



www.hortihubniger.com

Final Report Horti Culture Hub Niger 2021 – 2024



Netherlands Enterprise Agency



This report is a cooperation of the cluster partners:





Table of contents

Preface

Management Summary

1. Introduction

- **1.1 Project Background**
- **1.2 Objectives**

2. Project Overview: Modules, Executed Activities, and Responsibilities

- **2.1 Three-Year Overview**
 - **2.1.1 Activities in Year 1**
 - **2.1.2 Activities in Year 2**
 - **2.1.3 Activities in Year 3**
- **2.2 Modules and Responsibilities**
 - **2.2.1 Coordination and Management**
 - **2.2.2 Study Phase**
 - **2.2.3 Demonstration Project**
 - **2.2.4 Knowledge Transfer and Capacity Building**
 - **2.2.5 Communication Module**

3. Results of Key Activities

4. Planned Activities Not Executed, Unplanned Activities, and Activity Changes

- **4.1 Planned Activities Not Executed**
- **4.2 Unplanned Activities and Unexpected Results**
- **4.3 Bottlenecks Leading to Activity Changes**

5. International Corporate Social Responsibility (iCSR)

6. Performance Indicators

7. Communication

8. Budget

9. Team and Cooperation

10. Lessons Learned and New Insights



Preface

This report is a synthesis of three years working on the Impact Cluster project HortiCulture Hub Niger, called HortiHub Niger for short. It was an adventure when we started it. On the one hand with the partners, on the other hand as part of the Impact Cluster pilot. Implementing an Impact Cluster is a challenge in countries that are attractive to Dutch business. In a country like Niger, it is more than that. But looking back, I dare say here: a lot has been achieved! And also: a lot has been achieved under not easy, indeed difficult and sometimes even seemingly impossible circumstances. In this report we go more into detail on this.

Together, we found great solutions. Which can safely be called very sustainable because they anticipate the future - from project to business. With the team that started working on behalf of Holland Greentech from September 2022 onwards, a good cooperation has developed with the remaining partners Rivulis, Partners for Innovation and Synergos Communications. In particular, the synergy between Partners for Innovation and the Holland Greentech Team has grown and in this last year has developed into a very fruitful collaboration. In which field work in particular is a time-consuming but important aspect that the teams have shared well. An achievement that is good to mention here is the establishment of Consulting FHG by the Holland Greentech Team. One of the goals is to grow from project to business. The establishment of Consulting FHG has created a possible new shareholder for the future company.

Financially we are on track. The year 2022-2023 has forced us to apply for an adjustment. With the large amount of changes, we started making an amendment in November 2023. The final version was approved by RVO in January 2024. With the new budget allocation, we worked and achieved the results we wanted to achieve as a cooperation team. At the end of Year 3, we found that a new change, although smaller than the one in Year 2, was necessary. Also with financial consequences was the fact that the coup has extended the duration of the project by three months. As a result, we approached a new cohort of lead farmers. We could not work with them as we did with the previous cohorts because of budget. But we will work with them in the new setting, as a company.

I would like to sincerely thank everyone for their cooperation that led to the results as described in this final report. In particular, I would like to mention the following people because they were and still are the backbone of the implementation on the ground: Idrissa Guissi Maïga Djibril and Ahmed Ibrahim Ali from Partners for Innovation. And Bounia Yahaya Habibou and Tafrij Ousseini from formerly the HGT-Niger team, now Consulting FHG.

I look forward to going on a follow-up journey together. Niger can use good projects, the current partners are keen to follow up and new parties have already come forward. With this core, we dare to take the next step. Never change a winning team - complementing is possible. You can read it in this report.

November 2024

Baud Schoenmaeckers – Synergos Communicatie
Project Leader



Management Summary

The HortiHub Niger project, launched in 2021 as part of the Impact Cluster initiative, aimed to enhance horticultural productivity, resilience to climate challenges, and youth employment in Niger. Over three years, despite political instability and partner transitions, the project made considerable strides in sustainable agriculture, local capacity-building, and entrepreneurship.

Key achievements include the establishment of the HortiHub Incubator and HortiHub Land, where over 200 farmers and agripreneurs were trained in modern horticultural practices. Various irrigation systems, including solar-powered pumps, were introduced to support water management in arid regions, resulting in improved productivity. The project also launched Consulting FHG, setting the groundwork for ongoing agribusiness support and potential investment.

