

# Guidelines/Tool kit for Food Hub agreement(s) between local actors and stakeholders establishing decision-making processes and operational rules

**D3.6** 

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#### **Short Description**

This deliverable presents the results of the activities conducted so far within Task 3.3. The Task aims to create and implement the network of 14 local Food Hubs (paired with 14 separate cities) in the six target countries. The Food Hub represents the project's organizational and operative unit that will join the local actors and stakeholders (i.e., small-scale farmers and their associations, food processors (SMEs), researchers, NGOs, and authorities) and serve as the centre of innovation.

The objective of this deliverable is to illustrate the process that has been designed in the first 18 months of the FoodLAND project towards the establishment of the 14 Food Hubs. A synthesis of the reports collected in the different Food Hubs is presented. Different types of FHs emerged, on one hand, on the size and focus of the several FHs, and on the other hand, on the legal status and institutional framework that FHs will have according to national rules. Elements addressing female empowerment are highlighted.

Annexes include the reports produced at national level by local facilitators.

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## 1. Food Hubs operational framework

#### 1.1.Introduction and scope

This deliverable presents the results of the activities conducted so far within Task 3.3. The Task aims to create and implement the network of 14 local Food Hubs (paired with 14 separate cities) in the six target countries. The Food Hub represents the project's organizational and operative unit that will join the local actors and stakeholders (i.e., small-scale farmers and their associations, food processors (SMEs), researchers, NGOs, and authorities) and serve as the centre of innovation.

The objective of this deliverable is to illustrate the process that has been developed in the first 18 months of the FoodLAND project towards the establishment of the 14 Food Hubs.

First, the deliverable presents a definition of the Food Hub concept together with guidelines that have been elaborated for the design, implementation, and assessment of the Food Hub, conceived as multi-actor centers of innovation where to develop or enhance the organizational, technological, cultural, and operational conditions enabling local food supply chains, and to strengthen their nutrition-responsive, agro-biodiversity and food diversity. Despite the diversity in terms of forms, characteristics, structures, functions, and stakeholders involved, the guidelines were elaborated to set up a common framework that could easily be adapted to different contexts. Specific instructions have been elaborated and provided to national coordinators to begin the activities necessary for Food Hub building, and to write homogeneous Food Hub reports describing this process. Second, the main results collected through the Food Hubs are presented; all the Food Hub reports elaborated by national coordinators are included in the annexes of this deliverable. Finally, the next steps necessary for Food Hub building are outlined.

#### 1.2. How do we define a Food Hub?

We define the Food Hub as a community of local operators aimed at making shared R&D decisions and enabling the adoption of innovations.

The Food Hub acts as center of innovation:

- providing an organizational/institutional framework for the collaboration between private and public actors/organizations operating in the local food value chains.
- providing information as well as logistical and organizational facilities.
- strengthening the sustainability, nutrition-responsiveness, agro-biodiversity, cultural value, and food diversity of local food systems.
- providing an inclusive and horizontal way-of-doing

Which elements characterize a Food Hub?

- 1. **Governance arrangements** ranging from non-binding Memorandum of Understanding to formalized agreements and legal entities
- 2. **Proximity.** Food Hubs are characterized by actors active at local or regional scale.





- 3. **Public and private actors'** participation (including third sectors, NGOs, consumers associations)
- 4. High community engagement, with a special focus on women involvement and empowerment
- 5. Inclusion of the consumer perspective
  - 1.3. How do we visualize a FH?

The following diagram provides a visualization of the FH process from its early steps (design and conception) to its formalization and consolidation in the medium-long term. Despite the process is hereby conceptualized in a linear and consecutive manner, we acknowledge that processes behind the FH construction can be rather complex and recursive, entailing that the below-mentioned phases can occur in a different order or even simultaneously. Linearity and consequentiality are here chosen to assist practitioners in identifying bottlenecks when implementing FH processes.

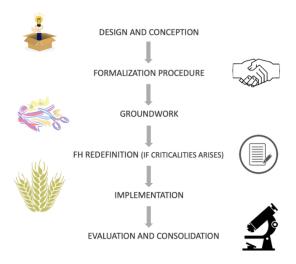


FIGURE 1. VISUALIZATION OF THE FOOD HUB PROCESS

#### 1.4. How do we operationalize a FH?

#### 1.4.1. Design and conception

This phase is aimed at defining the core group of local stakeholders involved in the FH, its scope of action, the objectives, activities that the actors involved would like to conduct and pursue. This phase includes the study of the context; definition of the facilitators; selection and mapping of stakeholders; the structure co-definition; "good governance principles" co-definition; defining stakeholders' roles and responsibilities taking into consideration the gender perspective; planning the activities of communication and branding, and the identification of challenges.





For each step, local partners should keep track of the main activities conducted using a specific diary template.

a. Studying the context: desk research and surveys with farmers and consumers This preliminary step provides a picture of the context in which the FH operates in terms of market overview, socio-economic conditions, ecological and agricultural overview. This first step will help the FH to identify opportunities, challenges, and commonalities from which to analyse the potential of the FH. Among the most important points of the market overview, we have the size of the market the FH is targeting (i.e., population size, consumption, buying criteria, regulations, consumer preferences).

Additionally, socio-economic, ecological, and agricultural context variables should be mapped, as to ensure that the FH coordinators have at their disposal a set of key variables concerning the territory, they are going to operate in. These variables include FH geographical boundaries/administrative partitioning, population density, age, education level, regional GDP, share of the primary sector, main primary sector activities, main LULC classes, other relevant data the FH has at its disposal, which can be of relevance for designing and setting up the FH (e.g., ethnicity and linguistic composition). These variables can be in part collected from the work undertaken to write other deliverables included in WP2 and WP3 (e.g., D2.1: Dataset on consumers' food choices, socio-economic and nutritional conditions, and on experimental results (quantitative measures) at project level); otherwise, information can be taken from literature, local experts, own experience, and specific meetings with stakeholders.

#### b. Facilitator role, participatory actor research

During the Project meetings, the list of facilitators has been identified for each Food Hub as follows (Table 1). The facilitators are the responsible for driving the creation of the Food Hubs, facilitating the meetings among stakeholders and the definition of institutional arrangements necessary for the formalization of the process.

TABLE 1 LIST OF PARTNERS THAT HAVE BEEN IDENTIFIED AS FACILITATORS FOR EVERY FOOD HUB

Country	Food Hub	Partner	City
MA	Zoyout Dir Beni Mellal	CEFA	Beni Mellal
MA	12 Aif ()uallal Biffif / Aif Yazem	ENAM, CEFA	Meknès
TN	3. Chebika	ISACM	Sousse
TN	4. Jendouba	CEFA	Tunis
ET	5. Laelay Machew / Axum	REST	Mekelle
ET	6. Akaki, Nifas Silk	CEFA	Addis Ababa
KE	7. Mukurweini	UoN	Nyeri

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necessarily reflect the views of the European Commission.



Country	Food Hub	Partner	City
KE	8. Kitui	UoN	Kitui
KE	9. Kisumu	DALF, FCI	Kisumu
TZ	10.Mvomero	HLV	Morogoro
TZ	11. Kilombero	HLV	Dar es Salaam
UG	12. Kamuli	VEDCO	Kalerwe
UG	13. Nakaseke	VEDCO	Kapeeka
UG	14. Kajjansi / Masaka	NARO	Kampala

#### c. Co-defining the core group/network

This step is aimed to understand how to define the core group of players and actors to involve and how to involve them. To develop a FH, potential individuals, organizations, associations, that are already in the network or that should be encompassed, need to be identified to create a stable core group and to co-define roles and responsibilities.

Together with identification of key actors, existing and potential relationships need to be exploited and activities to their willingness to engage, easiness of involvement needs to be assessed and encouraged. So, a crucial question that needs to be answered in this step is "how can we involve key actors?"

After having identified the core group, in the next phases of the FH implementation additional stakeholders might be included for specific tasks or activities (i.e., developing criteria for evaluation). It is important to guarantee a **gender-balanced representation** in the Food Hub. Where possible, an effort should be directed to involve women are organized in the area, in cooperatives, groups, rural women networks.

#### d. Co-defining the structure

This step is aimed to assess the purpose of the FH and it includes co-defining the mission, the vision, the objectives, and value propositions. Developing the mission and vision is important as it gives the opportunity to better define the goals of the FH and it represents the first step to determine the most appropriate degree of formalization.

The **mission** is a declaration of intent of the FH and represents the tangible objectives it wants to reach and how to reach them. It answers questions like "What do you plan to achieve thanks to the food hub? (reducing unemployment rate, increasing gender equality, promoting interconnectedness with urban areas, etc.)" or "Specific question: how do you plan to increase gender equality in the food hub?"

The **vision** statement gives the FH direction and promotes internal and external growth and purpose in the long term (think to a long-term frame, such as 5 years after the



project's end). It answers questions such as "How do you see your food hub in 5/10 years? Which changes you foresee for the local economy and people's life, thanks to the food hub?" The vision of the FH also accounts for its intentions and goals in creating social, economic, institutional and environmental impact potentials (for example: the creation of access to healthy local food for low-income consumers, contributing to community development through incubating small local firms and drawing from job training programs).

The **value proposition** is a statement summarizing why consumers and producers should choose the FH's products and services (i.e., price reasons, quality of the product or service offered, range of products available, experience). Usually, suppliers and farmers are more focused on factors as price, terms, ease of transaction.

This step needs to be carefully assessed and implemented to avoid creating a FH that does not meet real local needs. In terms of business justification, this is stronger the more the FH can respond to specific local needs. This step also requires careful consideration on how revenues will be generated (e.g., by taking a percentage of the sale price, charging commissions, charging for renting space or facilities?).

#### f. Co-defining "good governance principles

Good governance can be defined as ensuring that "the process of decision-making and the process by which decisions are implemented (or not implemented)" is run in an inclusive, effective and efficient manner. According to the Council of Europe, 12 are the main principles which characterize good governance. Ensuring good governance at a FH level also entails addressing the following questions linked to each principle. The principles are provided in Table 2, together with the questions they aim to answer.

TABLE 2. THE MAIN PRINCIPLES WHICH CHARACTERIZE GOOD GOVERNANCE

PRINCIPLE	RELATED QUESTIONS	
Participation, Representation,	Are the FH members guaranteed equal participation and	
Fair Conduct of Elections	representation in the FH decision-making process? How are	
	FH coordinators elected and roles assigned? Is the	
	gender balance considered?	
Responsiveness	Are the FH Objectives, rules, structures, and procedures	
	adapted to the legitimate expectations and needs of the FH	
	actors?	
Efficiency and Effectiveness	Are the planned results and objective aligned? Are the	
	resources available for the implementation and setting up of	
	the FH used in the best possible way?	
Openness and	How are/will be decisions taken within the FH? How are	
Transparency	decisions made available to the FH members and the public?	
Rule of Law	Are FH internal rules and regulations are adopted in	
	accordance with procedures provided for by law?	
Ethical Conduct	How are conflict of interests within the FH internal governance	
	tackled?	



PRINCIPLE	RELATED QUESTIONS	
Competence and Capacity	How the competence and capacity to act of the FH	
	coordinators is maintained and strengthened?	
Innovation and Openness to	How are results shared with other FHs?	
Change		
Sustainability and Long-term	How is the FH sustainability guaranteed?	
Orientation		
Sound Financial	How are annual budget and investments of the FH prepared	
Management	and deliberated?	
Human rights,	How are human rights, cultural diversity and social	
Cultural Diversity and Social	cohesion fostered and guaranteed within the FH?	
Cohesion		
Accountability	How are responsibility roles defined within the FH? How are	
	decisions reported and sanctioned? How are conflicts	
	between FH actors mitigated?	

#### g. Co-defining roles and responsibilities

After having identified key actors, their roles and responsibilities should be assessed according to their expertise and capabilities.

Attention should be devoted to the roles and responsibilities that are given to women and men, making sure women will also have an active voice and opportune responsibilities in the Food Hub.

#### h. Communication and branding

Communication and branding are part of the FH communication strategy. This step comprises: (i) how the FH internally communicates its activities to the FH members; (ii) how the FH externally communicates tits activities and values towards the community it serves; (iii) how the FH disseminate and exploit its results and outcomes for valorisation, knowledge transfer, and for maximizing the impact of the FH results in the public domain; (iv) research and innovation activities, also in terms of open innovation strategies

With local actors, it is necessary describe the main features of a suitable communication strategy for the SI during its implementation. Internal communication and external dissemination are to be considered. The target audience, the types of messages needed, and the appropriate tools to reach them are to be considered. This may be a "wishlist," i.e., not setting in stone the tasks but presenting the "ideal" situation of tasks.

FH coordinators can ask support to Elhuyar for disseminating and communicating the FH outputs.

i. Identifying challenges (and appropriate mitigation measures)





This step aims at addressing the main challenges occurring during the Design and Conception phase and potential conflicts that FH members might encounter during the following phases. The final aim is to tackle the challenges by addressing shared solutions that could then be defined and formalized in a good practices' toolkit.

#### 1.4.2. Formalization procedure

According to the different typologies, degree of maturity, actors involved, the FHs will assume different shapes in this phase. For example, Manifesto or Memorandum of Understanding (MoU) can be elaborated and signed. Indeed, according to the different needs, a set of formalization procedures has been foreseen. Every FH is free to choose the best option according to its own objectives and the specific national regulations that can limit or constraint the process.

- a. Manifesto. The Manifesto is a non-legally binding document reporting the share of vision and values among actors.
- b. Memorandum of Understanding (MoU). A MoU is a non-legally binding agreement which outlines aligned will, objectives, lines of action among the signing parties.
- c. Memorandum of Agreement (MoA). A MoA, similarly to the MoU, is an agreement aligning common objectives but on the other hand, establishes common legal terms that determine a "conditional agreement" for the transfer of funds including sanctions for non-compliances.
- d. Legal entity. The different FH formalization forms might require the design of a legal entity. This entity can be structured starting from existing entities as well as an adhoc created institutions. These legal entities should be horizontally driven and aimed at act as aggregators of the actors involved in the FH.

#### 1.4.3. Groundwork (organizational and technological innovation)

After having assessed the objectives, activities, characteristics of the FH, and formalization, the FH can proceed with the activities' implementation (i.e., kickstarting, first activities, meetings...)

- a. Meeting with the core group
- b. Co-defining technological innovation and data collection protocol
- c. Planning, scheduling activities, feasibility assessment, definition of KPIs
- d. Implementation of tools and equipment
- e. Development and testing at lab-/small-scale
- f. Production of guidelines/practice abstracts (innovation implementation and management)





#### 1.4.4.FH Redefinition (if criticalities arise)

If any kind of problems or resistance are encountered, which might deflect the FH from its intended path, changes in the way the FH operates, its objectives, structures and governance arrangements could require re-orientation and knowledge exchange with other FH experiences.

- a. Knowledge exchange activities with other food hubs
- b. SWOT analysis (or similar)
- c. Revisiting the previous stages of design

#### 1.4.5. Implementation (kickstarting of the Food Hub)

Once the FH has been implemented, the core activities can begin, including all the technological field tests and the training activities necessary to spread the innovations developed.

- a. Food Hub implementation
- b. Training activities
- c. Uptake of the innovations
- d. Validation at large scale of innovations (data collection and feedback loops of control/improvement)
- e. Assessing the impact on well-being of stakeholders working in the food hubs
- f. Networking the local food hubs
- g. Hub enlargement, stakeholder mapping

#### 1.4.6. Evaluation and consolidation

This phase evaluates all the steps conducted during the implementation phase. Here, the achievement of objectives, activities, impacts is evaluated and best practices deriving from the implementation of the FH and the challenges faced will be identified.

- a. Assessment criteria (e.g., Mixed methods? Participatory? Etc.)
- b. Is the food hub delivering its initial objectives? What has changed? What has failed? Etc.
- c. Scale up, scale out, scale deep
- d. Long term planning
- e. Financing and sustainability





# 2. Report from the Food Hubs: towards local agreements

#### 2.1.Introduction

The activities developed by the project in the first 18 months, mainly encompass the first step for the development of a FH, which means "design and conception (1.4.1)" and the beginning of the second step related with "formalization procedure (1.4.2)".

Every group of facilitators, at national level, has experimented this procedure, following the points explained in the previous chapter and using them as reference to write a detailed FH report. Objectives and methods of this activity have been discussed in six ad-hoc meetings that have been realized between UNIBO, who has overseen developing a harmonized methodological approach, and the facilitators at national level. The calendar of the meetings realized is provided in table 3.

Date Country		Group/team of	
		national facilitators	
12/07/21	Morocco	ENAM, CEFA	
13/07/21	Tunisia	ISACM, CEFA	
14/07/21	Ethiopia	CEFA	
15/07/21	Kenya	UoN, DALF	
16/07/21	Uganda	NARO, VEDCO	
05/08/21	Tanzania	HLV, SUA	

TABLE 3. CALENDAR OF MEETINGS BETWEEN UNIBO AND NATIONAL FACILITATORS

Despite the meeting with CEFA in Ethiopia regularly took place, the activity for the creation of FHs was later completely paralysed due to the serious political crisis of the country.

#### 2.2. General considerations

Apart from Ethiopia, in all the other countries, and in all the FHs, the activities have regularly taken place. The process for the creation of FHs has clearly not been completed, but sensible efforts have been realized everywhere, as attested by the national reports that can been found attached in the annexes of this deliverable. None of the FHs has been formalised with the sign of a MoU, but some MoUs have been already drafted (e.g., in Uganda). Both private and institutional (i.e., public) partners have been involved everywhere, which represents a meaningful attempt to guarantee the long-term acceptability and sustainability of the FH.

In most of the case, the process driven by the national facilitators is going to establish FHs that have a relatively small size, in terms of area and private partners involved, and focus on a relatively small number of crops or food products. This limit of area, actors and crop is determined by two factors:



- The preference for a more homogeneous Food Hub, which should guarantee easiness of coordination (also from a logistic perspective) and definition of objectives
- 2) The link with the activities and objectives of FOODLAND project, already focused on the technological improvements and processing of specific food products.

For example, in the case of Jendouba (Tunisia), only Agricultural Development Group (GDA) Hrayer Gloub Ethiran is currently actively involved, as farmer institution, in the FH creation (even if other GDAs could be invited in the future), and the objective are strongly connected with drying processes, micro-irrigation systems and bio-based packaging.

In Kitui (Kenya) four farmer groups are involved, while attention has been given to involve supermarkets and other final buyers (e.g., schools). Here the focus is on a limited number of products (mainly) quinoa and on the link with the processing SME Kitui Enterprise Promotions Company Limited. Similar is the case of Mukurweini (Kenya), where the FH builds on the contractual relationship between Tamarillo (SME) and the farmers (organized in groups) providing the raw products (the FH mainly focuses on flour and juices).

Naseke (Uganda) FH has involved a few farmers groups but is establishing strong contacts with enterprises providing services, training, inputs, market information as well as processors and buyers; the focus is horticulture. Similar is the case of Kamuli (Uganda) which is focused on a different group of crops (iron beans, millet and grain amaranths)

The limited size and scope of FHs is even more clear where the focus is on fish farmers. Kisumu (Kenya) FH will be restricted to four hundred farmers; similar is the size of Kajjansi/ Masaka (Uganda) FH.

However, there are situations, especially in Morocco, where the local conditions have driven the facilitators to widen the extension of the Food Hub, to cover a larger number of stakeholders (i.e., a relatively high number of cooperatives) and to embrace a larger number of crops and food products, even beyond the limits of the FOODLAND project, for the technological improvement of specific crops. Eight farmers groups (cooperatives and farmers' associations) have been invited for the Mekness FH and nineteen for the Beni Mellal FH. FHs in Tanzania are at earlier point in the development process, but also in this case the number of farmer groups to be invited is potentially high.

Concerning the institutional arrangements necessary for the creation of FHs, most of the local teams are focusing on the preparation of MoUs. At the moment none of these has already been signed. In the case of Tanzania, a Manifesto has been drafted by the facilitator partner (HLV) as a starting point for further involvements building on existing agriculture platforms. In the case of Uganda, an advanced draft of MoM has been prepared and discussed among the actors already involved in the process (see the MoM of Nakaseke in the annex).





However, due to specific local laws and regulations, there have been cases where a more formal institutional arrangement has been preferred. It is again the case of Morocco, where two ad-hoc legally recognized associations are currently in preparation, namely the "Association Carrefour de l'Alimentation de Meknès" and the "Association Carrefour de l'Alimentation de Beni Mellal". For each of them a very detailed statute has been drafted (the statute contains 27 articles) as well as a "Charter of Ethics".

There are situations where, instead of building new ad-hoc institutions (as in Morocco), local FH stakeholders try to use existing ones. In Tanzania, the team managed to collect information on the existing platforms. In fact, in each district there are already existing agriculture platforms (postharvest management platforms and others). With support from the office of the District Agriculture Irrigation and Cooperative Officer (DAICO) the team gathered information regarding the available agriculture platforms and their functions. It was agreed that the identified bodies be extended towards forming a FH. Such an approach would help in making the food hubs sustainable and avoid duplication of efforts and resources. Two existing agriculture platforms were identified in the two districts. In Mvomero, it was agreed that the agriculture multi-stakeholder platform for farming season would be used, while in Kilombero the multi-stakeholder postharvest management platform would be "revived".

In Kitui (Kenya), the FH will build on the existing relation between local farmers and the processing SME Kitui Enterprise Promotions Company Limited. Similar is the situation in Mukurweini (Kenya), where the FH builds on the contractual relationship between Tamarillo (SME) and farmers.

#### 2.3. Gender considerations

For all the FHs, gender aspects have been carefully considered. However, some FHs have been more specific and detailed than others to highlight gender aspects. These efforts need to be emphasized and spread among FOODLAND partners and should work as best practices in the next stages of FH creation to permit a compliance of all FHs. ENAM (facilitator of FHs in Morocco), has provided a document that should be considered as an example in considering gender issues.

For the two FHs of Morocco, specific attention has been given to the participation and representativeness of women. In the report is written:

"In order to guarantee **women's** representativeness within the FH, it has been proposed to establish an electoral quota at the level of the FH representation which can be considered as a positive and efficient measure that takes into account the reality of the global electoral base at the level of the city of [...]. However, in order to ensure the impact of the positive measures in the longer term, accompanying measures are also necessary to give more opportunity to **women** to access this representation, especially through the encouragement of cooperatives and women's associations to be part of the FH."

"To this end, several proposals were formulated during discussions with local partners (farmers and consumers) in order to move towards a FH with **gender-sensitive** representation. The most reasonable ones remain in relation to setting a minimum quota





at the level of the FH for women which should be at least 30% and to ensure that as many women as possible are invited as representatives of associations and cooperatives to attend the meetings for the election of FH representatives in order to achieve this objective and to have opportunities to selectively elect women to the FH (minimum level of competition) and who can play a positive role in this representation and participate in decision making."

Always in the report of Moroccan FHs, the empowerment of women has been carefully considered:

"The empowerment of **women** in the FH will be increased as a result of the innovations and changes brought about by the project, which will allow women to be involved in all decision-making processes at the FH level. In this sense, it is planned to set a minimum quota for women within the FH. To do this, it will be recommended to the consumer associations and agricultural cooperatives to be represented in a balanced way by women and men in order to reach the expected parity within the FH. Measures are also planned to influence the community to promote **gender equality**. The services offered within the framework of the FH must therefore take into account the different capacities of men and women to promote the planned activities. In this sense, and to further promote gender mainstreaming and improve women's access to positions of responsibility within the FH, it would be interesting to plan awareness sessions, courses and days for women in order to put them at the same level of effectiveness (information session, literacy courses, coaching...)."

In Kamuli (Uganda), where it is acknowledged that women's mobility to access resources and technology is limited, the report highlights that "Women have to be involved in facilitated innovation to foster empowerment (confidence, status and engagement in community activities)"

Finally, the case of Jendouba (Tunisia) is quite specific since the FH is mainly represented by women and the project will benefit women's groups, in fact:

"Food hub partners are mostly **women's organisations** or groups. Most of the GDA members are women, starting from its president; different stakeholders involved are women, such as Herbs and Flavors, a startup located in Tabarka, founded by a young women, who is also actively engaged in civil society activities; or Association Rayhana Pour femmes de Jendouba, a women-centred association with the aim of empowering women, of giving them the possibility to take part of an active social life in order to feel free to completely express themselves. Moreover, the activities which will be implemented in schools, where our community gardens will be located, will see an equal boys and girls' participation in all the activities."



### 3. Next steps: Food-Hubs as open innovation hubs

Food Hubs blend social and technological innovations with local communities' needs and cover multiple functions: from the role of aggregators and networking nodes, up to incubator of innovations. In all these roles, food hubs provide a critical supply chain link for rural communities and farmers to reach consumers interested in purchasing local products, also in urban markets. Considering the mission of the Food Hubs, at the end of the FoodLAND project we aim at having 14 food hubs serving the local economies and providing a crucial support to local actors for boosting their activities, improving their economic conditions, and creating new markets.

Since the formalization procedure is almost over [1.4.2], next steps foresee, on one side, the further development and set-up of the trial versions of the food hubs [1.4.3] based on the first arrangements reached in 1.4.2, thus promoting the physical (whether possible) meetings among actors involved and the definition of a common agenda for the pilot test and deployment of technological innovations (including Randomised Control Trials; T5.9), as well as the common definition of KPIs useful to monitor the Food hubs progression over time with reference to their specific objectives [1.4.6]; on the other side, other than hosting the innovations development and deployment, Food Hubs will be evaluated with reference to their engagement capacity of local actors. In fact, the success or failure of a food hub should not be measured solely in terms of its incubating function for innovations or in terms of economics actors empowered, but on its capacity to aggregate local actors and respond to local needs, thus empowering local communities. To this end, in case the local partners reported that the Food Hub is not engaging the communities as expected or it is not reaching the established objectives, a re-orientation phase is foreseen [1.4.4], based on participative methods and iterative processes, until a new arrangement is reached [1.4.6]. This phase can be activated all along the FoodLAND project; the governance mechanisms will ensure that the same phase can be activated also in the future (after the project conclusion). Flexibility is the key word for the first phases of food hub creation, but it needs to be an embedded characteristic of the food hub itself, as it aims to respond to local needs that are likely to change over time.

Following phase 1.4.3 and farmers' training about the innovations, the pilot test over large scale samples will be deployed and the evaluation phase will tell if there are beneficial impacts over the population involved, according to the local objectives established by each food hub. A networking activity among food hubs will be promoted in the implementation phase [1.4.5], to ensure the exchange of ideas and solutions to common or similar issues. At the same time, internal communication, information-sharing and coordination between producers and other participants in the supply chain of a same food hub will be promoted [1.4.3], as trusting relationships across the chain is reported as winning feature of successful experiences (Hand, 2010). Indeed, if successful, the Food Hub will progressively include new actors and widen its impact: a stakeholder mapping will be run again by the end of the project to monitor new entries.



In the evaluation and consolidation phase [1.4.6], the financial and long-term sustainability of the food hubs will be also assessed.

In the last twenty years, food hubs have had an increasing role in addressing food local needs and gaps of food systems in many places in the world, from advanced economies (US and Canada) to BRICS (South Africa). Their role is crucial in places where the food system cannot ensure a fair and equal access to healthy food for the local populations, as it happens in so-called "food deserts" in US. In fact, the GDP of a Country does not correspond to its ability or willingness to satisfy the food needs of its population. FoodLAND's ambition is to not to bring food where there is not, but to improve the interconnections among existing players in rural areas (producers) with the increasing, urban demand for food. The greatest challenge of the FoodLAND project is to create long-term, sustainable food hubs able to satisfy this urgent need.



# 4. References

Hand, M. S. (2010, December 2010). Local Food Supply Chains Use Diverse Business Models to Satisfy Demand. Amber Waves



# 5. Appendices

Annex 1 – Jendouba (Tunisia)

#### FH coordinators and main contacts

CEFA TUNISIE : Dorra Jamai CEFA TUNISIE: Fabiana Adamo CEFA TUNISIE : Corina Costea

#### FH process schedule

#### Implemented schedule

FH phases	Chapter	Activity description	Scheduled month
FH design	1	Farmers' surveys	Done. June 2021
FH design	2	Meeting with local authorities	Done. September 2021
FH design	3	Meeting with GDA	Done. September 2021
FH formalization	4	not yet	
FH groundwork	5	not yet	

#### FH meeting materials

Meeting Minutes	s (1)		
Project:	Project:		
Food Land Tunis	Food Land Tunisia.		
Date:		23-09-2021	
Time		14:30 (Tunisian Time)	
Purpose		Presentation meeting between CEFA Tunisia team	
	and the Delegate of Fernena (the local govern		
	represented)		
	CEFA Fabiana Adamo		
Participants:	cipants: Tunisia Dorra Jamai		
	Corina Costea		
	Delegate Fakhreddine Mahdaoui		
	Mohammed Ghazouani		
Note Taker	•	Dorra Jamai	





#### Meeting process:

The meeting session has started with a presentation of the participants and thanking them for being present.

After that, Fabiana Adamo spoke to present the project details as following:

Basic information:

Project financed by the EU's Horizon 2020 program

Project started in 2020 and goes into 2024

Project activities located in Fernena, Governorate of Jendouba, Tunisia

Project partners in Tunisia: INAT/ GDA Hrayerr.

Project objectives (Survey/FH/trainings/etc.)

Context:

The project encourages and contributes to the use of innovative and sustainable technologies to support the nutritional efficiency of local food systems. It aims to:

Develop and apply innovative organizational techniques for local food chains.

Develop, apply and validate technological innovations for agricultural systems

Develop, apply and validate technological innovations for food processing

Disclose and transmit innovations, strengthen and disseminate healthy and balanced diets and contribute to the reduction of malnutrition

#### Partnership:

In addition to the project partners, the FH predicts widen the specific partnerships into many local actors as: CRDA (Regional Agriculture Administration) /CRE (Regional Education Administration) /local CSO/etc.

Mr. the Delegate reacted to these presentation's detail by insisting on:

The social square of the activity as it could guarantee both economic and social stability to the community.

The availability of the local authorities to support the project and activity implementation.

The national general intention to support innovative solutions that improve local fiscal resources and public financial management of regions.

At the end of the meeting, the participants of CEFA Tunisia team thanked the availability of the Delegate and expressed the intention to exchange the activities update with the local authorities.



Meeting Minutes (2)		
Project:		
Food Land Tunisia.		
Date:		23-09-2021
Time		10:30 (Tunisian Time)
Purpose		Visit to the GDA local
	CEFA Tunisia	Mrs. Fabiana Adamo
Participants:		Mrs. Dorra Jamai
		Mrs. Corina Costea
	GDA	Mrs. Houda Hamdi (President)
		Mr. Kais Mechrgui
		Mr. Jalel Chaabani
Note Taker	•	Mrs. Dorra Jamai

#### Visit process:

The visit has started with a presentation of the participants and thanking them for being present.

After that, Houda Hamdi spoke to present the local details as following:

The local is composed of two main spaces: one is the office and meeting space and the other is a sort of workshop dedicated to the use of material and the transformation activities of the GDA adherents.

The absence of a water source is one of the main obstacles of the transformation activities of the GDA. The solution found by the adherents was to provide a water tank. The local is situated at a rural zone named "Sidi Said". The zone is about 30km far from Fernena village. And this made a little hardness of access especially for adherents who are not from the zone.

A conversation was also led about the legal situation of the GDA as the president is also the mayor of the region and the Tunisian law does not allow the combination of the two responsibilities at the same time. For this reason all GDA activities, especially financial ones, were blocked.

At the end of the meeting, the participants of CEFA Tunisia team thanked the availability of the GDA team and expressed the intention to exchange updates concerning the legal situation of the organization.



#### CHAPTER 1: FH DESIGN AND CONCEPTION PHASE

#### a. Studying the context: desk research and surveys with farmers and consumers

The Governorate of Jendouba, which registered in 2017 a population of 403970 people, is situated in the northwest of Tunisia at the borders with Algeria. The region is characterized by a high rate of unemployment (19,7%), increasing in the rural areas and according to the level of education (Jendouba en chiffres 2017, ODNO).

The province of Fernana, where the Food Hub will be implanted, is mainly characterized by a rural context with 39480 ha of usable agricultural land (arable, forest, free fodder). The total agricultural area used in the province of Fernana is 25051 ha for the following crops and cultivations: cereals ( 14807 ha), vegetables (358 ha), legumes (1010 ha), fodder (4750 ha), olive trees (3762 ha), citrus-fruits (9 ha), arboriculture (130 ha), industrial crop ( 50 ha), fallow (175 ha). 61% of these exploitations have an average surface of 0-5 ha.

The region is rich in water resources, but their exploitation and the current state of hydraulic infrastructures of the region don't guarantee access to water to the entire population, affecting agricultural and private activities. The irrigated perimeters are mostly public for a total of 1360 ha against 432 ha of private irrigated lands. The rural water service in the province reaches the rate of 70%-80%, which translates in the lack of water connection in the most internal areas and in the forestry areas.

The province of Fernana is strongly oriented towards agricultural productions and most of the exploitations are family-run. Therefore, the market economy is primarily subsistence farming and lacks industries or services capable of increasing the employment rate.

According to field research it has been found that the local population faces overlapping nutrition problems including deficiencies in vitamins and minerals and obesity. Anemia, especially among young women, and infant children is still a dominant problem. Finally, there is no progress regarding innovation in the food processing sector and still, too much food waste is observed.

A survey has been conducted on a sample of 500 farmers of the region aged between 18 and 85 years old of which 233 women and 267 men. According to the survey, 93% of the farmers interviewed own the land or the land is of the family, 15% rent a land and 10% rent a land in addition to his/her own exploitation. The land size of the sample ranges from 0.1 to 12 ha. As a result of the specificity of the region, the main crops cultivated are fruits, vegetables, nuts, wheat, vetch, oat, barley, fava beans, pasture, fodder crop, alfalfa, legumes and olive trees.

As regards to the introduction of new technologies, as envisaged by the Food Hub, 58% of the farmers taking part to the survey would volunteer to be the first to implement a new agricultural technology, while 20% would adopt new technologies if also other farmers adopt them and 6% is not interested in implementing new technologies. In general, 85,4% of the farmers interviewed are "moderately or extremely interested" in



implementing a new technology in his/her farm, namely in order to try new ways of production (79,4%) or because they consider most of the organisations promoting innovations in agriculture as reliable (71%).

The farmers identified some of the causes affecting farming activities during the last growing seasons as the lack or inadequacy of the seeds adopted, energy, pesticides, fertilizers, lack or bad management of water, lack of equipment, scarce use of innovation and lack of technical assistance.

As regards the farmers, 69% experience some or serious problems to meet their households needs and their monthly salary is spent to cover food needs and - to a lesser extent - farm cost. In particular, 47% of the farmers earn less than 200 TND per month, 21% between 200 and 300 TND, 12% approximately 350 TND, 6% approximately 430 TND and 7% more than 430 TND monthly.

Farmers have experienced several troubles in their farming activities and life, such as food shortages (57%), drought (61%), cost increase of fertilizer or seeds (89%) and salary reduction (83%). As for the near future, they worry about the same troubles experienced and other possible difficulties such as health problems and infestations.

#### b. Co-defining the core group/network

Increasing gender equality is one of the core principles of the food hub.

First, we will include women and girls in the assessment phase. They will be encouraged to actively participate in the analytic process, which will give quantitative and qualitative data. This will help to increase knowledge about their needs, always taking into consideration their age, their rhythms, and routines.

Second, since one of the activities we will implement regards the dissemination of nutritional recommendations, we will boost awareness raising campaigns on dietary diversity by giving priority to girls and women, who are a key driver of change in the food habits and diets of families and communities.

Nevertheless, as a third action, we will organise training courses, which will have as priority a balanced number of men and women as participants, aiming at avoiding the perpetration of women's role as household keepers.

Fourth, food hub partners are mostly women's organisations or groups. Most of the GDA members are women, starting from its president; CEFA's members involved in the project are women, different stakeholders involved are women, such as Herbs and Flavors, a startup located in Tabarka, founded by a young women, who is also actively engaged in civil society activities; or Association Rayhana Pour femmes de Jendouba, a women-centred association with the aim of empowering women, of giving them the possibility to take part of an active social life in order to feel free to completely express themselves. Moreover, the activities which will be implemented in schools, where our community gardens will be located, will see an equal boys and girls' participation in all the activities.





These kinds of stakeholders and activities aim at enhancing women's participation in the wide network of relations, at encouraging them to speak out their opinions and at ameliorating the exchange of skills and knowledge between women and men.

We would like to highlight that all the mechanisms that we promote will focus on actions of prevention of exclusion of women from any process we undertake and will encourage them to speak out their needs and to improve and exchange expertise in order to give them the same opportunities of revenue creation in the industry as men.



