























MESSAGE FROM THE SOIL VALUES PROGRAM DIRECTOR

A FIRST YEAR RICH IN LESSONS FOR THE SOIL VALUES PROGRAM



Dear readers, stakeholders in agricultural development, and partners,

The Soil Values program is pleased to share with you the lessons learned from its first year of activity and to reaffirm its ambitious vision: to transform the agriculture sector through soil health and soil fertility. This first year was marked mainly by the launch of the

program in the various implementing countries as well as by carrying out initial pilot activities in the field. Despite the challenges encountered, the program is moving forward with success. We have initiated relevant partnerships and carried out inclusive and participatory activities with various agricultural stakeholders. Collaboration with our national partners remains important for the success of all agricultural development initiatives. I extend my sincere thanks to all our partners for their invaluable support, which is essential to achieving our objectives.

I would like to express special gratitude to our donor, the Directorate-General for International Cooperation (DGIS) of the Kingdom of the Netherlands, whose financial support has made possible the implementation of this 10-year program built on the principle of synergy with national and regional stakeholders. The Kingdom of the Netherlands recognizes the importance of fertile and healthy soils for biodiversity and sustainable food systems, thus focusing its efforts on the Sahel to combat hunger and strengthen food security in the context of climate change.

I would also like to thank the Governments of the implementing countries of Burkina Faso, Mali, Niger, and Nigeria for their continued support, which facilitated and provided valuable assistance in the implementation of our initial activities. We remain firmly committed to providing continued support to small-scale agricultural food producers, particularly women and youth, in order to strengthen their capacities in sustainable agricultural land management and ensure food security in the geographical areas covered.

The 2025 work plan currently being finalized will help achieve these goals, with the essential collaboration with all key stakeholders. I wish all our partners and all stakeholders in agricultural development an excellent 2025, full of success and opportunities. We reaffirm our willingness to collaborate with you to carry out initiatives for the benefit of rural farming communities. Your commitment and continued support remain essential to jointly achieve visible qualitative changes in soil health and fertility.

Bigokazo FOTANA



SNV is a major development actor that has been present in several countries in Africa and Asia for more than 60 years. With a team of around 1,600 multidisciplinary experts, SNV collaborates with local and international partners to build capacities and catalyze sustainable transformations in agrifood, energy, and water systems. SNV's approach is grounded in equity for all in terms of gender equality and social inclusion. SNV focuses on adaptation to climate change while adapting its interventions to different local contexts to maximize their impact.

A Vision of Regenerative and Sustainable Agriculture

SNV strives for sustainable and resilient agrifood systems that can ensure food security and adequate nutrition while preserving economic, social, and environmental resources for future generations. SNV therefore implements integrated approaches, focused on resilient and productive landscapes, that combine sustainable agricultural production, restoration of natural resources, and improvement of farmers' livelihoods.

Resilient and Productive Landscapes: A Holistic Approach

SNV's vision is based on the idea that sustainable food production must be compatible with ecosystem regeneration and climate change mitigation. Working at farm, supply chain, and landscape scales, SNV seeks to restore and preserve ecosystems, boost agricultural productivity, foster rural development, and strengthen the resilience of food systems to climate hazards. This approach also connects producers, processors, and consumers, integrating agroecological practices to strengthen household food and nutrition security.

SNV's Four Pillars of Intervention to Achieve Its Objectives

To achieve its objectives, SNV relies on four complementary areas of intervention:

- Sustainable intensification and regenerative agriculture, which aim to increase crop yields while preserving natural resources and improving soil health;
- Sustainable pastoralism focused on climatepositive livestock and dairy production and aiming to improve the sustainability of agropastoral systems by reducing grassland degradation and ensuring the mobility of pastoralists;
- Climate adaptation services for smallholder farmers through which SNV supports agricultural innovations, facilitating access to finance, inputs, and insurance and strengthening the capacities of local actors to adopt resilient practices. This support fundamentally comes through services offered by the state system and private actors, inclusive dialogue, and strengthening the skills and governance mechanisms needed to encourage the adoption of resilient practices;
- Integrated landscape management and restoration promotes the protection and restoration of natural ecosystems while improving integrated and sustainable resource governance, including equitable access to land and water, especially for women. Integrated landscape management aims to protect, sustainably manage, increase the climate resilience of, and restore natural and modified ecosystems important for human production and health.

SNV's Contribution to Climate Adaptation Initiatives

For over a decade, SNV has been actively engaged in international climate change adaptation initiatives. By participating in the Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC), SNV promotes concrete solutions to strengthen the resilience of vulnerable populations affected by climate crises.

Through programs such as the Agri-Food Program for Integrated Resilience and Economic Development in the Sahel (Pro-ARIDES), Laikipia Isiolo Samburu Transforming the Environment through Nexus (LISTEN), Climate Resilient Agribusiness for Tomorrow (CRAFT), Integrated & Climate Smart Innovation for Agropastoralist Economies and Landscapes (ICSIAPL), and the Soil Values program, SNV contributes to transforming

agriculture, regenerating ecosystems, and improving the resilience of communities to climate challenges.

SNV remains committed to supporting local and international stakeholders in implementing innovative and sustainable solutions to address agricultural and climate challenges. We will continue to work together for a future in which food and agricultural systems support equity, resilience, and sustainability.

