CALL 2023:

Good practices towards sustainable soil and water management

May 18 –June 08

1. About the call

The Alliance for Food Sovereignty in Africa, the Alliance for Soil of Latin America and the Caribbean (LAC), the Argentinian Association of Direct Seeding, Catholic Relief Services, the Project +Cotton from the International Cooperation of Brazil-FAO, the Food and Agriculture Organization of the United Nations (FAO), through the Family Farming Knowledge Platform, Water Resources Management Team, Family Farming & Agroecology Communities of Practice of Africa and LAC, and the Soil Community of Practice for LAC invites all interested parties working on actions aimed at sustainable soil management to present good practices, innovations and technologies that can be replicated, adapted and scaled up in Latin America, the Caribbean and Africa.

The main theme of World Soil Day 2023 is "**Water to keep soils healthy and Soils to keep water healthy**". In this sense, this Call is based on the premise that the adoption of good practices to achieve sustainable production systems and ensuring a healthy food system requires healthy soils and integrated water resources management. Sustainable soil and water management promote food security, healthy ecosystems, and livelihoods of farming families and communities.

On the other hand, agroecology, because of its integrated, participatory, multidisciplinary and complementary approach, has enormous potential to maintain our soils, restore and regenerate degraded lands, reduce air, soil and water pollution and return much-needed carbon and nutrients to the soil, while helping to mitigate climate change.

Family farmers are co-creating new solutions, innovating, testing and adapting practices and technologies, e.g.: new agroecological biofertilizers, bioinoculants and bioprotectants. Diversification of agroecosystems (e.g., polycultures, agroforestry, mixed crop-livestock systems, etc.), regular use of organic nutrient inputs, and appropriate soil management and conservation practices are contributing to improved soil health and fertility by improving soil physical, chemical, and biological characteristics while halting soil degradation and erosion processes.

Family farmers need to share, collaborate, access, absorb and apply the rich local knowledge and available traditional and technical know-how. The co-creation and sharing of efficient and effective knowledge can improve the dissemination of innovations and information in different forestry and livestock contexts, from local to regional levels.

This Call seeks to identify diverse management techniques, innovations and practices that can help accelerate the transition and positive change towards sustainable soil and water management in sustainable and healthy food and forestry systems.

All selected good practices will be part of the repository of Practices and Techniques from the Family Farming Knowledge Platform. In addition, the selected good practices will be disseminated in the events and activities to **commemorate Global Soil Day**, organized by FAO for December 2023. Therefore, applications that include the relationship between these two resources (water and soil) will be very well received.

The co-organizers of this Call may additionally disseminate good practices in related territories, where they can be used as a means to learn and generate synergies and to encourage better use of knowledge from the various shared experiences.

2. About the applicants and the best practices for this call

2.1 Who can apply?

The Call is aimed at all parties interested such as farmers, trainers, extension agents, technicians, professionals, among others, in actions oriented to sustainable soil and water management, and may belong to public agencies, research centers, international, multilateral and cooperation agencies, non-governmental and civil society organizations, communities and producers' organizations, as well as corporations and private companies, among other actors related to the rural world.

Parties interested in applying may do so individually or represented by any institution.

2.2 What are the topics prioritized by the call for proposals?

This call is framed in the topics of:

i. **Sustainable soil and water health practices**
ii. **Co-creation, exchange and diffusion of local innovation for soil and water health.**
iii. **Capacities to improve soil health and water management and farmer autonomy.**

What is meant by each of these topics is explained in section **2.4.2.**

2.3 What is the eligibility profile of good practices?

This call has defined the following requirements for good practices to be considered eligible:

- **Priority issues:** The good practice is clearly linked to one more of the issues prioritized in point **2.2.**
- **Time and form:** The application is made online or sent to the email RLC-Convocatoria-BPS@fao.org at Spanish, Portuguese, English or French, within the deadline established in this call.
- **Location:** The good practice is or has been developed in any country in Latin America, the Caribbean or Africa.

