

MASTER'S DEGREE FINAL PROJECT

TITLE: Community
gardens as places for
community building using
artistic approaches



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ABSTRACT

For the past two years, the research topic was the role of Art in Peacebuilding methodologies, leading up to the creation of the current project. The current thesis is an elaboration and finalisation of an ongoing process that began in October 2020. This work will present a theoretical framework on biological farming, the role of the arts in community building and the possibility of linking both. Later, the project proposal will be shown and explained in its context, goals, activities, participants, calendar and budget—finally, a brief evaluation of the construction process and overall outcomes will be retrieved from this learning experience.

Keywords:

Health promotion, Food Empowerment, Artistic performances, Community Building, Organic Farming

ACRONYMS

MA – Millennium Ecosystem Assessment

SDG – Sustainable Development Goals

FAO – Food and Agriculture Organization of the United Nations

IFOAM - International Federation of Organic Agriculture Movements

“UM MUNDO ONDE A POBREZA E A DESIGUALDADE SÃO ENDÉMICAS SERÁ SEMPRE DADO A CRISES ECOLÓGICAS E DE OUTRAS ÍNDOLES. O DESENVOLVIMENTO ECOLÓGICO EXIGE QUE SE DÊ SATISFAÇÃO ÀS NECESSIDADES BÁSICAS DE TODA A GENTE E QUE SE PONHA AO ALCANCE DE TODOS A POSSIBILIDADE DE SATISFAZEREM AS ASPIRAÇÕES A UMA VIDA MELHOR.”

COMISSÃO MUNDIAL SOBRE MEIO AMBIENTE E DESENVOLVIMENTO

A WORLD WHERE POVERTY AND INEQUALITY ARE ENDEMIC WILL ALWAYS BE PRONE TO ECOLOGICAL AND OTHER CRISES. ECOLOGICAL DEVELOPMENT REQUIRES MEETING EVERYONE'S BASIC NEEDS AND MAKING IT POSSIBLE FOR EVERYONE TO MEET THEIR ASPIRATIONS FOR A BETTER LIFE.

WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT.

GENERAL INTRODUCTION

While writing this paper, the intention was always to follow the sage words of a professor that crossed the path of a very indecisive student. She once suggested that the works her students would have to present should reflect their personalities. This reference has left a mark, and since that date, the philosophy has maintained itself. Because what is the point of being someone else? With this line of thought, this paper combines two passions, food and music, and their connecting lines, which can be many since both serve various purposes, so the possibilities to link these two concepts are infinite.

That said, a few things are a significant part of people's life at all times and around the globe. "Food is, like sex, an essential ingredient of our life, an ingredient of what we expect of a good life." (Algers and Kaiser, 2016) The content of the plates we eat on results from the mix of nature and culture, so uncovering similarities in our global diet may appear challenging. Academics have made questions about food, and for a while, these questions have been overwhelmed by the search to guarantee food and enhance what we already possess. However, meaningful and normative queries have always occupied the social sphere regarding food: Are we eating the right food? Is food production appropriately executed? Is injustice and power present in the way we distribute food? Are we fibbed to worrying about what we put into our bodies? The notion of food choice is easily questioned if one reflects on the lack of it among individuals with low incomes. It has become apparent that food choices, and hence one's nutritional and health state, cannot be regarded as separate from the participants' individual stories and the intricacies of their lives. Day-to-day habits, economic circumstances, and nutrition accessibility affect people's food preferences.

Furthermore, we live in a time when the consequences of the productivist model of agricultural development have gained visibility, creating accentuated social movements regarding the ethics of food production and consumption. In this sense, in recent decades, organic farming products have gradually been introduced into the diets of many consumers in Western countries. They have become part of the discourses, recommendations and even strategies recommended by non-governmental organisations, some ministerial departments and companies. Organic products, referred to here as "bio" for ease of expression, have gradually achieved a prominent status under the transition to sustainable production and consumption practices when

climate change adaptation measures and policies are being considered.