Adaptation was crucial as the project faced several challenges. The coup in 2023 caused delays and additional costs, which required budget amendments. Partner withdrawals (UASTM and aQysta) necessitated role reallocations, adding complexity to coordination efforts. Despite these challenges, collaboration between the remaining partners—Holland Greentech, Partners for Innovation, Rivulis, and Synergos Communications—strengthened, leading to a successful project completion.

Internally, issues like financial management, logistical losses, and achieving gender participation goals underscored the need for flexible project management. Externally, the political climate presented barriers to investment expansion. Nevertheless, project continuity, enhanced local partnerships, and high engagement on digital platforms, such as WhatsApp, contributed to a resilient knowledge exchange network.

The project not only demonstrated improvements in local horticultural productivity and market access but also positioned Dutch horticultural solutions within Niger's context. As HortiHub Niger looks forward, the project's partners see potential for expansion and continued impact on Niger's agribusiness sector. The results and lessons from this project lay a solid foundation for sustainable agriculture and economic growth in challenging environments.





1. Introduction

1.1 Project Background

The HortiHub Niger project, initiated in 2021 as part of the Impact Cluster, aimed to improve horticultural productivity, climate resilience, and youth employment in Niger. Despite numerous challenges, including political instability and partners leaving, the project achieved significant impacts in capacity building, knowledge transfer, and agripreneurship. This report synthesizes the project's progress, challenges, and outcomes across its (more than) three-year span, as well as insights from detailed questions regarding executed, unmet, and unexpected activities, milestones, and impacts on trade and investment opportunities.

The project was executed in collaboration with several Dutch and local partners, including Holland Greentech (HGT), Partners for Innovation (PFI), Rivulis and Synergos Communicatie. At the start UASTM was partner as well as aQysta. Both left during the project period

Niger, being a challenging environment for agricultural ventures due to its arid climate and political instability, required a tailored approach to introduce and sustain new horticultural practices. The project's goal was to establish a horticulture hub that could serve as a model for sustainable agriculture, create employment, and foster entrepreneurship among the local population. Here I dare to say: we successfully succeeded!

In this report we summarize what has been done and achieved, based on the reports of the three years. We followed the document sent by RVO, called *Guideline Final report Impact Clusters (2017-2022)*.

1.2 Objectives

The primary objectives of the HortiHub Niger project were as follows:

- **Enhancing Agricultural Practices:** Introducing modern horticultural techniques and technologies to increase crop yield and quality.
- **Capacity Building:** Training local farmers and agripreneurs in sustainable farming practices, business management, and market access.
- **Establishing a Sustainable HortiHub:** Creating a central hub for knowledge exchange, demonstration of best practices, and support for local farmers.
- **Improving Economic Opportunities:** Generating employment through the development of a local horticultural value chain and creating opportunities for local businesses to thrive.



2. Project Overview

Modules, Executed Activities and Responsibilities

The project is divided into five modules with a number of activities for each module and the responsible partners linked to them. In this chapter, we briefly present what happened in the three years, some of the main activities and which party was responsible for what and which module.

2.1 Three years

The project was divided into three main phases, spanning from September 2021 to December 2024:

- **Year 1 (September 2021 - September 2022):** Focused on the initial setup of the project, recruitment, and training of the coordination team, and establishment of the first cohort of agripreneurs. The initial phase is used very well to get to know each other and found ways to work together.
- **Year 2 (September 2022 - September 2023):** Concentrated on the expansion of training activities, scaling up of the HortiHub operations, and overcoming logistical challenges. The year is marked as very turbulent.
- **Year 3 (September 2023 - December 2024):** Continued support for agripreneurs, implementation of advanced agricultural techniques, and adaptation to political changes in Niger. It is the year where the fruits are being picked; a smoothly cooperation between remaining partners gave energy to look for continuation.

2.1.1 Some Activities Executed in Year 1

○ **Recruitment and Setup:**

- In January 2022, a large-scale advertisement was published to recruit the necessary staff, resulting in over 70 applications. The team was formed with a coordinator and two field managers.
- Multiple meetings were held with project partners to translate the theoretical project plan into practical actions. These initial meetings revealed the complexities of implementing the plan on the ground.