SNV https://www.snv.org/





THE KINGDOM OF THE NETHERLANDS: A COMMITTED PARTNER FOR SUSTAINABLE DEVELOPMENT AND FOOD SECURITY IN THE SAHEL

In a global context marked by complex and interdependent challenges, the Kingdom of the Netherlands is actively committed to sustainable development and food security in Africa, specifically in the Sahel. This commitment to strategic and inclusive cooperation is based on common objectives and mutual interests.

Cooperation Based on Resilience and Economic Development

Following consultations with Dutch, African, and other international partners, the Netherlands has established an ambitious cooperation framework focusing on key priorities: economic development, security, stability, migration, poverty reduction, food security, and adaptation to climate change.

The specificity of the Dutch approach lies in its adaptation to local realities. Each of its initiatives is designed to take into account the specific contexts of each country and region, including the unique challenges facing the Sahel. This method requires inclusive consultations with the states concerned and all partners to ensure increased relevance and effectiveness of interventions.

Promoting Gender Equality and Social Inclusion

At the heart of the Dutch approach is strong integration of the gender dimension. True to its policy of equality and social inclusion, the Kingdom of the Netherlands ensures that women and vulnerable groups are actively involved in development programs. This strategy strengthens the resilience of communities while promoting inclusive and equitable growth.



Responding to Global Crises: expertise at the Service of Africa

Recent global crises, including the COVID-19 pandemic and the Russia-Ukraine war, have exposed the vulnerabilities of food supply systems in Africa. In the face of these challenges, many African countries are working to reduce their dependence on global markets by strengthening their domestic production systems. The Kingdom of the Netherlands supports these efforts with its leading expertise in agriculture, land management, and food security.

World-renowned Dutch institutions provide essential technical and financial support to help countries in the Sahel build more resilient and sustainable food systems.

Netherlands Strategy for Africa 2023-2032

GENDER IN THE SOIL VALUES PROGRAM

Integrating the voices of women, youth, and vulnerable people is crucial to promote social justice and ensure access to different agricultural resources under the Soil Values program. The program's gender equality and social inclusion (GESI) approach assesses and strengthens the integration of this principle at all stages of interventions, while promoting synergy with other partner projects and programs at the national level. It is imperative to include equality at every stage of this program. Inclusive committees, composed of women, men, and youth, are supported and strengthened to ensure that their needs are taken into account in the management of agricultural natural resources. This contributes to building a sustainable and resilient future for communities.

The actions of Soil Values aim to strengthen the confidence and capacities of women, youth, and vulnerable groups in relation to soil health. Intersectional analysis plays a key role for factors of inclusion and exclusion. Taking into account gender, age, and socioeconomic status, interventions are tailored to the specific needs of each group, ensuring that no individual is left behind.





Targeted initiatives such as community dialogues are carried out to deconstruct discriminatory norms and promote gender equality.

Collaboration with women-led organizations strengthens the relevance of interventions and ensures a response adapted to local realities.

Gender-sensitive monitoring and evaluation mechanisms measure the impact of initiatives while respecting the "do no harm" principle, and the results are used to continuously adjust and improve actions.

In 2024, the first year of the Soil Values program, strategic advocacy was undertaken with the ministries in charge of women and/or gender to obtain their support and buy-in for the program objectives. In parallel, GESI profiles were designed based on data collected at the watershed and sub-watershed levels in Burkina Faso, Mali, Niger, and northern Nigeria. These actions helped to better understand local dynamics and identify the specific needs of communities. In addition, community diagnostics were carried out, leading to the preliminary identification of GESI organizations and nongovernmental organizations (NGOs) likely to establish strategic partnerships for the implementation of the Soil Values program.

FOR FERTILE AND HEALTHY AGRICULTURAL LANDS IN THE SAHEL: THE KEY ROLE OF THE SOIL VALUES PROGRAM

The Sahel region faces major challenges, including accelerated soil degradation, which seriously threatens agricultural production and food security. This degradation, exacerbated by climate change, unsuitable agricultural practices, and low funding for soil health initiatives, generates considerable economic impacts. According to the Sahel Alliance, more than 38 million people in West Africa are threatened by food and nutrition insecurity. Economic losses due to soil degradation are estimated at \$18.9 billion, with an annual reduction in cereal yields ranging from 5 to 20 million tons in Burkina Faso (Sawadogo, 2021). This situation particularly affects rural women, who, due to a lack of adequate resources, struggle to restore depleted soils, as highlighted by António Guterres, Secretary-General of the United Nations.

To address these challenges, the Soil Values program offers sustainable soil management solutions.





The ambitious objective of the program is to restore the fertility of 2 million hectares of agricultural land through integrated soil fertility management (ISFM), agroforestry, and effective soil and water conservation practices. Soil Values focuses on training agricultural producers and extension agents, actively involving local communities. This inclusive approach promotes sustainable agroecological development by ensuring synergy between plant and animal production.

Soil Values functions are aligned with the Regional Hub on Fertilizers and Soil Health, which was also launched in 2024 and highlights the importance of coordination between local and international actors to enhance agricultural productivity and restore soil fertility in the Sahel and Africa. With funding of €100 million from DGIS, the Soil Values program is seeking additional support from other financial and technical partners such as the World Bank and the African Development Bank.