2.4 What are the evaluation criteria?

Eligible best practices will be evaluated according to the following criteria:

Criteria		Weight
2.4.1	Clarity and relevance	30%
2.4.2	Contribution to sustainable soil and water management	30%
2.4.3	Sustainability	30%
2.4.4	Communication	10%

2.4.1 Clarity and relevance

Priority will be given to those applications that describe their experience in a clear, coherent and complete manner, and that are related to the topics prioritized by the call for proposals.

2.4.2 Contribution to sustainable soil and water management

Priority will be given to those good practices that incorporate:

i. Sustainable soil and water health practices: What silvo-agricultural techniques and practices have proven to promote sustainable management for healthy soil and water? Provide concrete experiences, best practices, and success stories of practices carried out by women and young farmers. This call asks for concrete examples of practices that spatially improve soil water management, increase water uptake and storage, and avoid water loss through runoff and evapotranspiration. Practices that reduce erosion, increase soil organic matter content (moisture retention), the use of dead vegetation and/or live cover, intercropping, rotations and nutrient balance management that allow efficient water use, practices that reduce salinity problems and irrigation strategies that reduce water losses.

ii. Co-creation, sharing and dissemination of local innovation for soil and water health: what kind of interactions, collaborations and tools have been used to accelerate the creation, sharing and dissemination of information and knowledge on soil health and water management practices and techniques? How can knowledge hubs be more effective in making agroecological knowledge accessible to small-scale food producers? Give examples of what and where they have been used. What are the factors behind their effectiveness?

iii. Capacities to improve soil health and water management and farmer autonomy: How can family farmers and agroecology practitioners be supported to innovate, test, adapt and adopt new agroecological management techniques that promote soil and water health? What kind of practices, collaborations and skills need to be developed to enable these people to implement sustainable soil management? What is the role of rural extension services and farmer organizations in this transition to drive co-creation and knowledge sharing?

2.4.3 Sustainability

Corresponds to managing natural resources, in this case soil and water, so that ecosystem functions are preserved to respond to current and future human needs.

2.4.4 Communication

It corresponds to techniques that are transmitted in an attractive, close way and describes an own experience, beyond the correct wording. Those testimonies that come from the protagonists should be valued positively, rather than narratives interpreted by a third party or observer.

Shared materials or complementary information are useful to identify the transmission power that the practice itself has for other people or communities.

3. About the application process

All applications must be made only in Spanish, English, Portuguese or French.

There are two ways to apply:

a. **Online application**: through a form available **here**.

b**. Application by mail**: by sending the form available **here**, which should be addressed to the email RLC-Convocatoria-BPS@fao.org. It should be noted that emails sent to accounts other than this one will not be considered in the evaluation process.

In addition to the information on the form, applicants may include a link to a public folder for multimedia content that can clearly illustrate the good practice, as well as any previous systematization made.

To facilitate this process, FAO provides a format (.doc) to prepare the application before entering it into the online application system, available **here**.

The 2023 call for applications will be open from **Thursday, May 18 at 9:00 a.m.** until **Thursday, June 08 at 11:00 p.m.**, Santiago de Chile time, even when they belong to the regions: Latin America, the Caribbean or Africa.

Applications received by other means or formats and those sent after the closing date and time will not be accepted.

4. About the evaluation process

The evaluation and selection of best practices will be done in two stages:

4.1. Eligibility stage

This refers to the verification of compliance with the eligibility requirements indicated in section 2.3 of these guidelines. All good practices that meet the requirements will be classified as eligible and will advance to the next stage.

The results of this stage will be recorded in a logbook, which will indicate the list of eligible and ineligible good practices, specifying the reasons for non-compliance with the requirements.

4.2. Evaluation and selection stage

At this stage, the eligible good practices will be reviewed and evaluated by a network of experts, based on the evaluation criteria established in section 2.4 of this call for proposals.

The organizers reserve the right to contact the applicant entities to verify and request additional information to clarify doubts raised during the evaluation.

5. Communication of results

The results of the call will be published on the **website** and social networks of FAO and the co-organizers based on is the criteria indicated in number 6. In addition, the authors of the selected good practices will receive an individual notification about the selection of their application.