○ **Kick-off and Planning:**

- On February 22, 2022, the second kick-off meeting was held with 34 participants, including representatives from all partners and various stakeholders, both in person and online. This meeting was crucial for establishing the project's communication strategy and aligning all stakeholders.
- A positioning session with the RVO communications team on April 8, 2022, resulted in a tailored communication strategy for the project.



- **Logistics and Infrastructure:**
 - Transport of furniture and equipment from the Netherlands to Niamey was completed on June 21, 2022, laying the foundation for the physical hub.
 - A workshop with lead farmers was held on June 24, 2022, to assess their needs and begin the process of distributing essential agricultural inputs.
- **Selection and Training of Agripreneurs:**
 - By August 28, 2022, the first group of 25 agripreneurs and 12 lead farmers was selected from 341 applicants. Despite initial skepticism from participants, the project's results and consistent delivery on promises helped gain their trust and commitment.

2.1.2 Some Activities Executed in Year 2

- **Communication and Coordination:**
 - In early September 2022, WhatsApp groups were established for lead farmers, agripreneurs, and the executive team. These groups facilitated real-time communication and played a crucial role in overcoming challenges related to distance and limited access to formal communication channels.
- **Implementation of Irrigation Systems:**
 - In September 2022, the project realized that the initially planned Barsha pumps were unsuitable for the selected farmers' land. This led to a switch to solar-powered pumps, requiring additional data collection on farm sizes and water sources.
 - By March 2023, the solar pumps arrived, but the initial plan to use two panels per pump was revised to four, due to the need for more power. Despite delays, the installation was successfully completed at all selected sites.
- **Training and Expansion:**
 - Throughout the year, intensive training sessions were conducted for lead farmers and agripreneurs. These included topics such as sustainable farming techniques, irrigation management, and business development.
 - Coordination with local stakeholders, such as RECA and FCMN, was strengthened through workshops and meetings aimed at aligning project activities with local needs.



2.1.3 Some Activities Executed in Year 3

- **Adaptation to Political Instability:**
 - Following the coup, project activities were adjusted to operate within the new political context. Remote support and coordination were intensified to maintain momentum despite restricted access.
 - Travel to Niger was postponed for a year, with the project manager making a visit in July 2024 when the situation stabilized somewhat.
- **Training and Support Continuation:**
 - Training for the second and third cohorts of agripreneurs continued, with a focus on entrepreneurial skills and advanced agricultural techniques.
 - An experimental "interim campaign" was launched in July 2024 to test the feasibility of continuous production, involving nine lead farmers who were willing to participate.
- **Final Reporting and Budget Adjustments:**
 - The final annual report was submitted to RVO on November 13, 2024, detailing project activities, challenges, and results.
 - Several budget amendments were made to address the unforeseen expenses due to logistical losses and increased costs.

2.2 Modules and Responsibilities

All five modules were worked on by all partners. But each module had an (unofficial) leader, responsible. Below are the five modules, responsible parties and main activities.

2.2.1 Coordination and Management

- **Synergos Communications** led project management and coordination efforts, spending over 1,250 hours on tasks like reporting, coordinating meetings, and managing administrative documents. Which is a lot, but not surprising. After all, it is starting a working relationship with five different parties. All with their own angle and idea of how to work. Year 1 and part of year 2 in particular took a lot of time to 'keep the frogs in the bucket'. In Year 3, a lot of time went into absorbing the loss of aQysta, especially in the area of reporting. Synergos also facilitated effective communication among partners through regular meetings and online platforms, helped by the local partners Team Holland Greentech and Partners for Innovation.
- **Partners for Innovation (Pfi)** handled local coordination in Niger, overseeing daily operations and communicating. The company was responsible for the training of agripreneurs and the first year also for the training of the Lead Farmers, assisted by the Holland Greentech team. It was engaged also in managing the HortiHub incubator. They also adapted to fill roles left by UASTM and aQysta's departures.



2.2.2 Studies Module

- The **market study**, essential for strategic planning, was completed by the consortium in March 2022, with updates in early 2023. It provided fundamental insights and helped shape project interventions. The first Year UASTM was involved.