<u>Fertile and Healthy Soils in the Sahel:</u>
<u>The Key Role of the Soil Values Program</u>



CO-CONSTRUCTION OF SUSTAINABLE SOLUTIONS FOR SOIL HEALTH AND FERTILITY IN THE SAHEL BY THE SOIL VALUES PROGRAM

In July 2024, the Soil Values program conducted participatory diagnostics with rural watershed and sub-watershed communities in Burkina Faso, Mali, Niger, and northern Nigeria in order to gather the concerns of small-scale producers and livestock breeders regarding soil fertility and health. Organized in collaboration with local partners, the sessions culminated in the coconstruction of activities adapted to the specific needs expressed by these communities.

In Nigeria, the communities involved include Sani Babangida, Dadauda, Yar Titi, and Fajewa in Kano State. The 1.06 million m³ storage capacity of the Fajewa catchment marks a great resource, covering a large area: 16,514 hectares. The Yar Titi watershed covers an even larger area of 20,857 hectares. The Yar Titi landscape also features a water conservation structure incorporating small-scale irrigation facilities.

In Burkina Faso, participating communities included Diarradougou and Koumbadougou in the Kou subbasin in the Hauts-Bassins Region. This important sub-basin covers 1,823 km² and also includes the localities of Bama, Bobo-Dioulasso, and Péni.

In Mali, the targeted communities include Kaboïla and Mandela located in the Lotio sub-watershed in the Sikasso Region. This region benefits from an average annual rainfall of 1,300 mm.

In Niger, the localities concerned are Nadabar, Tsernaoua, and Doguéraoua located in the Maggia watershed in the Tahoua Region. This basin, which extends over 5,616 km², crosses the agricultural belt of southern Niger and the northwestern part of Nigeria. It is a key resource for farmers and herders of different ethnic groups, who use it for crops and livestock throughout the seasons.

Through a participatory approach, communities identified major challenges such as deforestation, erosion, and inadequate resource management. They highlighted the importance of collective action to improve soil fertility and proposed solutions adapted to local realities, such as the production of organic fertilizers, groundwater management, and participatory landscape management.

Supported by DGIS, the Soil Values program is committed to designing and promoting innovative solutions while strengthening local capacities to address environmental challenges in the Sahel. By actively involving communities in decision-making processes, the program aims to ensure that its interventions facilitate the adoption of sustainable solutions adapted to the specific needs of each region.



From water to land: creating innovative solutions for soil health and fertility in the Sahel



PROMOTING SUSTAINABLE INVESTMENTS IN AGRICULTURAL LAND MANAGEMENT IN THE SAHEL

The Soil Values program actively participated in the Africa Food Systems (AFS) Forum held September 2-6, 2024, in Kigali, Rwanda. This major agricultural event organized by AGRA, one of the Soil Values program's knowledge partners, brought together key stakeholders from the sector to discuss sustainable solutions for food systems in Africa.

The AFS Forum brought together a diversity of actors, including technicians, decision-makers, investors, and NGOs in order to promote sustainable agricultural practices.

During the forum, the Soil Values program participated in two sessions focusing on the importance of strategic investments for sustainable agricultural land management in Africa. These sessions emphasized that significant investments in initiatives aimed at improving soil health and fertility are crucial to ensure food security and strengthen African smallholder farmers' resilience to the challenges of climate change. This situation requires agricultural policies that facilitate inclusive financing adapted to local needs.

During the forum, the discussions focused on crucial themes for the agricultural sector, including seed sector reform, private investment in nutrition, and soil health. The Soil Values program actively contributed further by participating in a roundtable dedicated to the African Fertilizer and Soil Health Action Plan. Supported by several institutions, this plan reflects the importance of assessing soil conditions to better integrate climate information into agricultural practices.

Additionally, Dr. Prem Bindraban, Senior Advisor of Soil Values, spoke in a panel on mobilizing private investment to eliminate hunger and improve nutrition. The interventions discussed on the panel highlighted the essential role of public and private investment in implementing the Action Plan, particularly in supporting agricultural value chains. This support is essential to achieving food and nutrition security objectives in Africa.



<u>Investing in healthy, fertile soils to strengthen</u>
<u>Africa's food security</u>



SOIL VALUES PROGRAM SUPPORTS FERTILIZER DEVELOPMENT AND SOIL HEALTH IN WEST AFRICA

Food security in West Africa remains a major challenge due to low agricultural productivity and accelerated soil degradation. Decades of land exploitation without adequate nutrient replacement, along with climate change and rapid urbanization, make interventions for the sustainability of smallholder agriculture imperative.

Despite initiatives aimed to increase fertilizer use, such as the 2006 Abuja Summit, fertilizer consumption in Africa had only increased from an average of 8 kg/ha to about 18 kg/ha by 2022, according to the Africa Fertilizer and Soil Health Summit, a follow-up summit in held in May 2024 in Nairobi, where leaders adopted an action plan to improve soil health and promote increased, efficient fertilizer use in West Africa. As part of this plan, the World Bank commissioned the International Fertilizer Development Center (IFDC) to assess the fertilizer sector in the region and propose concrete recommendations.

Following an in-depth survey conducted in several countries, workshops were organized in Burkina Faso, Côte d'Ivoire, and Mali with the support of the Soil Values program. These workshops helped validate the assessment results, foster consensus on the state of the fertilizer sector, and develop national action plans aligned with the regional roadmap. These workshops brought together representatives from the public and private sectors as well as NGOs to discuss practical solutions to improve fertilizer use and soil health.

In Côte d'Ivoire, discussions highlighted the need for a complete review of the sector and the creation of specialized technical groups to pilot reforms. Fiscal measures, such as exemption from value added tax (VAT) on fertilizers, have been identified as important levers to reduce costs and boost adoption.