TFAO will contact the applicants by e-mail to inform them of the systematization and dissemination procedures and may convene the authors for an activity to promote good practices.

The selected good practices could also be systematized and documented in depth by FAO, in written, audiovisual and multimedia form, in order to include them in a compilation publication to be disseminated globally.

6. Calendar

Activity	Dates - Year 2023[1]
Launch of the call for proposals	May 18
Opening of the call for proposals	From May 18 to June 8
Consultation period	From May 18 to June 1
Closing online application	June 8 at 11:00 p.m. (Santiago of Chile time)
Evaluation process	June 09 to July 09
Announcement of results	From the second half of July

7. About the terms and conditions of the call

- The organizers will have the right to use, edit, adapt and disseminate the materials received and produced during the entire process.

- The organizers pledge to give credit to the authors and to respect the original title of the good practice in any reproduction and adaptation.

- The organizers are exonerated from any liability for copyright claims if the materials belong to a person or organization other than the one that registered them for the call.

- Participants are responsible for complying with the legal provisions in force regarding intellectual property and the right to one's own image.

[1] The selected best practices will be disseminated from the second half of 2023 onwards.

GLOSSARY

Water

Water: Water is essential for agricultural production and food security. It is the lifeblood of ecosystems - including forests, lakes and wetlands - on which our current and future food and nutrition security depends.

Water use efficiency: The ratio of the amount of water used for a specific purpose to the amount of water withdrawn or diverted from its source for that use. In irrigation, water use efficiency presents the relationship between estimated irrigation water requirements (through evapotranspiration) and actual water withdrawal. It is dimensionless and can be applied at any scale (plant, field, irrigation system, basin, country) (FAO, 2022).[2]

Integrated water resources management: a process that promotes the coordinated development and management of water, land and related resources to maximize the resulting economic and social welfare in an equitable manner without compromising the sustainability of ecosystems. Target 6.5 of the Sustainable Development Goals measures the extent and application of integrated water resources management (FAO, 2022).

Best Practices

Good practices: FAO (2006[3]) defines good practices as *"Doing things right and providing assurance of this".* Another definition: *"is the application of available knowledge to the sustainable utilization of basic natural resources for the production, in a benevolent manner, of safe and healthy food and non-food agricultural products, while ensuring economic viability and social stability".* According to FAO, *"the application of good practices involves knowledge, understanding, planning and measurement, recording and management aimed at achieving specific social, environmental and production objectives".*

Good practices should achieve the following objectives:

- care for the environment and animal welfare.
- food safety and consumer protection.
- health, safety and welfare of workers.
- economic sustainability over time.

Good soil practices refer to the set of tools that allow soils to fulfill their ecosystem services (FAO, 2017)[4] :

1. supporting services include primary production, nutrient cycling and soil formation;

[2] FAO. 2022. The State of the World's Land and Water Resources for Food and Agriculture - Systems at breaking point. Main report. Rome.https://doi.org/10.4060/cb9910en

[3] FAO (2006). Good Agricultural Practices (GAP): In Search of Sustainability, Competitiveness and Food Security. https://www.fao.org/3/a0718s/a0718s00.htm

[4] FAO 2017. Voluntary guidelines for sustainable soil management Food and Agriculture Organization of the United Nations Rome, Italy.

2. supply services include the provision of food, fiber, fuel, timber and water; land raw materials; surface stability; habitats and genetic resources;
3. regulating services refer to aspects such as water supply and quality, carbon sequestration, climate regulation, flood control and erosion;
4. cultural services refer to the aesthetic and cultural benefits derived from the use of the land.

Good agricultural practices for water management: In the hydrological water cycle, the soil regulates the availability of plants and the rate of water flow. Good agricultural practices that promote soil water infiltration, moisture retention and reduce losses through runoff, subsurface flow and evapotranspiration are considered sustainable water management. Increasing soil organic matter, mulching, intercropping, efficient irrigation systems, and rainwater harvesting through climate-smart agriculture are examples of these practices (FAO, 2005[5] ; FAO, 2015[6]).