2.2.3 Demonstration Project Module

- **Holland Greentech (HGT)** initially managed operations from Burkina Faso before setting up a dedicated Niger team. Holland Greentech team handled the training of lead farmers (assisted by Partners for Innovation and in regular consultation with Synergos), mainly from Year 2 on. Holland Greentech provided seeds and irrigation equipment, and established a sales network known as Consulting FHG. They managed the HortiHub land and organized hands-on training sessions and practical demonstrations.
- **Lead Farmers and Agripreneurs** participated in training and knowledge exchange. Lead farmers were introduced to innovative vegetable production, new farming techniques, the use of sustainably powered water pumps, and how to install and use them. Experiments were conducted on the Horti-Hub land and agripreneurs also gained practical knowledge there.
- This module was about importing all goods and ensuring proper distribution and explanation.

2.2.4 Knowledge Transfer and Capacity Building Module

- **Partners for Innovation** developed a comprehensive training program with seven modules for agripreneurs and six for farmers, covering topics like entrepreneurial skills, market gardening, and pest management. Assisted by the team of Holland Greentech for the farmers' modules. They took over the trainings all by themselves in Year 3. This led to training 350 agripreneurs and 72 lead farmers in total.
- **Synergos** contributed to training efforts and helped manage educational activities at the HortiHub incubator, facilitating both on-ground and digital knowledge exchanges through WhatsApp and other tools.

2.2.5 Communication Module

- **Synergos** spearheaded the launch of the HortiHub Niger website that was renewed in Year 3 (www.hortihubniger.com). Together with the local partners, promotional materials were created. They managed both internal and external communications, with the focus mainly on the internal communication. This was more important to get the project functioning in the best way. The efforts raised public awareness and increasing this will be done in the aftermath of the project.



3. Results of the Key Activities

The previous section made clear what the key activities are. Here we give the main results. To begin with a general one: the consortium maintained project operations and support despite significant political and logistical challenges.

- **Establishment of the HortiHub Incubator and HortiHub Land:** A central hub was set up to serve as a base for training and demonstration. The physical hub in the Agrifocus office is the incubator and place where the training sessions have been held. There is also HortiHub Land of 1800 m² where experiments were conducted and all new techniques tried out. This was largely the responsibility of the men from Holland Greentech. They also supervised the guys who were there 24/7. The hub facilitated the distribution of seeds, fertilizers, and irrigation equipment to local farmers.
- **Training and Capacity Building:** Over 200 local farmers and agripreneurs were trained in sustainable horticultural practices. Specific focus was given to lead farmers who acted as multipliers of knowledge in their communities.
- **Implementation of Modern Irrigation Systems:** Various irrigation systems, including drip and ‘shower’ systems were introduced and installed. Also solar-powered pumps were installed at multiple sites. This was crucial in areas with limited water resources. The solar-powered pumps are of great importance because of enormous reduction of fuel use.
- **Support for Agripreneurs:** The project supported the establishment of new agribusinesses and facilitated market access for local produce, thereby enhancing the economic prospects of the participants.
 - We do not want to leave unmentioned here that, partly because of this support, two of the agripreneurs of the first cohort co-founded a new union of farmers and processors of the products. UPAT now has 550 members of which 400 are women. (UPAT= Union Patronale des Agriculteurs et Transformateurs du Niger).
- **Community Engagement:** More than 785 people (Farmers and Agripreneurs) were engaged and sensitized, while an active WhatsApp platform enabled daily information exchange among local farmers.
- **Economic Impact:** Created economic opportunities for local communities through improved agricultural practices, leading to increased income for participating farmers.
 - Successful adaptation and implementation of solar-powered irrigation systems tailored to local conditions.
 - Enhanced agricultural productivity and improved water management for participating farmers.
 - Increased engagement and capacity building among local agripreneurs and lead farmers.

- **Improved Investment and Trade Opportunities**

- **Market Access for Local Farmers** improved as farmers adopted new practices, leading to higher-quality produce and increased market opportunities.
- **Establishment of Consulting FHG** offers an operational framework for ongoing business, supporting local farmers and creating a platform for future investments.
- **Increased Visibility for Dutch Horticultural Solutions** raised awareness of Dutch horticultural technologies, fostering potential for future collaborations despite current challenges.
- **Expanded Networking and Partnerships:** The project created connections among agripreneurs, farmers, and potential investors, laying the groundwork for future financial support and collaboration.
- **Skill Development for Agripreneurs:** Training improved agripreneurs' abilities in business planning and financial management, making them more attractive to investors.