ID	Name	email	Type (NGO, farmer)	Affiliatio n	Role in the FH	Activities planned	Necess ity of involve ment (High- Mediu m-Low)	Main interest(s) in being involved	Issues identified with involvem ent (i.e., formal involvem ent)	Relations with other stakeholders (indicates their progressive numbers)
1	UNIBO	luca.mulazzani @unibo.it marco.setti@uni bo.it	Public research institution	Univers ity of Bologn a	Guideline s and material provider	Workshops and Bilateral Meetings	High	Providing scientific support to FH coordinators, Facilitation skills	Project coordinat or; Not willing to engage in Bilateral meetings	1-2-3-4-5: partners of the project;





ID	Name	email	Type (NGO, farmer)	Affiliatio n	Role in the FH	Activities planned	Necess ity of involve ment (High- Mediu m-Low)	Main interest(s) in being involved	Issues identified with involvem ent (i.e., formal involvem ent)	Relations with other stakeholders (indicates their progressive numbers)
2	CEFA Tunisia	f.adamo@cefao nlus.it dorra.jemai@cef aonlus.it c.costea@cefao nlus.it	NGO	CEFA Onlus (NGO)	Activities' facilitator and local activities monitor	Meetings, Monitoring	High	Successful activities/ Local experience/ Community strengthening ad engagement	FH Facilitator / Partner	1: partners of the project, consultations and guidance 3: partners of the project, direct shaper of the activities 4: partners of the project, to consult and coordinate 5: partners of the project, to consult and coordinate and coordinate





ID	Name	email	Type (NGO, farmer)	Affiliatio n	Role in the FH	Activities planned	Necess ity of involve ment (High- Mediu m-Low)	Main interest(s) in being involved	Issues identified with involvem ent (i.e., formal involvem ent)	Relations with other stakeholders (indicates their progressive numbers)
3	Agricultural Developme nt Group (GDA) Hrayer Gloub Ethiran	gda.hrayer@gm ail.com	NGO/ Associatio n of farmers	None	Local reference and direct incubator of FH	Logistic organiser; Activities' hoster	Mediu m	Providing services and skills to its adherents/ Community engagement	Partner/ Operative involvem ent	2: partners of the project, to consult and coordinate 4: partners of the project, to be trained by and to provide orientations
4	National Agronomic Institute INAT	Faten.Khamassi @ gmail.com	Public research institution	Univers ity of Carthag e	Technolo gy provider, Formers of workshop s	Workshops	High	Facilitation skills/ scientific materials/exper imenting technology	Partner/ Coordinat or	2: partners of the project, meetings and activities organisation together 3: partners of the project, workshops ensured together





ID	Name	email	Type (NGO, farmer)	Affiliatio n	Role in the FH	Activities planned	Necess ity of involve ment (High- Mediu m-Low)	Main interest(s) in being involved	Issues identified with involvem ent (i.e., formal involvem ent)	Relations with other stakeholders (indicates their progressive numbers)
5	Higher Agronomic Institute Chott Meriem	cthabet@gmail.c om	Public research institution	Univers ity of Sousse + Ministry of Agricult ure	Technolo gy provider, formers of workshop s	Workshops	Mediu m	Facilitation skills/ scientific materials	Partner	2:partners of the project, meetings and activities organisation together 4:partners of the project, workshops ensured together
6	CRDA (Regional commission er for agricultural developmen t)	Crda.jendouba @iresa.agrinet.t n	Public institution	Ministry of agricult ure	Public services' provider	Technical support/ Information and data provider Activities promotion/finder of distribution solutions	High	Local development achievement	Active activities facilitator/ public connector /be lateral meetings	





ID	Name	email	Type (NGO, farmer)	Affiliatio n	Role in the FH	Activities planned	Necess ity of involve ment (High- Mediu m-Low)	Main interest(s) in being involved	Issues identified with involvem ent (i.e., formal involvem ent)	Relations with other stakeholders (indicates their progressive numbers)
7	Regional Directorate of Trade		Public institution	Ministry of comme rce	Public services' provider	Information and data provider	Mediu m	Local development achievement	Public connector	
8	Regional Commissio ner for Education	dre.jendouba@e dunet.tn	Public institution	None	Organiser of pupil participati ons and consumpti on of the FH productio n	Activities promotion	High	Activities promotion	Partner/ consumer represent ative (pupil)	
9	UTAP: Tunisian Union of Agriculture and Fisheries	contact@utap.or g.tn	Syndicate organisati on	None	Networkin g	Support / events participation / dissemination	low	Role achievement	Networkin g actor	





ID	Name	email	Type (NGO, farmer)	Affiliatio n	Role in the FH	Activities planned	Necess ity of involve ment (High- Mediu m-Low)	Main interest(s) in being involved	Issues identified with involvem ent (i.e., formal involvem ent)	Relations with other stakeholders (indicates their progressive numbers)
10	SYNAGRI: Syndicate of farmers of Tunisia	agriculteursdetu nisie20@gmail.c om	Syndicate organisati on	None	Networkin g	Support / events participation / dissemination	low	Role achievement	Networkin g actor	
11	University of Jendouba	contact@uj.rnu.t n	Public university	Ministry of high educati on	Former and orientatio n provider	Technical and strategic supports	Mediu m	Case studies	Data and research / marketing activities improver	
12	CTV: FERNANA Territorial agriculture promotion cell		Public institution	Ministry of agricult ure	Activities supporter	Technical support	Mediu m	Role achievement	Seeds and fertilizer provider	
13	Delegation of Fernena		Public Institution	Ministry of interior affairs	Territorial and local public decision	Local activities facilitation	Mediu m	Local development	Public local organisati on facilitator	





ID	Name	email	Type (NGO, farmer)	Affiliatio n	Role in the FH	Activities planned	Necess ity of involve ment (High- Mediu m-Low)	Main interest(s) in being involved	Issues identified with involvem ent (i.e., formal involvem ent)	Relations with other stakeholders (indicates their progressive numbers)
14	Municipality of Fernena		Public Institution	Ministry of local affairs and environ ment	Territorial and local public decision	Local activities facilitation	Mediu m	Local development	Public local organisati on facilitator	
15	Other local GDA: GDA Gloub Thiran		NGO	None	Co producer	Workshops/meet ings/local markets	High	Adherents' services	Supplier	
16	SMSA Amen		Mutual company	None	Services provider	Meetings	Mediu m	Adherents' services	Supplier/ buyer	
17	POLE ESS of Jendouba		NGO/cons ortium	None	Distributio n and contractor finder/con nector with other local communit y actors	Local markets	High	Networking promotion	Networkin g actor/syn ergies creator	





ID	Name	email	Type (NGO, farmer)	Affiliatio n	Role in the FH	Activities planned	Necess ity of involve ment (High- Mediu m-Low)	Main interest(s) in being involved	Issues identified with involvem ent (i.e., formal involvem ent)	Relations with other stakeholders (indicates their progressive numbers)
18	Association Sidil Bouzitoun	sidibouzitoun@g mail.com	NGO	None	Exchangi ng experienc es/ know how provider /client	Workshops/meet ings/local markets	High	Activities promotion	Activities improver /client	
19	Association Rayhana	association.rayh ana@gmail.com	NGO	None	Exchangi ng experienc es/ know how provider /client	Workshops/meet ings/local markets	High	Activities promotion	Activities improver/ client	





ID	Name	email	Type (NGO, farmer)	Affiliatio n	Role in the FH	Activities planned	Necess ity of involve ment (High- Mediu m-Low)	Main interest(s) in being involved	Issues identified with involvem ent (i.e., formal involvem ent)	Relations with other stakeholders (indicates their progressive numbers)
20	Herbs and Flavors (Local products' Market of other CEFA developmen t project in Jendouba)	abir.saouab@g mail.com	Private sale unit	None	Productio n distributer / client	Meetings	High	Activities and gain promotion	Distribute r /client	





Our food hub will be a centre of innovation and the core of a communication and exchange network between producers, retailers, consumers, academics, and researchers. The project will be oriented by a strong interconnection among these actors, which will have revealed the dietary needs of the community based on their habits, on their needs and on the territory attainability.

According to field research it has been found that the local population faces overlapping nutrition problems including deficiencies in vitamins and minerals and obesity. Anemia, especially among young women, and infant children is still a dominant problem. Finally, there is no progress regarding innovation in the food processing sector and still, too much food waste is observed.

Hence, one of our solutions is an air-drying tool which shall enhance primary processing of food raw materials not only enabling long-lasting preservation of food, but also processing nutrient and nutraceutical rich food raw ingredients and products. We will take not only fresh fruits and vegetables, but also unsold or unsuitable for selling products, dehydrate them and give them longer life. It will enhance technical performances as it reduces operating costs, and it safeguards final product quality and longevity through a bio-based package. As a matter of fact, safe and environmentally friendly storage of food will be ensured by prototypes of a bio-based packaging process.

#### **VISION**

Additionally, most of our products will come from one or more community gardens which we aim to create. These would encourage a territory circular economy, to help eliminate sources of waste throughout our value chains and local networks by using natural local resources. Furthermore, community gardens will have a positive impact also in terms of raising awareness on environmentally friendly practices among communities such as the importance of consuming local based and nutrient products, thus, reducing the carbon footprint, air, and water pollution.

The community gardens will be firstly implemented in primary and secondary schools in the area of Fernena. The aim of this action is that of using school lands, which are not often exploited, where to implement activities on hygiene, alimentation and common gardens with pupils in order to develop and enhance children- and school staff- 's nutritional knowledge. Thanks to these kinds of activities, we aim at raising a new generation of boys and girls completely aware of their power of action on their environment and their food system. At the same time the community gardens will also be a spot where local producers can meet, work together and share at a larger scale their expertise and knowledge. These spaces will also be at the disposal of local consumers who will be encouraged to formulate common strategies and take joint decisions in coordination with producers and researchers.

The food hub will see public and private actors' participation in its different activities: the air-drying tool, the community gardens or the different meetings and conferences organised. It will benefit consumers, producers, and retailers with all the information on food diversity and agro-biodiversity needed. From



time to time it will organise training courses for producers and master classes on nutrition and healthy diets for consumers, (i.e., schools, consumers' organisations, target groups). Behavioral change in consumers dietary habits will be observed also through less waste generation, since many packed consumer goods will be replaced by local fresh and healthy products, such as dehydrated fruits and vegetables.

As a matter of fact, research represents a core element for our project: from the collection, analysis and monitoring of data, to the improvement of technologies, implying lower climate impact and lower costs of food production, thanks to the synergies created in the local community.

Moreover, we also aim at connecting the food hubs among them and organise exchange visits not only for the purpose of sharing information, knowledge and experiences, but also of raising the share of food products for a balanced diet. In point of fact, our food hub will be part of a technological platform available to the African Scientific community and to the networks of Food Hubs. Yet, the regional socio-economic, ecological and agricultural context will be transformed and regenerated.



Our food hub main purpose is to improve social conditions and to safeguard eco systems by creating strong boundaries between the food hub and the network of local consumers, producers, retailers, and researchers. This will facilitate the exchange of information by creating interrelations between individuals, essential in affecting behavioral change. Therefore, smallholder farmers and food processors will have a spot where to meet, discuss, make shared decisions, and adopt common business models. Producers will have the opportunity to innovate the food processing procedure and have the certainty of not losing its crop for two main reasons. First, one will cultivate what consumers' healthy diets demand, so the offer will meet the demand's necessities. Second, the crop will go directly to the air drying tool which will dehydrate it avoiding the use of stock space and most importantly, avoiding leaving them in storage for too long, thus reducing the chances of rotten.

Moreover, special attention will pe paid to gender equality, through the promotion of mechanisms that will prevent the exclusion of women.

The unemployment rate will diminish due to the investments in research, in collection of data, in implementing new agricultures and in enhancing and encouraging food diversity. New jobs will be created around the concept of bio-based packaging for our food hub products.

#### MISSIO N

Health conditions will be improved: indeed, the food hub aims at increasing consumers' awareness about the benefits of food diversity and healthy diets, through massive information and awareness raising campaigns. Continuous iterations with producers and consumers will help especially sensitive groups (children and women) to reach a higher degree of consciousness on food consumption. Thus, the local agro system will grow and diversify. Cooperation between researchers and producers will achieve innovative cultures and methods of cultivation adapting to the climate and the soil.

For this reason our mission is to promote a new generation of young people aware of their power on the environment. By implementing some of our pilot projects in primary schools, we aim to initiate a cycle of activities with children not only on topics such as food sustainability, but also on developing their critical thinking and their problem solving approach. Different activities around hygiene, correct alimentation system and healthy habits will be implemented during the afternoon activities with children.

We foresee this model to spread in other schools all over the region.

Furthermore, collaboration with the universities is foreseen. Students' association of Jendouba is a stakeholder of the territory ready to work with us. They have a relevant weight on the students' community of the region and could set up important networks of expertise and knowledge exchange also with other students from Tunisia.



Specific objectives of our Food Hub include:

Saving energy through drying processes (combined solar and air energy)

Increase the number of job positions, through raising the range of food cultures, enhancing the research and creating ecological food products.

Reduction of food losses through the process of dehydrating, thus avoiding throwing away unsold food and giving it a longer life.

Creation of novel food products with enriched nutritional properties, which could replace unhealthy snacks.

Increase proportion of women and households consuming balanced dietary food.

Reduction of pollution through bio-based packaging and through environment-friendly production.

Developing tools for delivering communication campaigns to disseminate nutritional recommendations.

# OBJECT IVE

Increase the number of food operators.

Increase interconnection between universities, nationally and internationally and a consequent increased number of scientific publications and scientific international conferences.

Increase the number of consumers interested in buying the novel products.

Regular training courses for consumers, producers and retailers.

Consolidating knowledge of pan African consumers' on a healthy diet benefits.

Consolidating research network among Italy, European institutes, and Tunisia.

empowering young generations by implementing activities in primary and secondary schools with children around topics such as healthy diets, healthy habits, hygiene and environmental responsibility.

creating a strong and solid network among pupils, teachers, parents, farmers, local inhabitants, thus, consumers, producers and retailers, in order to shape their diets according to the universities' researchers' indications and training activities



## d. Co-defining "good governance principles"

The governance vision of the FH is based on sustainable management principles and it leans on collective decision making. FH would insist on presenting a collective utility function representing the utility of a sum of individuals as one. A system of collective decision making is to be found through maximising democratic governance and by mixing of resources. The role of the FH should in addition provide collective profits to the stakeholders and at the same time guarantee a local ancrage and community appearance. The adherence should be free and public to maximise the organisation contribution to the local development.

#### e. Co-defining roles and responsibilities

STAKEHOLDER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES	
Public Institutions	Supervision	active fellowship	
Consumers	clients	guarantee healthy consumption and fill active concentration	
Producers	Stuff and raw materials providers	guarantee sustainable production	
Local Authorities	facilitators	Facilitating FH function	
NGOs	Activity partners and endure	Supporting and co working with the FH	

## h. Identifying challenges (and appropriate mitigation measures)

Risk	Type of	Risk	Cause of	Chanc	Stage of the	Mitigation
	risk	description	risk	е	Design & conception phase	measures
Identifying needs/prod uctions characteristi cs/manage ment tools	Internal: Technica I	The needs of the FH in terms of energies, management tools could not be defined with high specification which increase the unpredictable obstacles	Lack of special studies	Medium	Pre production	A maximum of community studies and observation through the universities' contacts. A maximum of visits and meetings on the field work



Risk	Type of risk	Risk description	Cause of risk	Chanc e	Stage of the Design & conception phase	Mitigation measures
Identifying the commerciali zation strategy of the FH	Internal: Commer cial and related to marketin g	The identification of the commercial strategy of the FH could be complicated as the economic model is not habitual and needs specific considerations	Lack of previous similar experienc es Unknown responsiv eness of the market	Medium	Pre production	Studying the local and national market in relation with the FH main activities. Using the sample study method.
Coordinatio n between partners	Internal: Related to communi cation and Coordina tion	The big number of partners and stakeholders with different characterizations and natures complicate the synchronisation and the coordination of activities	Project nature	High	All phases	Increasing the number of meetings + Organising steering committees in order to keep continuous communication
Human Resources	Internal: Related to human resource s	The needs of the FH in terms of qualified human resources may be very specific and hard to be found.	The specificat ion of the activities and the context	High	All phases	Continued trainings and internship



Risk	Type of risk	Risk description	Cause of risk	Chanc e	Stage of the Design & conception phase	Mitigation measures
Level of credibility	internal and external	the FH needs to prove not only trust worthiness but also reliability and security of functioning as it is a first experience.	lack of similar experienc es and lack of tangible functionin g proofs.	Medium	Pre production	to build trust through deploying a brand of trust internally and this would be reflected externally. Maximising the implication of public institutions.
Instability of prices and inflation	External: Economi c	The instability of prices make prevision difficult	National economic instability	Low	Pre production + Post production	Considering the higher average of prices.
Economic crises	External: Economi c	Economic crises are very frequent in Tunisia	National economic instability	Medium	Pre production + Post production	Work out with stock consideration
Variable regulations and laws	External: Political/I egal	Laws are changing with government changing in the country (especially laws related to commercializat ion of vital product)	Socio- political instability	Medium	Post production	Being updated to contextual changes



Risk	Type of risk	Risk description	Cause of risk	Chanc e	Stage of the Design & conception phase	Mitigation measures
Security restrictions	External: Related to security	The village where the FH is implemented could be subject of security restrictions as it is a country border zone	Socio- political instability	Low	All phases	

#### i. Open innovation strategy

The main innovation strategy in the Fernena territory regards innovative horticulture systems (e.g., simplified hydroponics and community gardening) and a food-dryer tool. On the one hand, it will be at farmers' disposal so as to give everyone the possibility to obtain healthy dried fruits and vegetables coming directly from their crops. On the other hand, some of the products to be dried will come from the community gardens, which will start to be implemented on the small scale dimension in schools. An iterative process on larger scale on wider lands is foreseen.

In order to strengthen the resilience of local farming systems, an irrigation system will be set up so as to allow farmers to grow their crops easily.

The innovation will regard thus also the storage and processing of food since fruits and vegetables will be dried and apt to be consumed for a longer term duration. At the same time, the innovation is foreseen to be applicable also in the packaging system, in order to have a bio-based package apt for dried fruits and vegetables.

The FOODLAND innovations inside and outside the Food Hubs will be spread through an effective dissemination strategy which will create new institutional and commercial networks.



# Annex 2 – Enfidha-Chbika (Tunisia)

#### FH coordinators and main contacts

Institut Supérieur Agronomique de Chott Meriem

Commissariat régionale au développement agricole (CRDA) de Sousse

Commissariat régionale au développement agricole (CRDA) de Kairouan

Cellule Territoriale de Vulgarisation (CTV) Enfidha

Cellule Territoriale de Vulgarisation (CTV) Chbika

Coopérative de Services Agricoles (CSA) Chbika

Groupement de Développement Agricole (GDA) Slelma

Groupement de Développement Agricole (GDA) Mlelsa

Groupement de Développement Agricole (GDA) Gefna

Groupement de Développement Agricole (GDA) Kharroub

Union Tunisienne de l'Agriculture et de la Pêche (UTAP) Sousse

Union Tunisienne de l'Agriculture et de la Pêche (UTAP) Kairouan

Groupement Interprofessionnel des Fruits (GIF) Kairouan

Organisation de la protection des Consommateurs (ODC) Sousse

## FH process schedule

FH phases	Chapter	Activity description	Scheduled month
FH design	1	Meeting with local authorities	Done. June 2021
FH design	2	Meeting with farmers	Done. August- September 2021
FH design	3	Meeting with GDA	Done. Sept 2021
FH formalization	3	Not yet started	
FH groundwork	4	Not yet started	





#### CHAPTER 1: FH DESIGN AND CONCEPTION PHASE

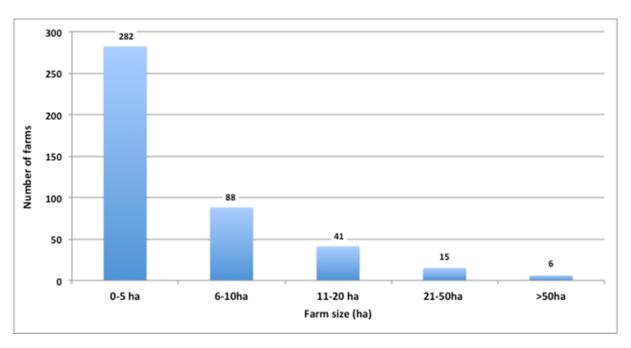
a. Studying the context: desk research and surveys with farmers and consumers

A farmer survey was carried out in Chebika and Enfidha regions. In total, 431 farms were surveyed. 243 farms belong to Enfidha, which is located in the Governorate of Sousse while the remaining 197 farms are from Chebika which in turn belongs to Kairouan governorate.

The sample shows that 89,1 % of the surveyed farmers are male. 31.1% of farmers are members of an association and 87,7 % have at least a primary educational level. Also, 92% of farmers are owners of their land.

This foodhub is traditionally made up of small farming systems with an average size of 6,74 ha. Figure 1 indicates the distribution of farming systems according to the size. Collected data shows that 65% of farming systems are less than 5 ha and large farms represent only 1,4%.

The results show that the main crop practiced in Enfidha/Chebika regions is olive tree, which is cultivated by 81,2% of farmers and account for almost 80% of the cultivated land. Cereals and vegetables mainly chilli pepper and tomato are cultivated by 16,5% of farmers. The remaining farmers (2,3%) cultivate vegetables (chickpea and broad bean) and other perennial trees like the pomegranate tree and citrus. Those crops are irrigated partially or totally relying on the amount and the distribution of the rainfall.



The distribution of farming systems by size.





58,9 % of farmers are not able to meet their household food needs because 81,5% get lower than average income.

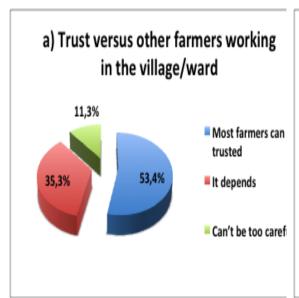
The household income is used totally to purchase food for 17,9% of the sample while 39,2% spent more than half of their income to cover farm cost as shown in the following table 1

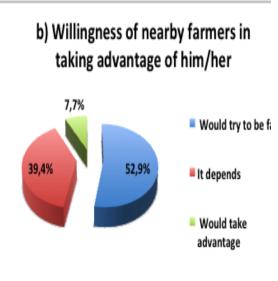
Share of the household income used to purchase food and to cover farm cost

row %	A very limited part (less than 25%)	Less than half (from 25% to 50%)	About half (50%)	More than half (from 50% to 75%)	Almost all (from 75% to 100%)	sum
spent on purchase food	15.3	29.5	22.0	15.3	17.9	100
used to cover farm cost	26.9	12.8	21.1	28.1	11.1	100

Relationship with nearby farmers.

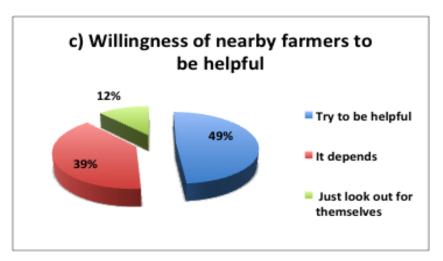
The following figure illustrates the relationship between farmers in the same village.











#### RELATHIONSHIP WITH NEARBY FARMERS

Collected data revealed that the farmers are equally divided between trust and carefulness of other farmers in the village. In fact, 53,4% of surveyed farmers affirms that most farmers can be trusted and 52,9 % tries to be fair.

Concerning the willingness of nearby farmers to be helpful, almost half of the sample (49%) think that nearby farmers are trying to be helpful while only 12% find them just look out for themselves.

## Propensity to innovation

Despite the risk involved by investing on innovations, more than half of the surveyed farmers (57.3%) are willing to try new ways of producing and only 14.6% prefer to avoid taking risks when it comes to managing their farm interests. The majority of farmers are also ready to adopt a new technology (74%) and 72,6% would voluntarily be one of the first in the village to introduce the presented technology. Also, Almost half of the sample (48,7%) thinks that most organizations promoting innovations in agriculture can be trusted.

#### Propensity to introduce new productions

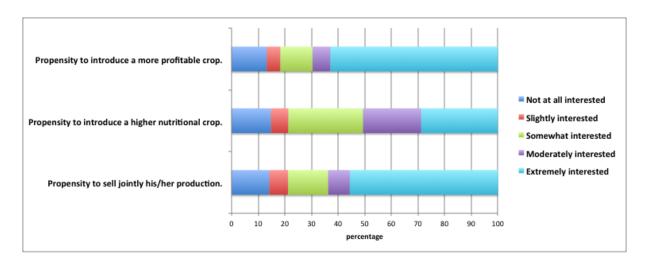
The surveyed farmers have a different behavior towards innovation and cooperation. Farmers are more interested in improving the viability of their farms than the nutritional





quality of their products. Figure 3 shows that 62,9% of farmers are extremely interested by introducing more profitable crops, while only 28% of farmers express moderate or no interest.

When it comes to selling their products on the market, 78% are interested in jointly selling their agricultural products.



The propensity of farmers to introduce new productions in their farms.

The survey allowed us to choose in an initial step the farmers associations that will be involved directly in the food hub.

The desk research on consumers' food behaviour and nutritional status in Tunisia is carried out within the framework of the FOODLAND project, the objectives of which are in line with the Sustainable Development Goals, mainly SDG-2.

Included research and papers are different regarding the type of design, samples and food consumption qualitative and quantitative indicators. However cross-sectional surveys are predominating (more than 90%). Main discussed topics were food consumption behaviour (in 60% of studies), about 36% of included papers discuss nutritional and diet quality, 32% involves obesity and overweight and only 14% analyses sustainability and environmental issues. Main findings show that in Tunisia, political, socio-economic and lifestyle changes, population growth, urbanisationand globalisationare significantly influencing diet and nutritional status. Actually, even if the Tunisian diet is considered as Mediterranean, between 1960 and 2000, the Mediterranean Adequacy Index (MAI) decreased from 4.67 to 2.65. Overweight, obesity and non-communicable diseases coexist with some micronutrient deficiencies. Obesity isincreasing with the index of household welfare growth, urbanisation and among women. Almost one fifth of men and one third of women over 18 years are obese. According to the different studies this prevalence is much higher in urban and coastal areas. Among children, stunting is residual, but overweight is a concern.





The introduction of the Western diet has affected the Tunisian food consumption pattern. Pizzas, hamburgers and soft drinks have been incorporated into the regular diet of children and adolescents. Food consumption transition in Tunisia is also characterised by a strong demand for meat, dairy products, sugar, fats and salt. Despite the decline in cereal consumption, cereals are still the staple food in the Tunisian diet. Indeed, there is a decrease in the consumption of wholegrain cereals and an increase in the refined ones. The consumption of vegetables and fruit remains moderate and is still above WHO recommendations.

In Tunisia, food security issues are essentially linked to the use and the (economic) access to food. Diet diversity is above average. There is no Protein-energy malnutrition but we can find vitamin and mineral deficiency especially iron deficiency in women. Generally, women have a lower Quality Diet Index score than men and higher energy intakes. According to the different studies, concerning selected food hubs, the northwest region (Jendouba) represents the second region with the highestcalories consumption and the lowest calcium intakes. Iron intakes are also low. Tunis (capital) has the best calcium and vitamin consumption and also a low consumption of iron. Finally, the centreeast presents the lowest protein intakes and a low calcium and iron intakes.

The main limits of this desk review were the lack of data in food-hub areas, particularly in rural areas. Even if a strong contrast in diet exists between urban and rural areas and between men and women, there is no sufficient information about food distribution inside the household. There are no studies and surveys about snacks and very few surveys including food waste.

The consumer survey and the experimental protocol are still in progress. The reason of the delay is related mainly to the COVID-19 sanitary situation in the country which obliged us to postpone several sessions with the intensification of the pandemic. However, the association of protection of consumers which is an active NGO in the Tunisian civil society has been contacted once more and they expressed their willingness to play an important role in the food hub particularly through awareness campaigns.

## b. Co-defining the core group/network

To ensure a gender balanced representation in the FH, we have chosen among farmers associations one GDA composed exclusively of women farmers in the region of Enfidha. Women are also well represented among the sample of producers as well as consumers. Moreover, the chief of the consumer's protection organization is a woman.



# .Stakeholder Mapping

ID (progressi ve number)	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Othercommen ts
1	ISACM	University of Sousse	Guidelines and material provider	Workshops and Bilateral Meetings	High	Providing scientific support to FH coordinators, Facilitation skills	No particular issues	Lear of ISACM
2	CRDA Sousse	Ministry of Agriculture	Advice, logistical and extension support	Workshops and Bilateral Meetings	High	Promoting investments and innovations to increase total factor productivity in agriculture	No particular issues	Commissioner of the CRDA of Sousse
3	CRDA Kairouan	Ministry of Agriculture	Advice, logistical and extension support	Workshops and Bilateral Meetings	High	Promoting investments and innovations to increase total factor productivity in agriculture	No particular issues	Commissioner of the CRDA of Kairouan
4	CTV Enfidha	CRDA Sousse	As an extension entity, its role is crucial in terms of disseminating innovations.	Workshops and Bilateral Meetings	High	Extension and dissemination of innovations are part of its prerogatives	No particular issues	CTV chief



ID (progressi ve number)	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Othercommen ts
5	CTV Chbika	CRDA Kairouan	As an extension entity, its role is crucial in terms of disseminating innovations.	Workshops and Bilateral Meetings	High	Extension and dissemination of innovations are part of its prerogatives	No particular issues	CTV chief
6	Coopérative de Services Agricoles (CSA) Chbika	Cooperativ e of agricultural services	Farmers' association	Workshops and Bilateral Meetings	High	Adopting the recommended innovations to increase their income	They ask for physical assistance in terms of providing equipments	The cooperative representative
7	Groupement de Développem ent Agricole (GDA) Slelma	CTV	Farmers' association	Workshops and Bilateral Meetings	High	Adopting the recommended innovations to increase their income	They ask for physical assistance in terms of providing equipments	Chief of the GDA
8	Groupement de Développem ent Agricole (GDA) MIelsa	CTV	Farmers' association	Workshops and Bilateral Meetings	High	Adopting the recommended innovations to increase their income	They ask for physical assistance in terms of providing equipments	Chief of the GDA
9	Groupement de Développem ent Agricole (GDA) Gefna	CTV	Farmers' association	Workshops and Bilateral Meetings	High	Adopting the recommended innovations to increase their income	They ask for physical assistance in terms of providing equipments	Chief of the GDA





ID (progressi ve number)	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Othercommen ts
10	Groupement de Développem ent Agricole (GDA) Kharroub	CTV	Farmers' association	Workshops and Bilateral Meetings	High	Adopting the recommended innovations to increase their income	They ask for physical assistance in terms of providing equipments	Chief of the GDA
11	Union Tunisienne de l'Agriculture et de la Pêche (UTAP) Sousse	NGO	Farmers' association	Workshops and Bilateral Meetings	High	Adopting the recommended innovations to increase their income	No particular issues	Regional representative
12	Union Tunisienne de l'Agriculture et de la Pêche (UTAP) Kairouan	NGO	Farmers' association	Workshops and Bilateral Meetings	High	Adopting the recommended innovations to increase their income	No particular issues	Regional representative
13	Groupement Interprofessi onnel des	Ministry of Agriculture	Producers' inter- Professional organisation	Workshops and Bilateral Meetings	High	Adopting the recommended innovations to	No particular issues	Regional representative





ID (progressi ve number)	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Othercommen ts
	Fruits (GIF) Kairouan					increase their income		
14	Organisation de la protection des Consommate urs (ODC) Sousse	NGO	Consumers' protection organisation	Workshops and Bilateral Meetings	High	Improve consumers welfare	No particular issues	Director of the ODC



## c. Co-defining the structure

VISION	The main vision related to the Food Hub creation of Chebikha and Enfidha is to create a sustainable "institution" composed of all the stakeholders involved in the value chains of selected agrifood products and having mutual interests. The latter will be the main factor of success and sustainability of the FH.
MISSION	The Food hub of Chebika and Enfidha has at least two missions:  - In the short run introducing the innovations recommended by the FOODLAND project and understand the determinants of their adoption. This phase is crucial to ensure meeting the interests of all the FH participants.  - In the long run, allowing local producers and all the stakeholders of the value chains to adjust their production choices and factors combinations according to the new technologies and new opportunities.
OBJECTIVE	The main objective is to increase the flexibility of the Tunisian agrifood sector and value chains through the dissemination of innovations. A more flexible agrifood sector is likely to increase the ability of the different stakeholders to benefit from the new opportunities and innovations and at the same time allow the whole economy to be less vulnerable against the different economic shocks related to the internal and external threats. Consequently, the welfare of all the producers and consumers will increase.

# d. Co-defining "good governance principles"

PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Participation, Representation, Fair Conduct of Elections  Responsiveness	Are the FH members guaranteed equal participation and representation in the FH decision-making process? How are FH coordinators elected and roles assigned? Is the gender balance considered?  Are the FH Objectives, rules, structures, and procedures adapted to the legitimate expectations and needs	These points will be discussed after the general meeting with all the participants. However, each stakeholder is free to nominate a coordinator who will have one voice in the decision taking.  The composition of the FH in which all the interests of the participants are met ensures that it will respond to the
Efficiency and Effectiveness	of the FH actors?  Are the planned results and objective aligned? Are the resources available for the implementation and setting up of the FH used in the best possible way?	real needs and expectations.  The planned results and objective are aligned. However, at this stage, we cannot judge about the likely efficiency of the resource use.
Openness and Transparency	How are/will be decisions taken within the FH? How are decisions made available to the FH members and the public?	The decisions within the FH are taken after consultation with all the stakeholders and participants. They are made available via the involved associations and organization such as: CTV of Chebika and CTV of Enfidha which are responsible of the extension activities
Rule of Law	Are FH internal rules and regulations are adopted in accordance with procedures provided for by law?	Yes



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Ethical Conduct	How are conflict of interests within the FH internal governance tackled?	If a possible conflict of interests emerges, it will be treated by negotiations
Competence and Capacity	How the competence and capacity to act of the FH coordinators is maintained and strengthened?	The competence and capacity of the FH coordinators will be maintained
Innovation and Openness to Change	How are results shared with other FHs?	Through the organization of field days or via the extension services of the Ministry of Agriculture as well as UTAP (Farmers union which is a national syndicate).
Sustainability and Long-term Orientation	How is the FH sustainability guaranteed?	The FH sustainability will be guaranteed if all the stakeholders will benefit and will be convinced with the relevance of the FH creation.
Sound Financial Management	How are annual budget and investments of the FH prepared and deliberated?	It should be discussed with all the involved stakeholders
Human rights, Cultural Diversity and Social Cohesion	How are human rights, cultural diversity and social cohesion fostered and guaranteed within the FH?	Human rights, cultural diversity and social Cohesion are ensured because the Tunisian society is homogeneous.
Accountability	How are responsibility roles defined within the FH? How are decisions reported and sanctioned? How are conflicts between FH actors mitigated?	Responsibility roles within the FH, mitigating conflicts etc should be discussed and agreed on by all the involved stakeholders.

# e. Co-defining roles and responsibilities

STAKEHOLDER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES
1	Scientific and technical support	Scientific support to the FH members and main source of innovations
2	Provide the logistical and technical support	Dissemination of new technologies
3	Provide the logistical and technical support	Dissemination of new technologies
4	Provide technical assistance and trainings	Dissemination of new technologies
5	Provide technical assistance and trainings	Dissemination of new technologies
6	FH member and participation in the field experiments	Participation in FH activities, dissemination of the tested technologies
7	Field of innovation testing and adoption by farmers	Participation in FH activities, dissemination of the tested technologies
8	Field of innovation testing and adoption by farmers	Participation in FH activities, dissemination of the tested technologies



STAKEHOLDER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES
9	Field of innovation testing and adoption by farmers	Participation in FH activities, dissemination of the tested technologies
10	Field of innovation testing and adoption by farmers	Participation in FH activities, dissemination of the tested technologies
11	FH member participationg to the decision	As a strong farmers' union, it should participate to the dissemination of new technologies
12	FH member participationg to the decision	As a strong farmers' union, it should participate to the dissemination of new technologies
13	Provide logistics and technical support and participate to the decision making	Inform and disseminate new technologies
14	Dissemination and interaction with the consumers	Communication and building the trust between the FH and consumers

# h. Identifying challenges (and appropriate mitigation measures)

Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Identifying needs/pro ductions characteri stics/mana gement tools	Internal: Technica I	The needs of the FH in terms of energies, management tools could not be defined with high specification which increase the unpredictable obstacles	Lack of special studies	Medium	Pre production	A maximum of community studies and observation through the universities' contacts. A maximum of visits and meetings on the field work



Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Identifying the commercia lization strategy of the FH	Internal: Commer cial and related to marketin g	The identification of the commercial strategy of the FH could be complicated as the economic model is not habitual and needs specific considerations	Lack of previous similar experienc es Unknown responsiv eness of the market	Medium	Pre production	Studying the local and national market in relation with the FH main activities. Using the sample study method.
Coordinati on between partners	Internal: Related to communi cation and Coordina tion	The big number of partners and stakeholders with different characterizations and natures complicate the synchronisation and the coordination of activities	Project nature	High	All phases	Increasing the number of meetings + Organising steering committees in order to keep continuous communication
Human Resources	Internal: Related to human resource s	The needs of the FH in terms of qualified human resources may be very specific and hard to be found.	The specificati on of the activities and the context	High	All phases	Continued trainings and internship



Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Level of credibility	internal and external	the FH needs to prove not only trust worthiness but also reliability and security of functioning as it is a first experience.	lack of similar experienc es and lack of tangible functionin g proofs.	Medium	Pre production	to build trust through deploying a brand of trust internally and this would be reflected externally. Maximising the implication of public institutions.
Instability of prices and inflation	External: Economi c	The instability of prices make prevision difficult	National economic instability	Low	Pre production + Post production	Considering the higher average of prices.
Economic crises	External: Economi c	Economic crises are very frequent in Tunisia	National economic instability	Medium	Pre production + Post production	Work out with stock consideration
Variable regulations and laws	External: Political/I egal	Laws are changing with government changing in the country (especially laws related to commercializat ion of vital product)	Socio- political instability	Medium	Post production	Being updated to contextual changes
Security restrictions	External: Related to security	The village where the FH is implemented could be subject of security restrictions as it is a country border zone	Socio- political instability	Low	All phases	



## i. Open innovation strategy

The innovation strategy in Enfidha and Chebikha should focus on overcoming the main problems encountered by all the stakeholders following a participatory approach. Among these problems we can find water availability and water saving techniques, innovative horticulture systems using mulching and techniques and a food-dryer tool. However, the success of all these innovations depends on their adoptions by farmers. In this context, an important work on the behaviors of farmers and particularly the determinants of their adoptions through statistical and econometric studies should increase the probability of success of all the FH.

