling	• Drainage						
	Pure seed quality	Diamaye						
	- 1 are seen quality							

### ## HARVEST AND POSTHARVEST ◆ HEALTH AND SAFETY **LABOR RIGHTS** Weeds Timing of harvest Safety instructions · Child labor · Harvest equipment Tools and equipment · Hazardous work Insects Education Diseases Drying time Training of pesticide Drying technique applicators Forced labor Molluscs Rodents Rice storage Personal protective Discrimination Birds Rice stubble · Freedom of association equipment · Rice straw Wages Washing and changing Applicator restrictions Re-entry time · Pesticide and chemical storage Pesticide disposal

<sup>4</sup> SRP-UTZ 3rd Party Audit Protocol for Pilots

<sup>&</sup>lt;sup>5</sup> SRP Protocol for Developing National or Regional Interpretation Guidelines

Each requirement in the Standard is aimed at achieving one or more of the SRP Performance Indicators. The links between the requirements in the Standard and the Performance Indicators are shown below (see Table 1). These relationships are also made explicit in the impact column of the Standard.

Table 1. Relationships between the Requirements in the SRP Standard and the SRP Performance Indicators

SRP STANDARD		SRP PERFORMANCE INDICATORS										
	Profitability: Net income	Labor productivity	Productivity: Grain yield	Water use efficiency	Nutrient use efficiency: N	Nutrient use efficiency: P	Biodiversity	Greenhouse gas emissions	Food safety	Worker health and safety	Child labor & youth engagement	Women's empowerment
Requirement	1	2	3	4	5	6	7	8	9	10	11	12
1 Crop calendar	Х		Χ									
2 Record keeping	Х		Χ									
3 Training	Х	Χ	Χ	Χ	Х	Χ	Χ	Χ	Х	Χ	Χ	Х
4 Heavy metals									Х			
5 Soil salinity	Х		Χ	Χ								
6 Land conversion and biodiversity							Χ	Х				
7 Invasive species							Χ					
8 Leveling	Х		Χ	Χ			Χ					
9 Pure seed quality	Х		Χ									
10 Water management	Х		Χ	Χ				Х				
11 Irrigation system at community level				Х								
12 Inbound water quality				Χ					Χ			
13 Groundwater extraction				Χ								
14 Drainage				Χ			Χ					
15 Nutrient management (organic, inorganic)	Х		Χ		Χ	Χ	Χ	Х				
16 Organic fertilizer choice	Х		Χ		Χ	Χ		Х				
17 Inorganic fertilizer choice	Х		Χ		Χ	Χ		Х				
18.1 – 18.6 Integrated pest management	Х		Χ				Χ		Х			
19 Timing of harvest	Х		Χ						Х			
20 Harvest equipment									Х			
21 Drying time	Х		Χ					Х				
22 Drying technique	Х		Χ						Х			
23 Rice storage	X		Χ						Х			
24 Rice stubble					Х	Χ		Х				
25 Rice straw					Х	Χ		Х				
26 Safety instructions										Х		

27 Tools and equipment				Х		
28 Training of pesticide applicators				Х		
29 Personal protective equipment				Χ		
30 Washing and changing				Х		
31 Applicator restrictions				Х		
32 Re-entry time				Х		
33 Pesticide and chemical storage			Х	Χ		
34 Pesticide disposal				Х		
35 Child labor					Χ	
36 Hazardous work					Х	
37 Education					Х	
38 Forced labor						
39 Discrimination						Х
40 Freedom of association						Х
41 Wages						Х

# Scoring

The Standard allows for stepwise compliance to encourage and reward progress toward full compliance. All requirements have several possible levels of compliance to allow use of the Standard both for assessment and as a directional improvement tool to promote farmer adoption. These different levels are available in recognition that improving farmer compliance takes time and can be a challenging process. Having different levels of compliance guides the improvement process and provides recognition of each improvement step with a higher score.

Each level of compliance corresponds to a number of points. The highest compliance level in most requirements scores 3 points. Most requirements have additional intermediate compliance levels with 2 points or 1 point. All requirements have made explicit the lowest level of compliance, scoring zero points. There are a few exceptions to the maximum scores per requirement. Requirement 15 on nutrient management has a maximum of 6 points and all requirements in the health and safety theme have a maximum score of 2 points. These changes have been made to obtain a balanced weighting over the different themes. The relative weighting per theme is presented in Figure 2.

Figure 2. SRP Standard Weighting by Theme

Labor Rights
16%

Health & safety
14%

Mutrient
management
9%

Pest management
14%

The total score of a farmer on the Standard is presented on a 0 to 100 scale. This score is based on the total number of points a farmer has scored, divided by the maximum number of points that can be scored, multiplied by 100.

Certain requirements may be non-applicable in some farm contexts; these will be excluded from the scoring. Non-applicability may exist in the following cases:

- When a farmer produces under rainfed conditions (no irrigation), requirements 11,12,13, and 14 will not apply.
- When a farmer does not dry his/her rice himself/herself, requirement 22 will not apply.
- When a farmer does not store his/her rice, requirement 23 will not apply.
- When a farmer has no children below the age of 18 working on the farm, requirement 36 will not apply.
- When a farmer has no children of school age, requirement 37 will not apply.
- When a farmer has no hired workers, requirements 38, 39, 40 and 41 will not apply.

# **Claims**

The SRP name and logo are registered trademarks and any use, such as a claim referring to the SRP Standard needs to be in accordance with the SRP Assurance Scheme and Communication Policy.

The SRP Standard allows for the evaluation of farmers according to their level of implementation of sustainable rice cultivation practices. This supports two objectives:

# 1. Promoting improvement

The SRP recognizes that many farmers are on the path of working toward sustainable rice cultivation, and that improving sustainability performance is a process over time. The SRP has defined the minimum score and a set of essential compliance levels (thresholds) that must be achieved to meet the claim of "working toward sustainable rice cultivation". This set of thresholds consists of requirements 4,18.1-18.5, 23, 29, 33, 34, 35, and 36 which relate to both farmers' health and food safety. Continuous improvements should be demonstrated to maintain this claim.

# 2. Defining what is sustainable

The SRP Standard enables users to claim that rice is sustainably cultivated and recognizes that such a claim should correspond to high overall compliance. The SRP has defined the minimum score and the essential compliance level (threshold) that must be achieved for every requirement to meet the claim of "sustainably cultivated rice."

The essential compliance level (threshold) for each requirement in the SRP Standard is indicated by an asterisk (\*) next to the corresponding level of compliance.

In line with these objectives, the SRP Standard adopts the following claims. The SRP has defined the conditions needed to meet each claim level (see Table 2 and Assurance Scheme).

Table 2. Claims and Conditions

CLAIM	CONDITIONS TO INITIALLY MEET THIS CLAIM LEVEL	CONDITIONS TO CONTINUE TO MEET THIS CLAIM LEVEL IN SUBSEQUENT YEARS
Working toward sustainable rice cultivation	<ul> <li>✓ Score at least 33 points on the 1-100 scale and</li> <li>✓ Meet the essential compliance level (threshold) for requirements 4,18.1-18.5, 23, 29, 33, 34, 35, and 36 (if requirements are applicable)</li> </ul>	<ul> <li>✓ Continue to meet the conditions indicated in the left-hand column, and:</li> <li>✓ Improve the level of compliance indicated in the left-hand column</li> </ul>
Sustainably cultivated rice	<ul> <li>✓ Score at least 90 points on the 1-100 scale and</li> <li>✓ Meet the essential compliance level (threshold) for all applicable requirements</li> </ul>	✓ Maintain the level of compliance indicated in the left-hand column

The farmer is free to choose what requirements are used to demonstrate continuous improvement and to bridge the gap to reach the next claim level. Figure 3 shows the scoring and claiming mechanism schematically.

Figure 3. SRP Scoring Claims

WORKING TOWARD SUSTAINABLE RICE CULTIVATION

WORKING TOWARD SUSTAINABLE RICE CULTIVATION

BY THE STAINABLY CULTIVATED RICE

WORKING TOWARD SUSTAINABLE RICE CULTIVATION

SUSTAINABLY CULTIVATED RICE

SRP allows development of nationally appropriate interpretations of the Standard to provide additional specifications according to the relevant national legal and regulatory framework. However, SRP National Interpretation Guidelines<sup>6</sup> must maintain the scoring system and minimum essential compliance levels (thresholds) to ensure equivalence of claims.

Any communication on claims must comply with the SRP Assurance Scheme,<sup>7</sup> which defines rules for actors engaged in measuring compliance or demonstrating improvements, and the use of SRP trademarks (claims or seals). Use of the SRP name or trademarks must follow the SRP Publication Policy.<sup>8</sup> Only SRP members and farmer organizations are entitled to seek approval for SRP trademark use in relation to verification claims, or value statements on compliance or improvement based on the SRP Standard.