Agripreneur Nadia holding a pitch. Agripreneurs training at the HortiHub Incubator.



4. Planned Activities Not Executed, Unplanned Activities Executed, Activity changes, Bottlenecks

For various reasons, some of the planned activities were not carried out. A number of activities were also merged and renamed because they did not work well in accounting. For instance, five activities in the Coordination Module were merged into *Consortium Coordination*.

4.1 Planned Activities not Executed

- **Implementation of Barsha Pumps** was halted due to technical incompatibility with local water sources, necessitating a shift to solar-powered pumps.
- **aQysta's Technical Training** could not proceed as planned due to security concerns and logistical challenges, which eventually led to their exit.
- **Expansion to Additional (Cohorts of) Lead Farmers:** new Lead Farmers could not be recruited due to budget constraints; instead, resources were directed towards maximizing support for the existing cohort.
- **Establishment of an HGT Entity in Niger** was deferred due to the political environment after the 2023 coup. HGT continued operating through local teams without formalizing a separate entity.
- **Full Achievement of Female Participation Goals:** While 50% female engagement was targeted, only 32% was achieved, likely influenced by cultural factors affecting women's participation in agribusiness.
- **Certain External Communication Goals:** Although communication ramped up in the final year, some outreach activities were delayed due to security concerns (not able to travel) and the prioritization of core operations.

4.2 Unplanned Activities Executed and Unexpected Results

Just as a number of activities were not carried out, a number of activities were carried out that were not planned. This was chosen because the partners wanted to continue the project at all costs, with success. Naturally, this had budget implications.

- **Shift to Solar-Powered Pumps** due to the unsuitability of Barsha Pumps, addressing irrigation needs effectively but at an increased import cost.
- **Solar Panels** were imported because of the powering of the pumps.



- **Creation of Consulting FHG** by HGT Niger’s team, aimed at achieving the “from project to business” vision. Consulting FHG now can act as a new shareholder for future operational sustainability.
- **Additional Coordination Efforts** were taken on by Synergos and Partners for innovation, particularly after partner exits, to ensure project continuity and reallocation of responsibilities.
- **Project Extension** by three months after the 2023 coup, allowing for the completion of key activities and engagement with additional lead farmers.
- **High Engagement on WhatsApp:** The platform became a vital daily communication tool, fostering an active community of practice and quick dissemination of knowledge.
- **Resilience Amid Instability:** Despite the coup, the project’s continuity demonstrated the strength of local partnerships and dedication of staff and participants.
- **Enhanced Synergy between Partners for Innovation and Holland Greentech:** The collaboration deepened, leading to more effective project implementation and operational support.

4.3 Bottlenecks leading to Activity Changes

We distinguish between internal and external bottlenecks. For most of them, we could find a solution. Like making changes in the approach, changes in the activity.

Internal Bottlenecks:

- **Partner Withdrawals:** The exit of UASTM and aQysta required project restructuring, which added strain on remaining partners to take on additional roles to prevent gaps in project implementation. It also asked for additional coordination efforts and the redistribution of responsibilities.
- **Financial management** challenges arose from unforeseen expenses, necessitating multiple budget revisions, reallocation of budgets and optimizing rates for better efficiency. Resulting in budget adjustments and mergers of activities. Also the withdrawal of partner aQysta who also did the accounting gave some problems. It did not change activities, but a working partner.
- **Gender Participation Challenges:** While the project aimed for 35% female agripreneur participation, societal factors led to a lower turnout of around 32%.
- **Technical Issues:** The initial plan to use Barsha Pumps was hampered by the Niger River’s insufficient current, necessitating a costly shift to solar-powered pumps. The solution was to shift from Barsha Pumps to Solar Pumps that provided a viable irrigation solution, reflecting a practical response to technical challenges with local water resources.