The FOODLAND innovations inside and outside the Food Hubs will be spread through an effective dissemination strategy which will create new institutional and commercial networks.



# Annex 3 – Mvomero and Kilombero Districts (Tanzania)

#### Introduction

The EU-funded, multi-country research and development initiative **FoodLAND** (**Food and Local, Agricultural, and Nutritional Diversity**) aims at strengthening agrobiodiversity and food diversity, along with increased diversity of healthy diets to combat the major forms of malnutrition in selected areas of the six countries involved.

In Tanzania, the Sokoine University of Agriculture (SUA) and HELVETAS Swiss Intercooperation as FoodLAND consortium members are implementing the project in the two districts of Mvomero and Kilombero in Morogoro region. The FoodLAND project is split into different work packages whereby Work package 3 foresees **Establishment of Food Hubs** among other things.

Food hubs entail a community of local actors and stakeholders aimed at making shared R&D decisions and enabling the adoption of innovations related to food production, processing, marketing, and consumption. Food hubs are expected to offer members a convenient platform for reflection and to exchange ideas and information on food and nutrition geared towards addressing adverse social economic environment conditions faced by farmers/food producers, processors, traders, and local government authorities as well as consumers throughout the whole food chain. Concerning the latter, the food hubs will also reach out to consumers in far off urban centres thereby establishing the links between rural and urban areas. In Tanzania, two food hubs are being formed, one in each in the districts of **Mvomero and Kilombero** (Kilombero district has been split into two councils: Ifakara town council (TC) and Kilombero district council; the food hub will be formed in Ifakara TC where most of the fishing activities are taking place). Objectives

To strengthen communication and learning among and between different stakeholders in the food value chain including farmers, food processors, governmental and private service providers, agro-dealers, NGOs, extension workers and policy makers, with the aim:

- To bridge the gap between food production and consumption
- To facilitate in the fields of food security, nutrition and food safety capacity building and learning innovation to members of the hubs and further actors in the food value chain
- To build coalition, create synergy and strengthen common voice to advocate for the interest of members on issues of food value chain and nutrition
- To promote entrepreneurship around the food hubs, thereby creating conditions for increased food security, improved nutrition and food safety, and effective commercialization of agreed products
- To create a platform where research is linked to development, where stakeholders identify research and training needs, and where innovations are brought to the community for use, testing and validation.

Food hub formation process and schedule





## Development of the food hub concept and manifesto

To start the process HELVETAS in August 2021 prepared an internal concept note drawing a picture and guide on the establishment of the food hubs in Tanzania. The concept note highlighted the objectives, participants/ target group, methodology, costs and resource mobilization (concept note attached as Annex 1). The concept then led to the development of the food hub manifesto (attached as Annex 2). This manifesto was developed as part of brainstorming steps and ways towards establishment of foods hubs. At this point the whole idea was put together to guide the process. It was then presented on October 1<sup>st</sup> and 20<sup>th</sup> 2021 in Ifakara and Mvomero respectively to the partners, i.e. the district council authorities, discussed, and agreed on the way forward towards the formation of the food hub.

Steps towards establishment of food hubs and achievements

Field visits, sensitisation, and information collection

In October 2021, HELVETAS together with SUA conducted a field visit to the regional office in Morogoro town and to the two district councils (Mvomero and Ifakara TC). The aim of the visits was to sensitize and sell the food hub manifesto to the local government officials. A total of 10 persons (2 HELVETAS staff, 2 SUA staff, 1 staff from the regional administrative office, 1 staff from Ifakara TC and 4 staff from Mvomero district) participated. Apart from informing and sensitizing the authorities, the team also managed to collect information on the existing platforms, available stakeholders and the district strategic plan.

The main observation from the discussion was the sustainability of the food hubs. It was mentioned that the previous value chain platforms failed because there were no funds allocated to support activities of the platform. Platforms will be active only if there is a project supporting its functioning. Otherwise, too often than not, platforms die once an initiative phases out. Hence, sustainability becomes key in setting up the platforms as the proposed food hubs. On the other hand, town and district councils have tools and resources, albeit limited, which would allow running such platforms, provided their need and usefulness is recognized by the directly concerned stakeholders (for more detail, see the attached FH diary – Annex 3).

Nevertheless, HELVETAS would like to apply for EUR 15'000/- (fifteen thousand Euro only/-) from FoodLAND as operational budget provided to the two food hub convenors to organise, convene and hold food hub meetings on a regular base, i.e. once in a quarter.

Mapping of existing platforms and their roles

In each district there are already existing agriculture platforms (postharvest management platforms and others). With support from the office of the District Agriculture Irrigation and Cooperative Officer (DAICO) the team gathered information regarding the available





agriculture platforms and their functions. It was agreed that the identified bodies be extended towards forming a food hub. Such an approach will help in making the food hubs sustainable and avoid duplication of efforts and resources. Two existing agriculture platforms were identified in the two districts. In Mvomero, it was agreed that the agriculture multi-stakeholder platform for farming season will be used, while in Kilombero the multi-stakeholder postharvest management platform will be "revived".

Identification of stakeholders and create stakeholders profile sheet

In collaboration with the DAICO's office, potential individuals, organizations, associations, farmer groups that are already in the network were identified to create a group of key stakeholders and to co-define roles and responsibilities. At any later stage, additional stakeholders can be included for specific tasks or activities. The identified stakeholders were contacted and invited to attend the 1<sup>st</sup> meeting scheduled to be held on 18<sup>th</sup> January 2022 in Mvomero and 20<sup>th</sup> January 2022 in Ifakara. Prospective members will be sensitized to voluntarily become member of the food hub. Contacts and addresses will be collected to establish their profiles (List of stakeholders mapped attached as Annex 4 and 5)

#### Communication and branding

Food hubs, respectively their members will produce learning flyers, posters and banners that will be communicating nutrition messages, innovations, etc. Success stories and lessons learned will be documented and shared within and outside the food hub through different communication channels (meetings, newsletter, conferences, etc.). The communication language will be Swahili, the language understood and spoken by majority in the food hub.

Learning and monitoring of the food hubs

Throughout the implementation there will be monitoring with periodic reporting of activities and technical backstopping to detect any challenges that food hub members might encounter and to tackle these challenges by looking for respective solutions.

Members of the food hub

- Public and private actors in the food value chain operating in the districts and from urban centres with links to the districts.
- Farmer/producer representatives, consumers representatives, processors/producers of novel local food products, (ranging from fresh, dried, and processed vegetables and fish to composite flours and therapeutic foods), transporters,





government representatives, research institutions (SUA), NGO, CBO, agro-input suppliers, financial institutions as well as nutrition and health experts.

Preparations for 1st food hub meetings

HELVETAS has been supporting the DAICOs in two districts to organize the first food hub meetings in Mvomero and Ifakara town council. At this step, DAICO's office is in charge for all preparations, while SUA and HELVETAS support the process and logistics. The 1<sup>st</sup> food hub meetings are scheduled on 18<sup>th</sup> January 2022 in Mvomero district and on 20<sup>th</sup> January 2022 in Ifakara town council. The plan for the 1<sup>st</sup> food hub meetings is attached as annex 6.

Food hub kick-off meeting with stakeholders in Mvomero

On 7<sup>th</sup> February 2022, HELVETAS and SUA supported the DAICO's office in Mvomero to organise and conduct the 1<sup>st</sup> food hub meeting in the district. A total of 94 food value chain stakeholders attended the meeting, which was officiated by the Mvomero District Commissioner who insisted on the importance of having the food hub at the district level, since it will act as a governing organ for all food value chain issues. The main objective of the meeting was to sensitise the food value chain stakeholders on the formation of the food hub. After the presentation of the food hub idea and the proposed concept by HELVETAS and SUA, which was followed by a discussion, stakeholders agreed that to set up such a food hub at Mvomero. They formed a task force which will work on the Terms of Reference, the structure and the mode of operation of the food hub. TOR, structure and the mode of operational will be refined and approved during the next meeting, where also the leaders for the food hub will be elected.

Discussion: observations and challenges

From the field visits conducted and through close communication with the district officials the following challenges were observed.

- Difficulty to convey food hub idea and concept to partners, including the links to the R&D work of SUA
- Difficulty to engage partners and encourage them to take the (self-) initiative
- Partners lack resources to e.g., convene food hub meetings and cover costs of participants (some food/lunch, transport); these costs have also not been budgeted by HELVETAS, because at time of planning and budgeting there was also from the project's side quite some unclarity/uncertainty about the food hub concept
- Due to listed gaps, implementation of food hub concept is slow

#### Recommendations

• We propose some additional budget to HELVETAS for food hub convenors (number of meetings x participants x cost per person) see also concept note attached





- Food hubs should be made simple and affordable, possibly extend from the existing value chain platforms
- For sustainability, food hubs should work on challenges along the value chain such as markets, crop levy, cost for agriculture inputs, transport and technology, etc. Plan for next Quarter

S/No	Activity	Time frame
1	Conduct 1st food hub meetings	February 2022
2	Formalization procedures of the food hub Identifying the formalization procedure Drafting of the Memorandum of Understanding (MOU)	February/March 2022
3	Preparations for the 2 <sup>nd</sup> food hub meetings	March/April 2022



#### Establishment of Food Hubs in Tanzania under the FoodLAND Initiative

## **Concept Note**

#### Introduction

HELVETAS Swiss Intercooperation is a member of the consortium implementing the EU-funded, multi-country research and development initiative **FoodLAND** (**Food and Local, Agricultural, and Nutritional Diversity**). The aim of the project is to strengthen agrobiodiversity and food diversity, along with increased diversity of healthy diets to combat the major forms of malnutrition in the selected areas. As FoodLAND member, HELVETAS supports the Sokoine University of Agriculture (SUA) in the implementation of the project in Tanzania in two districts of Mvomero and Kilombero within the region of Morogoro. The FoodLAND project is split into different work packages.

Work package 3 foresees Establishment of Food Hubs among other things. The planned two food hubs in the districts of Mvomero and Kilombero are seen as multi-stakeholder platforms of local food chain actors to exchange on food production and processing, food security and safety, nutrition, etc. and to serve as a sounding board for food related innovations and networking. Hence, the food hubs are expected to offer members a convenient platform for reflection and exchanging ideas and information on food and nutrition geared towards addressing adverse social economic environment conditions faced by farmers/food producers, processors, traders and local government authorities in rural areas as well as local and urban consumers in the whole food chain. Concerning the latter, the food hubs will also reach out to consumers in urban centres.

#### Objectives (of initiative related to food hubs)

- To strengthen communication and learning among and between different stakeholders in the food value chain including farmers, food processors, service providers, agro-dealers, NGOs, extension, policy makers, and others and to bridge the gap between food production and consumption
- To facilitate in the fields of food security, nutrition and food safety capacity building and learning innovation to members of the hubs and further actors in the food value chain
- To build coalition, create synergy and strengthen common voice to advocate for the interest of members on issues of food value chain and nutrition
- To promote entrepreneurship in the area of the food hubs and thereby creating conditions for increased food security, improved nutrition and food safety, and effective commercialization of agreed products.

#### **Key outputs**

- The food hub members/stakeholders in each district are identified
- Kick-off meeting of all stakeholders to:
  - Discuss and understand the food hub concept and its benefits
  - Develop the Terms of Reference and mode of operation of the hub





- Identify key areas of collaboration identified
- The food hubs have developed/approved their operating rules
- The food hub representatives meet quarterly or as agreed
- The food hubs identify and discuss food and nutrition related challenges and suggest and support food value chain actors in addressing these challenges
- The food hubs maintain close relationships with research institutions (SUA) to participate in and contribute to the latter's research and development activities

## Expected participants/ target group

- Public and private actors operating in the districts or linked to the districts
- Farmer/producer representatives, consumers representatives, processors/producers of novel local food products, (ranging from fresh, dried and processed vegetables and fish to composite flours and therapeutic foods), transporters, government representatives, research institutions (SUA), NGO, CBO, agro-input suppliers, financial institutions
- The two district level food hubs are coordinated under and convened by the District Agriculture, Irrigation and Cooperatives Offices (DAICO)

#### Methodology

The hubs are seen as sort of district-level working groups. Each district (Kilombero, Mvomero) will establish its own Food Hub by strengthening existing platforms at the two District Agriculture, Irrigation and Cooperatives Offices (DAICO). There are already existing platforms on postharvest management established by the Ministry of Agriculture, which can be extended by the DAICO to general food and nutrition (related) platforms. HELVETAS will support the DAICO in identifying key food hub members and facilitate the first meeting. During this kick-off meeting, project objective and food hub concept will be shared. Participants will be invited to ask questions and to share their observations and ideas.

This will later be followed by selection of key leaders such as chairperson and secretary to ensure smooth running of the hub, customise it to the local context and strengthen ownership.

Members will define key areas to work upon and general modality for their engagement. Hence, they will sign a Memorandum of Understanding (MOU) for clear roles and mandate.

## Please note:

- Although HELVETAS will take up the role of facilitator and contribute to the agenda of the food hubs, the two district-level hubs need their own convenors to keep the platforms going.
- HELVETAS propose working closely with the DAICO as part of building the capacity in managing the hub. During food hub meetings, HELVETAS, together with SUA and further food chain actors, will also provide technical inputs.
- Considering coordination of actors is within the mandate of DAICO and local government authorities, the proposed idea to place the food hubs at the DAICO fits well.





Preliminary discussion has been conducted with DAICO office to see their readiness to take up this initiative.

#### Cost and resource mobilization.

The food hub is a not-for-profit platform, and its members/representatives participate on a voluntary basis. Hence, the hubs' operations will mainly depend on the members' voluntarism and on the coordination by the DAICO. Nevertheless, some minimal costs will occur and must be covered to ensure a smooth functioning of the hubs. Costs and costs sharing are as follows:

- For the food hub meetings, the District Executive Director/DAICO office are to facilitate invitations, identification of stakeholders/invitees and arrange for logistics. As part of the general DAICO work, this administrative-logistics work is done by the DAICO.
  - Food hub meetings are expected to be conducted quarterly (4 times per year);

(24 meetings (12 quarters x 2 districts) for the remaining period of FoodLAND)

- Expected number of participants per district is 50.
- Participants/invited members attending the hub meetings organise themselves.
- For each meeting, an amount of EUR 10/- per participant shall be budgeted (see table below), whereby this amount is split in a contribution to the travel expenses (EUR 4/-) and to venue and refreshment (EUR 6/-).
- During the project life span, HELVETAS will work closely with DAICO to ensure the agreed action points are taken care and there is ownership of the process by the districts. For that, HELVETAS will appoint a staff or consultant as liaison person to the two DAICO. Budget for this person is available under HELVETAS' FoodLAND budget.



#### Challenges

- During the planning of the FoodLAND project, idea, concept and detailed implementation steps for the food hubs were not entirely clear to the project's consortium members. With the gained clarity, implementation may take off; however, a few issues and challenges remain which need to be addressed:
- Platforms and platform meetings as suggested for the food hubs come with some price tag, for which budget is required (see above amount of <u>EUR 15,000/-</u>). The budget of HELVETAS includes staff and travel costs only (for training and facilitation), but no operational costs for the food hubs. Hence, respective budgets for the operational costs must therefore come from SUA or some additional budget from FoodLAND would have to be sought.
- Roles and tasks between HELVETAS and the two other FoodLAND members in Tanzania, SUA and Katundu Traders, concerning the food hubs will require further clarification, though this can be done in a tripartite meeting

Dodoma, 5th August 2021

# MANIFESTO TOWARDS ESTABLISHMENT OF FOOD HUBS IN MVOMERO AND KILOMBERO DISTRICTS OF MOROGORO REGION, TANZANIA

#### Introduction

The EU-funded, multi-country research and development initiative **FoodLAND** (**Food and Local, Agricultural, and Nutritional Diversity**) aims at strengthening agrobiodiversity and food diversity, along with increased diversity of healthy diets to combat the major forms of malnutrition in the selected areas. In Tanzania, the Sokoine University of Agriculture (SUA) and HELVETAS Swiss Intercooperation as FoodLAND consortium members are implementing the project in the two districts of Mvomero and Kilombero in Morogoro region. The FoodLAND project is split into different work packages whereby Work package 3 foresees **Establishment of Food Hubs** among other things.

Food hubs entail a community of local operators aimed at making shared R&D decisions and enabling the adoption of innovations related to food production, processing, marketing and consumption. Food hubs are expected to offer members a convenient platform for reflection and exchanging ideas and information on food and nutrition geared towards addressing adverse social economic environment conditions faced by farmers/food producers, processors, traders and local government authorities as well as consumers in the whole food chain. Concerning the latter, the food hubs will also reach out to consumers in far off urban centres thereby establishing the links between rural and urban areas. In Tanzania two food hubs will be formed, that is one in each of the districts of **Mvomero and Kilombero** with a link to Morogoro town.



This manifesto, therefore, shows the objectives, steps and approaches towards the establishment of the food hubs in these two districts. It suggests for potential stakeholders and proposes TOR for the food hubs to be set up and become functional. **Objectives** 

 To strengthen communication and learning among and between different stakeholders in the food value chain including farmers, food processors, service

providers, agro-dealers, NGOs, extension workers, policy makers, and others

- To bridge the gap between food production and consumption
- To facilitate in the fields of food security, nutrition and food safety capacity building and learning innovation to members of the hubs and further actors in the food value chain
- To build coalition, create synergy and strengthen common voice to advocate for the interest of members on issues of food value chain and nutrition
- To promote entrepreneurship in the area of the food hubs, thereby creating conditions for increased food security, improved nutrition and food safety, and effective commercialization of agreed products.
- Create a platform where the research is linked to development, where researchers identify research and training needs, and where innovations are brought to the community for use, testing and validation.

## Steps towards establishment of food hubs

- 1. Co-defining of roles and responsibilities of the food hubs In collaboration with the DAICO and the food stakeholders, the roles and responsibilities of the concerned food hub members will be defined, which will go hand in hand with defining criteria for the identification, selection and involvement of food hub actors.
- 2. Mapping of existing platforms and their roles In each district there are already existing agriculture platforms (postharvest platforms and others). With support from the DAICO's office the project will gather information regarding the available agriculture platforms and their functions and see if the identified bodies can be extended towards forming a food hub. Such an approach will help in making the food hubs sustainable and avoid duplication of efforts and resources.
- 3. Identification of stakeholders and create stakeholders profile sheet In collaboration with the DAICO's office, potential individuals, organizations, associations, farmer groups that are already in the network will be identified to create a group of key stable stakeholders and to co-define roles and responsibilities. Additional stakeholders will be included for specific tasks or activities. The identified stakeholders will then be contacted and if possible, visited and sensitized on the goals and roles of food hubs, individually, in groups and through the mapped existing platforms. Prospective members will be sensitized to voluntarily be interested in joining the group. Contacts and addresses will be collected to establish stakeholder's profile.
- 4. Preparations for 1<sup>st</sup> food hub meeting
  HELVETAS and SUA will support DAICO to organize the first meeting. At this step, the
  DAICO's office will be in charge for all preparations, while SUA and HELVETAS will
  support the process and logistics. Preparations will include date, venue, agenda and





invitations as well as the preparation of presentations and the guidance through discussions. The draft TOR will be discussed in the meeting and adopted, as the TOR will be included in the MOU for the leaders to sign. During this meeting each stakeholder will be assigned a role to lead and report. Preparations also will include defining the structure of the food hub, data capture and future functioning, ideally quarterly exchanges at district level.

Communication and branding

Food hubs, respectively their members will produce learning flyers, posters and banners that will be communicating nutrition messages, innovations etc. Success stories and lessons learned will be documented and shared within and outside the food hub through different communication channels (meetings, newsletter, conferences, etc.). The communication language will be Swahili, the language understood and spoken by majority in the food hub. Translation of major products is possible

6. Learning and monitoring of the food hubs

Throughout the implementation there will be monitoring with periodic reporting of activities and technical backstopping to detect any challenges that food hub members might encounter and to tackle these challenges by looking for respective solutions.

#### Members of the food hub

- Public and private actors in the food value chain operating in the districts and from urban centres with links to the districts.
- Farmer/producer representatives, consumers representatives, processors/producers of novel local food products, (ranging from fresh, dried and processed vegetables and fish to composite flours and therapeutic foods), transporters, government representatives, research institutions (SUA), NGO, CBO, agro-input suppliers, financial institutions and Nutrition and health experts.

#### **Draft TOR for food hubs**

#### DAICO

- 1. Ensure food hubs are formed
- 2. Link food hubs and the District Management team (to enhance decision making)
- 3. Be the convenor and secretary of the food hub
- 4. Organize quarterly food hub meetings
- 5. Ensure sustainability of the platform
- 6. Coordinate government departments within the district to ensure implementation of the action points identified during meetings.

## Food hub members

- 1. Share experience and identify key challenges in the value chain that need to be discussed and come up with doable solutions
- 2. Use technologies and agronomic practices identified by researchers
- 3. Test innovations at field level and share results and experience of what works well
- 4. Strengthen the nutrition-responsive agro-biodiversity and food diversity in the community
- 5. Attend meetings as planned





- 6. Aggregate to develop or enhance the organizational, technological, cultural, and operational conditions enabling local food supply chains improvement Research institutes
- 1. Identify training needs and provide to local smallholder farmers and food processors knowledge and conditions about the environmental challenges
- 2. Develop, test and validate several technological innovations (including new tools, processes and products) together with local smallholder farmers and processors.

## Food Hub diary - Mvomero and Kilombero food hubs

#### FH process schedule

The following table shows the activities/meetings that have been undertaken and those planned for the future. Below is the description of each activity.

Planned schedule. Activities to be organized are written in red.

FH phases	Chapter	Activity description	Scheduled month
FH design	1	Bilateral meeting with Tanzania food hubs partners	Done August 2021
FH design	2	Manifesto development	Done October 2021
FH formation	3	Meeting with local authorities (regional and district government authorities)	Done October 2021
	4	Preparatory activities for the food hub meetings	Done November and December 2021
FH	5	1 <sup>st</sup> FH meetings (Mvomero and Ifakara TC/ Kilombero	Scheduled. January 2022
formation	6	Drafting of the Memorandum of Understanding	Scheduled. February 2022
	7	Preparations for the 2 <sup>nd</sup> food hub meetings	Scheduled. May 2022

#### **Description of the activities**

ACTIVITY 1: Bilateral meeting with Tanzania food hubs partners (August 2021)

**ACTIVITY 2:** Manifesto development (see Annex 2)

**ACTIVITY 3:** Meeting with local authorities (Regional and district government authorities)

Goal: To Introduce the Food hub idea and mapping of existing platforms

<u>Participants</u>: Agnes Mahembe (HELVETAS), Felix Bachmann (HELVETAS), Suzan Nchimbi (SUA), Fulgence Mishili (SUA), Mrs Rwegasira (Assistant Administrative Secretary Economic (AAS - E), Hoff Mwaikaje (TAICO Ifakara town council), Rehema Mhelule (Acting DAICO Mvomero district), Mr. Mihayo Lukayo (District cooperative officer Mvomero)

<u>Discussion</u>: Before visiting the two districts the team made a courtesy call to the regional offices and managed to meet the Assistant Regional Administrative Secretary responsible for economics who is also in charge of agriculture issues in the region. The team managed to





introduce the food hub idea and shared the manifesto. Thereafter, the team visited Mvomero and Ifakara town council where it managed to discuss in detail the manifesto. Points discussed and concluded:

Previous value chain platforms failed because there were no funds allocated to support activities of the platform, including meetings. Platforms will be active only if there is project support. Once the project phases out, there is the risk the platforms die out (sustainability!).

Food hubs should be made simple and affordable; a promising avenue is to link it to already existing (food & agriculture-based) value chain platforms

For sustainability, food hubs should work on challenges along the value chain such as markets, crop levy, cost for agriculture inputs, transport and technology, etc.

It was suggested that at the beginning the project looks at ways on how it can support the food hub meetings financially, while later on it shall be explored how the meeting costs can be incorporated in the councils' budgets, similar to the District Nutrition Multisectoral Committee Achievements:

The authorities in both districts were positive and ready to form food hubs in their districts They pointed out opportunities that will make the food hubs becoming sustainable <u>Commitments</u>:

Local authorities are ready to make sure that the food hubs are formed and sustained Planning meetings for FH meetings scheduled

**ACTIVITY 4:** Preparatory activities for the food hub meetings

<u>Goal</u>: To identify key stakeholders available and map existing platforms and opportunities towards establishment of the food hubs

<u>Participants</u>: Agricultural officers from the councils and representative from HELVETAS Achievements:

Managed to identify stakeholders in the value chain

Analysed the existing platforms that can be adopted and improved to form a food hub Developed a plan towards 1<sup>st</sup> food hub meetings

New commitments:  $1^{st}$  food hub meetings planned to be conducted between  $17^{th} - 20^{th}$  January 2022

**ACTIVITY 5:** 1st FH meetings (Activity plan and program attached – Annex 6)

**ACTIVITY 6:** Drafting the Memorandum of Understanding (MOU)

During this period a draft MOU will be developed and shared among stakeholders for inputs and familiarization. The draft will be shared to SUA then to the district authorities for review. Once every partner has agreed it is expected the MOU to be signed in the first half 2022

**ACTIVITY 7:** Preparations for the 2<sup>nd</sup> food hub meetings

With reference to the minutes from the 1<sup>st</sup>food hub meetings, HELVETAS will be supporting the district authorities to prepare for the 2<sup>nd</sup> meeting referring to the way forward agreed during the last meeting





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
1	Dakawa Amcos	None	Cooperative group	None	Member	Rice production	High	Networking	formal involvement	Expected to be good
2	Kweuma Amcos	None	Cooperative group	None	Member	Cocoa producers and sellers	High	Networking	formal involvement	Expected to be good
3	Mhonda juu Amcos	None	Cooperative group	None	Member	Cocoa producers and sellers	High	Networking	formal involvement	Expected to be good
4	Tuco pricos	None	Farmers group	Mtibwa sugar company	Member	Sugarcane growers	High	Networking	formal involvement	Expected to be good
5	Uwawakuda	None	Farmers group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
6	Mvomero Amcos	None	Cooperative group	None	Member	Maize producers	High	Networking	formal involvement	Expected to be good
7	Nasugulani group	None	Farmers group	None	Mamber	Coffee growers	High	Networking	formal involvement	Expected to be good
8	Nyalutchek	None	Farmers group	None	Member	Coffee producers and sellers	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
9	Vianze	None	Farmers group	None	Member	Maize producers	High	Networking	formal involvement	Expected to be good
10	Nei extract industries LTD	None	Farmers group	None	Member	Vanila producers and sellers	High	Networking	formal involvement	Expected to be good
11	Meru AgroTours &consultancy	None	Agrodeller	None	Member	Seed producers and sellers	High	Networking	formal involvement	Expected to be good
12	Twawose Nyandira,	None	Farmers group	None	Member	Milk producers and sellers	High	Networking	formal involvement	Expected to be good
13	Newan'ganyi wami sokoine	None	Farmers group	None	Member	Milk producers and sellers	High	Networking	formal involvement	Expected to be good
14	Umoja wa wanawake wauza maziwa wami dakawa	None	Farmers group	None	Member	Milk producers and sellers	High	Networking	formal involvement	Expected to be good
15	Kikundi cha wazalishaji na	None	Farmers group	None	Member	Milk producers and sellers	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
	wauzaji maziwa diongoya									
16	Kambala mshikamano	None	Farmers group	None	Member	Milk producers	High	Networking	formal involvement	Expected to be good
17	Namayana mangae	None	Farmers group	None	Member	Milk sellers	High	Networking	formal involvement	Expected to be good
18	Wafugaji wa samaki Hembeti	None	Farmers group	None	Member	Fish producers	High	Networking	formal involvement	Expected to be good
19	Umoja wa wafugaji wa kuku mkindo	None	Farmers group	None	Member	Chicken producers	High	Networking	formal involvement	Expected to be good
20	Heifer project	None	Project	None	Member	Cow loan	High	Networking	formal involvement	Expected to be good
21	Lishe endelevu	None	Project	USAID	Member	Nutrition education	High	Networking	formal involvement	Expected to be good
22	TAHA	None	NGO	None	Member	Extension services on vegetables production	High	Networking	formal involvement	Expected to be good
23	SAT	None	NGO	None	Member	Organic farming	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
24	ADRA/RIPAT SUA vikundi vya wakulima/wafugaji	None	Farmers group	SUA	Member	Extension services and market finding	High	Networking	formal involvement	Expected to be good
25	Mboga na matunda	None	Project	USAID	Member	Vegetable and fruits production and market searching	High	Networking	formal involvement	Expected to be good
26	SNV	None	NGO	None	Member	Sunflower production	High	Networking	formal involvement	Expected to be good
27	TAP- ACT	None	NGO	None	Member	Agriculture partners	High	Networking	formal involvement	Expected to be good
28	NAFAKA	None	project	USAID	Member	Support in rice production	High	Networking	formal involvement	Expected to be good
29	MVIWATA	None	Farmer's network	None	Member	Connecting farmers groups	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
30	WORLD VISION	None	NGO	None	Member	Farming education to farmers	High	Networking	formal involvement	Expected to be good
31	WOPATA	None	NGO	None	Member	Cereals post- harvest storage	High	Networking	formal involvement	Expected to be good
32	CHOLIMA	None	Research institute	Government institute	Member	Research on rice	High	Networking	formal involvement	Expected to be good
33	RIU	None	NGO	None	Member	Research into use	High	Networking	formal involvement	Expected to be good
34	ASA	None	Gov. agency	Government agency	Member	Seed production	High	Networking	formal involvement	Expected to be good
35	TANSEED	None	NGO	None	Member	Seed production	High	Networking	formal involvement	Expected to be good
36	JEROLD MALKIA	None	Farmer	None	Member	Farming mixed crops	High	Networking	formal involvement	Expected to be good
37	SILAS MSUYA	None	Farmer	None	Member	Farming mixed crops	High	Networking	formal involvement	Expected to be good
38	MH. SOSA	None	Farmer	None	Member	Farming mixed crops	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
39	MZEE ISHUMI	None	Farmer	None	Member	Farming mixed crops	High	Networking	formal involvement	Expected to be good
40	MAMA ISHUZA	None	Farmer	None	Member	Farming mixed crops	High	Networking	formal involvement	Expected to be good
41	NDG. KIKOLO	None	Farmer	None	Member	Farming mixed crops	High	Networking	formal involvement	Expected to be good
42	MH. AMOS MAKALA	None	Farmer	None	Member	Farming mixed crops	High	Networking	formal involvement	Expected to be good
43	FAUDU	None	Farmer	None	Member	Farming mixed crops	High	Networking	formal involvement	Expected to be good
44	RAIS MSTAAFU MH. BENJAMIN W. MKAPA	None	Farmer	None	Member	Farming mixed crops	High	Networking	formal involvement	Expected to be good
45	AVA	None	CSO	None	Member	Private extension workers	High	Networking	formal involvement	Expected to be good
46	KIOMA GROUP	None	Farmers group	None	Member	Sugarcane transporters	High	Networking	formal involvement	Expected to be good
47	KUPO INVESTMENT	None	Processors	None	Member	Rice processors	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
48	MKINDO FTC	None	Agric. Training institute	Government	Member	Agric. Training	High	Networking	formal involvement	Expected to be good
49	NMB Mzumbe	None	Financial agency	None	Member	Financial support to farmers	High	Networking	formal involvement	Expected to be good
50	EFTA – NGO	None	Financial agency	None	Member	Farming equipment loan	High	Networking	formal involvement	Expected to be good
51	SIDO	None	Gov. Agency	Government agency	Member	Food processing and support to small food industries	High	Networking	formal involvement	Expected to be good
52	PASS	None	Financial agency	None	Member	Financial support to farmers	High	Networking	formal involvement	Expected to be good
53	CRDB Mzumbe	None	Financial agency	None	Member	Financial support to farmers	High	Networking	formal involvement	Expected to be good





### Stakeholder mapping - Ifakara TC

### Stakeholders identified to be contacted and involved (Ifakara TC)

ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
1	John Bosco Mvunjapori	None	Agrodellers	None	Member	Selling agriculture inputs	High	Networking	formal involvement	Expected to be good
2	Ifakara AMCOS	None	Cooperative group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
3	Mshikamano AMCOS	None	Cooperative group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
4	Mgudeni AMCOS	None	Cooperative group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
5	Kidatu AMCOS	None	Cooperative group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
6	Kapolo AMCOS	None	Cooperative group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
7	Mang'ula AMCOS	None	Cooperative group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
8	Lukas Ndelema group	None	Processors group	None	Member	Rice processors	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
9	Pambazuko radio	None	Community radio	None	Member	Broadcasting agriculture news	High	Networking	formal involvement	Expected to be good
10	Mkula farmers representatives	None	Farmers group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
11	Michenga farmers representatives	None	Farmers group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
12	Mlabani Farmers representatives	None	Farmers group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
13	Lipangalala farmers representatives	None	Farmers group	None	Member	Rice producers	High	Networking	formal involvement	Expected to be good
14	Magreth Churu	None	Food processor	None	Member	Small scale food processor (fruits, vegetables, and fish processing)	High	Networking	formal involvement	Expected to be good
15	Sadiki Ujuma	None	Food processor	None	Member	Small scale food processor	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
						(fruits, vegetables, and fish processing)				
16	Kilombero transporters	None	Transporters association	None	Member	Transporting food products	High	Networking	formal involvement	Expected to be good
17	Members from the district nutrition committee	None	Nutrition Committee	None	Member	Managing nutrition activities in the district	High	Networking	formal involvement	Expected to be good
18	Katrin	None	Research institute	None	Member	Rice research	High	Networking	formal involvement	Expected to be good
19	IHI (Ifakara Health Institute)	None	Research institute	None	Member	Conducting research	High	Networking	formal involvement	Expected to be good
20	NMB bank	None	Financial agency	None	Member	Providing financial support to farmers	High	Networking	formal involvement	Expected to be good
21	YETU bank	None	Financial agency	None	Member	Providing financial	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
						support to				
						farmers				
	CRDB bank	None	Financial agency	None	Member	Providing financial	High	Networking	formal involvement	Expected to be good
22			,			support to farmers				
23	CMDO	None	CSO	None	Member	Providing nutrition education	High	Networking	formal involvement	Expected to be good
24	Lishe endelevu	None	Nutrition project	USAID	Member	Providing nutrition education	High	Networking	formal involvement	Expected to be good
25	Mboga na matunda	None	Project	USAID	Member	Vegetable and fruits production and market searching	High	Networking	formal involvement	Expected to be good
26	Sululu irrigation scheme	None	СВО	None	Member	Managing rice irrigation scheme	High	Networking	formal involvement	Expected to be good





ID #	Name	email	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)
27	Mang'ula youth scheme	None	СВО	None	Member	Managing rice irrigation scheme	High	Networking	formal involvement	Expected to be good
28	Maki Magombera scheme	None	СВО	None	Member	Managing rice irrigation scheme	High	Networking	formal involvement	Expected to be good
29	Mkula scheme	None	СВО	None	Member	Managing rice irrigation scheme	High	Networking	formal involvement	Expected to be good





### Annex 4 – Beni Mellal (Morocco)

### FH coordinators and main contacts:

National School of Agriculture of Meknes, ENAM, Noureddine MOKHTARI, Ali ABIDAR, Coordinators.