In Burkina Faso, participants stressed the importance of reducing dependence on the international fertilizer market by promoting local production. Key proposals include the creation of safety stocks and supporting the emergence of national producers, whether they specialize in organic or inorganic fertilizers. An accelerated revision of Law 026-AN/2007 governing fertilizer control was also recommended to better meet the current challenges of the agriculture sector. A reflection on an adapted subsidy model is underway to make fertilizers more accessible and support national agricultural production in a sustainable manner.

In Mali, stakeholders recommended strengthening policy and legal frameworks by adopting integrated agricultural policies and supporting the use of sustainable agricultural practices, while developing the necessary human and material capacities. They also stressed the importance of investing in research and innovation to promote alternatives to chemical fertilizers and better local soil management. Access to finance will need to be improved to support farmers, including through public-private partnerships. The Soil Values program, in collaboration with its partners, is committed to supporting such initiatives to strengthen food security in West Africa. Through targeted reforms and concrete actions, countries in the region can expect significant improvements in agricultural productivity and more sustainable soil management, which are essential to meet the growing challenges of food security and rural development.



STRENGTHENING SOIL FERTILITY IN NIGER AND MALI: A COMMITMENT TO FOOD SECURITY AND CLIMATE RESILIENCE

The Soil Values program is committed to sustainably restoring soil fertility on 400,000 hectares in both Niger and Mali, for a total of 800,000 hectares. The objective is to strengthen food production while increasing the resilience of 600,000 smallholder farmers, including men, women, and youth, to the impacts of climate change.

In this context, stakeholder workshops on soil fertility mapping were organized in Mali on September 18-19, 2024, and in Niger on November 13-14, 2024. Soil mapping is a priority in Mali, and the Institute of Rural Economy (IER) provided additional support.

These meetings provided strategic exchange platforms to identify the main constraints and needs in soil mapping, to take stock of existing knowledge on soils, and to formulate recommendations to strengthen the capacities of national institutions in soil fertility management.

Since soil mapping is a priority in Mali, workshops there highlighted the importance of investing in adapted solutions for effective and sustainable land management. These initiatives support the development of robust geospatial databases and contribute to better guiding public policies on soil fertility and food security.

During Niger's meetings, Amina Abass, Director General of Agriculture and Representative of the Minister of Agriculture and Livestock of Niger, recalled the commitment of the highest Nigerien authorities to strengthen the agriculture sector. She underscored Niger's dual ambitions: to achieve food security in the short term and food sovereignty in the medium and long term, with a particular emphasis on the production of basic foodstuffs.

Faced with the growing challenges posed by land degradation and climate change, Abass affirmed that sustainable management of soil fertility is now a strategic priority. She mentioned that Niger's abundant natural resources can guarantee this food sovereignty and transform agriculture into a driver of socioeconomic development.

The Soil Values program embodies a shared vision to restore soils, strengthen agricultural resilience, and build sustainable food systems in Malie and Niger.

These combined efforts between stakeholders, institutions, and local communities show that innovative and inclusive solutions can address the challenges of food security and resilience to climate change.



KANO COMMUNITIES WELCOME SOIL VALUES PROGRAM

The Agro-Climatic Resilience in Semi-Arid Landscapes (ACReSAL) initiative recently held a Soil Values program presentation session with the communities of Fajewa and Yartiti in Kano State. The ACReSAL team, led by Environmental Protection Officer Mukhtar Bello, included several members of the Kano State Project Management Unit.

At this event, Samuel Ugo Innocent, a GESI expert from the Soil Values program in Nigeria, presented the 10-year program, which is funded by DGIS. He highlighted the relevance of this partnership with ACReSAL since the two initiatives share converging objectives between them.

The Soil Values program aims to complement ACReSAL efforts in the 19 participating states and the Federal Capital Territory (FCT), by strengthening actions for agro-climatic resilience and sustainable development.

The Soil Values team took advantage of this opportunity to establish direct contact with local communities. Focus groups were organized to

inform populations about the program's objectives and to gather their suggestions and support. These exchanges helped lay the foundation for harmonious and inclusive collaborations for the program's success.

District Heads from two communities of Yar Titi – Alhaji Mohammad Inuwa from Fajewa and Alhaji Ibrahim Sani Gaya from Shanono – expressed their enthusiasm for the initiative. They welcomed the Soil Values program and its commitment to sustainable agricultural development in their areas. Furthermore, they encouraged their community members to actively support the program for its success, emphasizing the potential benefits for the well-being of the people of Kano State.

The collaboration between the Soil Values program and ACReSAL demonstrates a shared commitment to address the challenges of agro-climatic resilience in the semi-arid zones of Nigeria. This synergy promises to improve the livelihoods of rural communities while strengthening sustainable natural resource management.



On October 4, 2024, Burkina Faso's Ministry of Agriculture organized a workshop, held in Ouagadougou, to validate a preliminary draft law on fertilizer control. This meeting brought together various stakeholders from the agriculture and environmental sectors, including the Soil Values program, represented by IFDC. The workshop made it possible to finalize legal texts that are intended to be consensual and applicable to all stakeholders concerned in fertilizer regulation.