- **External Bottlenecks:**

- **Political Instability:** The coup in 2023 posed external challenges, leading to project delays and limiting the likelihood of further Dutch investments. It disrupted project activities and restricted access to project sites. But we continued!
- **Logistical Issues:** Logistical challenges, such as transport delays and attacks on convoys, led to significant disruptions and losses of critical equipment. We considered it as a loss. We could not change an activity here.
- **Inundations and a death.** The heavy rains of summer 2024 led to major floods at several lead farmers. These were unfortunately unavoidable. The death of one of the lead farmers also came as a blow - which nothing could be done about.



Group of lead farmers with HortiHub Team



5. International Corporate Social Responsibility (iCSR)

This paragraph has been drafted along a number of questions. Answering them best reflects how the project stands in relation to iCSR.

1. Has an iCSR policy been developed?

- The project incorporated an iCSR approach by emphasizing sustainable agricultural practices and promoting inclusive growth within the local communities. Although a specific standalone iCSR policy document isn't made, the project's objectives align with key CSR principles, such as environmental sustainability, economic empowerment, and gender inclusion.
- By integrating Dutch best practices with local knowledge, HortiHub Niger aimed to improve horticultural productivity in a way that directly addresses social and environmental needs, particularly by targeting food security, youth employment, and climate resilience.

2. Have any specific iCSR measures taken place?

- Yes, several iCSR measures were embedded in the project's activities:
 - **Environmental Responsibility:** Introduction of climate-resilient practices, including the use of renewable energy sources (solar-powered irrigation systems) and sustainable agricultural techniques, helped reduce environmental impact.
 - **Community and Economic Development:** The project focused on training local youth and women, supporting the development of small agribusinesses, and enhancing food security through increased vegetable production.
 - **Gender Inclusion:** The project targeted at least 35% female participation in agripreneur training programs to foster gender inclusion, although final participation reached about 32%.
 - **Ethical Knowledge Transfer:** The project was careful to blend Dutch horticultural expertise with local knowledge, recognizing the value of traditional practices and fostering mutual respect and capacity-building among local stakeholders.

3. Specific iCSR actions from the administrative decision:

The year reports highlight alignment with the Sustainable Development Goals (SDGs), specifically those related to hunger, health, quality education, economic growth, sustainable communities, and partnerships. These align with iCSR by fostering long-term sustainable development outcomes in the local horticultural sector, emphasizing responsible practices and local community welfare.



6. Performance Indicators

Looking at the Performance Indicators, we can conclude that the efforts described collectively indicate a significant positive impact on the local private sector, improving economic opportunities and strengthening the agricultural business ecosystem.

- **Original Performance Indicators:**
 - Improvement in crop yield and quality among participating farmers.
 - Number of agripreneurs and lead farmers trained in sustainable practices.
 - Successful establishment and operation of the HortiHub as a central facility for knowledge exchange.

- **Status of the Performance Indicators:**
 - **Training of Agripreneurs and Farmers:** The project achieved its target of training 232 agripreneurs and 84 lead farmers. Training programs covered critical areas like market gardening, financial management, and pest control.
 - **Establishment of HortiHub and Land:** Both the physical HortiHub and HortiHub Land were successfully established, serving as an incubator for training and as a demonstration site for practical horticultural techniques.
 - **Community Engagement and Outreach:** Over 785 farmers were sensitized through direct outreach, with the formation of a community on WhatsApp facilitating ongoing communication and knowledge-sharing among local farmers.
 - **Female Participation:** While the target was 35%, the project achieved 32% female participation. Efforts were made to engage women, but various social factors impacted the final participation rate.

- **Extent of Local Private Sector Improvement:**
 - **Knowledge Transfer and Capacity Building:** By training a large number of agripreneurs and farmers, the project has enhanced the local private sector's capabilities, equipping individuals with the knowledge to start and manage agribusinesses.
 - **Increased Market Access and Quality of Produce:** The adoption of advanced farming techniques improved the quality and quantity of produce, enabling farmers to access better markets and achieve higher revenue.
 - **Sustainable Practices:** Through the introduction of climate-resilient and environmentally-friendly methods, the project has laid the foundation for sustainable agribusiness in Niger, which has a positive long-term impact on the private sector.

- **Formation of Consulting FHG:** The creation of Consulting FHG by the HGT team has set up a local business entity, enhancing the capacity for ongoing agribusiness support and trade within the community, thus fostering a more robust local private sector.