Moroccan Federation of Consumer Rights, FMDC;

### FH process schedule

FH phases	Chapter	Activity description	Scheduled month
FH design	1	Meetings with stakeholders at the project kick- off meeting	Nov. 2020
FH design	2	Meetings with local authorities and development services	February - Mai 2021
FH design	3	Meetings with farmers' associations	Mai –June 2021
FH design	4	Online meetings with consumer associations	October 2021
FH formalization	5	Co-development of the manifesto and awareness of the purpose of the FH	November 2021
FH background work	6	Preparation of the draft memorandum of understanding	November 2021
FH background work	7	Distribution of roles and responsibilities and means of governance	November 2021
FH background work	8	Identification of the appropriate organization mode and drafting of the collaboration document	December 2021
FH background york		Circulation of letters of invitation for the signing of the Memorandum of Understanding	December 2021

#### FH meeting materials:

Several face-to-face meetings and online meetings were held during the period from March to November 2021. These meetings were devoted at the beginning to the presentation of the project in a general way then afterwards to the explanation of the objectives of the creation of the FoodHub at the level of the city of Beni Mellal and thereafter the discussion with the various partners on the mode of organization and the adequate legal form of the FoodHub. These sessions were attended by the associations and agricultural cooperatives of the regions of Beni Mellal, on the one hand, and the local associations for the defense of consumer rights in the city of Beni Mellal.





Some meetings, especially those related to the presentation of the project and the expected objectives of the FoodHub, saw the participation of several representatives of the development services of the region of Beni Mellal – Khenifra who contributed to enrich the discussions around the problems related to the improvement of agricultural productions, the quality of food products and the access to information on the quality and the origin of food by the consumers

These different working sessions have brought together the representatives of farmers through agricultural associations and cooperatives with consumer rights associations. The discussions between the representatives of the agricultural producers and the consumers allowed to evaluate the points of view on the needs of each partner in relation to the improvement of the quality of the nutrition and the agricultural products intended for the human consumption.

Regarding the expectations of farmers' associations and cooperatives, toward the FoodHub: its role, its missions, its mode of operation, the links with other committees or local bodies related to agriculture and food, in particular the regional development services...The following recommendations and comments were made:

- Strengthen relationships with local producers and consumers through meetings at the FoodHub to learn about production or consumption needs and opportunities;
- Continue to develop and disseminate good practices on the most relevant topics, including the quality of local products, their origin and their label;
- Insure to link the work of the FoodHub to national guidance on nutrition and quality requirements;
- Remain responsive to regional development services to improve the effectiveness of actions;
- Plan regular meetings with the general public in order to better disseminate results and recommendations;
- Integrate in the objectives of the FoodHub the dissemination of knowledge to partners through mini-conferences or seminars on professional topics according to a logic of "professional groups" or "target population
- Listen to the associations and remain pragmatic: many agricultural cooperatives are in a precarious financial situation. It would be interesting to consider consulting the maximum number of associations and agricultural cooperatives not currently represented in the creation of the FoodHub in order to ensure a better representation of farmers in the FoodHub at the scale of the whole region. All partners currently invited to the FoodHub are therefore encouraged to work with associations in the region to raise awareness of the FoodHub.
- To study the means and the actions to be envisaged in order to perpetuate and improve the action of the FoodHub during the duration of the project and after the end of the FoodLAND project, in particular the means of financing the actions and the modalities of organization which must be flexible to allow a better autonomy.





#### CHAPTER 1: FH DESIGN AND CONCEPTION PHASE

a. Studying the context: desk research and surveys with farmers and consumers

Morocco falls into the lower middle-income category, with a per capita income of US\$3,340 in 2016. Its strong growth since 2000 keeps Morocco above the average for lower-middle-income countries, but this growth is still well below the average for upper-middle-income countries.

The evolution of the standard of living was positive during the 2000s. In real terms, the growth rate of the standard of living rose from 3.3% between 2001 and 2007 to 3.6% between 2007 and 2014. Expressed in current Dirham, the average standard of living per person rose from 8,280 DH in 2001 to 11,233 DH in 2007 and 15,876 DH in 2014. This improvement benefited both urban and rural dwellers.

The standard of living for city dwellers rose from MAD 10,642 in 2001 to MAD 19,513 in 2014, while the standard of living in rural areas rose from MAD 5,288 to MAD 10,425 over the same period. However, although per capita consumption in rural areas grew faster than in urban areas between 2001 and 2007 (4.7% vs. 2.7% per year), this was not the case between 2007 and 2014 (2.8% vs. 3.5%). This translates into a further widening of the gap in living standards between the two environments of residence. This gap, which was around 2.01 in 2001, was established at 1.79 in 2007 and then at 1.87 in 2014.

### **Income disparities**

An analysis of the concentration of per capita income in 2019 by different socioeconomic categories yields the following findings:

- At the national level, the wealthiest 20% of the population hold more than half (53.3%) of household income compared to 5.6% for the least wealthy 20%.
- With an average annual per capita income of MAD 57,400, the wealthiest 20% of the population have an income about 10 times (9.6) that of the least wealthy 20% (MAD 6,000).
- In urban areas, the average annual income per capita is 65,070 DH for the 20% most affluent, compared with 7,286 DH for the 20% least affluent. In total, the share of the wealthiest 20% in the total mass of income is 52.1% against 5.9% for the least well-off 20%.
- In rural areas, the wealthiest 20% of the population have an average annual income per capita of 40,700 DH and hold more than half of the total income (52.3%), while the least wealthy 20%, with an average annual income per capita of 4,900 DH, have 6.3%.

This concentration of income is more pronounced among the least affluent 10% of the population and the most affluent 10%:





- The 10% of the population with the lowest incomes live on less than 6,270 DH per person per year (7,756 DH in urban areas and 5,157 DH in rural areas), while the 10% with the highest incomes have more than 41,705 DH (48,440 DH in urban areas and 28,090 DH in rural areas)
- The highest incomes are concentrated in urban areas: the wealthiest 10% of the population live on an average annual per capita income of more than DH 48,440, i.e. 72.4% more than the 10% of the wealthiest rural households.
- The wealthiest 10% of the population account for 37.8% of total income, compared with 2.2% for the least wealthy 10%, which corresponds to an inter-decile ratio of 17.2. These indices are respectively 36.5%, 2.3% and 15.9 in urban areas and 37.9%, 2.6% and 14.6 in rural areas.

Under these conditions, income inequality, as measured by the Gini index, is 46.4%, which is relatively high and exceeds the socially tolerable threshold (42%). This income inequality is 45% in urban areas and 44.5% in rural areas.

The average annual expenditure of Moroccan families on food products is around 5800Dhs. This component represents 37.1% of their annual income in 2017. The average increase in annual income between 2002 and 2014 was around 5% annually to go from 11,000Dhs in 2002 to 19,000Dhs in 2014.

Food expenditure remains on average the most important item with an amount of 4553Dhs in 2007 and 5847Dhs in 2014. In general, the structure of consumer spending shows a decline in food consumption in volume and an improvement in quality.

The share of food expenditure in the family budget has decreased from 40% to 37% nationally between 2001 and 2014. However, the budgetary share of food is quite disparate between the urban area, which is at 33%, and the rural area, which records 47.3%. This disparity is also significant when analyzing the budgets devoted to food by the richest and poorest categories.

The wealthiest 10% spend 26% of their budget on food while the least wealthy spend half of their budget on food. Spending on education, culture and entertainment has increased significantly, reaching 9.3%. Other expenditure items have increased during the same period, such as housing and energy (7%) and hygiene and health care (8%).

The situation of household consumption expenditure changed between 2007 and 2014, in line with long-term trends. However, the share of basic necessities (food and clothing) has declined significantly in favor of other consumption functions, from 55.9% of the household consumption budget in 1985 to 46.1% in 2001 and 40.2% in 2014.

The development gaps between the richest and least wealthy regions imply great heterogeneity in terms of purchasing power and standard of living of the population. In this respect, the regions with a higher standard of living than the national average are Eddakhla-Oued Eddahab; Grand Casablanca-Settat; Laâyoune-Sakia El Hamra; Rabat-Salé-Kénitra; Tangier-Tétouan-Al Hoceima and Oriental.

The coefficient of convergence of living standards between 2001 and 2014 is significant and thus indicates a trend towards a reduction in disparities in living standards between the different regions of the Kingdom. This can be explained by the fact that economic growth can be accompanied, under certain conditions, by a readjustment between





regions with rich economies and those with less favored economies in the direction of a reduction in disparities and territorial integration by reducing inequalities between territories and social categories.

At the regional level, the evolution of the standard of living between 2001 and 2014 has clearly shown the existence of a convergence process between the 12 regions of the Kingdom, although the pace of reduction of regional gaps has not been the same for all regions. The convergence coefficient clearly indicates that the standard of living in the least wealthy regions tends to grow faster than that of the wealthiest regions. Regions such as Fez-Meknes and Oriental have clearly converged towards the more affluent regions, while the regions of Drâa-Tafilalt and Bzni Mellal Khenifra are marked by a remarkably slow pace of convergence. Thus, less affluent regions such as Drâa-Tafilalet, Oriental, Marrakech-Safi, Fez-Meknes show rates of increase in the standard of living higher than those of the richest regions, such as Ed Dakhla-Oued Eddahab, Laayoune-Sakia- El Hamra, Casablanca-Settat, Guelmim-Oued Noun.

### **Evolution of the food profile**

Since 1960, the share of the consumption budget allocated by Moroccan households to food has tended to decrease overall, reaching 37% in 2014 after having reached 48.6% in 1985, 41.3% in 2001 and 40.6% in 2007. However, the decline in the weight of food, which is in favor of other expenditure items, does not affect its first rank in the total household consumption budget in 2014. This sustained downward trend shows a tendency of households to change their lifestyles and particularly their food behavior.

The disparity in the budget share of food between urban and rural areas (33.3% in the city versus 47.3% in the countryside) is still very significant and is even increasing.

The least affluent 20% spend almost half of their budget (49.6%) to satisfy their food needs, while the most affluent 20% spend only about one third (29.1%). Conversely, products rich in proteins and vitamins (meat, fish, milk, dairy products and fruit) are more popular among the wealthiest 20% of rural people, who spend 40.9% of their budget on them, compared with 31.7% for the least well-off 20%.

Despite the narrowing of the gap between these two expenditure categories, the proportion of the budget reserved by rural households for food is still very high among most socio-economic categories. It is close to or exceeds 50%.

Another aspect of inequality in the standard of living is the nutritional quality of the food products acquired by the different socio-economic classes. In this case, products with a high caloric value and known as basic necessities (cereals, sugar and fats) as well as vegetables and legumes remain the foods of choice for the 20% of the rural population, the least affluent, who devote more than half of their food budget (53%) to them. The most affluent class spends 41.3% on them.

The food budget is highest among households headed by people with a higher level of education and a higher degree, at 10,140 DH and 10,384 DH per person per year respectively. These expenditures are twice as high as those of households headed by a head with no education and no degree, which are 5,088 DH and 5,233 DH respectively.





Households headed by an inactive head pay more attention to food, spending 1.1 times more than those headed by a working person. However, this item represents only 35% of the total budget of the first category but 37.5% in the second category.

The meat, poultry and offal group has remained the largest food budget item since 2001, accounting for almost one quarter of the food budget, or 23.5%.

The expenditure in current value reserved for vegetables all categories is about 701.5 DH on average per person in 2014, equivalent to 12% of the food budget and has recorded an annual increase of 3.28% compared to 2001.

The wealthiest 20% of the population spends an average of 1067.1 DH per person per year on vegetables compared to 393.9 DH for the bottom 20%, which is 2.7 times more. In 2014, the supply of fruit cost the Moroccan consumer 427.7 DH on average per year recording an annual increase of 6% compared to 2001.

The share of the "tea, coffee and herbs" group in the food budget has continued to decline since 1985 from 6.4% to nearly 4.2% in 2001 and reached 3.9% in 2014.

In terms of quality, products rich in calories (cereals, sugars and sweetened products) are decreasing in favor of products rich in proteins (meat, fish, eggs, dairy products). The share of the latter in food expenditure has risen from 33% to 36%.

Although food continues to weigh significantly on the Moroccan household budget, its weight is decreasing in favor of other expenditure items. At the national level, the food budget coefficient fell from 70.20% in 1960 to 37% in 2014, a reduction of 33%. It should also be noted that the food budget coefficient in rural areas clearly exceeds the coefficient recorded in urban areas. The share devoted to food expenditure in rural areas fell from 75.90% in 1960 (against 59.70% in urban areas) to 47.30% in 2014 (against 33.30% in urban areas).

b. Co-defining the core group/network





## Stakeholder Mapping

ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
1	Public research institution	National School of Agriculture of Meknes	Guidelines and material supplier	Guidelines and material supplier	High	Provide scientific support to FH coordinators, Facilitation skills.	Project Coordinator; Does not wish to participate in bilateral meetings	4	1
2	NGO	Moroccan Federation of Consumer Rights	Consultation, Guidance, Facilitation and Advice	Consumer awareness and communication	High	Provide support to the FH, facilitation skills to local consumer associations.	Does not want direct participation in bilateral meetings.	4	President of the Federation is willing to play this role
3	Cooperative already member of the GIE Zoyout Dir Beni Mellal	Abou El Jamil - Takharouaate	Facilitation and Advice	Awareness and communication with agricultural cooperatives	Medium	Provide support to the FH, facilitation skills to agricultural cooperatives	Does not want direct participation in bilateral meetings.	3	Local representative has agreed to participate as a facilitator.
4	Cooperative already member of the GIE Zoyout Dir Beni Mellal	IMSKAR - Tanougha	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.
5	Cooperative already member of the	Tamskourt - Zaouit CheÏKH	FH member, participation and decision	Choice of agricultural production orientations	High	In-depth knowledge of local agricultural production and	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
	GIE Zoyout Dir Beni Mellal			favorables à la nutrition et		the development potential of the			
6	Cooperative already member of the GIE Zoyout Dir Beni Mellal	El khair - Bouysiaane	FH member, participation and decision	agrodiversité Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
7	Cooperative already member of the GIE Zoyout Dir Beni Mellal	Coliza - Zaouit CheÏKH	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
8	Cooperative	Nassim - Douar ahel sabel foum ansar	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
9	Cooperative	Telzamer - Ait oum el bakht zaouiat chikh	FH member, participation and decision	Choice of agricultural production orientations favourable to	High	In-depth knowledge of local agricultural production and the development	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
				nutrition and agrodiversity		potential of the agricultural sector			
10	Cooperative	Ouhaki - Takadoust ait oum el bakht zaouiat chikh	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
11	Cooperative	Machrodez maroc - Centre kesba tadela	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
12	Cooperative	Dahab elahmar atlas - Douar ait ishak foum ansar	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
13	Cooperative	Agrobiofal - Adouz foum ansar	FH member, participation and decision	Choice of agricultural production orientations favourable to	High	In-depth knowledge of local agricultural production and the development	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
				nutrition and agrodiversity		potential of the agricultural sector			
14	Cooperative	Sakhaa - Massira 1 lot tadamoun benimellal	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
15	Cooperative	Zaytoun benimellal - Oulad hamdan benimellal	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
16	Cooperative	Imaar atlas - Oulad hamdan street 4 benimellal	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
17	Association	Moroccan Association of olive producers and water saving - El Kelâa Sraghna	FH member, participation and decision	Choice of agricultural production orientations favourable to	High	In-depth knowledge of local agricultural production and the development	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
				nutrition and agrodiversity		potential of the agricultural sector			
18	Association	Moroccan Association for Consumer Protection and Orientation - Fkih ben salh	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.
19	Association	AKDET Association for the Development and Environment of Tourism - El Ksiba	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.
20	Association	Chkounda Association for Drinking Water and Development - Douar Chkounda CR Dir El ksiba	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
21	Association	Association Qualification des Jeunes "AQJ" – Beni Mellal	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.
22	Public institution	Regional Direction of Agriculture of Beni Mellal Khenifra (DRA)	Guidance and counseling and technical support	Strategic orientations for the development of agricultural sectors	High	Provide support to the FH, expertise in the development of Agriculture and choice of new products	Does not want direct participation in bilateral meetings.	6	Possibility of technical assistance to the FH.
23	Public institution	Provincial Directorate of Agriculture in Beni Mellal (DPA)	Guidance and counseling	Advice on the development of agricultural sectors	Medium	Provide support to the FH, technical advisory skills to farmers	Does not want direct participation in bilateral meetings.	3	Technical assistance in the field to the FH.
24	Public institution	Chamber of Agriculture of Beni Mellal;	Guidance and advice on food safety and quality	Advice on food safety and environmental requirements	Medium	Provide support to the FH, expertise in food security upstream and downstream of the chains	Does not want direct participation in bilateral meetings.	3	Possibility of technical assistance on the evaluation of the quality of agricultural products and foods.





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
25	Association	Farmers Union - Regional Chamber of Agriculture of Beni Mellal	Member of the FH, participation in consultation and decision	Participation in FH meetings and guidance on food choices and consumer preferences	High	Knowledge of consumer behavior and interface with FH urban consumers.	Participation in FH meetings and consumer representation at the FH	4	Representative has agreed to participate as a member of the FH
26	Association	Ghayt arahmane - Douar aslama oualad mbarek	Member of the FH, participation in consultation and decision	Participation in FH meetings and guidance on food choices and consumer preferences	High	Knowledge of consumer behavior and interface with FH urban consumers.	Participation in FH meetings and consumer representation at the FH	4	Representative has agreed to participate as a member of the FH
27	Association	Sanad - Rue 20 aout oualad mbarek	Member of the FH, participation in consultation and decision	Participation in FH meetings and guidance on food choices and consumer preferences	High	Knowledge of consumer behavior and interface with FH urban consumers.	Participation in FH meetings and consumer representation at the FH	4	Representative has agreed to participate as a member of the FH
28	Public institution	Cooperation development office - Regional delegation in Beni Mellal	Guidance and counseling	Advice on the development of agricultural sectors	Medium	Provide support to the FH, technical advisory skills to farmers	Does not want direct participation in bilateral meetings.	3	Technical assistance in the field to the FH.





For the radio Medina FM, the idea is to use the airwaves of the radio to design, adapt and implement devices of awareness (broadcasts) and spotlight (in different forms) to the attention of listeners: farmers or consumers, in order to direct them in terms of agricultural production and consumption to products more interesting in terms of quality, productivity and nutrition.

In order to guarantee women's representativeness within the FH, it has been proposed to establish an electoral quota at the level of the FH representation which can be considered as a positive and efficient measure that takes into account the reality of the global electoral base at the level of the city of Beni Mellal. However, in order to ensure the impact of the positive measures in the longer term, accompanying measures are also necessary to give more opportunity to women to access this representation, especially through the encouragement of cooperatives and women's associations to be part of the FH.

Experience in other countries shows that representation reflects the role of women in public life in general and is the result of a comprehensive approach that includes qualitative and quantitative measures and is based on a gender perspective in all areas of society. Nevertheless, for the specific case of our FH in the city of Beni Mellal, it is possible through a bottom-up approach at the level of agricultural associations and cooperatives represented within the FH and also of local consumer rights associations to encourage them to be represented at the FoodHub level while respecting a good representation of women within the FH.

To this end, several proposals were formulated during discussions with local partners (farmers and consumers) in order to move towards a FH with gender-sensitive representation. The most reasonable ones remain in relation to setting a minimum quota at the level of the FH for women which should be at least 30% and to ensure that as many women as possible are invited as representatives of associations and cooperatives to attend the meetings for the election of FH representatives in order to achieve this objective and to have opportunities to selectively elect women to the FH (minimum level of competition) and who can play a positive role in this representation and participate in decision making.



## c. Co-defining the structure

VISION	Healthy, efficient, resilient and sustainable food system
MISSION	Improved nutritional performance
OBJECTIVE	Promote nutritional performance, access to information on the quality of local food products and improve nutrition-oriented agricultural production and processing technologies.

# d. Co-defining "good governance principles"

PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Participation, representation, fair conduct of elections	Are FH members assured of equal participation and representation in the FH decision-making process? How are FH coordinators elected and their roles assigned? Is gender balance taken into account?	All members of the FH are treated with equal rights and duties and may be elected to coordinate or represent the FH. The coordination of the FH is assigned by election. The roles are assigned according to the forms fixed by the document of creation of the FH and can be distributed according to the profiles of the elected (Consumers/Producers/Administration). In all cases, the representations and roles of the elected representatives will be the result of a democratic process. Taking into account the low number of women's representation in the NGOs and associations that are members of the FH, a minimum of 20% of women is foreseen in the FH document. See the FH's ME
Reactivity	Are the objectives, rules, structures and procedures of the FH adapted to the legitimate expectations and needs of the FH actors?	The organization of the FH is defined in such a way as to enable it to meet the objectives and expectations of the stakeholders. Roles, structures and procedures are decided and agreed upon internally by the FH stakeholders and can be adapted in relation to



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
		changes in these expectations and needs.  The entire organization is described in the FH creation documents and is subject to the rules of application described in this organization.
Efficiency and effectiveness	Are the planned results and the objective aligned? Are the resources available for the implementation and delivery of the FH being used in the best possible way?	The management of the HLF should be results-based and so should the financing: with this mechanism, all actions should be resourced and budgeted to contribute to the achievement of the predefined objectives and results. It is envisaged that there will be an annual or biannual program contract with projected funding based on results that aims to increase accountability by establishing a more direct link between the resources implemented and the expected results
Openness and transparency	How are/will decisions be made within the FH? How are decisions made available to the members of the FH and the public?	The members of the FH should aim to strengthen the coherence of their strategies and decisions in a transparent manner and in harmony with the orientations of the FH. The management committee within the FH should therefore ensure that the orientations and decisions taken within the FH are implemented in a transparent manner and that periodic review and reports are made at the FH meetings.
Rule of law	Are the rules and regulations of the FH adopted in accordance with the procedures required by law?	The legal form and internal organization of the FH as well as the mode of management is controlled by the public authorities and must comply with the rules and





PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
		procedures stipulated by the laws and texts in force.
Ethical behavior	How are conflicts of interest within the FH's internal governance addressed?	Any internal conflict must be submitted to the elected bodies of the FH. If a conflict of interest arises within the FH, it may be subject to legal action in accordance with the relevant national legislation.
Competence and capacity	How is the competence and capacity of public health coordinators maintained and strengthened?	ONSSA is the public organization in charge of control and safety of food products in Morocco. Its participation in the FH, as an observer, will contribute to strengthen actions in the direction of safety and compliance with quality requirements of food products.
Innovation and openness to change	How are the results shared with other FHs?	It is planned within the framework of the FH activities to establish an annual calendar of meetings with FHs and organizations working in the field of nutrition in order to share experiences and strengthen exchanges.
Sustainability and long-term orientation	How is the sustainability of the FH guaranteed?	In order to sustain the organization in the long term, it is necessary to look for ways to finance the activities of the FH. It is possible to solicit public subsidies within the framework of specific activities (program contracts or calls for projects) or from private organizations within the framework of bilateral collaboration.
Good financial management	How are the annual budget and investments of the FH prepared and deliberated?	The organization of associations or federations of associations is stipulated in the Moroccan law on the organization of the accounting and financial aspects of associations. These obligations





PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
		imply the application of balance sheets and annual accounts that must be justified and are subject to mandatory control by the State.
Human rights, cultural diversity and social cohesion	How are human rights, cultural diversity and social cohesion promoted and guaranteed within the FH?	It is mandatory to comply with national legislation regarding the respect of human rights to cultural diversity and gender parity as stipulated by the text of the National Constitution of 2011. In this sense, it will be mandatory at the level of the texts of creation and organization of the FH to mention these obligations in order to guarantee their practical application within the FH.
Responsibility	How are roles of responsibility defined within the FH? How are decisions reported and sanctioned? How are conflicts between FH actors mitigated?	All decisions within the FH must be made in regular or special meetings with the presence of the majority of the members. Decisions are reported in minutes and circulated to all members of the FH. In order to mitigate conflicts between actors, it is possible to set up negotiation and consultation committees on subjects of interest that may be the subject of divergence between the actors of the FH.

## e. Co-defining roles and responsibilities

STAKEHOL DER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES
1	Scientific and technical support	Scientific support to FH coordinators, facilitation and technical assistance
2	Consultation and facilitation with consumers	Interface with consumer associations, orientation, facilitation and advice on food
3	Facilitation and Consulting in cooperation	Technical and legal support to agricultural cooperatives, facilitation and advice to the FH





STAKEHOL DER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES		
4	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
5	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
6	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
7	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
8	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
9	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
10	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
11	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
12	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
13	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		
14	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies		





STAKEHOL DER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES
15	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
16	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
17	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
18	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
19	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
20	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
21	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
22	Guidance and counseling and technical support	Support for agricultural development, selection of new agricultural products, technical guidelines and orientations.  Development of resources and skills (standards of practice, guidelines, decision aids for producers).
23	Guidance and Counseling	Support in technical advice to farmers and agricultural cooperatives
24	Guidance and advice on food safety and quality	Technical support in terms of upstream and downstream food safety and technical advice and guidance in terms of compliance with environmental and public health requirements (use of pesticides, additives and choice of processing technologies).



STAKEHOL DER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES		
25	FH member, participation and decision	Participation in FH activities, technical support and advice to consumers, improvement in nutrition and access to information on food quality		
26	FH member, participation and decision	Participation in FH activities, technical support and advice to consumers, improvement in nutrition and access to information on food quality		
27	FH member, participation and decision	Participation in FH activities, technical support and advice to consumers, improvement in nutrition and access to information on food quality		
28	Guidance and Counseling	Support in technical advice to farmers and agricultural cooperatives		

Women are generally poorly represented in decision-making bodies in the country. Sociocultural attitudes often prevent women's participation in decision-making and their presence in local organizations and associations. In order to achieve good representation of women in the FH, it is envisaged that a set of affirmative action rules will be put in place to achieve a minimum parity.

The empowerment of women in the FH will be increased as a result of the innovations and changes brought about by the project, which will allow women to be involved in all decision-making processes at the FH level. In this sense, it is planned to set a minimum quota for women within the FH. To do this, it will be recommended to the consumer associations and agricultural cooperatives to be represented in a balanced way by women and men in order to reach the expected parity within the FH.

Measures are also planned to influence the community to promote gender equality. The services offered within the framework of the FH must therefore take into account the different capacities of men and women to promote the planned activities. In this sense, and to further promote gender mainstreaming and improve women's access to positions of responsibility within the FH, it would be interesting to plan awareness sessions, courses and days for women in order to put them at the same level of effectiveness (information session, literacy courses, coaching...).

#### f. Activities planned with stakeholders

Typology of activity	Start date	End date	Activity description	Actors involved
Introduction	13 November 2021	13 November 2021	Project kick-off meeting. Presentation of the specific objectives of the FH to the project partners	Development and research partners, consumer association





Typology of activity	Start date	End date	Activity description	Actors involved	
				representatives and farmers	
Educational activity	3 March 2021	16 March 2021	Meetings with farmer associations and cooperatives in conjunction with farmer survey activities on the importance of nutrition and agrobiodiversity and the role of farmers in the FH	Farmers and representatives of agricultural cooperatives	
Educational activity	25 October 2021	12 November 2021	Meetings with consumer associations in the city of Beni Mellal on the importance of the involvement of associations in the improvement of nutritional performance and the orientation of consumers towards a healthier diet. At the same time, these meetings have helped to clarify the role that these associations must play within the FH.	Representatives of associations for the defense of consumer rights in the city of Beni Mellal	
Educational activity	16 December 2021	162 December 2021	In addition to the consumer survey activities, presentations were provided to participants on the objectives and goals of the project and more specifically on the importance of FHs in improving the nutritional performance of urban consumers in relation to food quality and improving access to information on local food products.	Urban consumers	
Regulatory Compliance	06/01/2022	06/01/2022	Regulatory Compliance	Representatives of consumer rights associations and agricultural	





Typology of activity	Start date	End date	Activity description	Actors involved
				cooperatives in the Beni Mellal area
Educational activity	16/05/2022	16/06/2022	Regional workshop with all stakeholders in the field of food and agriculture for the specification of needs and the choice of actions to be undertaken on new products	Different Beneficiaries

# g. Communication and branding

Type of activity	Activity	Activity Description	Target audience	Scale	Channe I	Timing	Support needed from FoodLAN D communic ation partners [YES/NO]
C.I	Establishme nt of a strategic vision for the FH	Discussion of the reasons for the inadequacy of local diets and stakeholders' visions for action.	Consumers/ Farmers/ S. Developme nt	Interest groups and represent atives	Dedicat ed event	Oct. 2022	Yes
C.E.	Cultivating the FH brand	Improve the visibility of the FH at the city level and communicate about its activities	Large audience	Open	Various Activitie s	Regul.	Yes
C.E.	Press communicat ion and Internet broadcastin g	Raising awareness and disseminating information on nutritional efficiency and improved diets	Large audience	Open	Partners and Website	Regul.	No



Type of activity	Activity	Activity Description	Target audience	Scale	Channe I	Timing	Support needed from FoodLAN D communic ation partners [YES/NO]
R.I.	Presentatio n of research results	Presentation of results on technological innovations	Agricultural cooperative s	Open	Worksh ops	Fin 2022 et 2023	Yes
R.I.	Presentatio n of research results	Presentation of organizational and consumer innovations	Consumer associations	Open	Worksh ops	2023- 2024	Yes
D.E	Disseminati on of research results	Presentation of research results on products and technological and organizational innovations for diet performance	Farmer/Con sumer Representat ives	Interest groups	Dedicat ed events	April – Nov. 2023	Yes
C.E	Radio broadcast about the actions of the FH	Broadcasting and communication about the activities of the FH on the radio (Medina FM)	General public	Open	Radio broadca st	2023- 2024	No
C.I	Meetings with agricultural associations and cooperative s	Specification and clarification of actions to be taken in order to encourage the adoption and diffusion of innovations	Target audience	Interest groups	Worksh ops/ Confere nces	2023	Yes
C.E	Event Communica tions	Outreach activities on the occasion of International Food Day and other	Large audience	Open	Dedicat ed events	2022- 2023- 2024	Yes





Type of activity	Activity	Activity Description	Target audience	Scale	Channe I	Timing	Support needed from FoodLAN D communic ation partners [YES/NO]
		celebrations					
		related to food					
		and agriculture					

## h. Identifying challenges (and appropriate mitigation measures)

Risk	Type of risk	Risk descripti on	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Stakehold er identificati on	operational	Stakehol der suitability	Different categories of stakeholders	High	Conception	- Identified beneficial alliances for the project through a concise elimination process; - Making direct contact with trusted individuals who have previously participated in ENA's projects and were willing to learn and participate in a new project.



Risk	Type of risk	Risk descripti on	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Determine the role of each stakehold er who may become a member of the FH	operational	Sharing the vision of FH manage ment with stakehol ders	There are many variables that lead to conclusions about the role, position, expectations, and interests of stakeholders for strengthening the process of coordination and facilitation of FH management interventions.	High	Conception	Matching the needs of stakeholders with the objectives of the FHs.
Understan d what the stakehold er could bring to the FH member.	operational	Minimiza tion of stakehol der misunder standing s	The information collected on stakeholders was comprehensive and difficult to standardize in order to facilitate the selection and draw relevant conclusions about the stakeholders.	High	Conception	Better understanding of the needs of the FH and improved quality of the information collected through targeting.



Risk	Type of risk	Risk descripti on	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Identify the informatio n held by the stakehold er and its usefulness to the FH activities.	operational	Docume ntary review of referenc e texts relating to stakehol ders	- Availability of detailed information is limited to those directly involved, in this case each stakeholder and their employees Lack of trust and reluctance to share confidential information with the general public.	High	Conception	- Obtaining reliable information on stakeholders through trusted and well-placed contacts in the field Presentation of the project The reputation of the National School of Agriculture of Beni Mellal plays a key role in attracting the attention of stakeholders.
Stakehold er analysis process to determine stakehold er expectatio ns, roles, capabilitie s.		Attributions of the stakeholders that will have to be taken into account in the implementation of the actions in favor of the FHs.	- lack of concrete information - difficulties to get in touch with stakeholders	Medium	Conception	Defending the corporate interests of the FH while supporting Transparency in decision making and future stakeholder involvement.
Targeted representa tion	Organistion nel	The FH must be made up of represen tatives of farmers and	Lack of rules and eligibility quotas	High	Formalization of the organization and rules of operation	Rules for the distribution of seats in the FH





Risk	Type of risk	Risk descripti on	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
		r rights associati ons				
Determina tion of the resources needed and the degree of real involveme nt of the stakehold ers.	Strategy	Manage ment of material and human resource s of FHs.	Definition of the type and number of resources required to accelerate the achievement of the objectives related to FH development, the partners to be involved in order to strengthen the FH organization.	Medium	Conception	- Better planning: Determining the amount of resources available to the FHs and the time required to mobilize them; - Better understanding of available resources; - Better distribution of tasks among stakeholders.
Low support from farmers	Organisatio nnel	Farmers are very little organize d in agricultur al associati ons and cooperati ves in the target areas	Low interest in cooperation and level of education.	High	Operational	- Constent communication about the project; - Try to reach out to them and involve them in every process to help them feel included and heard.



Risks	Type of risk	Risk descripti on	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Funding	Financial	Capital and funding	- Mismanagement of financial resources and unexpected or excess expendituresExpenditures in excess of actual needs Uncontrolled expenditures.	High	Conception	- Identification of projected expenses; - Follow-up and control.
Institution al difficulties	Institutional	Internal Stakehol der Organiza tion	Institutional mechanisms of cooperatives and stakeholders may conflict with those of FHs.	High	Conception	- Make sure to have all the necessary authorizations from the relevant authorities; - Discuss the institutional needs of each members with all the stakeholders.
Inclusion of women	Gender Issues	- Women are poorly represen ted in agricultur al associati ons and cooperati ves and cannot access the FH	- Women's educational level, social discrimination and perceptions of women's role in society; - Gender inequity in Morocco and non-inclusion of women despite their participation.	High	Implementa tion and internal organization of the FH.	- Rules and quotas for the election of women to FH bodies - Encourage women's participation; - Monitoring and transparency.





Risks	Type of risk	Risk descripti on	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
		- Monopol y of men in decision making and unrepres entative percenta ge of women participat ing in the FH Problem				
Lack of involveme nt	Humain	s of training, accompa niment and involvem ent of the members of the FHs.	Difficulties in integrating members to accomplish tasks and time differences in members' availability.	High	Organizatio n	- Control, guidance and follow-up; - Set a time slot for meetings/ activities to be respected.
Conflict between agricultura I and consumer cooperativ es	Manageme nt	Conflict of interest between the different cooperati ves	Creating a lasting link between the two types of cooperatives is quite difficult because of their divergent intentions and objectives	High	Organizatio n	- Find a common ground between the two types in order to satisfy their needs equally;-Réunions régulières entres les parties prenantes.



Risks	Type of risk	Risk descripti on	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Risk of detour and fraud	Financial	External control of FHs	- Large number of stakeholders involved in FHs; - Inefficient monitoring.	Medium	Organizatio n	- Ongoing, regular and systematic monitoring by internal and external auditors; - Stakeholder monitoring.

# CHAPTER 2: FH FORMALIZATION PROCEDURE TEMPLATE

a. Identifying the formalization procedure

Activity	Date	Method	Description of the activity	Participants	Outcomes
Introduction	Novem ber 2020	Project kick-off meeting	General presentation of the concept and the expected objective of the FH	All participants in the project activities. Public and private partners and associations	Information on the purpose and process of creating the FH in the target cities
Planification	5-6/21	Remote or face-to-face preliminar y meetings	Presentation of the approach and interests of the FH to the various partners	Representatives of consumer associations and agricultural cooperatives and development services	Adherence to the FH implementation project and agreement on active participation in its activities
Planification	5/21	Bilateral meetings	General presentation of the concept and the expected objective of the FH	Regional Planning and Development Managers	Adherence to the FH project and active contribution to activities
Formalization of the organization	9-10/21	Focus group meetings	Discussion of the FH operational implementation model	Consumer associations and	Validation of the organization project



# b. The draft of the Memorandum of Understanding

## **ACAB**

Association Carrefour de l'Alimentation de Beni Mellal

#### **DRAFT STATUTE**

#### **Preamble**

Food and nutrition play a major role in public health with regard to the importance of the national demand in basic products on the one hand, and the requirements in terms of quality and quantities of agricultural products intended for human food on the other hand. Agriculture constitutes the base of the food and its development must allow to continue to play this essential role through the improvement of the technical and organizational performances in order to optimize the use of the resources and the improvement of the conditions of access to the basic food products for the consumers. This development of agriculture cannot be conceived, in the current economic context, without taking into account the concepts of sustainable development, optimization of resources, preservation of the environment and taking into account the preferences and specific needs of local consumers.

In this sense, it is necessary to undertake a set of actions to strengthen the social responsibility of the various partners in order to promote a sustainable and efficient agriculture that takes into account the needs and preferences of consumers to improve performance and nutritional efficiency throughout the region.