<sup>&</sup>lt;sup>6</sup>Protocol for Developing SRP National/Regional Interpretation Guidelines <sup>7</sup>SRP Assurance Scheme

<sup>&</sup>lt;sup>8</sup> SRP Publication Policy

# List of definitions

A water management practice where irrigation is applied at intermittent intervals resulting Alternate wetting and drying (AWD) in alternating wet and dry soil conditions. Application of irrigation is based on water depletion measure via a field water tube (15 cm below the soil surface as threshold) or soil water potential (-10 kPa at 15 cm below the soil surface), which can save irrigation water without yield penalty, hence, also termed as "safe-AWD". Child labor Children engaged in hazardous child labor, or children below 15 working on commercial farms. Non-hazardous activities of young workers on family farms are excluded. Command area Total area that can be economically irrigated viaf an irrigation system or scheme without considering the limitation on the quantity of available water. It includes otherwise uncultivable areas e.g., ponds, residential areas). Crop calendar A written plan and schedule of the cropping season from the fallow period and land preparation, to crop establishment and maintenance, to harvest and storage. A crop calendar allows farmers to plan for input purchase and use, determine labor requirements, organize contractors, and other aspects of farm management. Crop rotation The practice of growing a series of crops in the same area in sequenced seasons. A crop rotation may span a period of more than one year if multiple crop types are included in a sequential schedule that takes more than one year to complete (e.g., a rice-sugarcane rotation where the sugarcane is grown for 12 to 18 months following rice). Cropping season Duration of a single crop. For rice crops the cropping season generally starts with land preparation and includes seeding either into a nursery or directly into the field, and ends after the fallow period following the harvest. Deforestation Direct human-induced conversion of forested land to non-forested land. Natural or artificial removal of surface water and sub-surface water from the field or Drainage landscape. Benefits generated provided by ecosystems that contribute to making human life and Ecosystem services wellbeing. Ecosystem services are grouped into four broad categories: provisioning, such as the production of food and water; regulating, such as the control of climate and disease; supporting, such as nutrient cycles and oxygen production; and cultural, such as spiritual and recreational benefits. Effective puddling Defined and measured as the decrease in the rice season's total of vertical percolation of water. Farm All land and facilities used for agricultural production and processing activities covered by a single management entity and using the same operational procedures. Farmer The individual, including both men and women, (or organization) responsible for management of the farm or farm estate.

Farmer group (or "Group")

A group of farmers organized in an association or cooperative or managed by a supply chain partner (such as a miller or exporter) or another entity; also referred to as the "group".

Integrated pest management (IPM)

An ecosystem management approach to keep pest populations below economically damaging levels while minimizing hazards to humans, animals, plants, and the environment. This is achieved through a combination of techniques such as use of resistant varieties, conservation of natural enemies through habitat modification and minimization/avoidance of pesticide application, and modification of cultural practices.

Invasive species

Animals, plants or other organisms introduced by man into places out of their natural range of distribution, where they become established and disperse, generating a negative impact on the local ecosystem and species. Invasive species can negatively impact human health, the economy (i.e., tourism, agriculture), and native ecosystems. These impacts may disrupt the ecosystem processes, introduce diseases to humans or flora and fauna, and reduce biodiversity.

Irrigation

A farm system where supply of water to land or crops is controlled and intentional, with mutual understanding among main actors (e.g., government, service providers, communities, farmers) on when farmers or farmer groups will receive water.

Irrigated production system— flood-prone

A farm system where: (1) irrigation is controlled and intentional, with mutual understanding among main actors (e.g., government, service providers, communities, farmers) on when farmers or groups will receive water, and (2) there are low-lying areas that are flooded by river overflow, rain, or tidal inflow, where water remains stagnant for three weeks or more.

Irrigated production system— not flood-prone

A farm system where (1) irrigation is controlled and intentional, with mutual understanding among main actors (e.g., government, service providers, communities, farmers) on when farmers or groups will receive water, and (2) there are areas where water stagnation can be managed and there are intentional irrigation events.

Key Biodiversity Area™

The World Database of Key Biodiversity Areas<sup>™</sup> hosts data on Key Biodiversity Areas (KBAs). This databasecan supportstrategic decisions on protected areas by governments orcivil society, and guides the identification of sites under international conventions and in the setting of private sector policies and standards. The database is managed bythe KBA Partnership, which is served by the KBA secretariat hosted jointly by BirdLife International and the International Union for Conservation of Nature.See World Database of Key Biodiversity Areas<sup>™</sup>: http://www.keybiodiversityareas.org/site/search

Non-application zones

Non-target areas, water bodies (including main irrigation channels), small diversion canals, protected areas, and areas within 5 meters of human activity (including schools, occupied buildings, roads, and pathways). Application of pesticides (biological and chemical) must avoid these zones. To support targeted application, pesticides should be applied in the absence of conditions that may generate drift (e.g., strong winds), when field conditions (e.g., soil moisture, crop health) are ideal for the particular product at the time of application, and according to product label instructions.

Obsolete pesticides

Pesticides unfit for further use. This may be the case if a product has been de-registered locally or banned internationally. More commonly, however, a stock of pesticides becomes obsolete as a result of long-term storage, during which the product and/or its packaging degrade.

Pesticides

Insecticides, fungicides, herbicides, disinfectants, rodenticides, molluscicides, and any other substances or mixture of substances intended for preventing, destroying, or controlling any pest, including unwanted species of plants, animals, or microorganisms, causing harm during production, processing, storage, transportation, or marketing of food or other agricultural commodities.

Preharvest interval

The time interval permitted between the final pesticide application in the season and the date of harvest of treated crops or in the treated area.

Primary forest

A forest that has never been logged and that has developed following natural disturbances and under natural processes, regardless of age. "Direct human disturbance" refers to intentional clearing of forest by any means (including fire) to manage or alter the landscape for human use. Also included as primary forests are forests used inconsequentially by indigenous and local communities living traditional lifestyles relevant for the conservation and sustainable use of biological diversity (source: FAO: www.cbd.int/forest/definitions.shtml).

Protected area

A clearly defined, officially designated geographic space, recognized, dedicated, and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. Examples include national parks, wilderness areas, community-conserved areas, and nature reserves.

Rainfed production system

A farm system that is not part of an irrigation system or network, not irrigated through groundwater pumping, and not irrigated though river diversion.

Ramsar Sites

Designated sites that meet the nine *Criteria for identifying Wetlands of International Importance under the Convention on Wetlands* (1971). The first criterion refers to sites containing representative, rare or unique wetland types, and the remaining eight cover sites of international importance for conserving biological diversity.

See the List of Wetlands of International Important (Ramsar List): http://www.ramsar.org/sites-countries/the-ramsar-sites

Re-entry time

The safe minimum number of days following pesticide application when it is safe to reenter the sprayed area without protective equipment.

Risk assessment

A systematic process for identifying and evaluating hazards. Hazards can be identified in an external environment (e.g., economic trends, climatic events, competition) and within an internal environment (e.g., people, process, infrastructure). When these hazards interfere with objectives—or can be predicted to do so—they become risks.

Secondary forest

A forest that has been logged and has recovered naturally or artificially. It also includes degraded forest, which is a secondary forest that has lost, through human activities, the structure, function, species composition, or productivity normally associated with a natural forest type expected on that site (source: FAO: www.cbd.int/forest/definitions.shtml).

Short or medium-duration varieties	Short duration varieties mature between 90 and 110 days, and medium varieties in 120 – 140 days. Varieties maturing in more than 140 days are considered long-duration.
Site-specific (Field-specific)	Specific to a given area (e.g. a field). For example, optimal timing of application of nutrients when the plant needs it, in the right amount and at the specific area and root depth.
Smallholder	A producer who relies primarily on family or household labor, including reciprocal workforce exchange with other members of the community.
Water body	Any significant accumulation (natural or artificial) of water, including, for example, lakes, lagoons, ponds, reservoirs, wetlands, rivers, streams, and canals.
Worker	A person, including both men and women, who performs work on a farm or for a farmer or farmer group and is paid for his or her work. This definition covers all types of workers, including permanent, temporary, migrant, transitory, and piece workers.

# **Additional Guidance**

Discrepancies may occur between requirements under the Standard and national or regional law. In such cases, the stricter of the two requirements shall be held to apply, unless explicitly stated otherwise.

If contracted services or labor is used, the contracting party (smallholder, group management, or large farm) will remain responsible for compliance by the contractor. For example, if pesticide application is contracted to a service provider by the farmer or group, the farmer or group is responsible for compliance of the service provider for relevant requirements (e.g., tools and equipment, training of applicators, personal protective equipment, washing and changing, applicator restrictions).

Where written records are required, illiterate farmers may seek the help of their children, group manager, extension workers, or other support to develop and maintain written records for relevant requirements (e.g., crop calendar, record keeping).

# **Icons**

Icons are used to suggest the level of inspection for each requirement, as described below. For further detail please refer to the SRP Assurance Scheme.



This icon denotes that the farmer is responsible for tracking action and maintaining evidence of level of compliance. Verification of level of compliance is conducted at the farm level.



This icon denotes that a group (e.g., association, cooperative, miller, exporter, supply chain partner, non-governmental organization, government agency) is responsible for tracking action and maintaining evidence of level of compliance. Verification of level of compliance is conducted at the group level (e.g., through a group manager or administrator), with additional checks conducted with farmers in the group.