This process is part of an approach aimed at adapting legislation to recent developments in the fertilizer sector. Adopted in 2007, Law 026-2007/AN established fertilizer control to guarantee producers quality fertilizers, improve agricultural productivity, and protect consumer health and the environment. However, this legislation was designed at a time when the fertilizer sector was still embryonic in Burkina Faso, and it is now showing its limitations today, in the context of rapid developments at the national and international levels.

More than a decade after this law's adoption and implementation, several gaps have been identified, particularly due to the emergence of new dynamics in the fertilizer market. These developments have made it imperative to revise the legislation in order to better meet the current needs of the sector and ensure its sustainability.

This reform is also of paramount importance for the Soil Values program, as it creates a strengthened regulatory framework that promotes the adoption of quality fertilizers, essential for sustainable agricultural practices, improving soil health, and increasing the resilience of small-scale producers to agroecological challenges.

Another major step forward announced at the meeting concerns the creation of the Burkinabe Company of Agricultural Inputs and Equipment (SOBIMA). This state company will be responsible for the regular supply of agricultural inputs and agricultural equipment to the country. In addition, SOBIMA will function as the exclusive importer of fertilizers in Burkina Faso, while distribution will be entrusted to private operators.

This legal reform and creation of SOBIMA reflect the desire of the Government Burkina Faso to modernize the fertilizer sector. They aim to ensure stock availability, stabilize prices, and strengthen market competitiveness. In short, these initiatives mark a key step for Burkina Faso in its quest for a more efficient, sustainable, and inclusive agriculture sector.



NIGER EXPRESSES ITS EXPECTATIONS TOWARD THE SOIL VALUES PROGRAM FOR A SUSTAINABLE IMPACT

On October 23, 2024, in Dogondoutchi, Niger celebrated World Food Day in conjunction with the launch of the 2024-2025 irrigated crops season. The Soil Values program actively participated, reaffirming its commitment to the sustainable management of soil fertility and soil health.

Chaired by Colonel Mahaman El hadj Ousmane, the Minister of Agriculture and Livestock, the ceremony highlighted this year's theme: "Right to Food, for a Better Life and Future." This message resonated with the government's priorities, including the development of economic sovereignty and food security.

Agriculture and livestock farming represent more than 87% of agricultural assets and contribute nearly 50% of the gross domestic product (GDP), according to the Nigerien News Agency. However, these key sectors face many challenges, including the impacts of climate change, soil degradation, and limited access to sustainable agricultural practices. In this context, the Soil Values program, funded by the Kingdom of the Netherlands and implemented by IFDC, provides essential support to strengthen the resilience of farms.

Its interventions aim to promote agroecological practices, improve soil management, and preserve soil fertility, thus contributing to food security and sustainable development in Niger.

During the event, Colonel Ousmane visited the booths of various exhibiting agricultural stakeholders, including that of Soil Values. He first praised IFDC's efforts in promoting sustainable agricultural practices and expressed his expectations for the program to continue to have a tangible impact on rural communities. Colonel Ousmane stressed the importance of innovative and adapted solutions to address the country's agricultural challenges.

Colonel Ousmane encouraged the Soil Values program to strengthen its actions in soil management while further involving local farmers and stakeholders to ensure sustainable results. The celebration of World Food Day and the launch of the irrigated crops season mark an important milestone for Niger in its quest for food security and environmental sustainability. In close collaboration with the government, Soil Values is positioning itself as a key player in supporting the country toward a resilient and prosperous agricultural future.



STRENGTHENING SOIL HEALTH AND FERTILITY IN THE SAHEL THROUGH STRATEGIC PARTNERSHIPS

The Soil Values program is intensifying its efforts to promote sustainable soil management and strengthen agricultural resilience in the Sahel. The program has initiated strategic partnerships with various key actors in its intervention countries, consolidating both the scientific bases and the operational capacities of its interventions.

In Niger, in-depth discussions have taken place with the Agri-Food Program for Integrated Resilience and Economic Development in the Sahel (Pro-ARIDES), the Office du Niger, the Network of Chambers of Agriculture (RECA), and academic institutions, such as the faculty of agronomy at the Abdou Moumouni University of Niamey. These exchanges aim to coordinate efforts around the management of soil fertility and water resources while integrating scientific data and to guide the program's interventions.

In Mali, the Soil Values program has engaged in promising collaborations with the Directorate General of Agriculture, the Institute of Rural Economy (IER), and the European Cooperative for Rural Development (EUCORD). These partnerships focus on mapping soil fertility and integrating sustainable practices into rural development projects, thus contributing to better planning and management of natural resources.

In Burkina Faso, efforts have focused on assessing training and technical support needs in the Kou and Comoé regions. Fruitful exchanges have taken place with NGOs such as Tree Aid, paving the way for integrating community-based natural resource management into soil restoration initiatives. Overall, these partnerships aim to strengthen local capacities for long-term sustainable land management.

In Nigeria, strong links have been established with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). Pilot projects are being launched in Kano State testing innovative, locally adapted solutions for sustainable soil management. These initiatives will generate data and lessons for effective scaling up.

These strategic partnerships in each of the implementing countries strengthen the impact of the Soil Values program by combining local expertise, scientific research, and sustainable practices. They embody an integrated and inclusive approach, essential to address the challenges related to soil management and climate change in the Sahel region.



The Soil Values program marked its contribution to the National Soil Summit organized by the Institute of Agricultural Research and Training (IART), in Ibadan, Nigeria, on October 8-9, 2024. Emphasizing its theme, "Soil Information Management: Challenges, Prospects, and Opportunities for Sustainable Land Use and Food Security," the event highlighted critical issues related to sustainable soil management in Africa.