Sociological research generally concludes that these trends towards "sustainable" food production and consumption - which are gaining ground in the agri-food market - are mainly due to the revelation and exposure of various irregularities in the intensive agricultural system that threaten food safety, consumer health, sustainability and agrobiodiversity. Numerous episodes, such as the "mad cow crisis", the marketing of foods made from GMOs¹, bird flu and foot-and-mouth disease, have triggered successive "food scares" in public opinion.

Recent reforms of the Common Agricultural Policy (CAP) also emphasise the provision of quality food, which seeks to stimulate the market for organic produce. This shift towards quality has affected not only the food regulation systems, production and retailing but also the consumption habits of parts of the Western population. Some authors have stated that this transition context has stimulated the emergence of consumers who are more selective about food; or even more "conscious" and "reflective" in the sense of a responsible political and ethical involvement in everyday food choices, giving rise to a shift from the status of "consumer" to that of "citizen".

How often have we heard someone lament the lack of taste in fruit or the unusual way it matures or express genuine concern about toxic residues in food? Organic farming can thus be seen as an alternative and radical critique of the industrialisation and agro-food intensification model. It can be a counter-culture movement to the production and consumption of standardised foods, often perceived by consumers as lacking "quality". Nonetheless, organic farming is multidimensional and subject to contradictory disputes among producers and consumers. While organic farming is understood as an ecologically benign form of agriculture, for others, it represents a revolutionary alternative to the hegemonic and traditional food production and retailing standard. So the question remains, how can organic farming become more and more used for food production?

GOALS OF THE MASTER'S THESIS

As is evident from our earlier discussion, the problem that the project wishes to tackle is food insecurity and community powerlessness. In the context of Portugal, for example, if one

¹ Genetically modified organisms.

does not have the luck to have a proper job² where it can assure food supplies, surviving without any outside help is pretty challenging. From a personal experience, living in Portugal with the minimum wage is already unbearable, so imagine if one lives merely on state subsidies. People need to come together and help each other, and they desperately need a community where they can feel like they have support. Furthermore, to produce or create some of the basic needs, food. Suppose one can be responsible for producing part of the food they eat. In that case, it is not only better for their financial stability but also creates sustainable systems that allow people to eat healthier.

Moreover, one essential need that people often take as silly is the need to express themselves and what they are feeling or thinking. Life is hard, and people need to express their concerns, fears and passions; it is as simple as that. The only problem is that one needs to create conditions where people can do that, especially for those often marginalised from mainstream society. Based on all these problems, the project "Community Gardens as places for Community Building using artistic approaches" came to life. The performative art that will be developed for this particular project is music.

There is a considerable need for a great majority of people to reconnect with Earth and with themselves, which social media and rapid lifestyles are completely deleting. Within this piece of work, the goal is to inform of the importance of creating sustainable food systems that allow people to choose the food they put on their plates; while doing a team activity, one of agriculture, to create deeper connections that restore the physical contact among people. By recognising the simplicity of human needs, one can quickly become happier and healthier.

Throughout the paper, it will be visible that these needs are the ones the project wants to deal with and arrange possible solutions to these deficits. It can also serve as an inspiration to those who are financially advantaged to rethink and observe what food choices patterns they have. Projects like these are meant to develop a better society and ensure that individuals fulfil their potential for themselves and others. Because even though people often confuse social projects with initiatives that are exclusive to poor people (at least from the perspective of a European white woman), it is, in fact, the opposite. Injustices and inequalities will always reflect one's capacity to behave with each other.

² Meaning that the wages versus life costs are not proportional.

CHAPTER 1 – FOOD SYSTEMS

"FOOD SYSTEMS ARE ONE OF THE MOST POWERFUL LINKS BETWEEN HUMANS AND THE PLANET."