# Requirements of the SRP Standard for Sustainable Rice Cultivation (Version 2.0)

No.	Impact	Requirement	Level(s) of compliance	Points
		Farm management		
1	Profitability Productivity	CROP CALENDAR  A written crop calendar is developed in	a) Crop calendar includes the expected and actual dates for all four activities (if applicable).	3
		advance for each cropping season. If needed, it is updated to adapt to changing circumstances (e.g., weather, pest pressures).	b) Crop calendar includes the expected and actual dates for activities 1 and 2 (if applicable) only.	2
		c) Crop calendar inc	c) Crop calendar includes the expected and actual dates for activity 1 only.	1*
		of field activities, and the actual dates of implementation of those activities. Activities can include (if applicable):	d) There is no crop calendar, or it is otherwise incomplete.	0
		<ol> <li>Timing of major operations (e.g., land preparation, planting, harvest).</li> <li>Timing of major fertilization (e.g., split plan) and water management activities (e.g., irrigation).</li> </ol>		
		<ul><li>3. Timing of evaluating pest threat and damage levels (i.e., scouting).</li><li>4. Timing of labor and/or contracted services (e.g., machines).</li></ul>		

No.	Impact	Requirement	Level(s) of compliance	Points
2	Profitability Productivity	Records are kept for each cropping season. These records shall at least reflect basic data level (easily collected by farmers) and should include data at the intermediate level (which may require collection by external partners).  Basic data (if applicable):  • seed variety  • yield  • fertilizer use  • pesticide use  • number of irrigations  • irrigation water quality risk assessment  • net income from rice  • list of sightings of key pests and indicator  Intermediate data (if applicable):  • same as above but more specific data  • mg CO <sub>2</sub> equivalents/hectare  • milled grain samples submitted to laboratory for analysis  For specific details on basic and intermediate data level measuring units please refer to the SRP Performance Indicators.	<ul> <li>a) Records are kept of applicable data at the intermediate level.</li> <li>b) Records are kept of applicable data using a mix of basic and intermediate data levels.</li> <li>c) Records are kept of applicable data at the basic data level.</li> <li>d) No records are kept.</li> </ul>	3 2 1* 0
3	All	Farmer training, information, and support needs are assessed for all topics in the SRP Standard.  Farmer receives needed training, information, and support. SRP-authorized training providers are the preferred external partners or professional sources for training on SRP. SRP also recognizes information exchange with other farmers or within farmer organizations.  Farmer demonstrates that relevant content is applied.	<ul> <li>In the last 5 years:</li> <li>a) Farmer training, information, and support needs assessed; farmer received needed training from an SRP-authorized training provider; and farmer demonstrates that content is applied.</li> <li>b) Farmer training, information, and support needs assessed; farmer received needed training; and farmer demonstrates that content is applied.</li> <li>c) Farmer training, information, and support needs assessed; and farmer received needed training.</li> <li>d) Farmer training, information, and support needs not assessed.</li> </ul>	3 2 1*

No.	Impact	Requirement	Level(s) of compliance	Points
		Preplanting		
4	Food safety	HEAVY METALS  Milled grain shall be safe from heavy	a) There is proof (not older than 5 years)     that the milled grain is safe from heavy     metals.	3
		metals. Milled grain is safe when there are no detectable levels of heavy metals in the milled grain as set by international authorities on food safety <sup>9</sup> , or by national law or regulations (whichever is stricter).	b) There is proof (not older than 5 years) (by a group soil analysis or a reliable external source) that the level of heavy metals in the soil of the group or region does not exceed background levels.	3
		Risk of soil contamination from heavy metals such as arsenic, cadmium, chromium, mercury, and lead has been analyzed. <sup>10</sup>	c) A group risk assessment (not older than 5 years) does not show risk from heavy metal contamination (see Annex A: Risk Assessment Checklist).	2*
		<ol> <li>In the presence of (risk of) soil contamination from heavy metals:</li> <li>A group level soil analysis is conducted in contaminated areas at least every 5 years.</li> <li>Soil remediation techniques are</li> </ol>	d) In case of risk, a group level soil analysis is carried out at least every 5 years; in case of the presence of soil contamination from heavy metials, soil remediation techniques are implemented.	1
		implemented. <sup>11</sup>	e) None of the above.	0

 ${}^{\rm g}\! Available$  international and national standards on food safety include:

<sup>&</sup>lt;sup>9</sup>Available international and national standards on food safety include:
(1) Codex Alimentarius Commission: www.fao.org/fileadmin/user\_upload/livestockgov/documents/1\_CXS\_193e.pdf
(2) US Food and Drug Administration: www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?fr=165.110
(3) European Commission: eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1998:330:0032:0054:EN:PDF
(4) Australia: www.legislation.gov.au/Details/F2011C00542

<sup>10</sup> Methods to analyze risk of soil contamination by heavy metals include:
(1) A group soil analysis, conducted by qualified laboratories, shows no risks from heavy metal contamination.
(2) A grouprisk assessment shows no risks from heavy metal contamination (see Annex A: Risk Assessment Checklist).
(3) Reliable external proof shows no risks from heavy metal contamination.

<sup>11</sup> General soil remediation techniques (not site-specific) include: (1) Immobilization by solidification/stabilization and vitrification; (2) Reduction toxicity and/or mobility by chemical treatment, permeable treatment walls, biological treatment, bioaccumulation, phytoexendiation, phytoextraction, phytoextraction, phytostabilization, rhizofiltration, bioleaching, and biochemical processes; (3) Physical separation and extraction by soil washing, pyrometallurgical extraction, in situ soil flushing, and electrokinetic treatment; (4) Complexation processes using applied amendments, including clay, cement, zeolites, minerals, phosphates, organic composts, and microbes; (5) Isolation by physical capping and subsurface barriers.

No.	Impact	Requirement	Level(s) of compliance	Points
5	Profitability Productivity Water use efficiency	SOIL SALINITY  Risk of soil salinity has been analyzed. 12  Soil salinity is monitored, when at acceptable levels (i.e., not in excess of 3 dS/cm for soil or 5 g/L for water), and effectively managed, when the levels are deemed high.	<ul> <li>a) There is documented proof, not older than 3 years (per any method in footnote 12), that:</li> <li>There is no (risk of) soil salinity within the group or region, or</li> <li>Soil salinity within the group or region is at an acceptable level (i.e., not in excess of 3 dS/cm for soil or 5 g/L for water).</li> </ul>	3
		In the presence of (risk of) soil salinity, mitigation/adaptation measures include:  • Selection of salinity-tolerant varieties.	b) There is (risk of) soil salinity, and mitigation/adaptation measures taken are effective (e.g., yield gap as compared to an area not affected by	2
		<ul> <li>Monitoring of salinity in field water.</li> <li>Management of salinity through maintained water pressure in the field.</li> <li>Management of inflow/outflow in</li> </ul>	soil salinity narrows). c) There is (risk of) soil salinity, and mitigation/ adaptation measures are taken.	1*
		quantity and timing to minimize salinity.  • Expert advice and subsequent action.	d) None of the above.	0

<sup>12</sup>Methods to analyze risk of soil salinity include:
(1) A group soil or field water analysis, conducted by qualified laboratories, shows a maximum salinity level of 3 dS/cm for soil or 5 g/L for water.
(2) A grouprisk assessment shows no risks soil salinity (see Annex A: Risk Assessment Checklist).
(3) Records of public authorities that show a maximum salinity level of 3 dS/cm for soil or 5 g/L for water.

No.	Impact	Requirement	Level(s) of compliance	Points
6	Biodiversity Greenhouse gas emissions	Greenhouse gas emissions Rice farming after 2009 has not been causing conversion within a (proposed) protected area, Key Biodiversity Areas™,	a) There has been no conversion of described areas after 2009, and farming practices maintain and/or enhance site-specific biodiversity and ecosystem services.	3
			b) There has been no conversion of described areas after 2009, and farming practices maintain and/or enhance site-specific biodiversity.	2
		At the field level, farmer maintains and/ or enhances applicable site-specific	c) There has been no conversion of described areas after 2009.	1*
		<ul> <li>In-field habitat / refuge</li> <li>Field margins</li> <li>Non-cropped area</li> <li>Plant species which host beneficial natural enemies</li> <li>Trees (replanted if harvested)</li> <li>Farming practices maintain and/or enhance ecosystem services.</li> </ul>	d) There has been conversion of described areas after 2009.	0
7	Biodiversity	INVASIVE SPECIES  No invasive species (e.g., water hyacinth,	a) No invasive species are introduced intentionally by the farmer or group since 2009.	3*
		golden apple snail) have been introduced intentionally by the farmer or group since 2009.	b) In the presence of invasive species, invasive species are effectively managed.	1
		In the presence of invasive species, effective management measures are taken against invasive species, while protecting native species.	c) Invasive species are introduced intentionally by the farmer or group.	0

No.	Impact	Requirement	Level(s) of compliance	Points
8	Profitability Productivity Water use efficiency Biodiversity	Instructions: Identify the system that applies to the majority of land under cultivation. Respond for that system:  Flat land or terraces Sloping land without terraces Dry land  Rice cultivated on flat land or on terraces: If laser leveling is used, the land or terraces are leveled up to 1/1000 withinplot slope. If laser leveling is not used, visual observation confirms that the field does not have high and low spots when filled with water and crop stand is uniform in height (i.e., no undulating).	For flat land or terraces:  a) Land has been leveled up to 1/1000 within-plot slope. b) Land has been leveled. c) Land has not been leveled.  OR  For sloping land without terraces: d) Both physical and cultural soil conservation practices are used. e) Only physical soil conservation practices are used. f) No soil conservation practices are used. OR  For dry land: g) No leveling is required	3 2* 0 3 2* 0
		<ul> <li>Physical soil conservation practices are used (e.g., contour farming, installation of erosion barriers)</li> <li>Cultural soil conservation practices are used (e.g., non-invasive cover cropping, mulching)</li> </ul>		