Medinah Ayuba Fagbemi, the Soil Values Country Coordinator in Nigeria, actively represented the program by giving a presentation entitled "Soil Health and Engaging the Next Generation for Sustainable Agriculture." This presentation highlighted the impact of soil degradation on food security and the economy while explaining its repercussions on social and environmental issues, including insecurity and youth unemployment.

Nigerian youth represent a vital force in addressing the challenges of soil fertility and food security. With their creativity, energy, and ability to integrate innovative solutions into their daily lives, young people can play a pivotal role in transforming the agriculture sector. Recognizing this potential, Soil Values is actively committed to the following:

- Provide training opportunities by strengthening the technical and practical skills of young people in sustainable soil management and agriculture.
- Promote agricultural entrepreneurship by supporting entrepreneurial initiatives through innovative projects focused on sustainability.
- Facilitate access to technological and financial resources to enable young people to realize their ideas and projects.

By involving young people in sustainable soil management, the Soil Values program will help build a more resilient agricultural future, capable of responding to the region's climate, economic, and social challenges.

The summit brought together a wide range of stakeholders including organizations, research institutions, and private sector partners. The Soil Values program's participation helped to strengthen its visibility in Nigeria while reinforcing its positioning as a key player in the promotion of sustainable agricultural practices.



ACHIEVING SUSTAINABLE SOIL MANAGEMENT AND AGRICULTURAL PRODUCTIVITY IN NIGERIA

The Soil Values program is scaling up its efforts in Nigeria by initiating strategic actions to support sustainable soil management and improve agricultural productivity. At the National Stakeholders Workshop of the Nigerian Farmers Soil Health Card Scheme (NFSHCS), organized by the Federal Ministry of Agriculture and Food Security on August 12-16, 2024, in Abuja, the program reaffirmed its commitment to the Nigerian authorities for the implementation of sustainable agroecological practices in the country's agricultural areas.

The Soil Values program takes a proactive approach by collaborating with various stakeholders to address agricultural challenges and promote sustainable solutions. A key initiative is its partnership with the HortiNigeria program to revise a training manual for extension agents. The manual focuses on advanced soil fertility management techniques applied to vegetable crops, particularly tomatoes. It incorporates innovative solutions, such as the integration of digital technologies, reinforcing a key strategic effort by Soil Values to modernize agriculture and make it more efficient and sustainable.

Indeed, the integration of digital technologies is a key pillar of the program's interventions. On September 18, 2024, the program participated in a workshop organized by Digital Green on the use of the Farmer. Chat application in Nigeria. This digital platform provides farmers with simplified access to practical advice on best agricultural practices and relevant, up-to-date information, promoting modern and resilient agriculture.

During the National Stakeholders Workshop, Soil Values presented its activities and explored opportunities to integrate Farmer. Chat into its extension interventions. This initiative reflects the desire to modernize agriculture in Nigeria and equip producers with technological tools adapted to their needs.



The Soil Values program participated in the West Africa and Sahel Fertilizer and Soil Health Hub national workshops, which took place October 24-25, 2024, in Niger, November 5-6 in Burkina Faso, and October 30-31 in Mali. Initiated and organized by IFDC under the Soil Values program in collaboration with the International Institute of Tropical Agriculture (IITA) and the ministries responsible for agriculture, these events provided an essential platform to exchange best practices in sustainable soil management.

The workshops brought together a diversity of stakeholders, including researchers, academics, producers, technical partners, private sector stakeholders, and representatives of ministries of agriculture. Discussions focused on issues related to fertilizer use and soil health and the definition of a roadmap to strengthen national initiatives in these areas. The discussions also helped identify the specific needs of each country, share successful experiences, and create synergies for integrated soil management at the regional level.

The Regional Hub itself aims to provide technical assistance and develop targeted investments to improve soil health and optimize soil fertility while increasing agricultural yields and resilience to climate change. This initiative covers West African countries as well as Mauritania and Chad. Following its launch, the Regional Hub entered its implementation phase with the adoption of a collaborative approach to promote efficient use of resources, strengthen local capacities, and ensure sustainable agricultural productivity. The national workshops played a central role in this effort, engaging national stakeholders in a concerted dynamic to address soil management challenges in the Sahel.



SNV, a Soil Values consortium member, is responsible for activities under Intervention Area 2: optimizing landscape and watershed management through participatory planning for efficient and integrated use of soil, water, and biodiversity. One of the key activities in this area is the mapping of watersheds and subwatersheds in order to establish a comprehensive list of priority areas.

Given the importance of this topic, Soil Values organized two workshops on these activities: one in Ziniaré, Burkina Faso, on October 22-23, 2024, and the other in Niamey, Niger, October 30-31. These events brought together stakeholders involved in watershed management in both countries. The main objectives were to present a synthesis of the secondary data available on the watersheds, present the selection criteria, analyze and select the basins with the greatest potential, and finally to identify potential concentration areas for the program within the selected watersheds.

Dr. Bachir Bounou Issoufa, Country Director of IFDC Niger, praised the commitment of the participants despite scheduling constraints. He also highlighted the importance of the technical and financial support provided by IFDC and its technical and financial partners to support public institutions in their ambitions and initiatives to improve agricultural yields and improve producers' incomes.