Lead Farmers getting training how to work with hybrid seeds



7. Communication

In terms of communication, a lot has happened. Especially in the last phase, a lot is still happening. The reason is that now there is a lot to communicate; results, cooperation, successes, looking ahead, new possibilities.

Although the idea was good to use the Netherlands Branding team, this collaboration did not work out. The timing of the offer did not match the situation the project was in. All partners were busy getting the execution right.

Branding efforts were primarily managed internally by the project team through the creation of a website and promotional materials to enhance the project's visibility

- **Internal Communication:** Regular coordination meetings, including 38 monthly team meetings, 36 interim meetings, and over 100 bilateral meetings, were conducted by Synergos to ensure project alignment. Information exchange was enhanced via WhatsApp groups, allowing for continuous updates and efficient problem-solving among team members. This consistent communication fostered close collaboration, particularly between Partners for Innovation and the Holland Greentech team.
- **External Communication:** A dedicated website, www.hortihubniger.com, was launched in the final project year, showcasing results and raising public awareness of HortiHub services. Disseminating the results is among the final work in this; disseminating the successes in order to find new partners for a follow-up.
Nor should 'natural external communication' go unnoticed. By this is meant the propagation of the project, the results the new techniques during the 'normal' work carried out by the partners on site. As well as the stories spread on LinkedIn.
Promotional materials such as banners, branded gilets, leaflets, notebooks, and stickers were created and distributed to raise project visibility and engage stakeholders. Additionally, the project utilized WhatsApp for daily exchanges among farmers and agripreneurs.
- **Results:** The project became well-known within the community, attracting significant interest from local agripreneurs, farmers and stakeholders. The WhatsApp platform became a vital tool for daily knowledge sharing among farmers, facilitating ongoing communication and community engagement.





8. Budgets

The project utilized the budget efficiently, although adjustments were made in response to shifting circumstances, including partner changes, equipment needs, and the introduction of new activities (such as switching to solar-powered pumps). Here we show the development of the budget per partner. The first table shows the initial budget.

Partner	Initial Budget	Budget after Amendment	Grant after Amendment	Own Contribution
Partners for Innov.	€ 263 551,00	€ 263 551,00	€ 158 130,60	€ 105 420,40
Synergos	€ 259 391,00	€ 259 391,00	€ 155 634,60	€ 103 756,40
HGT	€ 140 622,20	€ 140 622,20	€ 84 373,32	€ 56 248,88
UASTM	€ 38 040,00	€ 38 040,00	€ 22 824,00	€ 15 216,00
aQysta	€ 37 895,00	€ 37 895,00	€ 22 737,00	€ 15 158,00
Rivulis	€ 10 500,00	€ 10 500,00	€ 6 300,00	€ 4 200,00
Total	€ 749 999,20	€ 749 999,20	€ 449 999,52	€ 299 999,68

As discussed, after Year 2 the consortium saw that an amendment of the budget was necessary. This resulted in the next table:

2022-2023

Partner	Budget after Amendment YR2	Grant after Amendment YR2	Own Contribution
Partners for Innov.	€ 263 551,00	€ 158 130,60	€ 105 420,40
Synergos	€ 259 391,00	€ 155 634,60	€ 103 756,40
HGT	€ 140 622,20	€ 84 373,32	€ 56 248,88
UASTM	€ 38 040,00	€ 22 824,00	€ 15 216,00
aQysta	€ 37 895,00	€ 22 737,00	€ 15 158,00
Rivulis	€ 10 500,00	€ 6 300,00	€ 4 200,00
Total	€ 749 999,20	€ 449 999,52	€ 299 999,68

In the last year of the project, it became Clear that not everything was achieved, not all activitgeiten could be carried out that were budgeted in the amendment. For example, it became clear that UASTM could not return to the project and aQysta could not carry out the work in 2024 due to the post-coup situation and the language barrier. The latter would ensure that even more work would fall on the shoulders of the local teams. This led to the following table. Another request for change was made for this during the writing of the report. Especially Holland Greentech and Partners for Innovation had to increase their work. Also because of an extension of the project until December.