No.	Impact	Requirement	Level(s) of compliance	Points
9	Profitability Productivity	PURE QUALITY SEEDS  Pure quality seeds are free of weeds seeds,	a) Farmer uses certified seed that is suitable for local conditions and meets criteria for certified seeds.	3
		pests, and diseases. <sup>13</sup> Certified seeds must comply with applicable	b) Farmer uses seed with quality control that is suitable for local conditions and meets criteria for seeds with quality	3
		national law/regulation or the regulation of the destination market.	control. c) Farmer uses self-saved seeds that meet criteria for self-saved seeds with	2*
		Seeds with quality control (not certified) must meet criteria including varietal purity, weed seed-free, germination testing, safe	quality control for a maximum of 3 crop cycles. d) Farmer uses:	0
		storage, fungal control, and others.  Self-saved seeds with quality control must	<ul><li> Uncertified seeds,</li><li> Seeds without quality control,</li><li> Self-saved seeds without quality</li></ul>	
		meet criteria including safe storage, roguing (removal of all off-types or mixtures of plants) in the field before harvest, and others.	<ul><li>control, or</li><li>Self-saved seeds for more than 3 crop cycles.</li></ul>	
		The practice of self-saving seeds should not exceed 3 crop cycles.		
		Water use		
40	Duraffica hillia	WATER MANAGEMENT		
10	Profitability Productivity Water use efficiency Greenhouse gas emissions	Instructions: Identify the local production system Respond only for the corresponding requirement Rainfed production system (10.1) Irrigated production system— flood-prone Irrigated production system— not flood-pr	nt for that system: (10.2)	ltivation.
10.1		RAINFED PRODUCTION SYSTEM	<ul><li>a) Farmer implements all four measures.</li><li>b) Farmer implements measures 1, 2,</li></ul>	3 2
		Measures are in place to enhance water-use efficiency including: 1. Timely and appropriate crop establishment	and 3 only.  c) Farmer implements measures 1 and 2 only.	1*
		according to local climate.  2. Direct seeding or effective puddling, and strong bunds  3. Use of varieties suitable for local climate (e.g., short or medium-duration varieties).	d) None of the above.	0
		4. Provision of on-site rainwater harvesting and storage for supplementary irrigation.		

<sup>&</sup>lt;sup>13</sup> Due to variation depending on local conditions, SRP recommends that criteria for certified seeds, seed with quality control, and self-saved seeds with quality control is further specified in SRP National Interpretation Guidelines.

No.	Impact	Requirement	Level(s) of compliance	Points
10.2		IRRIGATED PRODUCTION SYSTEM— FLOOD-PRONE  Measures are in place to enhance water-use efficiency including:  1. Timely crop establishment to avoid submergence of the crop during expected floods.  2. At least one dry-down event (i.e., midseason drainage of 7 days drained period/aeration), if possible.  3. Leveling with provision for minor drainage conditions.  4. Use of flood-tolerant varieties	a) Farmer implements measure 1 and any two additional measures. b) Farmer implements measure 1 and any one additional measure listed. c) Farmer implements measure 1 only. d) None of the above.	3 2 1* 0
10.3		IRRIGATED PRODUCTION SYSTEM—NOT FLOOD-PRONE  Measures are in place to enhance water-use efficiency including:14  1. One dry tillage before flooding if soil is cracked.  2. Leveling and strong bunds.  3. Dry seeding, or transplanting following land soak, effective puddling, and tillage within a 1-week period.  4. Alternate wetting and drying.  5. Use of short or medium-duration varieties with similar yield potential as long duration varieties  6. Termination of irrigation at least 10-15 days before harvesting.	a) Farmer implements all six measures. b) Farmer implements measures 2, 3, and 6 only. c) Farmer implements measures 2 and 4 only. d) None of the above.	3 2 1* 0
11	Water use efficiency	IRRIGATION SYSTEM AT COMMUNITY LEVEL  The irrigation system under command of the farmer or group (supplied by surface and/ or ground water) complies with the following criteria:  1. The command area has sufficient internal canals for supply and drainage. 2. There are no leakages in dikes. 3. Sluices (if any) are functioning well. 4. There is stakeholder involvement in decision making on the irrigation system.	a) Farmer produces under rainfed conditions (no irrigation). b) All four of the listed criteria are met. c) Any three of the listed criteria are met. d) Any two of the listed criteria are met. e) None if the above.	n/a 3 2* 1 0

<sup>14</sup> In severe water-scare areas additional technologies (e.g., aerobic rice varieties, drip irrigation) may be necessary to maintain sustainable cultivation.

No.	Impact	Requirement	Level(s) of compliance	Points
12	Water use efficiency Food safety	INBOUND WATER QUALITY  Inbound water is obtained from clean sources that are free of biological, saline, and heavy metal contamination. 15,16  In the presence of (risks of) contaminated water, remediation techniques include, for example, installation of a filtration system or selection of alternative varieties if available.	<ul> <li>a) Farmer produces under rainfed conditions (no irrigation).</li> <li>b) There is documented proof, not older than 3 years (per any method in footnote 15), that the inbound water is obtained from clean sources.</li> <li>c) Same as b, but the documented proof is older than 3 years.</li> <li>d) In case of (risks of) contaminated water, mitigation measures are taken to reduce the potential impact of contaminated water.</li> <li>e) None of the above.</li> </ul>	n/a 3 2 1*
13	Water use efficiency	GROUNDWATER EXTRACTION  Groundwater extraction is legal and sustainable.  Sustainable groundwater extraction avoids depletion of water resources beyond the watershed recharge capacity, and balances the competition for its use.	<ul> <li>a) Farmer produces under rainfed conditions (no irrigation).</li> <li>b) Groundwater extraction complies with sustainable water extraction licensing policies.</li> <li>c) Within the past 3 years, professional advice on sustainable groundwater use is sought and followed.</li> <li>d) There is active participation in watershed management and community groundwater water infrastructure projects.</li> <li>e) None of the above.</li> </ul>	n/a 3 2* 1

 <sup>15</sup> Methods to analyze inbound water quality include:
 (1) A group water sample analysis, conducted by qualified laboratories, shows no contamination beyond official national or regional levels.
 (2) A group water quality risk assessment shows no risks of water contamination (see Annex A: Risk Assessment Checklist).
 16 Point of measurement of inbound water quality:
 o If no drained water merges with the irrigation canal, water quality should be tested at the main irrigation canal.
 o If drained water merges with the irrigation canal, water quality should be tested at the inlet used by the farmer or group (i.e., after the point of merging).

No.	Impact	Requirement	Level(s) of compliance	Points
14	Water use efficiency	DRAINAGE	a) Farmer produces under rainfed conditions (no irrigation).	n/a
	Biodiversity	Intentional surface (sideways) drainage after surface application of agrochemicals is sufficiently delayed to avoid contamination	b) There is no intentional surface (sideways) drainage, due to having good practices in place.	3
		from agrochemical runoff, or according to the product label. Agrochemical runoff	c) There is surface (sideways) drainage, but no use of agrochemicals.	3
		can negatively impact biodiversity or surroundings and waterways	d) Surface (sideways) drainage is delayed after surface application of agrochemicals by at least 4 days for fertilizers and 14 days for pesticides, or according to the product label.	2*
			e) Surface (sideways) drainage is delayed after surface application of agrochemicals, but for fewer days due to unexpected need to protect crops.	1
			f) None of the above.	0

No.	Impact	Requirement	Level(s) of compliance	Points
		Nutrient management		
15	Profitability Productivity Nutrient use efficiency Biodiversity Greenhouse gas emissions	NUTRIENT MANAGEMENT (INORGANIC AND/OR ORGANIC)  Efficient and site-specific nutrient management is applied and documented. 17  Measures for efficient nutrient management include:  1. Timing of fertilizer (inorganic and/or organic; N, P, and/or K) application is according to plant needs 18, locally adapted recommendations, and product label instructions (if available).  2. Amount of fertilizer (inorganic and/or organic; N, P, and/or K) applied is based on knowledge of soil fertility and expected yield, locally adapted recommendations, and product label instructions (if available).  3. Natural systems of soil fertility enhancement (e.g., crop rotation, intercropping, and/or non-invasive cover cropping) are used.	a) Farmer complies with all elements listed in the requirement. b) Farmer complies with any two elements listed. c) Farmer complies with any one element listed. d) Farmer is non-compliant with any of the elements listed.	6 4* 2 0
16	Profitability Productivity Nutrient use efficiency Greenhouse gas emissions	Organic material (e.g., animal manure, green manure, mulch, rice straw) is used as fertilizer if the conditions are favorable.  Favorable conditions include:  1. It can be applied in non-flooded fields in composted or de-composted state.  2. There is sufficient time for its decomposition prior to flooding.  3. It is available locally and in sufficient quantity.	<ul> <li>a) Farmer uses organic material as fertilizer if all three conditions are present.</li> <li>b) Farmer uses organic material as fertilizer if conditions 1 and 2 are present, but not condition 3.</li> <li>c) Farmer does not use organic material as fertilizer because one or more of the listed conditions cannot be met.</li> <li>d) Farmer does not use organic material as fertilizer even though all conditions are present.</li> <li>e) Farmer incorporates organic material into flooded soils.</li> </ul>	3* 2 2* 1 0

<sup>&</sup>lt;sup>17</sup> Due to variation depending on local conditions, SRP recommends that measures for site-specific nutrient management are further specified in SRP National Interpretation Guidelines.
<sup>18</sup> Examples of fertilizer application according to plant needs include: applying N up to 30% of the total amount when plants have 3-5 leaves, and using leaf color charts or SPAD meters to identify timing of the next application; or splitting N application between basal, active tillering, and panicle initiation after sowing, and applying P and K during basal stage; or using controlled-release fertilizers.