THE SOIL VALUES PROGRAM SUPPORTS AGRICULTURAL PRODUCERS IN THE HAUTS-BASSINS IN BURKINA FASO

The Soil Values program participated in the second edition of the Hauts-Bassins Regional Agroecology Days (JRAE), held in Bobo-Dioulasso, Burkina Faso, November 5-7, 2024, under the theme "What contribution does agroecology make to food security?" This event brought together stakeholders from the agriculture sector to share experiences and innovations on the agroecological transition in Burkina Faso. The Soil Values program supported the event, rewarding 36 agroecological producers, including Léontine Bondé, who emphasized that this prize would allow her to acquire an agricultural equipment kit to strengthen her agricultural activities.

Dr. Catherine Dembélé, a Tree Specialist at the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) – a knowledge partner of Soil Values – remarked, "Let's restore degraded agroforestry parklands to support the agroecological transition in Burkina Faso." She highlighted the benefits of agroforestry systems for soil health, such as reducing erosion, improving water retention, and stimulating soil biological processes.

At the Soil Values booth, agroecological technologies developed by IFDC, SNV, and CIFOR-ICRAF were presented. Bayoulou Bedeme, Field Manager of the Soil Values program in Burkina Faso, explained to booth visitors that the program places particular emphasis on integrated soil fertility management (ISFM). He also explained the program's actions that target small-scale agricultural producers and particularly emphasize the agroecological approach. Technical documents, covering topics such as biodigesters and the production of improved plants, were distributed to booth visitors for more information.







STRENGTHENING THE CAPACITIES OF FIELD AGRICULTURAL AGENTS ON INTEGRATED SOIL FERTILITY MANAGEMENT (ISFM) IN BURKINA FASO

The Soil Values program organized a training session November 18-22, 2024, in Bobo-Dioulasso, targeting extension agents from the Kou and Lower Mouhoun sub-watersheds. This was the first in a series of cascading trainings, organized to follow up on community diagnostics carried out by national partners. The session aimed to strengthen the technical skills of agents and local producers in order to improve agricultural productivity while addressing environmental challenges.

Soil scientist and ISFM specialist Dr. Zacharie Zida led this training on both theoretical and practical modules. He emphasized the program's readiness to help, confirming, "After this training, the Soil Values program will support the agents in the field monitoring, providing them with the necessary support."

More than 20 technical agents from partner projects and decentralized services of the Ministry of Agriculture participated and were trained on innovative technologies that were adapted to local contexts. This participatory training was designed for adult participants, encouraging their active involvement.

Léon Zongo, the Soil Values program coordinator in Burkina Faso, said that the training on ISFM aimed to improve the skills of field agents, explore available technologies, and consider which technologies to scale up. He said that this training should help support producers in different areas, taking into account the details specific to local contexts.

Aguiratou Savadodgo, an agent at the provincial directorate of the Ministry of Agriculture and Animal and Fisheries Resources (MARAH) in the Balés Province, commented, "We learned many technologies, in particular, innovative aspects that were previously unknown to us."

In the next phase, each of these trained agents will share their knowledge from the training to 25 relay producers selected from among local farmers, ensuring a fair representation of women and young people. Soil Values will support these relayed sessions in improving agricultural practices in the field through further training and targeted monitoring. These training sessions will rely on simple educational tools, such as posters, image boxes, and demonstration plots, with a practical approach to ensure good understanding of the concepts and concrete application.

AREAS OF INTERVENTION OF THE SOIL VALUES PROGRAM

- BRING TOGETHER TECHNOLOGICAL AND SOCIO-ECONOMIC PACKAGES INTO PACKAGES ADAPTED TO AGRICULTURAL CONDITIONS.
- INTEGRATE LANDSCAPE AND WATERSHED ELEMENTS
 THROUGH PARTICIPATORY PLANNING FOR OPTIMAL
 MANAGEMENT OF SOIL, WATER, AND BIODIVERSITY.
- NEGOTIATE FINANCIAL INSTRUMENTS TO PROVIDE FINANCIAL AND OTHER INCENTIVES TO FARMERS TO SUSTAINABLY MANAGE SOIL FERTILITY.
- BRING PARTIES TOGETHER TO COLLECTIVELY DEVELOP ENABLING POLICIES ALLOWING STAKEHOLDERS TO CO-OPT ON SUSTAINABLE SOIL FERTILITY MANAGEMENT PRACTICES.
 - FRAME POTENTIAL SOLUTIONS WORLDWIDE AND LEARN ABOUT PROVEN TECHNOLOGIES AND APPROACHES TO ACHIEVE INNOVATIVE AGROTECHNICAL AND SOCIO-INSTITUTIONAL INTERVENTIONS.

05

RESOURCES RELATED TO SOIL FERTILITY AND HEALTH MANAGEMENT

INTEGRATED SOIL FERTILITY MANAGEMENT (ISFM) TRAINING GUIDE FOR TECHNICAL SHEETS



AVAILABLE IN FRENCH ON THE IFDC WEBSITE

https://api.hub.ifdc.org/server/api/core/bitstreams/25769d 3c-a063-4d17-96f9-3880972cb26f/content

Introduction du manuel

Neuf fiches techniques consacrées à la Gestion Intégrée de la Fertilité des Sols (GIFS)

Il est possible d'améliorer durablement la sécurité alimentaire et de réduire la pauvreté par riest possice a uneurore unracement la securite ammeniare et ce recume la pauvrece p l'intensification agricole dans la sous-région des Grands Lacs d'Afrique Centrale. L'IFDC, le Centre international pour la fertilité des sols et le développement agricole, s'est engagé à relever ce défi à travers le projet CATALIST (Catalyser l'intensification agricole accélérée pour la stabilité sociale et environnementale). Ce projet concerne le Rwanda, le Burundi et l'Est de la République démocratique du Congo (provinces de Kivu).