To this end, it is important to have an open, committed and efficient organization at the local level, recognized and representative of all partners and stakeholders in the agriculture and food sectors, including development and research services, with a view to developing unified strategies and actions to promote food performance upstream and downstream of the agricultural chains. This institutional and inter-professional partnership aims at the same time to improve farmers' income through the choice of agricultural products with high economic and nutritional potential and to encourage consumers to improve their nutritional performance through the orientation and targeting of consumption.

In view of the above-mentioned elements, the agricultural cooperatives and the associations of defense of the consumers' rights, conscious of their role and with the aim of accomplishing their missions and serving the general interest, constituted themselves in an Association named " Carrefour de l'Alimentation de Beni Mellal ", of which what follows, represents the statutes

The Association Carrefour de l'Alimentation de Beni Mellal is a non-profit association.

The Association Carrefour de l'Alimentation de Beni Mellal, "ACAB" has the following objectives





- To represent, federate, and unite local economic operators (cooperatives and associations), or in order to promote food diversity and nutritional performance on a regional scale;
- To value the direct dialogue between consumers and farmers in order to promote the development of agriculture and the improvement of the quality and accessibility of food and the improvement of nutritional conditions;
- To promote the development of local agricultural products dedicated to food and quality;
- Encourage the development of technological and organizational solutions for the benefit of consumers and producers;
- Promote food safety, sustainability and quality of food products;
- To coordinate, within the framework of partnerships, all actions and/or initiatives to strengthen agro-biodiversity and nutritional performance, particularly through R&D activities.
- Undertake counseling, guidance, training and extension activities to improve nutritional and agricultural performance;
- Regulatory and normative monitoring in areas of interest.

# Article 1: Continuation of the legal form

It is continued between natural and legal persons representing farmers and professions of agriculture and agribusiness or representatives of consumer associations in Morocco directly or indirectly, the ACAB, a non-profit association, governed by the Dahir No. 1-58-376 of 3 Journada I 1378 (November 15, 1958) as amended and supplemented, by the general principles of law applicable to contracts and obligations, as well as by these statutes and the rules of procedure

## **Article 2: Name**

The Association will continue to operate under the name: Association Carrefour de l'Alimentation de Beni Mellal, by abbreviation "ACAB".

## Article 3: Missions

## ACAB's missions include:

- Federating and representing consumers and farmers;
- Lead and/or contribute to any local or regional strategy for the development of sustainable agriculture;
- Develop and promote local agricultural products for better nutritional efficiency;
- Participate in any public-private partnership (PPP), as the preferred representative of farmers and consumers;
- Raise consumer awareness about the quality of food and agricultural products including brands, designs, packaging, trade names, signs, etc;
- To contribute to the training, research and development of technological and organizational solutions to improve the effectiveness of diets at the local, regional and national levels:
- Build partnerships for the promotion of sustainable agriculture, food and nutrition with national and international partners;
- Take into consideration the gender aspect in the activities dedicated to agricultural development and food;
- Carry out and/or conduct studies, surveys, monitoring projects, databases;





- To create or participate in any grouping, union, federation, confederation, business club, platform, business council, aimed at the development and promotion of agriculture and nutritional performance;
- Organize any meeting, fair, seminar, conference

# Article 4: Headquarters

The headquarters of ACAB is located at Chamber of Agriculture of Beni Mellal, in the Administrative District, bd Omar Ibn Lkhattab BENI MELLAL. It may be transferred to any other place in Beni Mellal by decision of the Board of Directors, and to any place in the region of Beni Mellal - Khenifra by decision of the Extraordinary General Meeting.

#### **Article 5: Duration**

The duration of the Association is unlimited.

# **Article 6: Composition**

ACAB is composed of active members, honorary members, partner members, and observer members

#### 6.1. Active members

Active members are natural or legal persons exercising agricultural activities in the region of Beni Mellal - Khenifra and representing a group of farmers or being able to become one, as well as any group in the region of Beni Mellal – Khenifra working directly or indirectly for the promotion and defense of consumer rights.

Active membership in ACAB is open to individuals and/or legal entities as defined below who meet the conditions for admission as set forth in these bylaws and the internal regulations:

- Any regional or local grouping, whatever its form, legal or physical person carrying out an economic activity directly or indirectly related to agriculture and whatever its sector of activity such as agro-industry, trade, services, fishing, transport, logistics, IT, engineering, energy, local products, trading, etc.;
- Any regional or local association directly or indirectly involved in the promotion and defense of consumer rights, such as sectoral associations, federations, confederations, etc;
- Natural and/or legal persons providing services to agriculture (training, accompaniment, commercial information, promotion, digitization and any activity of support and defense of the interests of members, ...);

To be an active member, an applicant must:

- To adhere to these bylaws;
- Adhere to the internal rules of the association;
- Be approved by the Executive Board;
- Commit to paying the annual membership fee.

The amount of the annual fee is set by the Board of Directors, upon proposal of the Executive Board.

# 6.2. Honorary members





The Board of Directors, on the proposal of the Executive Committee, may admit as an honorary member of ACMA, any natural person by reason of his or her functions, notoriety or competence.

Honorary membership is strictly personal.

Honorary members are not required to pay membership fees. They are not eligible to vote or be elected. They do not have voting rights in ACAB.

#### 6.3. Partner members

Partner membership may be granted by the Board of Directors, on the proposal of the Executive Board, in accordance with the internal regulations.

These partner members are not required to pay dues. They are not eligible to vote or be elected. They do not have voting rights in ACAB.

#### 6.4. Observer members

The following are observer members, members of public organizations and institutions, related to agriculture, sustainable development and food.

Administrations, institutions and public bodies are exempt from paying the annual fee and do not have voting rights.

# **Article 7: Loss of Membership**

Membership in the Association is lost by:

- Resignation addressed by registered letter to the President of the Association and accepted by the Executive Board;
- Non-payment of dues in the year in which they are due for active members;
- Expulsion by the Executive Board for disciplinary reasons and approved by the Board of Directors:
- Dissolution, judicial liquidation and death.

#### **Article 8: Resources**

- The resources of the Association are composed of:
- Dues for active members;
- Support from members;
- Gifts and beguests;
- Proceeds from various services or events organized by the Association on an incidental basis;
- Public or private grants and donations;
- All financial products;
- Reserve Fund;
- Any other resources authorized by law.

## **Article 9: Financial organization**

The Association's budget is prepared by the Executive Board on the proposal of the Treasurer and according to the action plan approved by the Board of Directors.

The Association's accounts are kept under the responsibility of the Treasurer, Assistant Treasurer and the President, in accordance with the regulations.

The accounts of the Association are certified by one or more auditors, registered with the Order of Chartered Accountants, appointed by the ordinary general meeting on the proposal of the President.





The auditor is in charge of controlling and monitoring the accounts of the Association. The duration of his mandate is fixed by the general assembly and has a maximum limit of 3 years. The auditor will have to establish for each accounting period a detailed report in which he gives an account to the general assembly, of the execution of his mandate, points out all the irregularities and inaccuracies which he has been able to notice after having made all the necessary verifications and observations.

Audits of the Association's accounts may be ordered by the General Assembly, by the Board of Directors, or by the Executive Board.

#### **Article 10: Exercise**

The accounting year begins on January 1 and ends on December 31 of each year.

# **Article 11: Responsibility of members**

The Association's assets alone are liable for the commitments entered into by it, and none of its members, even those who participate in its administration, may be held personally liable for the Association's commitments.

# Article 12: Structures and functions of the Association

The structures, organs and functions of the Association are:

- Ordinary General Meeting;
- Special General Meeting;
- The president of the ACAB;
- Board of Directors;
- Executive Board;
- ACAB Management.

# **Article 13: The General Assembly**

The General Assembly is composed of all the members of the Association. It is the supreme body of the Association. The right to vote is reserved for active members who have paid their membership fees. The date, place and agenda are determined by the Board of Directors. The General Assembly can only deliberate on the issues on its agenda.

#### Convocation

The General Assembly shall be convened by the President of the Association, at least fifteen days before the date fixed, by individual mail or e-mail or by an announcement in the press indicating the time, place and agenda of the meeting. It may also be convened at the request of half (1/2) of the members of the Board of Directors or one quarter (1/4) of the active members who have paid their dues.

# 13.1. The ordinary general assembly

## 1 3.1.1. Convocation and composition

The Ordinary General Assembly shall be convened by the President of the Association in the manner specified in Article 13, at least once a year. All other legal entities or natural persons may attend the ordinary general meeting at the invitation of the president, without the right to vote

#### 13.1.2. Allocations

The ordinary general assembly meets to:

- To elect the President;
- Define the overall vision as proposed by the Board of Directors;





- To hear and deliberate on the moral and financial reports of the past year and to decide on the discharge;
- To hear the reading of the auditor's report;
- To approve the amount of annual dues as estimated by the Board of Directors upon proposal of the Executive Board;
- Define, direct and control the commitments of ACAB;
- To rule on all matters within its competence relating to the proper functioning of ACAB;
- Appoint one or more auditors for each financial year, on the proposal of the President, to audit and examine the accounting records of ACAB;
- To appoint and dismiss the auditor, and to determine the term of office;
- To rule on the risk of dysfunction of the Board of Directors and the Executive Board;
- To take all decisions tending to reinforce the action of the Association and to support its effectiveness;
- Debate on miscellaneous issues.

#### 13.1.3. Quorum

The ordinary general assembly deliberates validly when at least one quarter (1/4) of the active members up to date with their subscriptions are present or represented. In the absence of this quorum, a second general assembly is convened within a minimum period of fifteen (15) days. This assembly can validly deliberate with a quorum of one eighth (1/8) of the members present or represented. It can then take its decisions by a majority of the votes of the members present or represented. In the event of a tie, the president has the casting vote.

## 13.1.4. Election of the President

The Ordinary General Assembly elects the President of the Association or, if necessary, renews his expired mandate.

## 13.2. The extraordinary general meeting

## 13.2.1. Convocation and composition

If necessary, the president may convene an extraordinary general assembly, following the formalities provided for in article 13. The extraordinary general assembly is composed of all active members, up to date with their membership fees.

## 13.2.2. Allocations

The Special General Meeting shall meet to:

- To amend the articles of association in whole or in part;
- Transfer the headquarters of ACAB to any other location outside the city of Casablanca:
- To decide on the dissolution of the Association or its merger with other associations pursuing a similar goal;
- Designate, if necessary, the liquidators;
- To determine the terms and conditions of the liquidation in accordance with the legal provisions in force;
- To decide on the total or partial disposal of real estate by nature or of holdings included in ACAB's fixed assets;
- To take any other decision not falling within the exclusive competence of the ordinary general meeting.

# 13.2.3. Quorum





The deliberations of the Extraordinary General Assembly are subject to a quorum of at least half (1/2) of the active members up to date with their dues present or represented.

In the absence of this quorum, a second general assembly is convened within a period of at least 15 days with a quorum of one third (1/3) of the members present or represented.

The Extraordinary General Assembly takes its decisions by a two-thirds majority of the votes present or represented.

#### **Article 14: The Board of Directors**

# 14.1. Composition:

The Association is administered by a Board of Directors composed of appointed members, ex officio members, observer and partner members and honorary members.

# 14.1.1. Designated members

These members are appointed from among the active physical members who have paid their dues

These members are appointed intuitu personae.

Designated members have the right to vote.

## 14.1.2. Members Observers and partners

Observer members are representatives of administrations, institutions and public or private organizations concerned with agriculture, sustainable development and food, duly mandated. Any member of the council appointed by the president, for a 5-year term, is eligible for reelection.

Observer and partner members do not have the right to vote.

## 14.1.3. Honorary members

Honorary members may be invited to take part in the Board of Directors.

Honorary members do not have voting rights.

The functions of the members of the Board of Directors do not give rise to any remuneration. The Board of Directors is headed by the President of the Association. In case of impediment, he is replaced by one of the vice-presidents, on the basis of a delegation from the president.

## 14.2. Meeting

The board of directors meets at least once every six months upon convocation by the president or upon the initiative of one third (1/3) of the active members, and as often as required by the interest of the association.

The meetings of the board can take place in any place in Beni Mellal.

#### 14.3. Quorum and decision

The effective presence of one third (1/3) of the members entitled to vote is necessary to validate the deliberations.

Decisions are taken by simple majority. In the event of a tie, the president has the casting vote.

#### 14.4 Duties of the Board of Directors:

The Board of Directors shall meet to:

• To propose and implement the overall vision of the Association decided by the General Assembly and to exercise a supervisory function over the activity of the Association;





- To act, moreover, as an organ of regulation and control of the activities of the Association:
- To designate, on the proposal of the president, the members of the council invested with the functions of vice-president, treasurer, assistant treasurer, secretary general who sit in the executive office:
- To draw up the accounts and budget estimates to be presented to the ordinary general assembly;
- To stop the moral report;
- Adopt the rules of procedure;
- Transfer the headquarters to any other location in Beni Mellal;
- To decide to convene the General Assembly and to set its date and agenda;
- To set a deadline for the receipt of nominations for the presidency;
- To review nominations for the office of President and approve eligible candidates.

The Board of Directors reports to the General Assembly.

## Article 15: The Executive Board

## 15.1. Composition

The Executive Board is composed of 9 to 15 members including:

- President;
- The vice-presidents;
- The Treasurer:
- The assistant treasurer;
- The secretary general.

The members of the executive committee are chosen by the board of directors on the proposal of the president among the members of the board of directors.

Nevertheless, the president may invite to the meetings of the executive committee, in an advisory capacity, other personalities known for their expertise and experience. The invited personalities do not have the right to vote.

In the event of a vacancy in the Executive Board, it is filled by co-option from among the members of the Board of Directors. The Board of Directors validates the decision at its next meeting. The vice-presidents are each entrusted with a mission set by the executive committee on the proposal of the president. The executive committee is responsible to the board of directors. The function of member of the executive committee does not give rise to any remuneration.

## 15.2. Meeting

The Executive Board meets at the invitation of the President four times a year and as often as required by the interests of the Association. Its decisions are taken only when half of its members are present and it takes its decisions by simple majority. In the event of a tie, the president has the casting vote.

## 15.3. Allocations

#### **Executive Board:**

- Ensures the execution of the decisions taken by the general assemblies and applies the orientations which are fixed to him by the board of directors;
- Prepares the moral and financial reports that are submitted to the general assembly;
- Prepares the action plan and budget for submission to the Board of Directors;





Ensures the proper administrative and financial functioning of the Association.

The Executive Board may, on the proposal of the President, create as many working groups and commissions as required for the proper functioning of the Association. These commissions are chaired by active members of the Board of Directors or by personalities who are active members known for their expertise and who are appointed on the proposal of the President.

The Executive Board shall welcome new members and proceed with the removal of members in accordance with Article 7. The said removals are proposed to the Board of Directors for approval.

All decisions taken within the executive committee are validated by the board of directors.

# 15.4. The Strategic Committee

The Executive Board may create a Strategic Committee composed of the President, the Vice-Presidents and the Presidents of the clusters. The mission of the strategic committee is to coordinate the work of the various divisions.

#### **Article 16: The President of the Association**

#### 16.1 Nomination for ACMA President

Candidates for ACMA President must:

• Be legal representatives of an association, group or cooperative working in agriculture, agri-food, local development or in defense of consumer rights who are active members and who can prove 2 years of continuous membership.

The rules of procedure will define the application procedures.

In the event of the permanent cessation of the office of the president due to death, resignation, or any other cause resulting in a permanent absence or impediment, the board of directors is obliged to convene, by one of its vice presidents, the general assembly within three (3) months of the vacancy of the office of president, in order to elect a new president. The latter will continue the mandate with the same board of directors and the same executive committee until the end of the current mandate unless the assembly decides otherwise.

The senior Vice President shall serve as interim President of ACMA until the next meeting to elect a new President.

#### 16.2. Term of office of the President

The president elected by the ordinary general assembly receives a mandate to lead the board of directors and the executive committee for a non-renewable period of 5 years. If no eligible candidates for the presidency are nominated within the time limit set by the Board of Directors, the mandate of the outgoing president will be renewed once again.

# 16.3. Duties of the President

- Represents the Association with public authorities and partners;
- Convenes and presides over general meetings, the board of directors and the executive committee;
- Implements the decisions of the Executive Board, the Board of Directors and the General Assembly;
- Leads the Executive Board and the Board of Directors;
- Represents ACMA in court and in all acts of civil life;
- Proposes the Ombudsman to the Board of Directors;





- To appoint and dismiss all functions of the bodies of ACMA;
- Presents the moral report and the annual action plan of the executive committee, the board of directors for the general assembly of the Association;
- Hires and removes the staff of the Association;
- May delegate all or part of its powers to one or more vice-presidents who shall assist it and replace it in case of impediment;
- Proposes among the members of the board of directors those to be invested with the functions of vice presidents, treasurer, assistant treasurer and secretary general;
- Ensures with the treasurer the management of the funds of the association.

#### **Article 17: The Treasurer and Assistant Treasurer**

The Treasurer is responsible for:

- Oversee the preparation of the Association's budget, the collection of annual dues and the incurring of budgeted expenses;
- Oversee the maintenance of regular accounting of income and expenses in accordance with legal requirements;
- To close the accounts as of December 31 of each year and to prepare the situation to be presented to the general assembly;
- Present the budget and financial report to the Board of Directors and the General Assembly:
- To ensure with the president the management of the funds of the Association.

The Assistant Treasurer assists the Treasurer and replaces him/her in case of absence. The signature of the treasurer or his assistant is mandatory.

## **Article 18: The Secretary General**

Under the responsibility of the president, the secretary general assumes all administrative responsibilities of the association. In particular, he/she ensures:

- Preparation of correspondence;
- The drafting of the minutes of the meetings;
- Keeping records, correspondence, minutes and all administrative documents;
- Preparation of the agenda in collaboration with the president.

# Article 19: The permanent structure: management

The President of the Association shall be responsible for the general management of the Association. The President shall appoint the Director(s) of the Association and determine their duties.

The Executive Director and the Director shall prepare and attend the work of the General Meetings, the Board of Directors and the Executive Committee. They may not, however, vote in these bodies.

# **Article 20: Disciplinary Board**

It is composed of one member of the Board of Directors appointed by the President and three members chosen by the General Assembly, among its members or among the honorary members. It intervenes in case of :

- Non-compliance by a member with the statutes, the code of ethics and the specifications setting the conditions of practice of the profession;
- Loss of membership.





#### **Article 21: Minutes**

The deliberations of the Association's bodies are recorded in minutes signed by the President and/or the Secretary General and kept at the Association's headquarters.

# **Article 22: Internal regulations**

The establishment or modification of ACMA's Bylaws is the sole responsibility of the Executive Board.

Any proposal to modify, amend or supplement the bylaws should be submitted to the Board of Directors for approval.

The bylaws are intended to regulate, supplement or clarify the various points provided for or not provided for in the bylaws.

In case of contradiction between the statutes and the rules of procedure, the statutes shall prevail.

#### **Article 23: Dissolution**

The dissolution of the Association may be pronounced at any time by an Extraordinary General Meeting specially convened for this purpose on the proposal of the Board of Directors or of 2/3 of the active members of the Association who have paid their dues.

The General Assembly will deliberate in this case under the conditions set out in Article 13-2-3 above.

In the event of voluntary or forced dissolution, the meeting deliberating under the conditions of article 13-2-3, shall appoint one or more commissioners to be responsible for the liquidation of the Association's assets, the amount of which, after settlement of all debts, shall be devolved in accordance with the legislation in force and according to the rules determined by the general meeting.

## Article 24: Dispute, mediation and arbitration

The members of the Association shall endeavor to settle amicably and in the spirit of the Articles of Association, all difficulties which may arise in the application of these Articles of Association. Should they fail to do so, they shall call upon a person chosen by mutual agreement, whose mission shall be to reconcile them.

In the event that this mediation is impossible, within a period of 30 days, any dispute will be submitted to arbitration, in accordance with articles 306 and following of the Code of Civil Procedure.

The internal regulations will complete, if necessary, the modalities of implementation of this clause

# Article 25: Entry into force and enforceability

The present statutes will take effect as from the date of their adoption by the extraordinary general assembly and will be opposable to third parties, in accordance with article 5 of the Dahir N°1-58-376 regulating the right of association.

## **Article 26: Transitional Provisions**

The term of office of the current President shall be extended to the term set forth in Article 16.2. The ACMA President is mandated during this transitional period to organize the governance of ACMA in accordance with the new bylaws.

# **Article 27: Formalities**





The president will carry out the formalities provided for by the Dahir of November 15, 1958. He may delegate for this purpose all powers to one of the members of the association or to any person he deems competent, bearing an original or a certified copy of the present statutes.

#### **CHARTER OF ETHICS**

#### **Preamble**

The present Charter of Ethics (hereinafter the "Charter") established by the Association Carrefour de l'Alimentation de Beni Mellal (hereinafter "ACAB") has been unanimously adopted by its members (hereinafter the "Member(s)") and is annexed to the Internal Regulations of ACAB.

## **Article 1: Purpose**

- 1.1 The purpose of this Charter is to specify the rules applicable to (i) the Members in their relations within ACAB and with ACAB (ii) ACAB itself, as well as the obligations to which the Members and ACAB are bound, in particular with regard to competition law.
- **1.2** The ACAB Board appoints a Delegate as Compliance Officer with the mission of ensuring proper compliance with the Charter (hereafter the "Compliance Officer").

#### **Article 2: Commitments of Members**

## 2.1 Cooperation

Each Member agrees to cooperate with ACAB to ensure the best possible functioning of ACAB.

# 2.2 Loyalty

Each of the Members undertakes not to maintain or undertake any action of any nature whatsoever which would have the effect of undermining, directly or indirectly, the missions of ACAB, as defined in Article 4 of the Articles of Association.

## 2.3 Compliance with competition rules

**2.3.1** Each Member shall comply with the laws and regulations applicable to it and undertakes, in particular, to respect the rules of the market and of free competition between itself and the other Members.

Any discussion between Members within ACAB is strictly limited to ACAB business and Members are not permitted to communicate, request or receive commercially sensitive information in their meetings and discussions within ACMA that would influence the market or the activities of competitors.

- **2.3.2** In order to ensure compliance with this commitment, each Member undertakes, in particular:
- to verify the topics on the agenda of ACAB meetings and the potential problems with regard to competition law and respect for individual freedoms;
- to request cancellation of critical topics and, if such cancellation is rejected, not to participate in the meeting;
- not to participate in meetings that do not have a fixed agenda;





- in case of doubt as to the legal nature, with regard to the competition rules, of a subject and/or exchange discussed at the meeting, to refer the matter to the Compliance Officer (or outside counsel) present;
- to respect the advice given, on its own initiative or at the request of one of the Members, by the Compliance Office (or outside counsel);
- if discussions continue despite the Compliance Officer's (or outside counsel's) advice to the contrary, to leave the meeting and ensure that his or her departure is recorded in the minutes;
- to verify that the minutes correctly reflect the course of the meeting and to request amendments and modifications, if necessary.



# Annex 5 – Ait Ouallal Bittit / Ait Yazem – Meknes - (Morocco)

#### FH coordinators and main contacts:

National School of Agriculture of Meknes, ENAM, Noureddine MOKHTARI, Ali ABIDAR, Coordinators.

# FH process schedule

FH phases	Chapter	Activity description	Scheduled month
FH design	1	Meetings with stakeholders at the project kick- off meeting	Oct. 2020
FH design	2	Meetings with local authorities and development services	Mars - June 2021
FH design	3	Meetings with farmers' associations	June –July 2021
FH design	4	Online meetings with consumer associations	September 2021
FH formalization	5	Co-development of the manifesto and awareness of the purpose of the FH	October 2021
FH background work	6	Preparation of the draft memorandum of understanding	September 2021
FH background work	7	Distribution of roles and responsibilities and means of governance	October 2021
FH background work	8	Identification of the appropriate organization mode and drafting of the collaboration document	October 2021
FH background work	9	Circulation of letters of invitation for the signing of the Memorandum of Understanding	December 2021

Several face-to-face meetings and online meetings were held during the period from March to November 2021. These meetings were devoted at the beginning to the presentation of the project in a general way then afterwards to the explanation of the objectives of the creation of the FoodHub at the level of the city of Meknes and thereafter the discussion with the various partners on the mode of organization and the adequate legal form of the FoodHub. These sessions were attended by the associations and agricultural cooperatives of the regions of Ait Ouallal Bittit and Ait Yazem mentioned above, on the one hand, and the local associations for the defense of consumer rights in the city of Meknes.

Some meetings, especially those related to the presentation of the project and the expected objectives of the FoodHub, saw the participation of several representatives of the development services of the region of Meknes-Fes who contributed to enrich the discussions around the problems related to the improvement of agricultural productions, the quality of food products and the access to information on the quality and the origin of food by the consumers

These different working sessions have brought together the representatives of farmers through agricultural associations and cooperatives with consumer rights associations. The





discussions between the representatives of the agricultural producers and the consumers allowed to evaluate the points of view on the needs of each partner in relation to the improvement of the quality of the nutrition and the agricultural products intended for the human consumption.

Regarding the expectations of farmers' associations and cooperatives, toward the FoodHub: its role, its missions, its mode of operation, the links with other committees or local bodies related to agriculture and food, in particular the regional development services...The following recommendations and comments were made:

- Strengthen relationships with local producers and consumers through meetings at the FoodHub to learn about production or consumption needs and opportunities;
- Continue to develop and disseminate good practices on the most relevant topics, including the quality of local products, their origin and their label;
- Insure to link the work of the FoodHub to national guidance on nutrition and quality requirements;
- Remain responsive to regional development services to improve the effectiveness of actions;
- Plan regular meetings with the general public in order to better disseminate results and recommendations;
- Integrate in the objectives of the FoodHub the dissemination of knowledge to partners through mini-conferences or seminars on professional topics according to a logic of "professional groups" or "target population
- Listen to the associations and remain pragmatic: many agricultural cooperatives are in a precarious financial situation. It would be interesting to consider consulting the maximum number of associations and agricultural cooperatives not currently represented in the creation of the FoodHub in order to ensure a better representation of farmers in the FoodHub at the scale of the whole region. All partners currently invited to the FoodHub are therefore encouraged to work with associations in the region to raise awareness of the FoodHub.
- To study the means and the actions to be envisaged in order to perpetuate and improve the action of the FoodHub during the duration of the project and after the end of the FoodLAND project, in particular the means of financing the actions and the modalities of organization which must be flexible to allow a better autonomy.

CHAPTER 1: FH DESIGN AND CONCEPTION PHASE

b. Co-defining the core group/network





# Stakeholder Mapping

ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
1	Public research institution	National School of Agriculture of Meknes	Guidelines and material supplier	Guidelines and material supplier	High	Provide scientific support to FH coordinators, Facilitation skills.	Project Coordinator; Does not wish to participate in bilateral meetings	4	_
2	NGO	Moroccan Federation of Consumer Rights	Consultation, Guidance, Facilitation and Advice	Consumer awareness and communication	High	Provide support to the FH, facilitation skills to local consumer associations.	Does not want direct participation in bilateral meetings.	4	President of the Federation is willing to play this role
3	Public institution	Delegation of the Development Cooperation Office	Facilitation and Advice	Awareness and communication with agricultural cooperatives	Medium	Provide support to the FH, facilitation skills to agricultural cooperatives	Does not want direct participation in bilateral meetings.	3	Local representative has agreed to participate as a facilitator.
4	Cooperative	Agricultural cooperative of the arboriculturists of Lakssir	FH member, participation and decision	Choice of agricultural production orientations favorable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
5	Cooperative	Ait Habrich Agricultural Cooperative	FH member, participation and decision	Choice of agricultural production orientations favorables à la nutrition et agrodiversité	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.
6	Cooperative	Olea Bittit Agricultural Cooperative	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	Representative has agreed to participate as a member of the FH.
7	Cooperative	Honey Agricultural Cooperative - Atlas Portal	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
						agricultural sector			
8	Cooperative	Cooperative Ismailia – Ait Yazem	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.
9	Cooperative	Cooperative Hassania – Ait Yazem	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.
10	Cooperative	Association for onions – Ait Oullal Biitit	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
						potential of the agricultural sector			
11	Cooperative	Cooperative Saadiya – Ait Yazem	FH member, participation and decision	Choice of agricultural production orientations favourable to nutrition and agrodiversity	High	In-depth knowledge of local agricultural production and the development potential of the agricultural sector	Participation in FH meetings and representation of farmers	3	President has agreed to participate as a member of the FH.
12	Public institution	Regional Directorate of Agriculture of Fes - Meknes	Guidance and counseling and technical support	Strategic orientations for the development of agricultural sectors	High	Provide support to the FH, expertise in the development of Agriculture and choice of new products	Does not want direct participation in bilateral meetings.	6	Possibility of technical assistance to the FH.
13	Public institution	Regional Direction of the Agricultural Council of Fes - Meknes	Guidance and counseling	Advice on the development of agricultural sectors	Medium	Provide support to the FH, technical advisory skills to farmers	Does not want direct participation in bilateral meetings.	3	Technical assistance in the field to the FH.
14	Public institution	Regional Directorate of the	Guidance and advice on food	Advice on food safety and	Medium	Provide support to the FH, expertise in	Does not want direct participation in	3	Possibility of technical assistance on





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
		National Food Safety Office	safety and quality	environmental requirements		food security upstream and downstream of the chains	bilateral meetings.		the evaluation of the quality of agricultural products and foods.
15	Association	Consumer Rights Association Wisslane	Member of the FH, participation in consultation and decision	Participation in FH meetings and guidance on food choices and consumer preferences	High	Knowledge of consumer behavior and interface with FH urban consumers.	Participation in FH meetings and consumer representation at the FH	4	Representative has agreed to participate as a member of the FH
16	Association	Association for the defense of consumer rights City Meknes	Member of the FH, participation in consultation and decision	Participation in FH meetings and guidance on food choices and consumer preferences	High	Knowledge of consumer behavior and interface with FH urban consumers.	Participation in FH meetings and consumer representation at the FH	4	Representative has agreed to participate as a member of the FH
17	Association	Association for the defense of consumer rights Medina	Member of the FH, participation in consultation and decision	Participation in FH meetings and guidance on food choices and consumer preferences	High	Knowledge of consumer behavior and interface with FH urban consumers.	Participation in FH meetings and consumer representation at the FH	4	Representative has agreed to participate as a member of the FH
18	National Radio	Medina FM Radio	Dissemination and communication	Assistance in communication and	Medium	Provide support to the FH, in terms of	Does not want direct participation in	3	Possibility of organizing thematic





ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Relations with other stakeholders (indicates their progressive numbers)	Other comments
			to the general	dissemination		dissemination	bilateral		programs on
			public of the	of information		and	meetings.		the activities
			activities and	on the		communication.			and objectives
			role of the FH.	activities of the					of the FH.
				FH.					

For the radio Medina FM, the idea is to use the airwaves of the radio to design, adapt and implement devices of awareness (broadcasts) and spotlight (in different forms) to the attention of listeners: farmers or consumers, in order to direct them in terms of agricultural production and consumption to products more interesting in terms of quality, productivity and nutrition.

In order to guarantee women's representativeness within the FH, it has been proposed to establish an electoral quota at the level of the FH representation which can be considered as a positive and efficient measure that takes into account the reality of the global electoral base at the level of the city of Meknes. However, in order to ensure the impact of the positive measures in the longer term, accompanying measures are also necessary to give more opportunity to women to access this representation, especially through the encouragement of cooperatives and women's associations to be part of the FH.

Experience in other countries shows that representation reflects the role of women in public life in general and is the result of a comprehensive approach that includes qualitative and quantitative measures and is based on a gender perspective in all areas of society. Nevertheless, for the specific case of our FH in the city of Meknes, it is possible through a bottom-up approach at the level of agricultural associations and cooperatives represented within the FH and also of local consumer rights associations to encourage them to be represented at the FoodHub level while respecting a good representation of women within the FH.

To this end, several proposals were formulated during discussions with local partners (farmers and consumers) in order to move towards a FH with gender-sensitive representation. The most reasonable ones remain in relation to setting a minimum quota at the level of the FH for women which should be at least 30% and to ensure that as many women as possible are invited as representatives of associations and cooperatives to attend the meetings for the election of FH representatives in order to achieve this objective and to have opportunities to selectively elect women to the FH (minimum level of competition) and who can play a positive role in this representation and participate in decision making.





# c. Co-defining the structure

VISION	Healthy, efficient, resilient and sustainable food system		
MISSION Improved nutritional performance			
OBJECTIVE	Promote nutritional performance, access to information on the quality of local food products and improve nutrition-oriented agricultural production and processing technologies.		

# d. Co-defining "good governance principles"

PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Participation, representation, fair conduct of elections	Are FH members assured of equal participation and representation in the FH decision-making process? How are FH coordinators elected and their roles assigned? Is gender balance taken into account?	All members of the FH are treated with equal rights and duties and may be elected to coordinate or represent the FH. The coordination of the FH is assigned by election. The roles are assigned according to the forms fixed by the document of creation of the FH and can be distributed according to the profiles of the elected (Consumers/Producers/Administration). In all cases, the representations and roles of the elected representatives will be the result of a democratic process. Taking into account the low number of women's representation in the NGOs and associations that are members of the FH, a minimum of 20% of women is foreseen in the FH document. See the FH's ME
Reactivity	Are the objectives, rules, structures and procedures of the FH adapted to the legitimate expectations and needs of the FH actors?	The organization of the FH is defined in such a way as to enable it to meet the objectives and expectations of the stakeholders. Roles, structures and procedures



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
		are decided and agreed upon internally by the FH stakeholders and can be adapted in relation to changes in these expectations and needs.  The entire organization is described in the FH creation documents and is subject to the rules of application described in this organization.
Efficiency and effectiveness	Are the planned results and the objective aligned? Are the resources available for the implementation and delivery of the FH being used in the best possible way?	The management of the HLF should be results-based and so should the financing: with this mechanism, all actions should be resourced and budgeted to contribute to the achievement of the predefined objectives and results. It is envisaged that there will be an annual or biannual program contract with projected funding based on results that aims to increase accountability by establishing a more direct link between the resources implemented and the expected results
Openness and transparency	How are/will decisions be made within the FH? How are decisions made available to the members of the FH and the public?	The members of the FH should aim to strengthen the coherence of their strategies and decisions in a transparent manner and in harmony with the orientations of the FH. The management committee within the FH should therefore ensure that the orientations and decisions taken within the FH are implemented in a transparent manner and that periodic review and reports are made at the FH meetings.



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Rule of law	Are the rules and regulations of the FH adopted in accordance with the procedures required by law?	The legal form and internal organization of the FH as well as the mode of management is controlled by the public authorities and must comply with the rules and procedures stipulated by the laws and texts in force.
Ethical behavior	How are conflicts of interest within the FH's internal governance addressed?	Any internal conflict must be submitted to the elected bodies of the FH. If a conflict of interest arises within the FH, it may be subject to legal action in accordance with the relevant national legislation.
Competence and capacity	How is the competence and capacity of public health coordinators maintained and strengthened?	ONSSA is the public organization in charge of control and safety of food products in Morocco. Its participation in the FH, as an observer, will contribute to strengthen actions in the direction of safety and compliance with quality requirements of food products.
Innovation and openness to change	How are the results shared with other FHs?	It is planned within the framework of the FH activities to establish an annual calendar of meetings with FHs and organizations working in the field of nutrition in order to share experiences and strengthen exchanges.
Sustainability and long-term orientation	How is the sustainability of the FH guaranteed?	In order to sustain the organization in the long term, it is necessary to look for ways to finance the activities of the FH. It is possible to solicit public subsidies within the framework of specific activities (program contracts or calls for projects) or from private organizations within the framework of bilateral collaboration.



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Good financial management	How are the annual budget and investments of the FH prepared and deliberated?	The organization of associations or federations of associations is stipulated in the Moroccan law on the organization of the accounting and financial aspects of associations. These obligations imply the application of balance sheets and annual accounts that must be justified and are subject to mandatory control by the State.
Human rights, cultural diversity and social cohesion	How are human rights, cultural diversity and social cohesion promoted and guaranteed within the FH?	It is mandatory to comply with national legislation regarding the respect of human rights to cultural diversity and gender parity as stipulated by the text of the National Constitution of 2011. In this sense, it will be mandatory at the level of the texts of creation and organization of the FH to mention these obligations in order to guarantee their practical application within the FH.
Responsibility	How are roles of responsibility defined within the FH? How are decisions reported and sanctioned? How are conflicts between FH actors mitigated?	All decisions within the FH must be made in regular or special meetings with the presence of the majority of the members. Decisions are reported in minutes and circulated to all members of the FH. In order to mitigate conflicts between actors, it is possible to set up negotiation and consultation committees on subjects of interest that may be the subject of divergence between the actors of the FH.