No.	Impact	Requirement	Level(s) of compliance	Points
17	Profitability Productivity Nutrient use efficiency	INORGANIC FERTILIZER CHOICE  Inorganic fertilizers can be used only if they are registered and come from a non-	<ul><li>a) There is no use of inorganic fertilizers.</li><li>b) Farmer uses inorganic fertilizers that are registered and come from a non-counterfeit source.</li></ul>	3 3*
	Greenhouse gas emissions	counterfeit source.	c) Farmer uses inorganic fertilizers that are not registered and/or come from a counterfeit source.	0

# Pest management

# **INTRODUCTION ON INTEGRATED PEST MANAGEMENT (IPM)**

Principles of IPM include:

- o Evaluating pest threat and damage levels regularly (scouting).
- o Using action thresholds recommended by local government extension experts.
- o Evaluating all available pest control methods.
- o Selecting a pest control method that maximizes human safety, minimizes environmental impact, is economically justifiable, and prevents food safety risks for all crops.

IPM combines preventative and curative pest control methods. Preventative pest control methods help to manage conditions to avoid pest build-up and can include: resistant varieties, crop rotation, intercropping, sanitation, ecological engineering, and others. Curative pest control methods help to treat pest build-up that has occurred and can include: mechanical control (e.g., hand weeding), biological control (e.g., biological control agents), and chemical control (e.g., synthetic pesticides).

The SRP Standard seeks to encourage ongoing preventative pest control actions, and punctual curative pest control actions when preventative methods are not effective on their own. Pesticides are used only if and when action thresholds are exceeded and the severity of the pest is expected to cause significant damage or loss. Actions should be as targeted as possible to avoid unintended impacts. Measured actions can support cost-reduction for farmers.

Requirements 18.1-18.6 list common preventative pest control methods and the conditions for appropriate use of pesticides for six types of pests.

No.	Impact	Requirement	Level(s) of compliance	Points
18.1	Profitability Productivity Biodiversity Food safety	WEED MANAGEMENT  Preventative weed control methods can include: Good land preparation Use of certified seeds Crop rotation Flooding (if water is abundant)  Farmer follows IPM principles and the following criteria:  1. Preventative weed control methods are used, before considering curative methods. 2. Herbicide is used only if other curative methods (e.g., manual and mechanical weeding) are not effective on their own and severity of the weeds is expected to cause significant damage or loss. 3. Herbicide selection is in line with national government recommendations, is registered for use in rice, comes from a non-counterfeit source, and is not on any of the following international lists:  Persistent Organic Pollutants in the Stockholm Convention 1A or 1B under World Health Organization classification Annex III of the Rotterdam Convention <sup>19</sup> 4. Herbicide application is targeted to avoid non-application zones. 5. Herbicide application method is according to the product label instructions, follows specified preharvest interval, and does not exceed specified dosage (for worker safety and food safety). 6. Herbicide selection and use responds to the target weed species, considers timing of the closing of the rice canopy, and considers local information on herbicide-resistant weeds (for efficiency).	a) No curative weed control methods are required.  Curative weed control methods are required and: b) Farmer effectively controls weeds without the use of herbicide. c) Farmer meets all six criteria listed. d) Farmer meets criteria 1, 2, 3, 4, and 5 only. e) Farmer meets criteria 1, 2, and 3 only. f) Farmer does not meet criteria 1, 2, and 3.	3 3 2* 1 0

<sup>&</sup>lt;sup>19</sup> Products on this list may be safe to use under controlled circumstances and justification must be provided for use.

No.	Impact	Requirement	Level(s) of compliance	Points
18.2	Profitability Productivity Biodiversity Food safety	INSECT MANAGEMENT  Preventative insect control methods can include:  Balanced nutrient application (e.g., avoid excessive application of nitrogen)  Promotion of beneficial natural enemies (e.g., insects, spiders) and increasing habitat diversity around rice fields  Synchronized planting  Use of resistant/tolerant varieties  Promotion of other predators (e.g., birds, bats, frogs)  Crop rotation or extended fallow period  Farmer follows IPM principles and the following criteria:  Preventative insect control methods are used, before considering curative methods.  Insecticide is used only if other curative methods (e.g., insect pheromones, biological control agents) are not effective on their own, if action thresholds are exceeded, and if the presence of a specific insect is expected to cause significant damage or loss.  Broad spectrum insecticide is not used within the first 40 days after planting in the production field (unless in accordance with IPM recommendations given by local government extension experts).  Insecticide selection is in line with national government recommendations, is registered for use in rice, comes from a non-counterfeit source, and is not on any of the following international lists:  Persistent Organic Pollutants in the Stockholm Convention  Annex III of the Rotterdam Convention  Annex III of the Rotterdam Convention <sup>20</sup> Insecticide application is targeted to avoid non-application zones.  Insecticide specified dosage (for worker safety and food safety).  Insecticide selection and use responds to the target insect species, considers optimum timing for the target species, and considers local information on insecticide-resistant insects (for efficiency).	a) No curative insect control methods are required.  Curative insect control methods are required and: b) Farmer effectively controls insects without the use of insecticide. c) Farmer meets all seven criteria listed. d) Farmer meets criteria 1, 2, 3, 4, 5 and 6. e) Farmer meets criteria 1, 2, 3 and 4. f) Farmer does not meet criteria 1, 2, 3 and 4.	3 3 2* 1 0

<sup>&</sup>lt;sup>20</sup> Products on this list may be safe to use under controlled circumstances and justification must be provided for use.

No.	Impact	Requirement	Level(s) of compliance	Points
18.3	Profitability Productivity Biodiversity Food safety	Preventative disease control methods can include (effective for fungal, bacterial, and viral diseases):  Balanced nutrient application (e.g., avoid excessive application of nitrogen) Planting at optimum densities Use of resistant varieties Synchronized planting Removal of host plants (e.g., weeds on bunds, rice stubble, volunteer rice) Keeping the environment between soil and plant canopy either dry or moist (depending on the disease)  Farmer follows IPM principles and the following criteria: Preventative disease control methods are used, before considering curative methods. Fungicide is used only if other curative methods (e.g., biological control agents) are not effective on their own and severity of the disease is expected to cause significant damage or loss. Fungicide selection is in line with national government recommendations, is registered for use in rice, comes from a non-counterfeit source, and is not on any of the following international lists:  Persistent Organic Pollutants in the Stockholm Convention An or 1B under World Health Organization classification Annex III of the Rotterdam Convention <sup>21</sup> Fungicide application method is according to the product label instructions, follows the specified preharvest interval or is at least 30 days before harvest (if preharvest interval is not available), and does not exceed specified dosage (for worker safety and food safety). Fungicide responds to the target disease type, considers recent history of fungal disease and predicted weather patterns, and considers local information on fungicide-resistant diseases (for efficiency).	a) No curative disease control methods are required.  Curative disease control methods are required and: b) Farmer effectively controls diseases without the use of fungicide. c) Farmer meets all six criteria listed. d) Farmer meets criteria 1, 2, 3, 4, and 5. e) Farmer does not meet criteria 1, 2, and 3. f) Farmer does not meet criteria 1, 2, and 3.	3 3 2* 1 0

<sup>&</sup>lt;sup>21</sup> Products on this list may be safe to use under controlled circumstances and justification must be provided for use.