Partner	Budget after Amendment YR3	Grant after Amendment YR3	Own Contribution
Partners for Innov.	€ 275 681,88	€ 165 409,13	€ 110 272,75
Synergos	€ 258 727,11	€ 155 236,27	€ 103 490,85
HGT	€ 153 326,93	€ 91 996,16	€ 61 330,77
UASTM	€ 25 126,95	€ 15 076,17	€ 10 050,78
aQysta	€ 26 637,00	€ 15 982,20	€ 10 654,80
Rivulis	€ 10 500,00	€ 6 300,00	€ 4 200,00
Total	€ 749 999,20	€ 449 999,52	€ 299 999,68

The total budget remains the same, as well as the total amount of subsidy, being respectively €749.999 and €449.999. The total grant received is €404.999. Which means that the consortium wishes to claim the remaining €44.953.

As for the overrun of >25% per budget item:

- **Coordination Costs:** Increased coordination costs exceeded the initial budget due to the additional time spent on adapting and reallocating responsibilities after partner withdrawals. Synergos, for instance, dedicated 2,500 hours to coordination, reflecting these adjustments.
- **Equipment Costs:** The transition from Barsha Pumps to solar-powered pumps led to higher-than-anticipated equipment expenses due to increased import costs from India
- **Training and Implementation Costs:** Partners for innovation and Holland Greentech had to absorb responsibilities initially assigned to UASTM and aQysta, resulting in reallocations within training and implementation budgets to cover expanded roles.

And about the differences between costs (and subsidy requested) per cluster partner.

- **Partners for Innovation** took on additional training and coordination responsibilities due to the withdrawal of UASTM, leading to a higher proportion of project costs. Also Synergos took over some of the activities from UASTM.
- **Holland Greentech** also incurred additional expenses related to training and equipment provision, as they established a local team to oversee activities. The establishment of Consulting FHG represented an unplanned yet beneficial cost that supported the project's transition toward sustainability.



9. Team and Cooperation

The cooperation between the individual cluster members and the teams were in the core good. But yes, a few problems occurred

- **Cooperation:** The collaboration between Partners for Innovation, Synergos, and Holland Greentech remained strong, with especially close coordination between Partners for innovation and the Holland Greentech team, which evolved into a highly effective partnership in the project's final stages.
- **Problems:** The departure of UASTM and aQysta led to significant shifts in roles and responsibilities, necessitating resource reallocations and added tasks for remaining partners. These changes were managed effectively but required additional coordination efforts.

The cooperation between the cluster members and stakeholders can be described as good and positive.

- Cooperation with local farmers, agripreneurs, and community leaders was positive, with active engagement through training sessions and workshops. Some Dutch companies, however, expressed hesitancy to establish operations in Niger following the political instability caused by the 2023 coup, limiting the potential for expanded Dutch investment in the local sector.
- Strong collaboration with local organizations like RECA and FCMN facilitated the integration of project activities into the local agricultural framework. Also they are of great importance of the follow up of the program.
- Engagement with local farmers and agripreneurs was maintained through continuous support and training.



Rains of 2024 made many farmers suffer from Inundations - and losses of harvests



10. Lessons Learned and New Insights

- **Adaptation to Change:** The ability to quickly adapt project plans and activities in response to political and logistical challenges was crucial to maintaining momentum and achieving results.
- **Importance of Local Partnerships:** Strong partnerships with local stakeholders, including farmers and agripreneurs, were essential for navigating challenges and ensuring project sustainability.
- **Local Knowledge is Key:** Effective knowledge transfer relied on blending Dutch agricultural techniques is only possible with local expertise and knowledge. The mix allows local farmers to adapt new practices that complement their traditional knowledge.
- **Resilience and Perseverance:** The commitment and dedication of the project team, despite numerous setbacks, were key factors in the project's ability to deliver positive outcomes.
- **Demand for Agripreneur Support and Training:** High engagement levels among local farmers and agripreneurs indicate a substantial demand for ongoing training and capacity-building in sustainable agriculture, suggesting further opportunities for similar initiatives.
- **Gender Inclusion Requires Persistent Efforts:** Achieving gender parity in agripreneurship remains challenging. Future projects may benefit from tailored strategies to encourage female participation in agribusiness roles.



Fati Taima, one of female lead farmers