# e. Co-defining roles and responsibilities

STAKEHOL DER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES
1	Scientific and technical support	Scientific support to FH coordinators, facilitation and technical assistance
2	Consultation and facilitation with consumers	Interface with consumer associations, orientation, facilitation and advice on food
3	Facilitation and Consulting in cooperation	Technical and legal support to agricultural cooperatives, facilitation and advice to the FH
4	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
5	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
6	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
7	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
8	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
9	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
10	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to producers and improvement of agricultural technologies
11	FH member, participation and decision	Participation in FH activities, technical support and advice to farmers, guidance to



STAKEHOL DER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES		
		producers and improvement of agricultural technologies		
12	Guidance and counseling and technical support	Support for agricultural development, selection of new agricultural products, technical guidelines and orientations.  Development of resources and skills (standards of practice, guidelines, decision aids for producers).		
13	Guidance and Counseling	Support in technical advice to farmers and agricultural cooperatives		
14	Guidance and advice on food safety and quality	Technical support in terms of upstream and downstream food safety and technical advice and guidance in terms of compliance with environmental and public health requirements (use of pesticides, additives and choice of processing technologies).		
15	FH member, participation and decision	Participation in FH activities, technical support and advice to consumers, improvement in nutrition and access to information on food quality		
16	FH member, participation and decision	Participation in FH activities, technical support and advice to consumers, improvement in nutrition and access to information on food quality		
17	FH member, participation and decision	Participation in FH activities, technical support and advice to consumers, improvement in nutrition and access to information on food quality		
18	Dissemination and communication to the general public of the activities and role of the FH.	Dissemination and communication of the results and objectives of the FH activities to the general public. Nutritional counseling, nutrition education, health promotion (information, education and communication).		

Women are generally poorly represented in decision-making bodies in the country. Socio-cultural attitudes often prevent women's participation in decision-making and their presence in local organizations and associations. In order to achieve good representation of women in the FH, it is envisaged that a set of affirmative action rules will be put in place to achieve a minimum parity.



The empowerment of women in the FH will be increased as a result of the innovations and changes brought about by the project, which will allow women to be involved in all decision-making processes at the FH level. In this sense, it is planned to set a minimum quota for women within the FH. To do this, it will be recommended to the consumer associations and agricultural cooperatives to be represented in a balanced way by women and men in order to reach the expected parity within the FH.

Measures are also planned to influence the community to promote gender equality. The services offered within the framework of the FH must therefore take into account the different capacities of men and women to promote the planned activities. In this sense, and to further promote gender mainstreaming and improve women's access to positions of responsibility within the FH, it would be interesting to plan awareness sessions, courses and days for women in order to put them at the same level of effectiveness (information session, literacy courses, coaching...).

# f. Activities planned with stakeholders

Typology of activity	Start date	End date	Activity description	Actors involved
Introduction	13 January 2021	13 January 2021	Project kick-off meeting. Presentation of the specific objectives of the FH to the project partners	Development and research partners, consumer association representatives and farmers
Educational activity	15 February 2021	17 February 2021	Meetings with farmer associations and cooperatives in conjunction with farmer survey activities on the importance of nutrition and agro-biodiversity and the role of farmers in the FH	Farmers and representatives of agricultural cooperatives
Social Activity	24 March 2021	24 March 2021	On the sidelines of the celebration of Women's Day, a meeting was held on the theme of the role of women in improving the quality of household nutrition for a healthier and more efficient food	Local development association, specialist in nutrition and women's associations



Typology of activity	Start date	End date	Activity description	Actors involved
Educational activity	29 March 2021	2 April 2021	Meetings with consumer associations in the city of Meknes on the importance of the involvement of associations in the improvement of nutritional performance and the orientation of consumers towards a healthier diet. At the same time, these meetings have helped to clarify the role that these associations must play within the FH.	
Educational activity	22 November 2021	22 November 2021	In addition to the consumer survey activities, presentations were provided to participants on the objectives and goals of the project and more specifically on the importance of FHs in improving the nutritional performance of urban consumers in relation to food quality and improving access to information on local food products.	Urban consumers
Regulatory Compliance	01/03/2022	31/03/2022	Regulatory Compliance	Representatives of consumer rights associations and agricultural cooperatives in the Meknes area



Typology of activity	Start date	End date	Activity description	Actors involved
Educational activity	01/05/2022	30/05/2022	Regional workshop with all stakeholders in the field of food and agriculture for the specification of needs and the choice of actions to be undertaken on new products	Different Beneficiaries

# g. Communication and branding

		_					
Type of activity	Activity	Activity Description	Target audience	Scale	Channel	Timing	Support needed from FoodLAND communica tion partners [YES/NO]
C.I	Establishme nt of a strategic vision for the FH	Discussion of the reasons for the inadequacy of local diets and stakeholders' visions for action.	Consumers/ Farmers/ S. Developme nt	Interest groups and represent atives	Dedicat ed event	Oct. 2022	Yes
C.E.	Cultivating the FH brand	Improve the visibility of the FH at the city level and communicate about its activities	Large audience	Open	Various Activitie s	Regul.	Yes
C.E.	Press communicat ion and Internet broadcastin g	Raising awareness and disseminating information on nutritional efficiency and improved diets	Large audience	Open	Partners and Website	Regul.	No



Type of activity	Activity	Activity Description	Target audience	Scale	Channel	Timing	Support needed from FoodLAND communica tion partners [YES/NO]
R.I.	Presentatio n of research results	Presentation of results on technological innovations	Agricultural cooperative s	Open	Worksh ops	Fin 2022 et 2023	Yes
R.I.	Presentatio n of research results	Presentation of organizational and consumer innovations	Consumer associations	Open	Worksh ops	2023- 2024	Yes
D.E	Disseminati on of research results	Presentation of research results on products and technological and organizational innovations for diet performance	Farmer/Con sumer Representat ives	Interest groups	Dedicat ed events	April – Nov. 2023	Yes
C.E	Radio broadcast about the actions of the FH	Broadcasting and communication about the activities of the FH on the radio (Medina FM)	General public	Open	Radio broadca st	2023- 2024	No
C.I	Meetings with agricultural associations and cooperative s	Specification and clarification of actions to be taken in order to encourage the adoption and diffusion of innovations	Target audience	Interest groups	Worksh ops/ Confere nces	2023	Yes
C.E	Event Communica tions	Outreach activities on the occasion of	Large audience	Open	Dedicat ed events	2022- 2023- 2024	Yes



Type of activity	Activity	Activity Description	Target audience	Scale	Channel	Timing	Support needed from FoodLAND communica tion partners [YES/NO]
		International Food Day and other celebrations related to food and agriculture					

# h. Identifying challenges (and appropriate mitigation measures)

Risk	Type of risk	Risk description	Cause of risk	Stage of the Design & conception phase	Mitigation measures
Stakeholder identification	operational	Stakeholder suitability	Different categories of stakeholders	Conception	- Identified beneficial alliances for the project through a concise elimination process; - Making direct contact with trusted individuals who have previously participated in ENA's projects and were willing to learn and participate in a new project.



Risk	Type of risk	Risk description	Cause of risk	Stage of the Design & conception phase	Mitigation measures
Determine the role of each stakeholder who may become a member of the FH	operational	Sharing the vision of FH management with stakeholders	There are many variables that lead to conclusions about the role, position, expectations, and interests of stakeholders for strengthening the process of coordination and facilitation of FH management interventions.	Conception	Matching the needs of stakeholders with the objectives of the FHs.
Understand what the stakeholder could bring to the FH member.	operational	Minimization of stakeholder misunderstandings	The information collected on stakeholders was comprehensive and difficult to standardize in order to facilitate the selection and draw relevant conclusions about the stakeholders.	Conception	Better understanding of the needs of the FH and improved quality of the information collected through targeting.



Risk	Type of risk	Risk description	Cause of risk	Stage of the Design & conception phase	Mitigation measures
Identify the information held by the stakeholder and its usefulness to the FH activities.	operational	Documentary review of reference texts relating to stakeholders	- Availability of detailed information is limited to those directly involved, in this case each stakeholder and their employees Lack of trust and reluctance to share confidential information with the general public.	Conception	- Obtaining reliable information on stakeholders through trusted and well-placed contacts in the field Presentation of the project The reputation of the National School of Agriculture of Meknes plays a key role in attracting the attention of stakeholders.
Stakeholder analysis process to determine stakeholder expectations, roles, capabilities.		Attributions of the stakeholders that will have to be taken into account in the implementation of the actions in favor of the FHs.	- lack of concrete information - difficulties to get in touch with stakeholders	Conception	Defending the corporate interests of the FH while supporting Transparency in decision making and future stakeholder involvement.
Targeted representation	Organistionnel	The FH must be made up of representatives of farmers and consumer rights associations	Lack of rules and eligibility quotas	Formalization of the organization and rules of operation	Rules for the distribution of seats in the FH



Risk	Type of risk	Risk description	Cause of risk	Stage of the Design & conception phase	Mitigation measures
Determination of the resources needed and the degree of real involvement of the stakeholders.	Strategy	Management of material and human resources of FHs.	Definition of the type and number of resources required to accelerate the achievement of the objectives related to FH development, the partners to be involved in order to strengthen the FH organization.	Conception	- Better planning: Determining the amount of resources available to the FHs and the time required to mobilize them; - Better understanding of available resources; - Better distribution of tasks among stakeholders.
Low support from farmers	Organisationnel	Farmers are very little organized in agricultural associations and cooperatives in the target areas	Low interest in cooperation and level of education.	Operational	- Constent communication about the project; - Try to reach out to them and involve them in every process to help them feel included and heard.



Risks	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conce ption phase	Mitigation measures
Funding	Financial	Capital and funding	- Mismanagement of financial resources and unexpected or excess expendituresExpenditures in excess of actual needs Uncontrolled expenditures.	High	Conce ption	- Identification of projected expenses; - Follow-up and control.
Institution al difficulties	Institutional	Internal Stakeholder Organization	Institutional mechanisms of cooperatives and stakeholders may conflict with those of FHs.	High	Conce ption	- Make sure to have all the necessary authorizations from the relevant authorities; - Discuss the institutional needs of each members with all the stakeholders.
Inclusion of women	Gender Issues	- Women are poorly represented in agricultural associations and cooperatives and cannot access the FH - Monopoly of men in decision making and unrepresentative percentage of women participating in the FH	- Women's educational level, social discrimination and perceptions of women's role in society; - Gender inequity in Morocco and non- inclusion of women despite their participation.	High	Imple mentat ion and interna I organi zation of the FH.	- Rules and quotas for the election of women to FH bodies - Encourage women's participation; - Monitoring and transparency.



Risks	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conce ption phase	Mitigation measures
Lack of involveme nt	Humain	Problems of training, accompaniment and involvement of the members of the FHs.	Difficulties in integrating members to accomplish tasks and time differences in members' availability.	High	Organi zation	- Control, guidance and follow-up; - Set a time slot for meetings/ activities to be respected.
Conflict between agricultur al and consumer cooperati ves	Manageme nt	Conflict of interest between the different cooperatives	Creating a lasting link between the two types of cooperatives is quite difficult because of their divergent intentions and objectives	High	Organi zation	- Find a common ground between the two types in order to satisfy their needs equally;- Réunions régulières entres les parties prenantes.
Risk of detour and fraud	Financial	External control of FHs	- Large number of stakeholders involved in FHs; - Inefficient monitoring.	Medium	Organi zation	- Ongoing, regular and systematic monitoring by internal and external auditors; - Stakeholder monitoring.



#### CHAPTER 2: FH FORMALIZATION PROCEDURE TEMPLATE

### a. Identifying the formalization procedure

Activity	Date	Method	Description of the activity	Participants	Outcomes
Introduction	Oct 2020	Project kick-off meeting	General presentation of the concept and the expected objective of the FH	All participants in the project activities. Public and private partners and associations	Information on the purpose and process of creating the FH in the target cities
Planification	6-9/21 Remote or face- to-face preliminary meetings		Presentation of the approach and interests of the FH to the various partners	Representatives of consumer associations and agricultural cooperatives and development services	Adherence to the FH implementation project and agreement on active participation in its activities
Planification	3-6/21	Bilateral meetings	General presentation of the concept and the expected objective of the FH	Regional Planning and Development Managers	Adherence to the FH project and active contribution to activities
Formalization of the organization	9- 10/21	Focus group meetings	Discussion of the FH operational implementation model	Consumer associations and	Validation of the organization project



# Annex 6 - Kamuli (Uganda)

#### FH coordinators and main contacts

Prof. Muyonga John Mr. Nsereko Henry

### FH process schedule

ID	Activity description	Scheduled month		
1	Inception meetings with farmers & Local leaders	Done, February,		
1	inception meetings with farmers & Local leaders	2021		
2	Farmer Profiling	Done, March 2021		
3	Enterprise selection & prioritisation	Done, March2021		
4	Training in recommended Agronomic practices	Done April,2021		
5	Establishment of demonstration gardens/practical learning sites	Done April 2021		
6	Training in group dynamics	Done May-		
O	Training in group dynamics	June,2021		
7	Training in Post-Harvest Handling (PHH)	Done June,2021		
8	Community Awareness on food hub formation	Done June,2021		
9	Stakeholder mapping for selected enterprises	Done August,2021		
10	Stakeholder engagement & drafting and compiling of M.O U document	Done August,2021		
11	Drafting of governance principles	Done August,2021		
12	Training in Agro-ecological farming practices	Done August,2021		
40	Tradicion or acceleration of maintaining	Done		
13	Training on good governance principles	November,2021		
4.4	Development of the hyperding 9 communication strategy	Done		
14	Development of the branding & communication strategy	November,2021		
15	Drafting 9 development of the constitution	Done		
15	Drafting & development of the constitution	December,2021		
16	Registration of the constitution at the District	On-going		

#### CHAPTER 1: FH DESIGN AND CONCEPTION PHASE

b.Co-defining the core group/network





### Stakeholder Mapping

ID	Name	Email	Type (NGO, farmer)	Affilia tion	Role in the FH	Activitie s planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s) in being involved	Issues identifie d with involve ment (i.e., formal involve ment)	Relatio ns with other stakeho Iders (indicat e their progres sive number s)	Other comments
1	Makerere University Kampala (School of Food science & Technology)		Public research institution	Maker ere Univer sity Kamp ala	Project coordinator- Uganda	Worksho ps & Bilateral meetings	High	Providing scientific support to FH & Product developm ent	Formal	2,3,4	Prof. Muyonga John
2	Nutreal Itd								Formal	1	
3	VEDCO		NGO		Trainings (Capacity building) Organisatio n(group, association &	Worksho ps & Bilateral meetings	High	Extension services	Formal	1,3,4,6,7 ,9,10,11, 12,15,16 ,18	Mr. Nsereko Henry 0772510439





ID	Name	Email	Type (NGO, farmer)	Affilia tion	Role in the FH	Activitie s planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s ) in being involved	Issues identifie d with involve ment (i.e., formal involve ment)	Relatio ns with other stakeho Iders (indicat e their progres sive number s)	Other comments
					Cooperative s)						
4	National Agricultural Research		Public research institution	Maker ere Univer sity Kamp ala	Artisans &Resaerche rs	Worksho ps & Bilateral meetings	High	Providing scientific support to FH	Formal	1,2,3	
5	Chancejob international ltd		Private Marketin g company		Public sector buyer	Worksho ps & Bilateral meetings	High	Marketing (Buyer)	Willing to engage in bilateral meetings	6,10,13	Mr. Chance Job 0706525831
6	Kamuli District Local Gov't		Governm ent of Uganda		Technical assistance	Worksho ps & Bilateral meetings	High	Technical Assistanc e	Formal	3,4,7,8,9 ,10,11,1 2,13,14, 15,16	Musenero Richard (District Production Officer-Kamuli)





ID	Name	Email	Type (NGO, farmer)	Affilia tion	Role in the FH	Activitie s planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s ) in being involved	Issues identifie d with involve ment (i.e., formal involve ment)	Relatio ns with other stakeho Iders (indicat e their progres sive number s)	Other comments
											0772595849/075 3595849
7	Canaan schools		Private School		Buyer	Bilateral meetings	High	Buyer (School feeding program)	Willing to engage in bilateral meetings	4,7,6	Achilu Peter- Director Canaan schools 0752988396/077 5058695
8	Banatya investment Uganda limitted		Private storage facility		Producer/Bu yer/store keeper	Bilateral meetings & worksho ps	High	Buyer/mar keter	Willing to engage in bilateral meetings	3,6,7,10	Mr. Batwaula George 0753677637
9	Kamuli Nakulyaku farmer's Cooperative		Farmer cooperati ve store		Producer/Bu yers	Bilateral meetings &	High	Buyer/stor age services	Willing to engage in	3,4,6,7,8	Mr. Batwaula George 0753677637





ID	Name	Email	Type (NGO, farmer)	Affilia tion	Role in the FH	Activitie s planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s ) in being involved	Issues identifie d with involve ment (i.e., formal involve ment)	Relatio ns with other stakeho Iders (indicat e their progres sive number s)	Other comments
						worksho ps			bilateral meetings		
10	Finance Trust Bank		Financial institution		Financial provider	Bilateral meetings & worksho ps	High	Provision of Loan capital	Willing to engage in bilateral meetings	3,7,9,10, 17,18	Baguma David 0700162065 david.baguma@f inancetrust.co.u g
11	Di-Grow- Uganda		Organic Agric. Input dealer		Organic input dealer	Bilateral meetings & worksho ps	High	Provision of Agric.In- puts	Willing to engage in bilateral meetings & worksho ps	7,9,10	Sajabi Moses 0751671431
12	Kamuli Mission Hospital		Private Hospital		consumers	worksho ps	High	Consumer /Buyer	Willing to engage	4,6,13,1 4	Ronald Watongola





ID	Name	Email	Type (NGO, farmer)	Affilia tion	Role in the FH	Activitie s planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s ) in being involved	Issues identifie d with involve ment (i.e., formal involve ment)	Relatio ns with other stakeho Iders (indicat e their progres sive number s)	Other comments
									in worksho ps		Administer 0755187499
13	Kamuli Transporter's Association		Transport er's Associati on		Transport & Distribution services	worksho ps	Medium	Transport & Distributio n	Willing to engage in bilateral meetings	7,10,12, 6	C/P- Mr. Tibenkana – Samuel 0702620298
14	Kamuli General Hospital		Gov't Hospital		Consumers	Bilateral meetings & worksho ps	High	Consumer /Buyer	Willing to engage in bilateral meetings	4,6,12,1 3,17,18	DhikusokaMans ul(In-charge) 0774307668 0755870348
15	Simuntu Farmer's Cooperative		Farmer cooperati ve		Storage services/sto re	worksho ps	High	Buyer	Willing to engage in bilateral meetings	3,6,9,12	C/P- SimuntuErias 0755522190/077 2522190





ID	Name	Email	Type (NGO, farmer)	Affilia tion	Role in the FH	Activitie s planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s ) in being involved	Issues identifie d with involve ment (i.e., formal involve ment)	Relatio ns with other stakeho lders (indicat e their progres sive number s)	Other comments
16	Kamukamu Farmer's Association		Farmer Group		Farmers/pro cessors	worksho ps	High	Processor s	Willing to engage in bilateral meetings	3,6,9,12	C/P-Mr.Mitala Johnson 0702136395
17	Others (NGOs)- IOWA		Iowa State Universit y-Uganda program		Customers/ buyers	Bilateral meetings & worksho ps	Medium	Partnershi ps/Buyers (Feeding centres/sc hools)	Willing to engage in bilateral meetings & worksho ps	6,7,10,1 1,12,13, 14	Nambafu Caroline Nutritionist 0704115440
18	Plan int Kamuli		Internatio nal NGO			Bilateral meetings & worksho ps	High	Networkin g & Partnershi ps	Willing to engage in bilateral meetings	6,7,10,1 1,12,13, 14	





ID	Name	Email	Type (NGO, farmer)	Affilia tion	Role in the FH	Activitie s planned	Necessi ty of involve ment (High- Medium -Low)	Main interest(s ) in being involved	Issues identifie d with involve ment (i.e., formal involve ment)	Relatio ns with other stakeho Iders (indicat e their progres sive number s)	Other comments
									& worksho ps		
19	Kamuli Processor's Association		Processo rs		Processors	Bilateral meetings	Medium	Processor s	Willing to engage in bilateral meetings		KinobaMicheal- C/P 0758412724
20.	Don supermarket		Local supermar ket		Buyers	Bilateral meetings	Medium	Buyers	Willing to engage in bilateral meetings	3	



# c. Co-defining the structure

	To connect food producers & consumers in communities to have self-reliant and resilient food network
MISSION	To improve access to quality products through value addition and knowledge transfer relevant for sustainable production and consumption among men nd women farmers in communities
OBJECTIVES  Control of the second of the sec	Promote the agriculture value chain through improved production, postharvest management, value addition through processing and market linkages of High iron beans, OFSP, millet and Grain amaranths.  To improve access to quality indigenous products for nutrition and food security among food hub members.  To create awareness on nutritional value and benefits of local mixtures for increased consumption and utilization of new technologies among communities, partners and stakeholders in sounthern division (Kamuli municipality),Butansi and Namasagali sub counties Kamuli district.  Dissemination of knowledge about environmental and economic benefits emerging from the adoption of new technologies.  Creating a permanent cooperation framework based on the transfer of knowledge, technology and innovation solutions between Members of the Food Hub (producers, buyers, policy makers, scientific institutions, NGOs and entrepreneurs).  Promoting entrepreneurship in the area of the Food Hub and creating conditions for effective commercialization of grain and nutritious mixture.

### d.Co-defining"good governance principles"

PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Participation,	Are the FH members guaranteed	Yes.The members fully
Representation,	equal participation and	participatedirectly or represented in
Fair Conduct of	representation in the FH decision-	decision making and not just
Elections	making process? How are FH	informed about decisions already
	coordinators elected and roles	made. The coordinators are
	assigned? Is the gender balance	elected through the annual general
	considered?	meeting that is conducted every



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
		calendrer year and roles are assigned as per the constitution. Gender is well balanced.
Responsivenes s	Are the FH Objectives, rules, structures, and procedures adapted to the legitimate expectations and needs of the FH actors?	Yes, through various trainings that make them appreciate the entire process.
Efficiency and Effectiveness	Are the planned results and objective aligned? Are the resources available for the implementation and setting up of the FH used in the best possible way?	Yes,the sources are based on donor funding that is always timely.
Openness and Transparency	How are/will be decisions taken within the FH? How are decisions made available to the FH members and the public?	Collective/ participatory decision making is emphasized, whereby all members participate and decision is reached on by consensus. They reach to other members through stakeholders' engagement/community gatherings and notices that are always pinned at public notice boards.
Rule of Law	Are FH internal rules and regulations are adopted in accordance with procedures provided for by law?	Yes,the Food hub organs comply with the rule of law as stipulated in the constitution and individuals within them can be held to account through compliance with any constraints on resources
Ethical Conduct	How are conflict of interests within the FH internal governance tackled?	Ethical values and standardsoutline the standards of behaviour and practices to be adapted by both the governing body & other members.
Competence and Capacity	How the competence and capacity to act of the FH coordinators is maintained and strengthened?	Capacity building through trainings and continuous engagements in workshops.
Innovation and Openness to Change	How are results shared with other FHs?	Through meetings and reports



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Sustainability and Long-term Orientation	How is the FH sustainability guaranteed?	Registration at district level as a food hub and members will be encouraged to do savings that always brings them together Also information sharing and continuous improvement of knowledge through synergic action The food hub will act as an entreprenurship centre(Resource centre).
Sound Financial Management	How are annual budget and investments of the FH prepared and deliberated?	One annual budget that is followed and exploited. Records of income and expenditure will be maintained by the Treasurer and a financial statement given at each meeting.
Human rights, Cultural Diversity and Social Cohesion	How are human rights, cultural diversity and social cohesion fostered and guaranteed within the FH?	Victory Food hub will not discriminate on the grounds of gender, race, colour, ethnic or national origin, sexuality, disability, religious or political belief, marital status or age.  Attending cultural events like Kyabazinga Days,Farmer Field days training them on human rights and starting up a fund that helps in times of need and joyful moments and organising other social events
Accountability	How are responsibility roles defined within the FH? How are decisions reported and sanctioned? How are conflicts between FH actors mitigated?	Constitution is followed and decisions are implemented in guidance with the constitution and in both executive and general meetings. Through dialoguing with all the affected parties.

# e. Co-defining roles and responsibilities

STAKEHOL	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES		
DER				
NUMBER				
1	Scientific researcher	Provision of scientific support and product		
		development		
2.	Implementing partner	Provision of Extension services &Knowledge sharing		





STAKEHOL DER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES
3.	Implementing partner	Provision Extension services
4.	Implementing partner	Provision of scientific support and product development
5.	Food hub buyer	Provision of Marketing services
6.	Monitoring & policy implementation	Provision of technical assistance
7.	Food hub buyer	Provision of market to the products
8.	Foodhub buyer/storage faclility	Provision of market/storage facility
9.	Producer/buyer	Storage facilities
10.	Financial provider	Provision of loan capital/Financial literacy
11.	Agric. In-put dealer	Provision of agricultural in-puts/technical assistance
12.	Consumer	Customer
13	Distributor	Provision of transport services
14.	Consumer	Customer
15.	Marketier	Provision of storage services/market
16.	Producers/small scale processors	Production/processing services
17.	Competitors/small scale processors	Production/processors
18.	Consumers	Potential customers/buyers
19.	Food hub processor	Provision of processing services
20.	Food hub buyer	Provision of market services

# f. Activities planned with stakeholders

Typology of activity	Start date	End date	Activity description	Actors involved
Inception	1st march,2021	5th march,2021	Meeting with farmer representatives & local leaders to brief them about the project	Farmers and Local government
	12 <sup>th</sup> April,2021	22 <sup>nd</sup> April,2021	Training in recommended Agronomic practices	Farmers and Local government
Capacity building	26 <sup>th</sup> June,2021	27 <sup>th</sup> June,2021	Training in group dynamics	Farmers and Local government
	15 <sup>th</sup> June,2021	16 <sup>th</sup> June,2021	Training in Post-Harvest Handling (PHH)	Farmers and Local government



Typology of activity	Start date	End date	late Activity description		
	27 <sup>th</sup> August,2021	31 <sup>st</sup> August,2021	Training in Agro-ecological farming practices	Farmers and Local government	
	25 <sup>th</sup> November,2021	26 <sup>th</sup> November,2021	Training on good governance principles	Farmers and Local government	
Business activities	17 <sup>th</sup> August,2021	19 <sup>th</sup> August,2021	M.O. U drafting	All Food hub members	
Compliance with local authorities	10 <sup>th</sup> -Dec-2021	On-going	Registering the Food Hub with Local Authorities	All Food hub members	

# g. Communication and branding

Type of activity	Activity	Activity descripti on	Target audience	Scale	Channel	Timin g	Support needed from FoodLAND communication partners [YES/NO]
Internal communication	Community meetings	Having meetings with farmers/ beneficia ries	Project beneficiar ies	High	Regular gatherings & community meetings		YES
	Report writing	Writing of a reportaft er conducti ng an activity	Coordinat or & partner NGOs	High	Sharing of monthly reports		NO
External communication	Sharing of milestones	Docume ntation on Project progress /achieve ments	Donors & policy makers	High	Reports, TVs, radio talk shows, spot messages, social media plat forms (Twitter, Facebook, success stories & Community of practice meetings		YES



Type of activity	Activity	Activity descripti on	Target audience	Scale	Channel	Timin g	Support needed from FoodLAND communication partners [YES/NO]
	Use of visibility materials	Designin g & Printing of visibility materials	General public	High	Through visibility materials like sign posts, banners& T- shirts among othersong		YES
	Use of policy briefs	Develop policy briefs on specific issues	Policy makers	High	Newspapers, magazines, reports and websites		Yes
Dissemination & Exploitation	Developing of brochures & training manuals	Develop, design & print training manual & brochure s	Beneficiar ies	High	Community meetings,cerem onies and monitoring visits		Yes

### h.ldentifying challenges (and appropriate mitigation measures)

Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Mal functioning of technology	Technologica I risk	Technolgy fails to work as expected	Technical conditions and failure of farmers t adopt to the new technolgy	50%	Conception	Involvement of beneficiaries in the design of the technology
Weather changes	Climate related risk	Un predictable weather changesimpe de the adoption of new	Climate change	100%	Design & conception	Promotion of weather insurances schemes, Training on climatechange mitigation measures( planting of trees





Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
		practices by farmers				planting of resistant and early maturing varieties), Training on water conservation techniques & Lobby for Irrigation Technology
Pests & diseases	Production related risk	Pest and disease infestation of gardens	Poor farmer practices, Nature, we ather changes, lack of knowledge on Good Agronomic practices	100%	coneption	Sensitization,Use of recommended agro-chemicals and Use of organic pesticides
High cost of inputs	Production related risk	In-put prices tend to be high	Farming season, exploitation of middlemen	100%	Design & Conception	Training in nursery bed establishment, Purchase in bulk through association & establishing a seedbank(seed as a business)
High Post- harvest losses	Poor post harvesting practices	Farmers are likely to lose a lot due to poor handling from harvesting time to the market	Spoilage from garden, Lack of knowledge and access to PHH techniques	100%	conception	Training in post- harvest hangling and provision of PHH techologies
Price fluctuactio ns/Low prices	Market related risk	Prices are likely to be low	Lack/Poor mechanisms of information sharing, poor quality products due to poor storage practices, lack of constracts, Poor PHH practices (drying on the ground), poor harvest that lead to low prices & poor	100%	conception	Collective marketing/bulking, value addition,branding & labelling of products,market promotions,regular meetings to share information,storage facility,market research on radios e.t.c



Risk	Type of risk	Risk	Cause of risk	Chance	Stage of the	Mitigation
		description			Design & conception	measures
					phase	
			road networks in			
Momon's		Man are the	rural areas	700/	Design 9	Mindoot obongo
Women's mobility to access resources and technology is limited		Men are the owners of land & easily have acess to resources than the women	Negativeattitude	70%	Design & conception	Mindset change, Process of training/innovation to be organized on- farm or in community at an appropriate time.  Women to be involved in facilitated innovation to foster empowerment (confidence, status and engagement in community activities)
Weight loss of the produce & breakage of produce	Storage risk	Weight loss due to Pests & Rodents,poor quality & Contaminatio n due to poor storage	Lack of storage facilities, poor knowledge and lack on PHH techniques	100%	Design & conception	Sensitization on the use of the reccommended PHH Practices like triple bags,silos,drying racks when drying
	Transport risk	Weight loss & spoilage from garden to home and from home to market	Lack containers/bags, High transport costs High maintenance costs for the available means of transport,poor road network,poverty and poor governance in rural areas			Mind-set change and awarenessness creation,lobbying & advocating for good roads,strengthening the saving groups



Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Continued use of outdated inputs & knowlegde on farming practices	Quality control risk	Use & incorrect application of Agro chemicals	Lack of out-put markets in rural areas,Lack of advisory services, Lack of appropriate research on the available in-puts.	80%		Demand for advisory/extension services,lobby to strengthen the law on in-put dealers,
	Research related risk	Continued use of out- dated in-puts & knowlegde on farming practices	Lack of funding on new innovations	70%		Strengthening partnerships with the exisiting NGOs

#### CHAPTER 2: FH FORMALIZATION PROCEDURE TEMPLATE

### a. Identifying the formalization procedure

Activity	Date	Method	Description of the activity	Participants	Outcomes
Stakeholder awareness about food hub formation	June,2021	Community gathering/meetings	Disemination of information about the project	Farmers,Loc al leaders	Information about project was sucessfully shared among communities Selection of key stakeholders & their roles specified
Stakeholder selection & mapping	August,2021	community meeting/ discussions with farmers and local leaders	selection of key actors to be part of the project	Farmers,Loc al leaders(Local government)	A number of stakeholders were identified(Primary stakeholders, secoundary and the



Activity	Date	Method	Description of the activity	Participants	Outcomes	
					support stakeholders)	
Stakeholder engagement	August,2021	Community meetings	Engeging the selected persons to see their level of interest in the project	Farmer representativ es(Producers ),bank rep.,process or,transporter ,buyers,cons umers,school representativ es,Health centre workers & district officials among others	Specified roles, level of intersest for each stakeholder Draft a contract/ M.O.U	
Development Memorrandum of Understanding	August, 2021	Discussions/meetings	An M.o.U will act as a binding document between members of the food hub	Farmers,Loc al leaders,in- put dealer,transp orter,buyers, distributor	Activities for each stakeholder need to be well spelt out in the M.O.U document	



# Annex 7 - Nakaseke (Uganda)

FH coordinators and main contacts
PROF: JOHN MUYONGA – MAKERERE UNIVERSITY (MUK)
HENRY NSEREKO – Volunteer Efforts for Development Concerns (VEDCO)FH process schedule

### Implemented schedule

FH phases	Chapter	Activity description	Scheduled month
FH design	1	Farmer / stakeholders inception meetings with a major focus of: Introducing the Food land project to the community/ stakeholders, explain out the design of the project, its concept and implementation approach. This was done at the community, sub county and district level	3 <sup>rd</sup> - 10 <sup>th</sup> / 03/21
FH design	2	Beneficiary's identification, selection and profiling, where all the intended FH beneficiaries were selected and the profiling exercise were completed and the data bank for this was established.  A total of 204 participants attended (Male – 139, Female – 65)	18 <sup>th</sup> - 25 <sup>th</sup> / 03/ 2021
FH preparation for ground work	3	Farmer's enterprise selection and priotization./ profiling This with full participation by the farmers and maximum guidance by the technical staff / implementing partners (VEDCO/ MUK & NAPIL), basing on the key crop enterprise which were included project proposal. The priotization aspect was based on the following: ( there susceptibility to disease/ pests, income generation, labour requirement, market availability, nutrition component and consumers preference etc) A total 116 farmers attended ( Male – 71, Female – 45 )	17 <sup>th</sup> - 30 <sup>th</sup> / 06 / 2021
FH design / formalization/ preparation for ground work	4	Identifying / selecting the site where the planned smart climatic smart irrigation/ fatigation technologies will be established and from where the whole research and learning process will be taking place for Nkaseke FH (MUK / VEDCO). 53 implementing staff with farmers participated in the exercise (Male- 32, Female 21)	27th /04/2021
FH design	5	Development the protocol for the research to done and in identifying / selecting the site where the planned smart climatic aquaculture technologies will be	12 <sup>th</sup> – 16 <sup>th</sup> /2021



FH phases	Chapter	Activity description	Scheduled
•	•		month
		established and from where the whole research and learning process will be taking place. The design to be	
		adopted for the entire arrangement was established (	
		NARO/ VEDCO) For Kajansi/ Wakiso FH. 6 staff	
		participated ( 2 Female , 4 Male	
FH	6	Farmer's introductory trainings on recommended	May & June -
preparation		agronomic practices (GAP) for the selected / priotized	2021
for ground		crop enterprise for Nakaseke FH (Tomatoes, green	
work		paper, carrot, fruits). The training was mainly focussing	
		on the recommended management practices / cost	
		benefit analysis.	
FH	7	Farmer's introductory training on smart irrigation /	May – June
formalization		fatigation process and agro ecological farming	2021
/ preparation		practices. The farmers were taken through the role /	
for ground		relevancy of smart irrigation / fatigation and the	
work.		recommended agro ecological farming practices.	
FH	8	Key Stake holder's identification/ mapping meetings.	$1^{st} - 10^{th} / 08$
formalization		This meeting included all the actors involved in the	2021
/ preparation		(production, marketing, processing etc chains for the	
for ground		priotized crop enterprises ie (producers, buyers,	
work.		consumers, input dealers, financial institutions et.	
FH	9	Farmers meeting for drafting the MoU document for	$17^{th} - 20^{th} / 08/$
formalization/		their FH. The executive and all the sub committees for	2021
preparation		the FH and some of the FH members were fully	
for ground		involved in the MoU drafting process. The MISSION,	
work		VISION, OBJECTIVES and intended interventions /	
FII	10	activities were noted in the FH MoU.	23 <sup>rd</sup> - 27 <sup>th</sup> / 08
FH formalization/	10	Finalizing with the MoU for Nakaseke food hub. The MoU document was completed some few selected	/ 2021
preparation		members included their names / signature on this write	/ 2021
for ground		up and its approved by all FH members to serve as	
work		basis for the existence of their FH and all the different	
WOTK		planned operations to be completed.	
do	11	Supporting FB members to develop governing	October /
		principles for their FH / establishing a gender based	November
		leadership line up for the FH / Developing FH by-laws (	2021
		Constitution)	
FH	12	15 Technical monitoring and support visits' towards the	Started in April
formalization/		Nakaseke FH member (horticultural crop producer)	2021 to date (
preparation		were conducted and the focus was on: ( strengthening	it is continuous
		FH, guidance in regard to production for the crop	)



FH phases	Chapter	Activity description	Scheduled month
for ground work		enterprise their dealing in, sharing / disseminating the information regarding the research process to be conducted using different technologies to be adopted and taken by the community in their daily farming systems geared towards improving on the food (production, handling, storage utilization, processing, distribution etc.)	