No.	Impact	Requirement	Level(s) of compliance	Points
18.4	Profitability Productivity Biodiversity Food safety	Preventative mollusc control methods can include:  Physical control (e.g., destruction of egg masses)  Reduction of water level so that snail attack is inhibited during the most vulnerable phase (i.e. early growth phase)  Promotion of predators (e.g., wild birds, ducks, fish)  Use of sturdier seedlings during transplanting by sowing low-density nursery beds and planting older seedlings  Crop rotation or extended dry fallow period  Parmer follows IPM principles and the following criteria:  Preventative mollusc control methods are used, before considering curative methods.  Molluscicide is used only if other curative methods (e.g., collection) are not effective on their own and severity of the mollusc is expected to cause significant damageor loss.  Molluscicide selection is in line with national government recommendations, is registered for use in rice, comes from a non-counterfeit source, and is not on any of the following international lists:  Persistent Organic Pollutants in the Stockholm Convention  An r 1B under World Health Organization classification  Annex III of the Rotterdam Convention <sup>21</sup> Molluscicide application method is according to the product label instructions, is not used before manual transplanting, follows specified preharvest interval, and does not exceed specified dosage (for worker safety and food safety).  Molluscicide responds to target mollusc species and is used only within the first 3 weeks after crop establishment (for efficiency).	a) No curative mollusc control methods are required.  Curative mollusc control methods are required and: b) Farmer effectively controls molluscs without the use of molluscicide. c) Farmer meets all six criteria listed. d) Farmer meets criteria 1, 2, 3, 4, and 5. e) Farmer does not meet criteria 1, 2, and 3. f) Farmer does not meet criteria 1, 2, and 3.	3 3 2* 1 0

<sup>&</sup>lt;sup>21</sup> Products on this list may be safe to use under controlled circumstances and justification must be provided for use.

No.	Impact	Requirement	Level(s) of compliance	Points
18.5	Profitability Productivity Biodiversity Food safety	Preventative rodent control methods can include:  Community rodent management (e.g., rat eradication campaigns, trap crops)  Synchronized planting  Use of narrow bunds (to minimize rodent habitat)  Promotion of predators (e.g., birds of prey, snakes)  Farmer follows IPM principles and the following criteria:  Preventative rodent control methods are used, before considering curative methods.  Rodenticide is used only if other curative methods (e.g., trapping, hunting) are not effective on their own, if there is historical evidence of rodent problems, and if severity of the rodent is expected to cause significant damage or loss.  Rodenticide selection is in line with national government recommendations, is registered for use in rice, comes from a non-counterfeit source, and is not on any of the following international lists:  Persistent Organic Pollutants in the Stockholm Convention  1A or 1B under World Health Organization classification  Annex III of the Rotterdam Convention <sup>22</sup> Rodenticide application is targeted to avoid non-application zones.  Rodenticide application method is according to the product label instructions, follows specified preharvest interval, and does not exceed specified dosage (for worker safety and food safety).  Rodenticide responds to target rodent species, is used before the reproductive growth phase of the crop to avoid an outbreak during grain filling, and is placed under protective cover (e.g., bamboo tubes, coconut husks) where not easily accessible to birds or exposed to rainfall (for efficiency).	a) No curative rodent control methods are required.  Curative rodent control methods are required and:  b) Farmer effectively controls rodents without the use of rodenticide. c) Farmer meets all six criteria listed. d) Farmer meets criteria 1, 2, 3, 4, and 5. e) Farmer does not meet criteria 1, 2, and 3. f) Farmer does not meet criteria 1, 2, and 3.	3 3 2* 1 0

<sup>&</sup>lt;sup>22</sup> Products on this list may be safe to use under controlled circumstances and justification must be provided for use.

No.	Impact	Requirement	Level(s) of compliance	Points
18.6	Profitability Productivity	BIRD MANAGEMENT	a) No bird control is required.	3
	Biodiversity Food safety	<ul> <li>Non-lethal bird control methods can include:</li> <li>Synchronized planting</li> <li>Scare/deterrent devices</li> <li>Promotion of predators (e.g., birds of prey, shrikes)</li> <li>Chemical repellents that do not kill birds and without negative side-effects</li> </ul>	Bird control is required and: b) Bird pests are managed by non-lethal bird control methods. c) Bird pests are managed by live trapping and all non-pest species are released alive. d) Bird pests are managed through discriminatory shooting (hunting).	3 2 1*
			e) Birds are indiscriminately persecuted by killing, poisoning, and/or hunting.	0
		Harvest and post-harve	st	
19	Profitability Productivity Food security	Rice is harvested at the appropriate time to optimize grain quality. <sup>23</sup> General indications of appropriate timing of harvest are:  1. When 80% to 85% of the grains per panicle are straw- or yellow-colored. 2. When moisture content is between 21% and 24%. 3. Between 28 and 35 days after heading in dry season, or between 32 and 38 days after heading in wet season. 4. Between 130 and 136 days after sowing for late, 113 and 125 for medium, and 110 days for early-maturing varieties. 5. Grains in the lower parts of the panicle should be in the "hard-dough" stage (firm but not brittle); grains that stick to your hand are too wet.	a) Farmer follows criteria 1 or 2. b) Farmer follows criteria 3 or 4. c) Farmer follows criteria 5. d) None of the above.	3 2* 1 0

<sup>&</sup>lt;sup>23</sup> Due to variation depending on local conditions, SRP recommends that criteria for appropriate timing of harvest is further specified in SRP National Interpretation Guidelines.

No.	Impact	Requirement	Level(s) of compliance	Points
20	Food safety	HARVEST EQUIPMENT  Rice is harvested with clean equipment to prevent contamination and mixing of varieties.  Machines (if used) are adjusted to optimum settings and operated according to the crop and field conditions resulting in minimum quality and shattering loss.	For manual harvesting: a) Heavy equipment is cleaned before use.  For mechanical harvesting: b) Harvest equipment is cleaned before use and machine settings are adjusted. c) Either harvest equipment is cleaned before use, or machine settings are adjusted. d) Harvest equipment is not cleaned before use and machine settings are not adjusted.	3* 3* 1
21	Profitability Productivity Food safety	PRYING TIME  Rice drying on-farm starts within 24 hours after harvest. The final moisture content is documented and depends on the further use of the rice:  14-18% moisture content for direct selling, for sale within 3 days.  16% or less moisture content for sale within 1 week.  14% moisture content or less for storing grains longer than 1 week.  12% moisture content or less for storing seeds.  Within a batch, the moisture content of a grain is not more than 1% after drying compared with the average moisture content (i.e., moisture gradient).  If rice is not dried on-farm (e.g., at farmer's concrete yard), it is transported to a drying (e.g., miller) or processing facility within 12 hours after harvest (so that rice can be milled at 14% moisture content).	a) Farmer transports rice to a drying or processing facility within 12 hours after harvest. b) Farmer starts drying rice on-farm within 24 hours after harvest and reaches 16% or less moisture content and not more than 1% moisture gradient within 1 week. c) Farmer starts drying rice on-farm within 24 hours after harvest and reaches 14-18% or less moisture content and not more than 1% moisture gradient within 3 days. d) Farmer starts drying rice on-farm within 24 hours after harvest but cannot document 18% or less moisture content or not 1% or less moisture gradient. e) Farmer does not transport rice to a drying or processing facility within 12 hours after harvest, or start drying rice on-farm within 24 hours after harvest.	3 3 2*

No.	Impact	Requirement	Level(s) of compliance	Points
22	Profitability Productivity Food safety	Rice is dried by using sustainable drying techniques.  For sun drying:  1. Layer thickness is 2-4 cm.  2. Rice is turned every 30 minutes.  3. Rice is protected from rain.  4. Rice is protected from mycotoxins, animals, and people (e.g., on nets, mats, or canvas).  For mechanical drying:  5. Use of quality dryers certified to produce optimum grain quality (no discoloration, smell, and minimized amount of broken rice).  6. Set dryer at a maximum temperature of 43°C for flat-bed batch dryers and 55°C for re-circulating batch dryers.	<ul> <li>a) Farmer does not do the drying himself/herself.</li> <li>b) Farmer uses mechanical drying and follows criteria 5 and 6.</li> <li>c) Farmer uses sun drying and follows criteria 1, 2, 3, and 4.</li> <li>d) Farmer uses sun drying and follows criteria 3 and 4.</li> <li>e) None of the above.</li> </ul>	n/a 3 2* 1 0
23	Profitability Productivity Food safety	Rice is safely stored to maintain its quality, through hermetic storage or the following measures:  1. Prevent contamination with hazardous substances, such as agrochemicals. 2. Maintain 14% moisture content or less. 3. Prevent rewetting. 4. Prevent pest damage without fumigation. 5. Rice is cleaned before storage (removal of dirt, weeds, and insects).	<ul> <li>a) Farmer does not store rice on-farm.</li> <li>b) Farmer practices hermetic storage or applies all five measures.</li> <li>c) Farmer applies measures 1, 2, 3 and 4 only.</li> <li>d) Farmer applies measures 1 and 2 only.</li> <li>e) None of the above.</li> </ul>	n/a 3 2 1* 0

No.	Impact	Requirement	Level(s) of compliance	Points
24	Nutrient use efficiency Greenhouse gas emissions	RICE STUBBLE  Rice stubble is not burned and is managed in a sustainable way to mitigate greenhouse gas emissions, minimize environmental impacts, and retain or improve soil quality. 24	<ul> <li>a) Stubble is not burned and not plowed under, with time (at least 3 weeks) to allow aerobic decomposition before wetting.</li> <li>b) Stubble is not burned, and is plowed under while the soil is dry, with time (at least 3 weeks) to allow aerobic decomposition before wetting.</li> <li>c) Stubble is not burned, and is plowed under while the soil is flooded, without time (at least 3 weeks) to allow for aerobic decomposition.</li> <li>d) Stubble is burned.</li> </ul>	3 2 1*
25	Nutrient use efficiency Greenhouse gas emissions	RICE STRAW  Rice straw is managed in a sustainable way to mitigate greenhouse gas emissions, minimize environmental impacts, and retain or improve soil quality.  Rice straw is:  1. Not burned.  2. Allowed sufficient time (at least 2 weeks) for aerobic decomposition if rice straw is left on the field or plowed under.  3. Collected, used a livestock feed or composted, and returned to the field.	a) Farmer meets criteria 1 and 3. b) Farmer meets criteria 1 and 2 only. c) Farmer meets criteria 1 only. d) Farmer burns rice straw.	3 2 1* 0

<sup>&</sup>lt;sup>24</sup>Research has identified the minimum-tillage system with stubble left on the field after grazing by livestock as a sustainable practice of treating rice stubble. SRP National Interpretation Guidelines may identify methods that are at an equivalent level of sustainability even if grazing by livestock or minimum-tillage is not practiced.