L'IFDC a opté pour une approche de « gestion intégrée de la fertilité des sols (GIFS) » qui LIFU. a opte pour une approcne de « gestion intégrée de la fertilité des sols (GIFS) » qui combine l'utilisation d'engrais et d'amendements à d'autres pratiques de protection et de conservation du sol. Il s'agit d'un processus qui permet d'augmenter le rendement des cultures, tout en protégeant la base physique de l'environnement. Dans le souci d'accélérer l'adoption de la GIFS, IFDC CATALIST a conçu neuf fiches techniques destinées aux agroes et aux vulgarisateurs agricoles. Les fiches 1 et 2 se réfèrent à des généralités sur la GIFS. Les fiches 3 à 9, quant à elles, donnent des détails sur les technologies de base et les

Ce guide a pour objectif d'être utilisé comme support de formation par les instructeurs

Le guide se compose de neuf modules différents (qui accompagnent les fiches techniques 1 à 9), à la fois théoriques et techniques, ayant pour objectif de donner : 1 Aux formateurs, les connaissances et les clés pédagogiques pour enseigner les

- méthodes permettant de comprendre la GIFS. Il leur est recommandé d'en maîtriser le contenu autant que possible. Aux producteurs bénéficiant de la formation, les compétences nécessaires pour
- maîtriser la GIFS.

objectifs, le découpage des différentes séances ainsi que le temps alloué, le lieu de forma tion et l'équipement nécessaire sont définis. Ensuite, c'est la démarche que le formateur doit suivre qui est détaillée. L'accent est alors mis sur les différents cor et la manière de les présenter.

Organisation préalable à la formation des producteurs

 Sélectionner en amont les producteurs à former (le nombre de participants pour cette formation ne doit pas être supérieur à 30), et s'assurer que le groupe soit bien équilibré du point de vue du genre.

- Informer les producteurs du début de la formation dans un délai raisonnable et s'assurer de leur disponibilité.
- Quelques jours avant le début de la formation, s'assurer que les participants soient bien informés de la date, de l'heure et du lieu de la formation, qu'ils aient confirmé let présence et qu'ils puissent s'y rendre facilement.
- Le formateur aura toujours avec lui/elle la liste des participants et les fiches techniq 1 à 9 (afin de montrer les photographies, images et autres exemples figurant dans les fiches).
- S'assurer que la salle de formation soit bien disponible
- S'assurer que le champ/le lieu de formation sur le terrain soit bien disponible et
- Préparer le matériel nécessaire (flinchart tableau à feuilles mobiles -, man

Le formateur doit éviter les notions trop techniques et essaver d'expliquer les différents termes dans un langage simple. Il/elle peut utiliser un projecteur pour montrer des pho-tographies et, si il/elle est dans l'impossibilité de le faire, il/elle peut faire un dessin sur le flipchart ou montrer notamment des graphiques à partir de la fiche technique.

des séances prévoient une partie pratique sur le terrain et une autre en salle de formatie il faut généralement d'abord com nencer par le terrain (aux champs), et s'y rendre une seule fois au cours de la séance. La formation continue alors dans la salle, après la visite sur le terrain. Le formateur doit également identifier à temps les champs qui serviront aux démonstrations et préparer le matériel didactique nécessaire à cette formation.

L'enchaînement des modules et des séances

Étant donné que les différents modules et séances ne sont pas nécessairement abordés au cours d'une même séance de formation, il peut être pertinent pour le formateur de rappeler (de manière très synthétique) les thèmes et notions déjà développés dans les modules précédents. Cette démarche est importante pour assurer la continuité des dif-férentes étapes de la formation qui ont été pensées dans un ordre particulier. Ceci est également valable sur une même journée de formation : en effet, les séances peuvent être entrecoupées de pauses café, déjeuner, etc. De retour en salle, un bref rappel du sujet abordé est toujours très utile.

Favoriser l'échange avec les producteurs

Il s'agit d'un point très important dans le manuel de formation. L'objectif n'est pas de déverser de multiples connaissances aux producteurs pour qu'ils n'en retiennent qu'à peine la moitié. Il faut les solliciter au maximum (pour les maintenir intéressés et qu'ils reçoivent l'information qu'on souhaite leur transmettre) pour que la formation ne soit pas un cours magistral, mais plutôt un véritable échange entre le formateur et ses élèves. En outre, tous ces échanges sont très utiles au formateur pour mieux comprendre les pratiques et les contraintes des producteurs, afin d'adapter son discours. Lors de ces plages de discussion, le formateur n'hésitera pas à noter sur le flipchart les éléments donnés par les producteurs, éléments sur lesquels il pourra revenir pour les confirmer, infirmer ou développer.



MAINSTREAMING SUSTAINABLE SOIL MANAGEMENT IN THE SAHEL

soilvalues@ifdc.org ifdc.org/projects/soil-values

B.P. E 103, Badalabougou - East River Street 33, Villa Lot 6 - Bamako/Mali Tel.: +223 44 90 01 22