CHAPTER 1: FH DESIGN AND CONCEPTION PHASE

b. Co-defining the core group/network



#### Nakaseke Food Hub Stakeholders- Nakaseke District.

ID	Name	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involveme nt (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)
1	Makerere University Kampala (school of food science & technology	Public research institution.	-	Overall project supervisor	Monitoring / coordinating the implementation of planned food land project interventions within the targeted foodhubs.	High	Providing research support for improved farming technologies/ innovation among the targeted FHs	Formal
2	Yahe international investment company	Private company	Private company  – Kapeeka industrial park	Buyer / service provider in value addition interventions, marketing, process, quality control etc	Producer interventions on planned production for high value crops together with value addition process/ marketing.	High	Consistent production for the high value crop on demend	Formal
3.	Namunkeker a Agro procceing industrial Itd (NAPIL)	Private company	Private company Kapeeka industrial park	Service provider ie, Extension services, trainings, monitoring, input distribution, market information & marketing.	Producer trainings on safe use of chemicals & environment conservation.	High	Environment conservation & management interventions ie applying AE farming practices.	Formal
4.	GLAD FARM	Private commercial model private commercial model farm	Private commercial model farm – Kapeeka Nakaseke district	Service provision in: storage & milling, food processing, trainings & advisory services, sales & marketing.	Producers trainings on storage & processing.	High	production	Formal
5.	VEDCO (Volunteer	NGO	Nongovernment al organization	Service provider: Extension services	Supporting/ guiding in the foodhub establishment,	High	Promoting sustainable	Formal





ID	Name	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involveme nt (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)
	Efforts for Developmen t Concrens)		Plot 504, block8, wagaba one Rubaga - Kampala	in: agricultural trade & development, food & nutrition security, climatic change & natural resource management.	developing their MOU, identification of the food hub chain actors, building capacity of hub members with regard to: Project goals/ objectives to be achieved.		agricultural practices for food & nutrition security & market competitiveness for farmers.	
6.	Nakaseke district local government	Government institution	Local government institution located in Nakaseke district	Service provider related with development in the entire district.	Developmental services	high		Informal
7.	Kapeeka general market	Government institution	Local government institution located at Kapeeka	Buyer / consumer	Marketing & quality control services	High	Consistent access of horticultural pdts / quality mantainance. supply	Informal
8.	Nakaseke General Hospital	Governtment institution	Local government institution located at Nakaseke T/Council	Buyer / consumer	access of good quality agricultural products	High	Consistent access of horticultural pdts / quality mantainance	Informal



#### Stakeholders identified to be contacted and involved- Nakaseke food hub

ID	Name	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Other comments
1	Yahe investment company ltd.	Private Company	Agricultural Business Company	Processor , Buyer & producer	Refresher trainings on processing / value addition & quality control	High	Buying & processing	Value addition arrangements	Builds farmers capacity on quality control & marketing
2	Glad farm	Private agricultural oriented farm	Agricultural business	Service provider in agricultural related aspects.	Technical guidance in agricultural production	High	Technical support service	Consistent production	Promotes production of high value crops.
3	Kisimula youth group	Producer farmers group	Production of horticultural crops.	Provides services on commercial production	technical guidance on vegetable growing	High	Producing vegetables for sale / consumption	Guides members on commercial production of vegetable.	Promotes
4	Namusale women's group	Producer farmers group for tomatoes	Commercial agricultural production	Service provider on tomatoes growing / marketing	Technical guidance on commercial tomatoes production.	High	Technical support services on tomatoes growing.	Promotes increased production of tomatoes for sale.	They do some AE practices





ID	Name	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Other comments
5	Muwanga Charles	Tomatoe Buyer	Agricultural marketing oriented business	Buyer (horticultural produce)	technical guidance on marketing aspects / quality control	Medium	Buying farmers produce	Supports farmers with marketing skills.	Provides timely information regarding marketing.
6	Kaweesa Paul	Buyer	Agricultural marketing oriented business	Buyer (horticultural produce	technical guidance on marketing aspects / quality control	Medium	Buying farmers produce	Provides market updates	Offers marketing services
7	Nvunanwa farmers group	Producer	Commercial production for vegetables.	Producer / service provider.	Guidance in production	High	Provides production service to members.	Supports members will irrigation technique/	Guides members on accessing / sourcing out good performing vegetable varieties.
8.	Kalagala producer group	Producer	Commercial production for horticultural crops	Producer / service provider	Offers guidance on production / marketing	High	Provides production extension services	Equip farming community with production skills	Guides farmers on production techniques.
9.	Naluvule producer group	producer	Commercial producer	Producer / service provider	Offer services on marketing	High	Service on marketing/ production		-





ID	Name	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Other comments
10.	Kikandwa producer group	Producer	Commercial producer	do	do	High	do	do	-
11.	NAPIL	Producer/ input dealer/ facilitator	Commercial producer	In put distributor /	Offer services on: processing, agronomy, quality control	High	Offering extension services	Services on safe use of agro chemicals / environmental management.	-

Note: The exercise is ongoing and we are expecting more actors during the real implementation on ground.



# c. Co-defining the structure

VISION	Improved utilization of horticultural / related food stuff products, bio diversity and nutrition diversity.
MISSION	To enhance maximum production and utilization of horticultural food stuff for nutrition diversity through improved bio diversity.
OBJECTIVE	To adopt & implement the innovated technologies for improved horticultural production, nutrition performance, and strengthening agro-biodiversity for sustainable agricultural production.

# d. Co-defining "good governance principles"

PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Participation, Representati on, Fair Conduct of Elections	Are the FH members guaranteed equal participation and representation in the FH decision-making process? How are FH coordinators elected and roles assigned? Is the gender balance considered?	There is maximum involvement of all members in all the decision making process and a maximum free and fare election process for the hub leaders, which done using secret ballot election process. The roles and responsibilities each post area designed/ developed together by the entire team of the hub. And the aspect gender is considered and given higher priority, where their executive / sub committees have got a good representative of women.
Responsiven ess	Are the FH Objectives, rules, structures, and procedures adapted to the legitimate expectations and needs of the FH actors?	Since the whole arrangement is still new, but all the necessary structures for a recommended FH have been introduced & established the adoption process with be strengthened with the implementation process, thus making the hub to be hub more viable / vibrant within and among the different actors. And on that note there will fully response for all the FH stakeholder with time for the different FH interventions among the different actors.
Efficiency and Effectiveness	Are the planned results and objective aligned? Are the resources available for the implementation and setting up of the FH used in the best possible way?	All the planned key FH objectives / activities do tally with their intended outputs / goals and with the well laid structures and tasks, roles & responsibilities for the different components within the FH. This will enhance full and maximum efficiency / effectiveness among the FH members in the process utilizing the existing resources for the maximum output.



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Openness and Transparenc y	How are/will be decisions taken within the FH? How decisions are made available to the FH members and the public?	With the existence of different vibrant sub & executive committees within the FH and the well established good/ gender based leadership line up, and well developed by laws, which will serve as guiding tool for the entire FHs different interventions, this will enhance maximum openness / transparency in all the engagements thus leading positive progressing of the FH, towards their expected objectives.
Rule of Law	Are FH internal rules and regulations are adopted in accordance with procedures provided for by law?	The presence the established by laws (food hub constitution) which will serve as the governing tool for the entire FH, thus in regard to this, the rules/ regulations will be looked at as key aspect for the recommended progressing of the FH in a sustainable manner.
Ethical Conduct	How are conflict of interests within the FH internal governance tackled?	For the case maintaining the recommended ethical conducts among the FH members. The committee for handling the well being / fare for the FH members is in place and this will be supported by the executive committee in the process of maintaining the desired discipline among the FH members.
Competence and Capacity	How the competence and capacity to act of the FH coordinators is maintained and strengthened?	Arrangements for the developing / improving the FH member's capacity / ability have been catered for in their constitution. This will facilitate the members to take / adopt all the newly innovated farming techniques at the same time improving on their leadership skills for their FH. This will help in strengthening their FH, at the same time pushing it a head for better performance in a sustainable state.
Innovation and Openness to Change	How are results shared with other FHs?	Taking on / adopting newly innovated technologies among the FH members this will be emphasized / strengthened by the established FH systems/ structures with the support the technical team (implementing partners ) together with the local government team, which will contribute t better performance of the FH towards the desired FH outputs.
Sustainability and Long-	How is the FH sustainability guaranteed?	The existing structures/ systems within the FH and other supporting technical team (local government/ implementing partners ) and the different capacity





PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
term		building arrangements for the FH members, this
Orientation		will help in sustaining / developing these food hubs.
Sound Financial Management	How are annual budget and investments of the FH prepared and deliberated?	The laid out financial management structure for the FH, where the executive members acts the signatories on the FH bank account (s), this will be giving maximum support in regard to financial issues for the FH, at the same time working together with the members in coming up with a an appropriate planning and budgets up which all financial related arrangements for the FH will be based on. Also this component will be responsible to maintain prompt accountabilities tallying with all expenses met, thus enhancing appropriate financial records.
Human rights, Cultural Diversity and Social Cohesion	How are human rights, cultural diversity and social cohesion fostered and guaranteed within the FH?	The aspect of the members rights, cultural diversity and social cohesion, this will be practiced and keenly observed and emphasized by different sub committees working together with executive committee and the members themselves. Thus the subcommittee responsible for maintaining the members rights / welfare will be giving support in this area for the best output.
Accountabilit y	How are responsibility roles defined within the FH? How are decisions reported and sanctioned? How are conflicts between FH actors mitigated?	The responsibility / roles were clearly defined as an aspect of having control over something, where by the FH leaders (executive/ sub committees) will be in position of taking the assigned responsibilities for the rest of the FH members and help them to achieve the intended goals/ objectives. The FH leaders will be taking their responsibilities and being accountable and control over members behaviours and also in the process of taking decisions over some FH arising issues such as on emerging conflicts between members, actors and will be serving as the overseer's body for the FH

# e. Co-defining roles and responsibilities

STAKEHOLD	MAIN ROLE IN	MAIN RESPONSIBILITIES
ER NUMBER	THE FH	
	Researchers	Will be resposible / taking a lead in establishing the
	(MUK, NARO)	research protocals and organizing/ conducting &
		supervising the research process for the desired





STAKEHOLD	MAIN ROLE IN	MAIN RESPONSIBILITIES				
ER NUMBER	THE FH					
		technologies/ innovations to be adopted and taken by				
		the producers/ farmers.				
		Take a lead in the data collection process, compiling				
		and analysing it for the final results.				
		Take a lead in sharering / disseminating out resaerch				
		findings among other FH stakeholder / out siders.				
		Praparing different nutritiuos food ingredients using				
		recomemnded food mixing fomulaes for the desired				
	Implementing	food recepies to be used by the consumers  Will responsible of being in close touch with the FH				
	partners (VEDCO)	members for the following intervations:				
	partitors (VLDOO)	Giving guidance in the different project intervations such				
		as: (FH review meetings, mobilizationprocess, crop				
		production/ management process, planning / budget				
		meetings, leadreship/ governance trainings, capacity				
		building trainings, technical support visists etc.				
	Government	The district / sub counties: will be working hand in				
	institutions	hand with the implemeting partners in nstrenghtening				
	(district, sub	the FH by giving them the necessay guidance in their				
	counties, schools,	plananed project intervations.				
	hospitals etc)	The schools district hospital: will srve on the major				
	Dellerenseleen	consumer for FH horticultural products.				
	Policy makers	Establishing the guding principles / structutes/ systems				
		to be followed during the different project intervations ie in marketing & distribution FH products, the				
		recommended quality of the items to produced and sold				
		out to the consumers etc.				
	Consumers	Serves as the first buyer for the FH produce.				
	Producers	Takes the overall responsibility of producing the food				
		items dealt by the FH				
	Buyers	Serves as go between the producers and the				
		consumers by buying from the producers sales to the				
		consumers at the same time providing / disseminating				
		information regarding marketing process ie prices for				
		the products, market supplies & demands etc.				
	processors	They help by addaing value to items produced by the				
		farmers ie( milling, sorting , grading, laballing, market				
	Transpoters	surveying, distribution etc  Facilitats the necessary movement of inputs, produce/				
	Transpoters	products and other forms of services, fro and to				
		products and other forms of services, no and to				



STAKEHOLD ER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES			
		beteween the diffferent FH chain actors and to out siders.			
	Input dealers	Provides services regarding agricultural inputs and guidance on how to use, handle, apply agro-inputs among the FH members and to other community members.			
	Distributors	Serves as center for distributing out diffferent forms of services ranging from produced items, inputs among others within the FH and to the rest of the community members.			
	Financial institutions	Offres financial related services to the FH members such: loans, credits among others for boosting up the FH business thus enhancing it to be progressing in a sustainable manner/ being economically viable.			
	Middle men	Serves as go between the producers & buyers & consumers. They provide services for quick delivery of inputs and purchase of produce, at the same time providing market/ production related information among the FH members/ community members.			

# f. Activities planned with stakeholders

Typology of activity	Start date	End date	Activity description	Actors involved
farmers / stake holders inception meetings	Introducing the Foodland project among the intended stakeholders and taking		Producers, buyers, implementers, input dealers, local government officials, CSOs, VEDCO, MUK etc.	
Beneficiaries identification, selection and profiling	18 <sup>th</sup> /03/21	25 <sup>th</sup> /03/21	Recruiting/ Registering all the intended beneficiaries for Nakaseke FH. The Important information regarding their status was captured and included in their data bank.	do
Farmers enterprise selection & priotization meetings.	17 <sup>th</sup> /06/ 21 30 <sup>th</sup> / 06/ 21		Farmers / producers were able to select and priotize out the key crop enterprises to be dealt with under the	Farmers, local government officials, opinion



Typology of activity	Start date	End date	Activity description	Actors involved
			FoodLand project, but this was done basing the crop enterprise which had been already noted out in the project document/ proposal and these included: Tomatoes, Green papers, Carrot & mangoes/ passion fruits.	leaders implementers.
Community awareness meetings on the research process to be conducted and identify/ selecting site from where the research will be conducted ( climatic smart irrigation/ fatigation )	27 <sup>th</sup> /04/21 27 <sup>th</sup> /04/21 t		Farmers / producers were fully engaged in the awareness meeting in regard to the type / purpose/ methodology of the research to be conducted focussing mainly on improving the production of horticultural crops and their consumption for the desired sustainable bio diversity & food systems in Nakaseke district.	Farmers, researchers, district officials, nutrition focal persons & implementers.
Developing protocols and site selecting for sites from where the research on the desired technologies will conducted from (smart climatic aquaculture technologies)	12 <sup>th</sup> / 04/ 21	16 <sup>th</sup> /04/21	NARO & VEDCO Strategic planning meetings in preparation for project implementation	NARO & VEDCO
Farmers introductory trainings on good agronomical practices for targeted crop enterprises/ climatic smart irrigation & fatigation.	May 2021	June 2021	The trainings were conducted both at the sub county and parish levels and the major focuss was amainly of recommended production / management basic principles for the crop enterprises to be dealt with and a little bit cost benefit analysis.( Tomatoes, green paper, carrot, & mangoes/passion fruits.	Farmers, buyers, NAPIL, Implementers, input dealers & government technical officials.



Typology of activity	Start date	End date	Activity description	Actors involved
			Basic principles for climatic smart irrigation & fatigation.	
Stakeholders meetings for mapping out key chain actors	1 <sup>st</sup> /08/ 21	10 <sup>th</sup> / 08/ 21	The meeting focussed mainly on those actor who will involved in the chain of producing horticultural crop to final consumers and some of their key roles and responsibilities were noted and even the key basic required principles for the different tasks to involved along the chain were mentioned (production practices, PHH techniques, processing, packaging storage, labelling, distributions etc,	Producers, consumers, buyers, middlemen, distributors, transporters, processors, implementers, local government personnel etc.
Farmers meeting for developing MOU development (drafting / final copy)	developing MOU development (drafting / final 17 <sup>th</sup> / 08/21 23 <sup>rd</sup> /08/21		The FH members were supported / guided during the MoU development process for their food hub and the following areas were note: relevancy of the MoU doc, basic principles/ key aspect to be included, ita purpose & role it will play in their FB.	Farmers, implementers, Buyers & processors
dovernance by laws		November 2021	Farmers meeting for developing governing by-laws for their FH were organised/ conducted, where members were fully participative and the necessary key aspect for their FH wer established/ approved and these included ;( FH objective, management principles, roles / responsibilities of leaders & members, general assembly ⊂ executive committees,	Farmer ( FH members), implementers, sub county officials among pthers.





Typology of activity	Start date	End date	Activity description	Actors involved	
			disciplinary & conflict management process, election procedures, meeting handling & management, financial management, constitution amendments, making group decisions, FH ethics etc.		
Technical monitoring and support visits towards the FH members.	April 2021 To date  Durir activity at the mem to colland imple be for and in the ir stress.		During the visits the planned activities were accomplished at the same time refreshing members on the key aspects to covered under the food land project, the implementation approach to be followed and their key role and responsibilities during the implementation. And stressing on the aspects of gender & main streaming.	Implementers & farmers / producers.	
			PLANNED INTERVATIONS /ACTIVITIES		
PHH Trainings for farmers	Jan 2022	Feb 2022	Post harvest handling principles using different technologies (harvesting, transportation, drying, sorting, grading, packaging & storage)	Farmers & implementers	
Organise / establish research / technology learning units among established FH					
Sharing / disseminating research findings (new innovations/ technologies)					
Data collecting process / analysis					
Linkage meetings between FH	Aug 2022	Sept 2022	Organising meeting for linking producers to other service providers such as:	All	



Typology of activity	Start date	End date	Activity description	Actors involved
members and other service providers			banks, importer, exporters, consultants, companies etc, so as to improve &strengthen their businesses	
Stakeholders trainings / meetings on nutrition basic principles.	March 2022	April 2022	Equipping stakeholders with the basic principles of nutrition and its relevancy in the day today's required food systems.	Implementers, producers, buyers, local government technical staff, healthy centre focal persons etc.
Stakeholders trainings on food handling, processing, preparation, packaging/ labelling	June 2022	Equipping stakeholders with the basic principles of for handling food stuff / food related products and its relevancy in the day today's required food systems		Implementers, producers, buyers, local government technical staff, healthy centre focal persons etc.
Stakeholder meetings on marketing and distribution	rketing and Aug 2022 Oct 2022		Stakeholders meetings regarding: ( quality / quantity assurance, prices, packing styles, market survey strategy, market information sharing / dissemination, etc.	Buyers, farmers, processors implementers,
FH trainings on gender and main streaming	Jan 2022	Dec 2022	Emphasizing on the gender and main streaming aspects among the food hub member/ out sider through the entire implementation.	Buyers, farmers, processors implementer
FH members exchange / exposure visits	Nov 2022	Dec 2022	It will be a leraning process facilitated by the farmers / producers by themselves in regard to different adopted innovations / technologies among FH members / different food hubs,	All actors
Technical support & monitoring visits for the FHs	Jan 2022	Dec 2022	Giving guidance / completing planned project innervations and strengthening	Implementing partners, farmers



# g.Communication and branding

Type of activity	Activity	Activity description	Target audience	Scale	Channel	Timing	Support needed from FoodLAND communicat ion partners [YES/NO]
Internal communication ( among the FH members)							
FH meetings & trainings	FH Trainings & meetings for agronomy, marketing, processing, reviews, research findings, PHH, nutrition, agroecology, linkages etc.	It will involve the members gathering in one venue and the information passed on, Shared / disseminated out to the gathering through these meetings (verbal communication by physical contact / face to face). The regarding good farming practices, marketing strategies, research findings, newly introduced farming technologies, information concerning about food handling, preparation, storage, ration mixing for the best nutritious recipes, etc Here the intended message will be delivered directly to the right / targeted audience.	FH member / out siders in the community	high	Face to face by verbal means of communica tion	2- 3 hrs per meeting / training,	
External communication (							





Type of activity	Activity	Activity description	Target audience	Scale	Channel	Timing	Support needed from FoodLAND communicat ion partners [YES/NO]
for FH members /							
outsiders							
Sharing out FH	Sharing out	This will include the different write	FH members,	High	Written	5- 10 days	
achievements/	achievements	ups predicting the progress,	buyers,		documents		
progress, plans &	realized by the FH	achievement, established action	consumers,		(reports,		
budgets	with other key	plan etc for FH: i.e. this will involve	implementers,		letters etc.)		
	stakeholders, in	the use of reports (monthly, bi-	processors				
	regard to project progress, way	annual, quarterly, annual ), newsletters, publications, e-mail,					
	forwards, lessons	SMS, FH meetings between					
	learnt, budget &	members etc.					
	plans, research						
	findings etc						
Dissemination &							
exploitation							
Sharing /	Information	This will involve information	FH members,	High	Phone,	2 – 3	
accessing	regarding market	sharing/ accessing important	buyers,		sms, mails,	weeks	
important	information, new	information for the FH such as:	consumers,		twitter,		
information for the	technologies	information concerning market	implementers,		radios, tv		
FH/ out siders.	concerning	situation i.e. prices, supplies,	processors		etc.		
	production,	source of products on demand,					
	processing, food	newly introduced technologies					
	recipe	concerning production,					
	preparation etc	processing, food recipe					





Type of activity	Activity	Activity description	Target audience	Scale	Channel	Timing	Support needed from FoodLAND communicat ion partners [YES/NO]
		preparation, new seed varieties,					
		improved animal breeds, etc					
Research &							
innovation							
activities / results							
FH research/	Sharing /	This involve the use FH meeting,	FH members,	High	Meetings,	2- 3	
innovation	disseminating out	printed materials, trainings	buyers,		sms,	months	
findings	FH research /	manuals, brochures, reports, sms.	consumers,		reports,		
	innovation results	Which will circulated out to all key	implementers,		brocures,		
		stakeholders	processors		training		
					manuals		
					etc		

# h. Identifying challenges (and appropriate mitigation measures)

Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception	Mitigationmeasures
					phase	
High farmers	Social economic	Farners are	Farmers over	Befeciries	Inception phases	Properly conducted
expectation	related	expecting a lot	relience on donors	relactance to		inception meetings
		from the project in	support.	perform /		Proper identification/
		term economic	Inadequate	implement		selection of project
		support	inception meetings			beneficiaries.





Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception phase	Mitigationmeasures
Diverting away from what you briefed the stakholders during project inception meetings.	Farmers loss of trust / ownership for the project	The remaining resources are not enough and you end up leaving out some key as activities un taclked	(lack throughlar explanation about the project goals/objective / aims )  Due to miss management the budgetd resources.  Due to over sepending on some intervations.	Project outputs/ objectives are not reached/ perfectly achieved  Beneficries starts daulting the implementer/ implementation process, and starts giving up and becomes reluctant to	Implementation phase	Proper management of the available resources. Proper planning / allocation of project resources.
Inadequate guidance/ support among the implementing partners	Ina dequate implementation of project plans	The expected output/ objectives are not pefectly achieved	There is less support (no team work) among the project implementing partners ie no joint planning/ project review meetings	implement.  Every partners starts working on his / her own depending on what she/ he thinks can work, which may affect the expected project outputs	Implementantation phase	Timely project review meeting on quarterly / bi-annual / annual basis
Un timely disbursement of funds	Limited resources to facilitate the project plans.	The project planned intervations are inadequately implemented	Due to limited/ luck enough funds to run the project activities	Late submition reports / accountabilities for the funds which was disbust first.	Implementation phase	Timely reporting (nurrative) and submition of accountabilities (financial report)





Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception	Mitigationmeasures
					phase	
Inadequate data	Poorly	Sub standard	The guiding	It affect the	At the protocol	Maximum concetration
collection &	developed	data is collected /	protocols were not	reserach results/	developing phase	/ time & knowledge is
presentation	reserach	incomplete	properly designed	findings, which		required during the
	protocols.		(not focussed to	will require to re-		protocol develpment
	Reluctant data		the type of	do the exercise,		process. (a lot of
	collectors		research to be	this will require		editing is required)
			conducted)	more resources in terms of time /		
				resources which		
				had been not		
				planned for.		
Technologies /	Limited	Indequately	The information	The technologies/	At preparation of	Farmers agricultural
innovations which	consultation	designed	collected from the	innpovations	project phase	burning needs/
does not tally with	inpreparation for	information	targeted	estblished		problems have to be
the farmers	nthe reserarch to	collecting tool	categories of	doesn't tally with		studied first and this will
agricultural related	conducted	from the intended	people was not	farmers needs /		serves as a basis for
needs/ problems		category of	complete and	problems, yet		the protocols / research
		people.	research assistant	time and		to be conducted.
		Sub standard	were not	resources have		
		resersch	comptent.	been spent (		
		assistant		wasted)		
		Inadetely well				
		edited/ analysed				
		data/				





#### i. Open innovation strategy

The FH will use innovations to generate and develop new products and services, new business model dealing in the different food handling & preparation systems for the desired food & nutrition security among the rural communities. In regard to this, the FH will use un **open innovation strategy** to disseminate/ sharing out information regarding innovated technologies. This kind information will be shared out within and outside the established FH. This will be done through the different producers' platforms, exhibitions, farmers/ producer field days, exchange/ exposure visits, FH members meetings / trainings etc. This will promote maximum collaboration / networking with the external service providers/ companies, thus making the innovations model to become more viable. It is this very strategy through which the FH will be acknowledged as a real business oriented FH for different stakeholders (chain actors). With this open innovation model, the FH will be in position of: using both internal & external knowledge resources, an opportunity of doubling its success rate, increased productivity etc.



# CHAPTER 2: FH FORMALIZATION PROCEDURE TEMPLATE

# a. Identifying the formalization procedure

Activity	Date	Method	Description of the activity	Participants	Outcomes
Farmers meetings for mapping key stakeholders	July - August 2021	Community / farmers group meetings including district & sub county officials , CSOs & opinion leadres	Community / farmers group meetings including district & sub county officials , CSOs & opinion leadres, where all the intended actor for the FH participated and the agenda for the meetings were as follows:  Prayer  Self introduction  Well coming remarks  Communication from the implementers ( VEDCO / MUK)  Objectives of the meetings.  Selection / mapping outprocedure  Noting out their responsibilities/ roles in the FH  Briefs from selected actors  Participants response, reactions, comments, suggestions/ proposals	The meetings were attended by : farmers, district/ sub county officials, CSOs, opinion leaders, buyers, processors, producers, consumers, input dealers, middle men, implementers etc	This gave clear picture on what is required to be done by the FH.  This will serve as one of the basis up on which the entire implementation and progress of the FH.  The other actors to be working with the FH were noted out and their roles/ responsibilities were ear market.( buyres, consumers, transpotrs, processors, nutrition focal
			Establishing action plan. AOBs Closing remarks Closing prayer.		persons, input dealers, middle men etc)





Activity	Date	Method	Description of the activity	Participants	Outcomes
					The action plan for the FHs intervations was established.
Stakeholders meetings for developing the MoU for Nakaseke FH		Farmers / stakeholders meetings	Community / farmers group meetings including district & sub county officials , CSOs & opinion leadres, where all the intended actor for the FH participated and the agenda for the meetings were as follows: Prayer Self introduction Well coming remarks Communication from the implementers ( VEDCO / MUK) Objectives of the meetings. Briefs about an MoU ( relevancy, key areas to be included in the document) Steps to Participants response, reactions, comments, suggestions/ proposals Establishing action plan. AOBs Closing remarks	Do	1st & final draft of the MoU were developed and the selectcted members included their names, position & signature on the final document
FH MEMBERS MEETING FOR DEVELOPING					





### b. The draft of the Memorandum of Understanding

## **Developed MOU documents for Nakaseke foodhubs**

# A MEMORANDUM OF UNDERSTANDING FOR NAKASEKE FOOD HUB-NAKASEKE DISTRICT.

We, the beneficiaries/partners of the project FOODLAND, sign this Memorandum, to establish cooperation within the Food hub in **Nakaseke District** 

To meet the challenges of the inadequate production system for horticultural crops (vegetables & fruits) to support the nutrition, food diversity and strengthening agrobiodiversity systems in Nakaseke district, and on that note, it is necessary to: Establish and implement the improved technologies / innovations for increased horticultural production, strengthening the attached value chains and disseminating innovation results and its contribution to the malnutrition challenges among the food hub members and beyond.

This can be done by establishing a local Food Hub as an important supportive organization.

The Food Hub will promote and support the development of the knowledge and innovation for [Tomatoes, Paper, Carrot & Mangoes] production/processing/trade for the stakeholders involved in the supply chain of [Fresh, dried, processed & labelled vegetables / fruit products (Tomatoes, Green paper, Carrot & mangoes)

#### Vision:

Improved on the utilization of horticultural / related food stuff products, bio diversity and nutrition diversity.

#### Mission:

To enhance maximum production and utilization of horticultural food stuff for nutrition diversity through improved bio diversity.

#### Objective:

To implement the innovated technologies for improved horticultural production, nutrition performance, and strengthening agro-biodiversity for sustainable agricultural production.

The specific chiestives of the Food Hub are:

# The specific objectives of the Food Hub are:

- To disseminate / sharing knowledge about environmental and economic benefits emerging from the adoption of the innovations / technologies for horticultural production among direct / indirect beneficiaries.
- To promote the utilization of the vegetables/ related products for nutrition and diversity of health diets.
- Creating a permanent cooperation framework based on the transfer of knowledge, technology and innovation solutions between Members of the Food Hub
- Developing cooperation between policy makers, scientific institutions, NGOs and entrepreneurs
- Promoting entrepreneurship in the area of the Food Hub and creating conditions for effective commercialization for horticultural production.





• Empowering female farmers with the adoption of innovations / technologies for horticultural production.

# The above specific objectives will be accomplished by undertaking the following activities:

- Producer's interventions regarding agronomical practices for horticultural crops (tomatoes, paper, carrot & mangoes.)
- Producers / processors interventions on Pre & post harvesting handling practices for vegetables ie drying, processing, packaging, labelling etc.
- Producers & consumers sensitization meetings on the recommended Agro ecological farming practices
- Producers research trials on the different types of irrigation methods, handling, management and its relevancy in horticultural crops.
- Establishing research demonstration units for the identified technologies to serve as a learning centre for the food hub.
- Food hub sensitization meetings / trainings on gender and main streaming.
- Consumers & producer meetings / trainings on value addition and marketing.
- Facilitate knowledge sharing / dissemination interventions among the food hub members & non-members. ( exchange/ exposure visits)
- Facilitate linkage meetings between the hub members and other chain value actors.
- Producer, processor & consumers meetings / trainings on different vegetable recipe preparation, handling and feeding.
- Developing protocols for the research to be conducted and type of data to be collected/ analyzed.

This Memorandum is an expression of good will to cooperate in the process of developing Nakaseke Food Hub and to realize all the above-mentioned objectives and therefore on behalf of the Food hub members, We, the beneficiaries/partners of Nakaseke Food hub we have signed on this Memorandum, to confirm & establish our maximum cooperation in the development process for Nakaseke Food Hub- in Nakaseke District





# Annex 8 – Kajjansi-Masaka (Uganda)

#### FH coordinators and main contacts

Dr. Cassius Aruho
 Dr. Gertrude Atukunda
 Dr. Mujib Nkambo
 Dr. Steven Tumwesigye Kashub
 Eng. Deogratius Benjamin Ssekidde
 Coordinator
 Coordinator
 Host-farm contact

# FH process schedule

Implemented schedule

FH phases	Chapter	Activity description	Scheduled month
FH design	1	Meeting with local authorities:  • MAAIF-DFR informed about FoodLAND. They will also approve the architectural plan for the value addition FH in Masaka.  • The host district officials in Wakiso and Masaka (Chief Administrative Officer, Fisheries, Community Development, Commercial, Production & Environment, LC 1 & 5, RDC) informed about FoodLAND & the activities the respective hub will undertake in the 4yrs.	Done in January 2022
FH design	2	Meeting with farmers Peri-urban & other fish farmers. Informed about FoodLAND and what the FH is about. Interventions (Fish production & Value-addition) Election of FH leadership (the hub management committee - HMC) for the 2 sub-hubs: Kajjansi & Masaka.	Done in January 2022
FH formalization	3	Manifesto co-development  Two documents (1 per sub-hub/ district)  • Building on the existing Producer Organizations' efforts, a FoodLAND guidelines/ manifesto document will be done for the peri-urban (Kajjansi) and other (Masaka) fish farmers.  • NARO will guide/ oversee the entire process.	On-going Feb - April 2022
FH groundwork	4	***Include the preparatory & actual tech. activities  i. MOU with the value-addition host farmer in Masaka.  As indicated in the grant agreement, Ssenya Fish Farm has worked with NARO as a host-farmer for on-farm fish trials on several occasions hence their choice for the value-addition component in an effort to foster sustainable private-public partnerships.  The MOU is attached pending signing.  ii. Site selection.	Done Dec 2020 Done
			Done 2021



FH phases	Chapter	Activity description	Scheduled month
		<ul> <li>Kajjansi sub-hub (at NARO-KARDC) to handle mass fish seed production of <i>Labeo Sp.</i> and <i>Barbus Sp.</i>, and integrated fish-crop peri-urban farming using fish hatchery wastewater activities. VEDCO will undertake the crop activities/ studies.</li> <li>Masaka sub-hub (at Ssenya fish farm) to handle fish value addition and bio-packaging activities.</li> </ul>	
		iii. Site Planning.	On-going
		<ul> <li>Architectural FoodLAND fish processing floor plan for the Masaka sub-hub developed pending approval by the line ministry, MAAIF. Plan attached</li> <li>Fish hatchery-crop garden design underway for the Kajjansi sub-hub.</li> </ul>	Nov 2021 – April 2022

#### CHAPTER 1: FH DESIGN AND CONCEPTION PHASE

## a. Studying the context: desk research and surveys with farmers and consumers

Fish used to be a source of cheap healthy animal protein and micronutrients in Uganda/ East Africa, however, in recent times, its consumption has diminished especially among the rural poor communities due to high prices, a situation worsened by the recent L. Victoria floods and COVID-19 pandemic economic crises. Today, a total supply of 829,200 tons of fish annually is required if the Ugandan populace alone were to consume fish at global average levels of 20.7 kg per capita consumption rate (FAOSTAT, 2019). Furthermore, Government of Uganda under the new National Fisheries and Aquaculture Policy (2019) has set a target of increasing fish production to 1.7 million tons annually by 2025 with aquaculture raising one million tons of it. Micronutrient deficiencies are widespread particularly among vulnerable groups (the sick (HIV & Covid-19), women of reproductive age and children <5 years) with almost one-third of children under five years in Uganda being stunted

Fish farming, one of the remedies to the economic and nutritional challenges, is dominated by two fish species (catfish and tilapia) and high entry but higher exit of investors majority of which are smallholders (95%) due to high feeding costs, poor harvest (low productivity) hence low marketability, and limited skills1.

The FoodLAND interventions, therefore, seek to increase aquaculture productivity by diversifying the farmed species to include indigenous Labeo Sp. and Barbus Sp., devising cost-effective farming practices for their inclusion in the sector, promoting climate-smart integrated technologies, reducing post-harvest losses, and enhancing farmed fish marketability through value-addition. This will be done on all fish sizes (stunted too) in addition to developing nutritious, low-cost, novel and safe fish-based products.



### b. Co-defining the core group/network

Principally, the FH is for farmed fish producers in Wakiso and Greater Masaka districts but other aquaculture value-chain actors like technological experts, government/ public leaders, input dealers/ suppliers, marketers, etc.

Several aquaculture studies for Uganda have shown less than 50% involvement of women, including a recent (2020) one showing 23,6% women fish farmers, and the FoodLAND (2021) survey at 27.2%. Therefore, gender was a critical selection criteria for FH farmers. The final selection of the participants was agreed upon with the district aquaculture officers, the District Fisheries Officers-DFOs calling for 100% women farmers recruitment (today the FH has 14 women out of 61 farmers). For selection of leaders, no committee was passed without women and youth as part. The Government of Uganda is organizing smallholder fish farmers into Producer Organizations - POs (legal with about 30 members each) at Sub county level for better lobbying, synchronized production and marketing. It is from these that the 30 active contact farmers per district of Wakiso (Kajjansi sub-hub) and Masaka (Masaka sub-hub) were chosen. Ultimately, at least 210 fish farmers from 7 POs will be reached through the selected 60 active farmers.

### c. Co-defining the structure

VISION	An economically prosperous self-driven sustainable fish hub.
MISSION	Increase stakeholders' food security and incomes from the aquaculture value-chain.
	To set a gender-responsive sustainable fish hub ascribing to environment-friendly and climate-smart innovations along the fish value-chain.
	To improve farmed fish access to markets of the FH members.
OBJECTIVE	To support FH on aquaculture knowledge acquisition on Best Management Practices - BMPs & value-addition technological innovations.  These objectives are expected to yield: i) Better fish yields; ii) Increased incomes through better farmed-fish marketability; iii) Increased social benefits eg., nutrition & knowledge; iv) Enhance ecosystem building capacity; and v) A fully functional and profitable FH.