No.	Impact	Requirement	Level(s) of compliance	Points			
Health and safety							
26	Worker health and safety	Workers, including working household members, receive regular safety instructions on how to prevent work-related accidents or diseases, where to access first aid kits, and	a) Workers, including working household members, receive safety instruction annually, and first aid kit is available onfarm or at a designated medical center known by and accessible to farmers in a group.	2			
		how to contact health workers.  The first aid kit should be well-labeled and	b) Workers, including working household members, have received safety instruction, and are aware of how to	1*			
		available on-farm or placed at a designated medical center known by and accessible to	contact the nearest health worker or clinic.				
		farmers in a group.	c) There is no safety instruction.	0			
27	Worker health and safety	TOOLS AND EQUIPMENT  Tools and equipment for farm operations and postharvest processes are working and efficient in use by regular and proper maintenance and calibration. Tools are adequately stored.	<ul> <li>a) Tools and equipment maintained and calibrated within the current cropping season.</li> <li>b) Tools and equipment maintained and calibrated within the past 2 years.</li> <li>c) Tools and equipment not maintained and calibrated within the past 2 years.</li> </ul>	2			
				0			
		Pesticide application equipment (if pesticide(s) is (are) applied) is maintained and calibrated to prevent leakage or contamination.					

No.	Impact	Requirement	Level(s) of compliance	Points
28	Worker health and safety	<ul> <li>TRAINING OF PESTICIDE APPLICATORS</li> <li>Pesticide applicators receive training and apply good practices on the safe handling and use of pesticides, including:</li> <li>An explanation of the names, toxicity, health risks, and other relevant information related to all substances to be applied.</li> <li>Techniques for correct handling of substances.</li> <li>Preventative measures for reducing possible damage to health and the environment caused by substances.</li> <li>Emergency procedures for cases involving poisoning or undue contact with substances.</li> </ul>	a) There is no use of pesticides.  If pesticide(s) is (are) used, in the last 5 years: b) Pesticide applicators participated in training and demonstrate that relevant content is applied. c) Pesticide applicators participated in training. d) Pesticide applicators did not participate in training	2 1* 0
29	Worker health and safety	Pesticide applicators use functional and good-quality PPE as recommended on the product label, including:  Chemical-resistant gloves Masks Dermal protection (e.g., long-sleeved shirt, long-trouser legs) Boots Eye protection during mixing and application	a) There is no use of pesticides.  If pesticide(s) is (are) used: b) In the case of spraying: Pesticide applicators use all five of the listed PPE items of good quality (or what is recommended on the product label). c) In the case of plane, drone, or tractor application: Pesticide applicators use chemical-resistant gloves and masks of good quality during mixing (or what is recommended on the product label). d) In the case of spraying: Pesticide applicators use at least chemical- resistant gloves and masks of good quality. e) None of the above.	2 2 1*

No.	Impact	Requirement	Level(s) of compliance	Points
30	Worker health and safety	WASHING AND CHANGING	a) There is no use of pesticides.	2
	and salety	Designated areas for washing of PPE, bathing, and changing are available for pesticide applicators after finishing the application. All PPE worn during pesticide application is washed after use and does not	If pesticide(s) is (are) used: b) Designated areas for washing and changing (separated) are available, and they are not used for household laundry.	2
		enter housing.  These designated areas are separated from areas used for household laundry.	<ul> <li>c) Designated area for washing and changing (combined) is available, and it is not used for household laundry.</li> <li>d) Area(s) for washing and changing for</li> </ul>	1* 0
		,	pesticide applicators is (are) used for household laundry.	
31	Worker health and safety	APPLICATOR RESTRICTIONS	a) There is no use of pesticides.	2
	, , , , ,	Pesticides are not applied by pregnant or lactating women, by persons below 18 years, or by persons who suffer from chronic or respiratory diseases.	If pesticide(s) is (are) used: b) Pesticides are not applied by pregnant or lactating women, by persons below 18 years, or by persons who suffer from chronic or respiratory diseases.	2*
			c) Pesticides are applied by pregnant or lactating women, by persons below 18 years, or by persons who suffer from chronic or respiratory diseases.	0

No.	Impact	Requirement	Level(s) of compliance	Points
32	Worker health and safety	RE-ENTRY TIME	a) There is no use of pesticides.	2
	and safety	Re-entry time after the use of pesticides:  1. Follows the recommendation on the product label, or after 48 hours if the label does not give a recommendation.	If pesticide(s) is (are) used: b) Farmer meets criteria 1 and meets criteria 2 by placing warning signs or symbols in the fields.	2
		2. Is clearly communicated.	<ul><li>c) Farmer meets criteria 1 and meets</li><li>criteria 2 by verbally communicating</li><li>re-entry time.</li><li>d) Farmer does not meet criteria 1</li></ul>	1*
			and/or 2.	U
33	Food safety Worker health and safety	PESTICIDE AND CHEMICAL STORAGE  Pesticides and inorganic fertilizers (including	a) There is no storage of pesticides and/or inorganic fertilizers.  If posticide(a) and/or inorganic fertilizer(a).	2
		partly-empty containers) are:  1. Labeled.	If pesticide(s) and/or inorganic fertilizer(s) is (are) stored: b) Farmer meets criteria 1 and 2.	2
		2. Stored in a locked place that is separate from fuel, food, and rice and which is out of reach of children.  Output  Description:	c) Farmer meets criteria 2. d) None of the above.	1* 0

No.	Impact	Requirement	Level(s) of compliance	Points
No. 34	Impact Worker health and safety	Requirement  PESTICIDE DISPOSAL  Empty pesticide containers, surplus pesticides, and obsolete pesticides (e.g., past shelf life or banned) are disposed of properly, through a collection, return, or disposal service, or through good practices in pesticide disposal.  Good practices in pesticide disposal include:  1. Empty containers are rinsed 3 times with	Level(s) of compliance  a) There is no use of pesticides.  If pesticide(s) is (are) used:  b) Farmer participates in a collection, return, or disposal service, especially if there is a large volume of waste.  c) In the absence of such a service, farmer meets all four criteria for good practices in pesticide disposal.  d) In the absence of such a service,	Points  2  2  1*
		<ol> <li>Empty containers are rinsed 3 times with water. Surplus spray and wash water is applied over an unmanaged part of the farm, away from water bodies.</li> <li>Containers are made unusable by crushing or puncturing before burying them onfarm.</li> <li>Containers are buried in a designated area (at least 20 meters away from a water body) and are not accessible to children or unauthorized persons.</li> <li>Obsolete pesticides are returned to the dealers or, if not possible, disposed of in a manner that minimizes exposure to humans and the environment.</li> </ol>	farmer does not meet all four criteria for good practices in pesticide disposal. e) There is a collection, return, or disposal service, but it is not used.	0

No.	Impact	Requirement	Level(s) of compliance	Points
		Labor rights		
35	and youth engagement  Children below 15 years are not engaged as workers. <sup>25</sup> Family members below 15 years of age living on family farms may participate in farming activities that consist of light, age-appropriate duties that give them an opportunity to develop skills, only if		<ul> <li>a) Farmer does not engage children below 15 years of age as workers.</li> <li>b) Family members below 15 years of age are living and working on the farm, and farmer complies with all four criteria.</li> <li>c) Family members below 15 years of age are living and working on the farm, and farmer does not comply with one or more criteria.</li> <li>d) Farmer engages children below 15</li> </ul>	3 3* 0
		<ol> <li>Not harmful to their health and development.</li> <li>Do not interfere with schooling and leisure time.</li> <li>Under supervision of an adult.</li> <li>Not in excess of 14 hours a week.</li> </ol> Age of workers is always verified and documented.	years of age (who are not family members living on the farm) as workers.	
36	Child labor and youth engagement	Children below 18 years are not assigned to work which is likely to harm their safety and health. <sup>26</sup> Children below 18 years of age do not conduct hazardous work or work that may harm their physical, mental, or moral wellbeing. <sup>27</sup> They do not:  1. Work in dangerous locations. 2. Work with dangerous machinery, equipment, and tools (as defined by national laws and regulations). 3. Carry heavy loads. 4. Work with dangerous substances. 5. Work at night.  Age of workers is always verified and documented.	a) There are no children below 18 years of age working on the farm. b) There are children below 18 years of age working on the farm, and farmer complies with all five criteria. c) There are children below 18 years of age working on the farm, and farmer does not comply with one or more criteria.	n/a 3* 0