Sustainable soil management

- **Sustainable land management:** Refers to comprehensive programs or projects that contribute to the sustainable development of rural territories, considering multiple actors and lines of action.

Likewise, sustainable soil management (itself understood as sustainable land management), using scientific knowledge, local knowledge, and proven, evidence-based approaches and technologies, can increase the supply of nutritious food, provide a valuable tool for climate regulation, and safeguard ecosystem services (FAO and GTIS, 2015[7]).

According to the World Soil Charter 2015:

> *Soil management is sustainable if the support, provisioning, regulation and cultural services provided by the soil are maintained or expanded without significantly impairing either the soil functions that enable these services or biodiversity.*

According to FAO, in the Voluntary Guidelines for Sustainable Soil Management Food and Agriculture Organization of the United Nations, 2017[8] :

> *Soil management is sustainable if the supporting, provisioning, regulating and cultural services provided by soils are maintained or enhanced without significantly impairing either the soil functions that make these services possible or biodiversity. Of particular concern is the balance between the supporting and provisioning services for crop production and the regulating services that soil provides for water quality and availability and for the composition of atmospheric greenhouse gases*.

[5] FAO, 2005. Optimization of soil moisture for crop production. https://www.fao.org/publications/card/es/c/6180fe75-f5b0-5702-a5f8-fd7de914d2c1/
[6] FAO, 2015. Soils in the water cycle. https://www.fao.org/soils-2015/news/news-detail/es/c/326296/
[7] FAO and GTIS. 2015. State of the World Soil Resource (EMRS) - Technical Summary. Food and Agriculture Organization of the United Nations and Intergovernmental Soil Technical Group, Rome, Italy.
[8] FAO 2017. Voluntary guidelines for sustainable soil management Food and Agriculture Organization of the United Nations. Rome, Italy.

Sustainable water management:

Sustainable water management in agriculture involves increasing crop production per drop of water used in the agricultural sector, ensuring that increased water use efficiency does not adversely affect water quantity and quality in the lower basin (https://www.iaea.org/es/temas/gestion-del-agua-con-fines-agricolas).

FAO's work on water focuses on more efficient, equitable and environmentally friendly water use in agriculture. Water issues to be addressed include: producing more food with less water; building resilience in farming communities to cope with floods and droughts; applying safe water technologies that protect the environment.

Sustainability

Sustainability: Corresponds to managing natural resources, in this case soil, in such a way that ecosystem functions are preserved to meet current and future human needs. The sustainability of the good practice may be related to: social, environmental, financial and economic strategies, and/or capacities developed, as the case may be.

Soil

Soils Its traditional meaning is defined as the natural medium for plant growth. It has also been defined as a natural body consisting of soil layers (soil horizons) composed of weathered mineral materials, organic matter, air and water. Soil is the end product of the influence of time and combined with climate, topography, organisms (flora, fauna and humans), parent materials (rocks and parent minerals). As a result, the soil differs from its parent material in texture, structure, consistency, color, and chemical, biological and physical properties.

Soils are the foundation for food production and food security, supplying plants with nutrients, water and support for their roots. Soils function as the largest filter and storage tank for water on Earth; it contains more carbon than all vegetation on Earth, thus regulating the emission of carbon dioxide and other greenhouse gases; and it hosts a tremendous diversity of organisms of key importance for ecosystem processes (FAO, 2015[9]).

Healthy Soil: It is a living and dynamic ecosystem, full of microscopic and larger organisms that fulfill many vital functions, including transforming inert and decaying matter and minerals into plant nutrients (nutrient cycling); controlling plant diseases, insects and weeds; improving soil structure with positive effects on the water and nutrient holding capacity of soils; and finally, improving crop production. In addition, healthy soils contribute to mitigating climate change by maintaining or increasing their carbon content (FAO, 2015[10]).

9 FAO. 2015. Healthy soils are the basis for healthy food production. https://www.fao.org/soils-2015/news/news-detail/es/c/277721

10 FAO. 2015. Healthy soils are the basis for healthy food production. https://www.fao.org/soils-2015/news/news-detail/es/c/277721