#### d. Co-defining "good governance principles"

PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Participation,	Are the FH members guaranteed	YES to all.
Representatio	equal participation and	The leaders were democratically elected
n, Fair	representation in the FH decision-	as evidenced in <b>Figure 8</b> .
Conduct of	making process? How are FH	The gender balance is elaborated in
Elections	coordinators elected and roles	section B.
	assigned? Is the gender balance	
	considered?	
Responsivene	Are the FH Objectives, rules,	YES
SS	structures, and procedures adapted	
	to the legitimate expectations and	
	needs of the FH actors?	
Efficiency and	Are the planned results and	YES. Even in future, this will be critically
Effectiveness	objective aligned? Are the	ensured.





PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
	resources available for the implementation and setting up of the FH used in the best possible way?	
Openness and Transparency	How are/will be decisions taken within the FH? How are decisions made available to the FH members and the public?	Through the Hub Management Committees (HMCs), guided by the Kajjansi/ Masaka FH coordinators on <b>page</b> 2.
Rule of Law	Are FH internal rules and regulations adopted in accordance with procedures provided for by law?	YES. This is to be ensured during their development and all through FH activity implementation.
Ethical Conduct	How are conflict of interests within the FH internal governance tackled?	These will be well spelled out in the guidelines/ Letters of agreement (LoA) and adhered to.
Competence and Capacity	How the competence and capacity to act of the FH coordinators is maintained and strengthened?	The FoodLAND project coordinators (Page 1) will continually engage the HMCs and facilitated wherever physical interactions are due.
Innovation and Openness to Change	How are results shared with other FHs?	Through dissemination materials, email, social media platforms as allowable by FoodLAND project.
Sustainability and Long-term Orientation	How is the FH sustainability guaranteed?	We are working with existing POs already formed by the line ministry, MAAIF. FoodLAND financing will be used effectively and the resultant resources from the hub products ploughed-back till substantive profits are made. The Masaka sub-hub will actively act as a value-addition school for all interested stakeholders including Makerere University Fisheries and Nutrition students (research placements), fish farmers from other districts, and any interested person/ groups at a modest fee.
Sound Financial Management	How are annual budget and investments of the FH prepared and deliberated?	To be given priority right from the start. The elected treasurers will do the work and as the FH financial base grows, a finance expert will be recruited.  These together with other FH members will be trained periodically on up-to-date financial management requirements.
Human rights, Cultural Diversity and Social Cohesion	How are human rights, cultural diversity and social cohesion fostered and guaranteed within the FH?	The HMCs will be periodically trained together with other FH members. The LoA will also spell these out well.
Accountability	How are responsibility roles defined within the FH? How are decisions reported and sanctioned? How are conflicts between FH actors mitigated?	The LoA will spell all these out well. And the coordinators together with the HMCs will ensure compliance.



## e. Co-defining roles and responsibilities

STAKEHOLDER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES
K24	Kajjansi sub-hub Chairperson	Coordinate the entire Kajjansi sub-hub.
K11	Nsangi A.C.S Hub Committee member	Coordinate their PO's involvement in the Kajjansi sub-hub.
M01	Host the value-addition hub activities.	Host the Kajjansi/Masaka FH value- addition activities.
M04	Masaka sub-hub Chairperson	Coordinate the entire Masaka sub-hub.
M05	Masaka sub-hub Vice chairperson	Coordinate the entire Masaka sub-hub.
M06	Masaka sub-hub Secretary	Document and manage all necessary documentations
M07	Masaka sub-hub Treasurer	Handle the financial matters for the Masaka sub-hub.
M08	Buwunga A.C.S Hub Committee member	Coordinate their PO's involvement in the Masaka sub-hub.
M09	Nyendo -Mukungwe A.C.S Hub Committee member	Coordinate their PO's involvement in the Masaka sub-hub.
M10	Kimanya -Kabonera A.C.S Hub Committee member	Coordinate their PO's involvement in the Masaka sub-hub.
All other farmers (K02 –	As fish farmers/ producers,	Participate in the relevant FoodLAND
K32 and M10 – M33)	they will supply the fish for processing. Participate in the relevant FoodLAND targeted technological activities.	targeted technological activities.

**Note:** During farmers' recruitment, we emphasized 100% women farmers' recruitment (today the FH has 14 women out of 61 farmers). For selection of leaders, no committee was passed without women and youth as part. As such the Chairperson, treasurer and the Nyendo - Mukungwe A.C.S Hub Committee member of the Masaka sub-hub are female. The Nsangi A.C.S Hub Committee member from the Kajjansi sub-hub is also female, among others.

#### f. Activities planned with stakeholders

Typology of activity	Start date	End date	Activity description	Actors involved
Forming a gender responsive stakeholders group.	<i>J</i> an 2022	Feb 2022	Holding local district leadership sensitization and a fish farmers' workshop on FoodLAND project, FH formation, and electing of the hub management committees (HMCs).	Fish farmers, DLGs, Researchers.
Establishing an effective leadership (HMCs) for the group with well defined ToRs.	Feb 2022	Feb 2022	Developing terms of references (ToRs) for HMC on how to run/ operate the hub.	HMC members and NARO
Jointly developing a constitution (LoA)/	Feb 2022	March 2022	Developing MOU between the project/ NARO and HMCs. And	Fish farmers, DLGs, Researchers





Typology of activity	Start date	End date	Activity description	Actors involved
guiding principles for the FH			Guiding the HMCs to develop a manifesto (Letters of agreement-LoA) for the farmers participating in the FH.	
Engaging the group in design, trainings/ demos, and technological validation on - (integrated crop fish farming – Wakiso & fish value-addition - Masaka).	Feb 2022	Project end	The FH stakeholders will be engaged in every step right from study design to product development and validation.	Fish farmers, DLGs, Researchers
Involving more women and youth along the value-chain while paying attention to gender-job safety issues.	Feb 2022	Project end	The women and youth will be engaged in every step right from study design to product development and validation.	Fish farmers, DLGs, Researchers
Developing an MOU between NARO- FoodLAND and the FH stakeholders.	March 2022	April 2022	An established set of agreed guiding principals for the FH.	Fish farmers, DLGs, Researchers
Developing the Standard Operating Procedures (SOPs) for all the studies (processing and analytical methods).	Sept 2021	Sept 2021	A set of guidelines on how all studies will be done.	Fish farmers, DLGs, Researchers
Developing the architectural plan for the envisaged fish processing plant. Awaiting approval by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF).	Nov 2021	Aug 2022	Selecting the sites for construction of the 2 hubs in Kajjansi & Masaka.  Sensitizing of the host farmer on the need for design and approval of the fish processing architectural plan as well as developing a quality management system for market niches.  Drawing architectural plans for the two sites and approval of the processing plant one in MAAIF.	Fish farmers, DLGs, Researchers



Typology of activity	Start date	End date	Activity description	Actors involved
Procurement of the required processing equipment.	Aug 2021	June 2022	Surveying of local markets for local processing equipment as a prerequisite for the procurement process.  Discussing with UNIBO on modalities for getting all necessary equipment.	NARO and UNIBO

# g. Communication and branding

Type of activity	Activity	Activity description	Target audience	Channe I	Timin g	Support needed from FoodLAND communicat ion partners [YES/NO]
(i) internal communi cation	Developing an MOU	One per sub- hub	FH members	Publicati on/ docume nt.	2022	Yes
	Dveloping LoA	One per sub- hub	FH members	Publicati on	2022	Yes
(ii) external communi cation	Designing a sub- hub specific brochure	Two (2) brochures, one per sub-hub showing intended technologies.  About 300 copies	FH members and other stakeholders.	Publicati on	2022	Yes
	Designing a FoodLAND project brochure	A NARO- tailored one showing intended iterventions. About 500 copies.	FH members and other stakeholders.	Publicati on	2022	Yes
(iii) dissemina tion and exploitatio n	Trainings/ Workshops Demos Conferences Technology show day Media	Designed along the technological innovations.	FH members and other stakeholders.	Present ations Videos Journal papers Manuals	2022 - 2024	Yes



Type of activity	Activity	Activity description	Target audience	Channe I	Timin g	Support needed from FoodLAND communicat ion partners [YES/NO]
(iv) research and innovatio n	Integrated crop- fish farming for peri-urban farmers.	Designed along the technological innovations.	FH members and other stakeholders.	Present ations Videos	2022 - 2024	Yes
activities		To be clearer as implementatio n progresses.		Journal papers Manuals		

# h. Identifying challenges (and appropriate mitigation measures)

Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & conception phase	Mitigation measures
Limited financing	operational	Farmers can't finace the FH actions	Most farmers leave below the optimal	FoodLAND is financing	Throughout	Ploughback sales when the time comes.
Varrying literacy levels	Dissemination	Delivery of sensitization materials to farmers of different educational status. Farmers are at different educational background and knowledge	The farmers have varrying education levels	Diverse dissemination methods available	Throughout	Include more illustrations and diagrams in dissemination materials and hand on training approach.
Quality assurance	Health	Compliance to national and international quality standards on fish and fishery products.	Contaminations and negligence along product development	Known quality assurance guidelines	Throughout	Developing a quality management system based on market product specifications.



#### CHAPTER 2: FH FORMALIZATION PROCEDURE TEMPLATE

#### a. Identifying the formalization procedure

Activity	Date	Method	Description of the activity	Participants	Outcomes
Selecting FH stakeholders	Jan 2022	Done by the DLGs (DFOs).	Fish farmers selected in Wakiso and Masaka districts.	Fish farmers  DLGs  NARO	61 Fish farmers and 4 Fisheries officers selected as
				Eigh fanns an	core FH members.
Sensitising stakeholders and electing their leadership	Feb 2022	Workshop by NARO	Holding local district leadership sensitization and a fish farmers' workshop on FoodLAND project, FH	Fish farmers  DLGs	The 65 stakeholders trained.
			formation, and electing of the hub management committees (HMCs).	NARO	elected.
Joint development of guiding	Dec 2020 – to	Letters of Agreement (LoA)	Stipulating modalities for working together as FH stakeholders.	Fish farmers	2 LoAs 2 MOUs
documents	date	MOUs	standingradie.	DLGs NARO	2 IVIOUS

# b. The draft of the Memorandum of Understanding

That between host-farmer (M01) and NARO developed pending signing after the equipment procurement process is concluded (As requested by the farmer). The FH MOU is yet to be developed.



# Annex 9 - Kisumu (Kenya)

#### FH coordinators and main contacts

- 1. Susan Clare Adhiambo Coordinator
- 2. Edwin Guya Oyoo Manager

# FH process schedule

#### **IMPLEMENTED SCHEDULE**

FH phases	Chapter	Activity description	Scheduled month
FH design	1	Sensitization of Extension Officers/ local	Done.
		authorities	March
			2021
FH design	2	Sensitization of fish farmers and Commercial	Done.
		Village formation	August
			2021
FH formalization	3	Consent forms filling with Farmers	Done.
			October
			2021
FH groundwork	4	Research and innovation technologies planning	Done.
			December
			2021

## CHAPTER 1: FH DESIGN AND CONCEPTION PHASE

b. Co-defining the core group/network



Table 1 Stakeholder Mapping

ID	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Other comments
1	Public research	University of Bologna	Guidelines and material	Workshops and Bilateral Meetings	High	Providing scientific support to FH	Project coordinator; Not willing to engage	Need to identify a
	institution	Bologila	provider	bliateral inteetings		coordinators, Facilitation skills	in bilateral meetings	suitable contact!
2	NGO	Farm Concern International	Capacity building of fish farmers through training	Trainings	High	Training of fish farmers on Market linkages and farming as a business	N/A	
3	SME	Aquabiotec Group	Formulate Innovation technology	Modification of the Recirculating Aquaculture System(RAS)	High	Modification of the RAS drum filters and the filtration system	N/A	
4	Public institution	Ministry of Agriculture Livestock and Fisheries(DALF)	Coordinating and management of the Food Hub	1.Day to day running of the Food Hub. 2.Trainings 3.Downscaling of the Aquaculture Recirculating system that can be locally adopted	High	Training of farmers Downscaling technologies that can be adopted	Project coordinator has engaged other stakeholders in the running of the food hub e.g Water Resource Management Authority(WARMA), Instittution of higher learning	There is need to identify a suitable contact person





# c. Co-defining the structure

VISION	To develop innovative multipurpose self cleaning water filtration solutions adopted for sanitation of different Wastewater streams used for Recirculating Aquaculture System and Agriculture irrigation.
MISSION	To build the capacity of local and regional aquaculture actors.
OBJECTIVE	To develop, test and intergrate novel technologies e.g self cleaning

# d. Co-defining "good governance principles"

PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH		
Participation,	Are the FH members guaranteed	Yes.		
Representation,	equal participation and	Food hub coordinators were		
Fair Conduct of	representation in the FH decision-	Nominated by the Chief Officer in		
Elections	making process? How are FH	the department of Agriculture		
	coordinators elected and roles	Livestock and Fisheries.		
	assigned? Is the gender balance	The roles are assigned depending		
	considered?	with the job tittle.		
Responsivenes	Are the FH Objectives, rules,	Yes		
s	structures, and procedures			
	adapted to the legitimate			
	expectations and needs of the FH			
	actors?			
Efficiency and	Are the planned results and	Yes		
Effectiveness	objective aligned? Are the	Yes		
	resources available for the			
	implementation and setting up of			
	the FH used in the best possible			
	way?			
Openness and	How are/will be decisions taken	Done through public participation		
Transparency	within the FH? How are decisions	and field days		
	made available to the FH members			
	and the public?			
Rule of Law	Are FH internal rules and	Yes		
	regulations are adopted in			
	accordance with procedures			
	provided for by law?			
Ethical Conduct	How are conflict of interests within	There is a national law guiding the		
	the FH internal governance	conflict of interests.		
	tackled?			



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Competence	How the competence and capacity	This is handle through the
and Capacity	to act of the FH coordinators is	government code of conduct and
	maintained and strengthened?	ethics to evaluate the food hub
		coordinators competence and
		capacity
Innovation and	How are results shared with other	Publication, Meetings/Field days
Openness to	FHs?	
Change		
Sustainability	How is the FH sustainability	Creation of a revolving fund to
and Long-term	guaranteed?	cutter for the maintenance and
Orientation		running cost of the food hub
Sound	How are annual budget and	Its prepared through the normal
Financial	investments of the FH prepared	government budget passed at the
Management	and deliberated?	county assembly
Human rights,	How are human rights, cultural	Food hub is open to all visitors
Cultural	diversity and social cohesion	locally and internationally so long
Diversity and	fostered and guaranteed within the	as they follow the standards of
Social	FH?	procedures at the food hub
Cohesion		
Accountability	How are responsibility roles	There are mechanisms put in place
	defined within the FH? How are	within the department to handle
	decisions reported and	responsibility roles, decisions
	sanctioned? How are conflicts	reported and sanctioned, and
	between FH actors mitigated?	conflicts for accountability in the
		department

# e. Co-defining roles and responsibilities

STAKEHOLDER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES
FCI	Capacity building	Farmers trainings
		Carry out survey with Consumers within Urban
ABT	Technology Innovation	Modification of the RAS drum filters and Filtration System

# f. Activities planned with stakeholders

Typology of activity	Start date	End date	Activity description	Actors involved
Departmental Staffs/Local Authority Sensitization	October 2020	December 2020	Introductory Meetings with the local Authority and Sub County Fisheries	Chief Officer Director Fisheries Fisheries Officers Local Chiefs





Typology of activity	Start date	End date	Activity description	Actors involved
			Officer about the FOODLAND Project	Project Coordinator Aquaculture Technicians
Appointing of Commercial Village Coordinator	January 2021	October 2023	Coordination of the project activities within the Commercial Villages	Aquaculture Technicians FCI representative Fisheries Officers
Farmers Survey	February 2021	August 2021	Review of Farmers Questionnaire draft Training of the Enumerators Data Collection in the Field Data entry and Submission Corrections	Fisheries Officers Project Coordinator Aquaculture Technicians Enumerators Commercial Village Coordinators
Farmers Consent Signing	July 2021	October 2021	Getting Farmers Opinion	Project Coordinator Aquaculture Technicians FCI representative Fisheries Officers Commercial Village Coordinators Chiefs
Identification of the Innovation Technology			Looking for Aquaculture technology that can be implemented to Fish Farmers in order to improve their Production	Project Coordinator Aquaculture Technicians

# g. Communication and branding

Type of activity	Activity	Activity description	Target audience	Support needed from FoodLAND communic ation partners [YES/NO]
Dissemin	Food	Describing of the	Local Fish Farmers, Institution	YES
ation and	hub	Recirculating	of higher learning, Research	
		Aquaculture	Centers, Local Industries	





Type of activity	Activity	Activity description	Target audience	Support needed from FoodLAND communic ation partners [YES/NO]
Exploitati	Techno	System(RAS),Membran		
on	logies	e Bioreactor(MBR) and		
		Irrigation system		
		components and how		
		each component works		
Researc	Fish	Formulation of fish	Local Fish Farmers	YES
h and	Feed	feeds using the locally		
Innovatio	formula	available materials like		
n	tion	the macrophytes		
	Improv	Improving of the RAS	Local fish farmers	YES
	ement	drum filter and Filtration		
	of the	system		
	RAS			



# h. Identifying challenges (and appropriate mitigation measures)

Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & concepti on phase	Mitigation measures
COVID	Health	Hindering public gathering	Natural	Compliance with government	Year 1	Enouraging partners and stakeholders to adhere to govt regulations
Production challenges from the farmers side	Production	Poor quality of fingerlings and feeds affects the production capacity of the farmers	Unaunthenti cated/ Unregulated suppliers/ manufactur es/ middlemen	Production of quality fingerlings by the FH. Exposure of the farmers to the various feeds production technologies	Year 1	Production of quality fingerlings by the FH. Exposure of the farmers to the various feeds production technologies
Malfunctioning of RAS equipment	production	Mulcfunction of pumps leads to water shorateg in the system -Also leads to fish mortality	Natural	-Routine Mentenance	Year 1	Routine mentance
Drought	Production	-Affects water level and quaity that can result to stunted growth and also fish mortality through predation.	Natural	Use of alternative sources of water like boreholes, reservoir tanks etc	Year 1	Use of alternative sources of water like boreholes, reservoir tanks etc





Risk	Type of risk	Risk description	Cause of risk	Chance	Stage of the Design & concepti on phase	Mitigation measures
Marketing	Marketing	Inadequate production leads	Natural and	-Improvement of the	Year 1	-Improvement of the
		to lack of market	man made	farmers' capacity to		farmers' capacity to
				produce		produce
				-Exposure to market linkage		-Exposure to market
				forums		linkage forums



# i. Open innovation strategy

- i. Modification of the RAS system (Filtration system which involves replacement of biomedia with sand, Modification of the drum filter membrane).
- ii. Feed formulation using the locally available materials such as macrophytes and black soldier fly.
- iii. Re-use of green water for irrigation.
- iv. Testing the product to analyse the quality of the fish and the vegetables in terms of suitability for human consumption.

#### CHAPTER 2: FH FORMALIZATION PROCEDURE TEMPLATE

## a. Identifying the formalization procedure

2/20 presentation about Kiwasco reached the project to Board project	Activity	Outcomes
requesting for a DALF space for the project	Meeting	reached and project site shown to



# Annex 10 - Mukurweini (Kenya)

#### FH coordinators and main contacts

www.tamarillo.co.ke Director/CEO- Mr. Daniel Wangombe Kiboi Co-Director - M/s Caroline Wanjiku Munene Coordinator - Thenya Kariuki

# FH process schedule

Table 2Implemented schedule

FH phases	Chapter	Activity description	Scheduled month
FH design	1	Meeting with Farmers and enumerators	Done. July
			2021
FH design	2	Meeting with Mukurewini local authorities	Done.
			July 2021
FH formalization	3	MOU under development, to be in next report	Done.
			July 2021
FHgroundwork	4	Pre training, pilot study andfarmers survey	July 2021

#### CHAPTER 1: FOOD HUB DESIGN AND CONCEPTION PHASE

Co-defining the core group/network





Table 3 Stakeholder Mapping

ID (progressive number)	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High-Medium-Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Other comments
1	Public research institution	University of Bologna	Guidelines and material provider	Workshops and Bilateral Meetings	High	Providing scientific support to FH coordinators, Facilitation skills	Project coordinator ; Not willing to engage in bilateral meetings	Need to identify a suitable contact!
1	UoN	Partner	Capacity built, collaboration	Workshops and bilateral meetings	Н	Both	None	Contact satisfactory
2.	Farmers groups	Suppliers	Provide raw material	Workshops	Н	Enhance growing skills	None	Contact satisfactory
3.	Sub- County commissioner of Mukurweini, Kenya	Authorization to operate and linkage to other local initiatives like the irrigation project.	Security, permit to meet	Inspection visit and authorization	Н	Maintaining government policy and guidelines	Usual govt bureacracy	Contact satisfactory
4.	Kenya Bureau of Standards (KEBS)	Certifications	Certification of Tamarillo products	Product testing and analysis	Н	Quality assurance	Did not have a standard of tamarillo products	Contact satisfactory



ID (progressive number)	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High-Medium-Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Other comments
5.	Department of Public Health	Quality, safety and public health	Guidelines	Inspection visit , inclusion of new products in their database.	Н	Ensure products meet public safety standards andguidelines	Frequent unannounced product sampling from supermarket shelves.	Contact satisfactory
6.	Agriculture and Food Authority (HCD)	Registration of seedling nursery	Training farmers	Workshops	М	Optimizing quality inseedling production	none	Contact satisfactory
7.	County Government of Nyeri	Regulation/licensing	Ensure good business atmosphere	Discussions on consolidation of licences/fees	М	Ensure we pay requisite rates and fees	Punitive licenses, e.g. distribution license even within the county	Contact satisfactory
8.	National Police Service	Partner in community policing	Provide security	Discussions on community policing	М	Less crime when youth are gainfully employed	Response times are sometimes slow	Contact satisfactory





ID (progressive number)	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Other comments
9.	Mulleys supermarket	Sales outlet	Market out let	Product promotion and marketing	M	Commercial arrangement as a market outlet	Supermarket collapsed earlier in the year and we lost some money	Contact unsatisfactory
10	Siel Supermarket Mweiga	Buyers of finished product	Market out let	Promotion of our products	M	Market avenue for our finished products	During covid lock downs, we are not allowed to carry out product promotions	Contact satisfactory
11.	Community	Source of employment and livelihood	Increase domestic revenues	Nursery management training	Н	Product awareness creation and income generation	Lack of clean, disease-free seedling material	Contact satisfactory
13	Promaco Kenya	Supplier of ingredients	Quality products supply	Discussions on new products development	M	Avenue for research and NPD products	Most ingredients are imported, sometimes they don't	Contact satisfactory





ID (progressive number)	Type (NGO, farmer)	Affiliation	Role in the FH	Activities planned	Necessity of involvement (High- Medium- Low)	Main interest(s) in being involved	Issues identified with involvement (i.e., formal involvement)	Other comments
							arrive on time therefore affecting production	
14.	Infinity Plastics	Supplier of bottling material	Supply packaging material	Discussions on NPD	Н	Buying packaging material to attract our clients	Labels are too expensive to produce	Contact satisfactory



## Co-defining the structure

VISION	To provide healthy value-added Tamarillo products in kenya.
MISSION	To provide the highest quality products from farmers produce using the best practices and community involvement.
OBJECTIVE	Our objective is to champion agribusiness through training and value addition of community produced tamarillo fruit.

Co-defining "good governance principles"

PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH		
Participation,	Are the FH members guaranteed	Gender balance is a priorityand all		
Representation,	equal participation and	elective posts follow the gender		
Fair Conduct of	representation in the FH decision-	parity rule, and also cover the 5		
Elections	making process? How are FH	wards in the subcounty.		
	coordinators elected and roles			
	assigned? Is the gender balance			
	considered?			
Responsivenes	Are the FH Objectives, rules,	HR Policy manuals are in place		
S	structures, and procedures	which governs operations within		
	adapted to the legitimate	TAM,		
	expectations and needs of the FH			
	actors?			
Efficiency and	Are the planned results and	Results and objectives are aligned,		
Effectiveness	objective aligned? Are the	the FH is already in operation,		
	resources available for the			
	implementation and setting up of	•		
	the FH used in the best possible	effects of not fully operational.		
	way?	Setting of FH is best.		
Openness and	How are/will be decisions taken	Quarterly meeting to be used as a		
Transparency	within the FH? How are decisions	, , ,		
	made available to the FH members	and to get feedback from the		
	and the public?	participants		
Rule of Law	Are FH internal rules and	YES, guided by the prevailing		
	regulations are adopted in	national and County government		
	accordance with procedures	legal framework.		
Ethical Co. I. (	provided for by law?	Tanadilla hairana Di O. ili.		
Ethical Conduct	How are conflict of interests within	Tamarillo being a PLC will not get		
	the FH internal governance	involved in recruitment of staff		
	tackled?	within the FH. That will be left to the		
		elected officials .		



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Competence and Capacity	How the competence and capacity to act of the FH coordinators is maintained and strengthened?	Qualified coordinators and enumerators have been trained and recruited; minimum education standards set before recruitment exercise.
Innovation and Openness to Change Sustainability and Long-term Orientation	How are results shared with other FHs?  How is the FH sustainability guaranteed?	Best practice of documentation (booklets) and through website updates.  The FH is pegged around a local community irrigation project where the registered farmers are direct beneficiaries and control the day-to-day management. FH has its own land and permanent structures, Shareholders are local majority being farmers who produce raw materials for the FH.
Sound Financial Management	How are annual budget and investments of the FH prepared and deliberated?	Annual budgets are prepared and Shareholders deliberate on it, investment is done by shareholders through share contribution and ploughing back the profits as part of investment.
Human rights, Cultural Diversity and Social Cohesion	How are human rights, cultural diversity and social cohesion fostered and guaranteed within the FH?	The FH majorly comprises of one ethnic divide so this is not a major issue but human rights are anchored in the prevailing rule of law where discrimination of any sort is prohibited. The HF is also located in a community where literacy levels are over 92%.
Accountability	How are responsibility roles defined within the FH? How are decisions reported and sanctioned? How are conflicts between FH actors mitigated?	Community leaders and local elders are part of the FH although not involved in the daily operations, Assistant chiefs are used for arbitration in case of any disputes.

## Co-defining roles and responsibilities

In the local community, women take charge of the farming so naturally they have the controlling stake in farmers groups. 70% are women, gender rule is adhered and also we encourage rotational leadership of women leaders to make majority have active voice in the FH.





STAKEHOLDER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES		
University of Nairobi	Capacity building, collaborator and research	Conduct research and the lead partner		
FoodLAND Project	Funding, knowledge, innovations and capacity building	Funder, conduct research and the lead partner		
Farmers group	Provide tamarillo with raw material for processing	Growing tamarillo fruits		
Sub-County	Coordinator of locals with	Ensures prudent use of any		
commissioner of	the county government	government resources provided		
Mukurweini, Kenya		and also mitigate incase of any issues		
KEBS	Certification of products	Product testing and quality certification		
Dept. of Public health	Approval of any new food products	Annual inspection of factory and issuing of health certificates to the production staff		
AFA	Training farmers	Licensing of seedlings nursery		
County Govt. of Nyeri	Provide a conducive business environment	Provision of business and trade permits		
NPS	Provision of security	Community policing initiatives		
Mulleys	Market out-let	Selling our product		
Siel Supermarket	Market out-let	Selling our products		
Community	Provide the growing farms	Provide seedlings and coordinate supply		
Promaco	Supply ingredients	Avail ingredients at the right time and quality		
Individual members	Market out-let	Buying the products thus marketing it.		
Infinity Plastics	Supply packaging	Producing bottles and wrappers		

### Activities planned with stakeholders

Typology of activity	Start date	End date	Activity description	Actors involved	
Meeting with coordinators and enumerators	July 2021		Meeting with farmer groups	UON, TAM and Mukurweini representatives	
Meeting with Mukurweini subcounty officials	July 2021		Introducing the FH and	Sub County Commissioner,	





Typology of activity	Start date	End date	Activity description	Actors involved
			explaining their involvement	Mukurweini leaders, TAM
Development of MOU with Mukurweini farmers groups	July 2021		Where to set up nurseries and sources of clean seedling material	TAM, Agriculture department, Private Tissue cultur Lab( Asepsis Limited) and Mukurweini farmers leaders
Pre-training Pilot study and farmers survey	June- July 2021		Training of enumerators and carrying out pilot survey	TAM, UON, Mukurweini farmers.

# Communication and branding

Type of activity	Activit y	Activity descripti on	Target audience	Channel	Timing	Support needed from FoodLAND communication partners [YES/NO]
Internal	Growin	Nursery	Farmers	Physical	One	NO
communi	g of	establish	groups	demonstr	week	
cation	tamarill	ment		ation		
	o fruit					
Internal	Trainin	New	TAM	Physical	1 week	NO
communi	g of	product	production	training		
cation	TAM	processin	team	at factory		
	product	g				
	ion staff					
External	Marketi	New	Retail	Promotio	6 month	YES
communi	ng	product	outlets	ns, social		
cation		marketing		media		
Dissemin	Booklet	Research	Other FH	Online	3	YES
ation and	product	and		and	months	
exploitati	ion for	informatio		manual		
on	good	n analysis		documen		
	practice			tation	_	
Researc	New	Product	Elderly,	Posters,	3	YES
h and	product	developm	nutritionist	seminars	months	
innovatio	develop	ent	S,			
n	ment		hospitals			
activities						



### Identifying challenges (and appropriate mitigation measures)

Risk	Type of risk	Risk description	Cause of risk	Chance	Mitigation measures
Taxation	Double taxation/levies	Multiple licences every time you go to a different county.	No harmony in county revenue tarrifs	high	Lobby ofor waiver
Pademic like COVID 19	Natural calamity	Operational pause idefinatately without notice	unknown	high	To be prepared for everything and work with non-perishable products like dried products and flour.
Seedling	Lack of clean/	Spread of diseases	Viral	High	Development
quality	disease-free seedlings	and pests	diseases		through tissue culture
Product	Loss of	Marketer/distributor		High	Binding
distribution	product/ money	collapses	dynamics		Contracts

### Open innovation strategy

- FH through TAM plans to process other types of fruit for blending/fortifying other available products e.g. flour, juices.
- Improve on extraction / dehydration techniques that would be more efficient or cost effective.

### CHAPTER 2: FH FORMALIZATION PROCEDURE TEMPLATE

### Identifying the formalization procedure

Activity	Date	Method	Description of the activity	Participant s	Outcomes
MOU	JAN	Consultation	Develop terms of	TAM and	Draft MOU
	202	with stake	engagement and	Mukurweini	
	2	holders	deliverables	farmers	
				groups	



# Annex 11 – Kitui (Kenya)

Food Hub (FH) coordinators and main contacts Managing Director (MD/CEO) Mr. Crack Wambua Munyao. Web page http://www.bit.do/kepco. Company Address kituienterprisepromotion@gmail.com

Chairman - Mr. Alex Mwangangi

Secretary - Mrs. Janet Mumo

Treasurer -Mr. David Muthoka

#### CHAPTER 1: FOOD HUB DESIGN AND CONCEPTION PHASE

### a. Studying the context: desk research and surveys with farmers and consumers

The desk research and surveys with farmers and consumers is still under review. The inlab behavioural experiments and survey data sets are ready awaiting analysis and presentation. Detailed report will be availed in the next report.

### b. Co-defining the structure

VISION	The market leader for mangoes value added products in Kenya.
MISSION	To establish and manage business enterprises that complement the agribusiness and other economic activites in Kitui County thereby, providing employment opportunities and a ready market for agricultural products while maximizing share holder value.
OBJECTIVE	The main objective of the Company is to increase incomes from commercialized agricultural value chainsforimproved livelihoods of small scale farmers in Kitui County by utilizing appropriate technologies, knowledge, skills and abilities. The current focus is on the mango value chain from production, processing and marketing. It is owned by 800 farmers, 70% being women

### c. Co-defining "good governance principles"

PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Participation,	Are the FH members guaranteed	Elections done during AGM and
Representation,	equal participation and	roles are stipulated in the available
Fair Conduct of	representation in the FH decision-	policy manual. Gender balance is
Elections	making process? How are FH	considered as per the government
	coordinators elected and roles	policy of rule of gender, that is one
	assigned? Is the gender balance	third gender representation.
	considered?	





PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Responsiveness	Are the FH Objectives, rules, structures, and procedures adapted to the legitimate expectations and needs of the FH actors?	Yes, Policy manuals that govern the FH are in place.
Efficiency and Effectiveness	Are the planned results and objective aligned? Are the resources available for the implementation and setting up of the FH used in the best possible way?	Results and objectives are aligned, the FH is already in operation, started in 2012. Resources are minimal due to COVID-19 pandemic hence FH is not fully operational. Setting of FH is best.
Openness and Transparency	How are/will be decisions taken within the FH? How are decisions made available to the FH members and the public?	During quarterly FH meetings, members are briefed on progress of FH and wayforward plans discussed. All stakeholders are encouraged to be involved and to participate. Audit is done annually and report shared with shareholders.
Rule of Law	Are FH internal rules and regulations are adopted in accordance with procedures provided for by law?	Yes rules are adhered to in accordance with policy manual and FH procedures.
Ethical Conduct	How are conflict of interests within the FH internal governance tackled?	They are tackled through ethical guidelines that stipulate: that employees shall refrain from engaging in actions which may appear to create potential or realconflict of interest with KITUI ENTERPRISE PROMOTION COMPANY. Specifically, no employee shall participate in the recruitment, selection, and award, administration of a contract where to his /her knowledgehis /her immediate family, partner or Company has interest. If this is inevitable, such interest shall be declared in advance to management.



PRINCIPLE	RELATED QUESTIONS	IMPLEMENTATION IN THE FH
Competence	How the competence and capacity	Qualified coordinators are
and Capacity	to act of the FH coordinators is	employed and on-Job-trainings
	maintained and strengthened?	(OJB) are done.
Innovation and	How are results shared with other	Best practice of documentation
Openness to	FHs?	(booklets) and through website
Change		updates
Sustainability	How is the FH sustainability	The FH has its own land and
and Long-term	guaranteed?	permanent structures,
Orientation		Shareholders are local people,
		majority being farmers who
		produce raw materials for the FH.
Sound Financial	How are annual budget and	Annual budgets are prepared and
Management	investments of the FH prepared	Shareholders deliberate on it,
	and deliberated?	investment is done by shareholders
		through share contribution and
		ploughing back the profits as part of
		investment.
Human rights,	How are human rights, cultural	Human resource policy manual
Cultural	diversity and social cohesion	guarantees in the FH. The policy
Diversity and	fostered and guaranteed within the FH?	manual is available. KEPC
Social Cohesion	FH?	observes and respects the rights of individuals and does not
		individuals and does not discriminate on cultural basis.
		KEPC endeavours to make every
		member feel that they are an
		important part of the KEPC
		ownership being members of the
		KEPC community.
Accountability	How are responsibility roles	Responsibility defined in the HR
	defined within the FH? How are	policy manual, organo- graph is in
	decisions reported and	place to use as channel of decision
	sanctioned? How are conflicts	reporting and conflicts handled by
	between FH actors mitigated?	subcommittee.

### d. Co-defining roles and responsibilities

We have organised groups whereby 70% are women, gender rule is adhered and also we encourage rotational leadership of women leaders to make majority have active voice in the FH.



STAKEHOLDER NUMBER	MAIN ROLE IN THE FH	MAIN RESPONSIBILITIES
University of Nairobi	Capacity building, collaborator and research	Conduct research and the lead partner
Farmer Cooperative	Provide raw material for processing at KEPC	Growingmangoes, sorghum and othercropproducts
County Govt of Kitui	Issuing of Permits and licenses	Policy formulation and guidance
KEBS	Certification of products	Product testingand quality certification.
МОН	Guidelines	Premises Inspection and authority to operate
MOA	Training farmers	Mobilizing farmers, prepairing training modules and training – best practise
KDC	Training farmers	Mobilizing farmers and conducting trainings
Kitui Baby Home	Product trials and research	Availing children to test the product
Mulleys	Market out-let	Availing product on the shelve for the customers and selling
Magunas	Market out-let	Availingproduct on the shelve for the customers and selling
Community	Market out-let	Buying the productsthus marketing it.
Kindergarden/school	Market out-let	Buying the product for children to test.
Individual members	Market out-let	Buying the productsthus marketing it.
Safe park	Supply packaging material	Producing packaging containers and wrappers

#### e. Open innovation strategy

Kitui FH was established in the year 2012 after registration and certification compliance. It started its operations in the year 2015. The FH currently majors in production, processing and value addition of mango value chain and sorghum products.

Some of the products include mango the innovation such as Mango powder, blendedandcomposite flour from sorghum and peanuts /soya.

Going forward, KEPC wishes to develop new innovative products from blend of peanuts/soya and Quinoa. Quinoa products will eventually replace peanuts because Quinoa has nutrients of very high value compared to locally grown crops.

Quinoa being a Novel product, KEPC targets children (infants and young children) and elderly people with this innovated food to address undernutrition and overall malnutrition.