 <sup>&</sup>lt;sup>25</sup> ILO Minimum Age Convention, 1973 (No.138)
 <sup>26</sup> If national law has set the minimum age at 16 (on condition that appropriate prior training is given and the safety and health of young workers are fully protected), this age applies (IL-OSafety abd Health in Agriculture Convention, 2001 [No.184])
 <sup>27</sup> ILO Worst Forms of Child Labour Convention, 1999 (No. 182) and Recommendation, 1999 (No.190)

No.	Impact	Requirement	Level(s) of compliance	Points
37	Child labor and youth engagement	EDUCATION  Children living on the farm in the age of	a) There are no children living on the farm within the age of compulsory schooling.	n/a
	ongagomoni	compulsory schooling go to school all year long.	b) Children living on the farm within the age of compulsory schooling go to school all year long.	3
			c) Children living on the farm within the age of compulsory schooling go to school, but not all year long.	2
			d) Children living on the farm within the age of compulsory schooling do not go to school, but efforts are made to provide education.	1*
			e) Children living on the farm within the age of compulsory schooling do not go to school, and no efforts are made to provide education.	0

No.	Impact	Requirement	Level(s) of compliance	Points
38	Not linked to a specific SRP performance indicator	FORCED LABOR  There is no forced, compulsory, or slave labor used, including trafficked and bonded labor, labor by prisoners, or the use of	<ul> <li>a) Farmer does not engage any workers.</li> <li>b) Farmer demonstrates full compliance with all six criteria. (Smallholders may demonstrate compliance without documentation.)</li> </ul>	n/a 3*
		extortion, debt, threats, fines or penalties. 28  The following criteria are met:  1. No withholding of (part of) the worker's salary, benefits, property, or documents (e.g., identity cards and travel documents) in order to force such worker to continue to work.  2. Workers are not charged recruiting or hiring fees that require them to be indebted to the farm (or recruiting agency).  3. Workers are allowed to leave the farm's premises at the end of their shifts.  4. Regular working hours of workers do not exceed 48 hours per week, with at least 1 full day of rest for every 6 consecutive days worked.  5. Spouses and children of contracted workers are not forced to work on the farm.  6. The farm does not participate in or allow human trafficking.	c) Farmer does not comply with one or more of the criteria.	0

 $<sup>^{28}</sup>$  ILO Forced Labour Convention, 1930 (No. 29) and ILO Abolition of Forced Labour Convention, 1957 (No. 105)

No.	Impact	Requirement	Level(s) of compliance	Points
39	WorkerHealth and Safety Child labor and Youth Engagement	There is no discrimination or disrespectful treatment of workers, including working household members. <sup>29</sup>	a) Farmer does not engage any workers.     b) Farmer demonstrates full compliance with all five criteria. (Smallholders may demonstrate compliance without documentation.)	n/a 3*
	Women's empowerment	The following criteria are met:  1. No discrimination on the basis of gender, ethnic background, national origin, religion, disability, sexual orientation, pregnancy, worker organization membership, or political affiliation.  2. No distinction, exclusion, or preference to harm equality of opportunity with regard to hiring, training, task assignment, benefits, remuneration, advancement, termination, retirement, or other employment-related decision.  3. No job-related medical testing as a condition of employment (except lawful drug testing).  4. No behavior, gesture, language, or physical contact that is sexually abusive, coercive, or threatening.  5. No bullying or physical punishment.	c) Farmer does not comply with one or more of the criteria.	0

<sup>&</sup>lt;sup>29</sup> ILO Equal Remuneration Convention, 1951 (No. 100) and ILO Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

No.	Impact	Requirement	Level(s) of compliance	Points
40	Worker Health and Safety Child labor and Youth Engagement Women's empower- ment	Workers have the right to establish and/or join an association of their choice without interference and take part in collective bargaining on working conditions. <sup>30</sup> The following criteria are met:  1. Workers can freely establish and join workers' organizations, both internal (e.g., workers' representations) and external (e.g., trade unions), and take part in collective bargaining on working conditions.  2. Labor organizations are allowed to conduct activities on-farm.  3. Effective functioning of labor organizations is not blocked and representatives of such organizations are not discriminated against.  4. Farmer complies with collective bargaining agreements.	a) Farmer does not engage any workers. b) Farmer demonstrates full compliance with all four criteria. (Smallholders may demonstrate compliance without documentation.) c) Farmer does not comply with one or more of the criteria.	n/a 3*
41	Worker Health and Safety Child labor and Youth Engagement Women's empower- ment	The following criteria are met:  1. Wages of workers meet or exceed the legal minimum wage required under local or national laws and regulations. If wages are negotiated voluntarily between employers and workers' associations, the negotiated wage amount(s) apply to all workers covered under the negotiated agreement. This includes providing equal pay to men and women for work of equal value.  2. Wages are paid in a timely manner and on a regular basis.  3. Wages are paid in a legal currency, or in another form acceptable to workers without creating any form of dependency.  4. Overtime is voluntary and is paid at the rate required by local or national laws and regulations, or as collectively negotiated	a) Farmer does not engage any workers. b) Farmer demonstrates full complies with all four criteria. c) Farmer demonstrates less than full compliance and/or does not comply with one or more of the criteria.	n/a 3* 0

<sup>30</sup> ILO Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) and ILO Right to Organise and Collective Bargaining Convention, 1949 (No. 98)

## Annex A: Risk Assessment Checklist for Soil and Water Quality

This soil and water quality risk assessment checklist is to be used along with the Standard, particularly for Requirements 4 (heavy metals), 5 (soil salinity), and 12 (inbound water quality). If all answers are "no", the farm is considered to be at low risk for any of the most common problems with soil or water quality. If any question is answered "yes", actions are suggested in the table below to address that particular risk.

Question	No	Yes	If yes, recommended action
Section A: Soil contamination risk			
1. Has any part of your land been used for any of the following during the past 50 years?  - Sewage sludge application (cadmium is most likely hazard)  - Industrial waste disposal  - Artisanal or industrial mining (mercury, cadmium, lead, arsenic are most likely hazards)  - Mine drainage (mercury, cadmium, lead, arsenic are most likely hazards)  - Battery recycling or disposal (cadmium, lead, mercury are most likely hazards)  2. Is your land adjacent to a busy road (like a highway, expressway)? (cadmium and lead from automobile exhaust are most likely hazards)			Learn as much as possible about the type of waste that has been disposed on your soil and the process that was used to produce it. Check soil quality by having the soil tested for the contaminants that are most likely to be present in the waste. If you have no information about the type of waste, test soil quality for cadmium, arsenic, mercury, and lead, and persistent organic pollutants. If the testing laboratory shows a value that is higher than the normal range for any test, seek advice about remediation. If the tests show nothing out of range, there is no action needed, except to repeat the soil test once every 5 years (if the waste production has stopped) or yearly (if the waste production is continuing).
<ul> <li>3. Is your land located downwind from a coal-powered electrical plant (within 5 km)? (mercury is most likely hazard)</li> <li>4. Is your land located downstream from an active or former water treatment plant, livestock (including poultry) production</li> </ul>			
facility, or fisheries operation?  5. Have any of the following products been used on your land during the past 50 years?  - Cadmium-containing fungicides (e.g. cadmium carbonate, cadmium chloride, cadmium succinate, cadmium sebacate, others: look for "cad" in the name)  - Mercury-containing fungicides (e.g. phenyl mercuric acetate, calomel chloride, mercury chloride, others: look for "merc" or "calo" in the product name)  - Arsenic-containing pesticides (e.g. arsenic acid, arsenic trioxide, arsonate, arsenite, aresonic acid, note: usually there is no clue in the product name)			If the product is currently being used on your land, discontinue it and seek expert advice about effective alternatives. Find out as much as possible about how much of the agrochemical was used and when (for how many years, ending when). Test the soil for the contaminant of concern. If the tests show dangerous levels of contamination: a) seek expert advice about remediation of the soil; b) test the rice produced on this land for the same contaminant; c) make and implement a plan for mitigating risk to yourself (from direct contact with the soil) and to consumers of the rice you produce. Repeat soil testing as required by the remediation plan, eventually decreasing to once every 5 years.
<ul> <li>Phosphate fertilizer from a high-cadmium source</li> <li>6. Have there been any reports of groundwater or surface water contamination in your region (with arsenic, cadmium, mercury, or anything else)?</li> <li>7. Has your irrigation source ever tested outside the normal limits for any contaminant?</li> </ul>			

Question	No	Yes	If yes, recommended action
Section B: Soil and water salinity risk			
8. Has your irrigation source ever had high salinity levels? 9. Is your land located within 3 km of a body of salt water? 10. Has your land received direct salt water intrusion within the past 5 years? (e.g., flood, typhoon waves, tsunami, etc.) 11. Does your land experience tide-related changes in water table? 12. Does your water table depth change by more than 10 cm between seasons? 13. Have there been any government or community warnings in your area about soil or water salinization? 14. Does your irrigation source get depleted towards the end of the dry season?			Check soil and irrigation water for salinity at least once per year, especially towards the end of the dry season. Seek expert advice on mitigation options if soil or water tests show salinity levels of concern (the laboratory doing the test will know the levels of concern for that particular test).

## **NOTES**