AMINA MOHAMMAD, DEPUTY SECRETARY-GENERAL OF THE UNITED NATIONS

A food system embraces all the elements³ and activities related to the production, processing, transportation and marketing, arrangement and consumption of food and the gains of these activities, including socioeconomic and environmental outcomes. A sustainable food system conveys both food and nutrition security for everyone. Which consequently creates the monetary, societal and climate bases to bring about food security and nutrition for upcoming generations. (Måren 2018, 1)

The Millennium Ecosystem Assessment⁴ stated that agriculture had increased its footprint drastically. 80% of endangered species experience habitat loss because of agriculture expansion. More than half of SGDs are linked to food security and nutrition worldwide. SGD 15 (Life on Land) is crucial and relates to part of them, specifically SGD 2, 3, 6, 12, 13 and 14.⁵ Recent studies confirmed that 86% of the biomass on the planet could be found on land and only 1% in the oceans. Moreover, humanity only represents 0,01% but completely dominates most global actions and tendencies within biodiversity. Summing up, our species is totally irrelevant but very harmful to life on Earth. (Måren 2018, 2)

Even though people (mainly in the global north) believe that they are being fed by large agribusiness, the reality is that food nowadays continues to be produced by small-scale farming systems. There is much to grasp from past and the global south knowledge regarding low footprint farming. The accumulated knowledge about these small-scale systems is highly understudied. Human fascination with modern technologies and innovations has somehow put aside the boundless capital of local expertise, an essential part of our ethereal cultural ancestry. Therefore, it is necessary to foster a pearl of trans-disciplinary wisdom created in these **keystone systems** if ones wish to transform the current unsustainable food system into a more sustainable one. (Måren 2018, 3) Here, it is essential to mention the strategies that promote a circular economy involving recycling and reuse, widely known as Agroecological systems. Additionally,

³ Environment, people, inputs, processes, institutions, infrastructure, markets and trade.

⁴The Millennium Ecosystem Assessment assessed the consequences of ecosystem change for human well-being.

⁵<https://sdgs.un.org/goals#goals>

they link resources to minimise dependency on external inputs, such as fossil fuels and imitate the natural cycles and functional diversification that characterises natural ecosystems. Yet, there is a significant learning gap on trade-offs in domestic ecosystems or agroecological systems, and there is a long road ahead regarding achieving sustainable systems.

"AGROECOLOGY IS AN OVERARCHING, HOLISTIC CONCEPT THAT ADVOCATES FOR A TRANSFORMATION PROCESS TOWARDS OVERALL SUSTAINABLE AGRICULTURAL AND FOOD SYSTEMS. IT IS SIMULTANEOUSLY A SCIENCE, A SET OF AGRICULTURAL PRACTICES AND A SOCIAL MOVEMENT. HOWEVER, THERE IS NO UNIVERSALLY AGREED DEFINITION FOR IT."

SUSTAINABLE AGRICULTURE (NAREN) SECTOR PROGRAMME

However, the current system is far from sustainable, so one must ask the following question. How does one address the democratic shortfalls in the food system today? Empowerment could be and has been a fundamental claim and reference for those seeking to transform the undemocratic system. In recent years, it has already emerged venues and practices where people's capacities to engage with food issues have been developed, which goes from local food initiatives and health-food initiatives to state educational policies. Therefore the argument is based on the idea that people become in control of the food system. Of course, individuals would have to improve their decision-making power regarding food matters or problems through an autonomous approach. In this line of thought, empowerment consists of developing a society that participates and decides more consistently and attentive so that it might create significant change toward equal and inclusive systems. This way, the path towards a democratic and sustainable new food system becomes feasible. (Bornemann and Weiland 2019) For example, a practical and prevalent approach is local food initiatives that are much healthier regarding the footprint left on the planet and in people's lives.

Before the supermarkets, individuals in rural and urban surroundings cultivated their food or purchased it in farmer's markets and local merchants. These customs, however, have been replaced, distancing the connections between producers and consumers. Local food initiatives are an opportunity to repair these ties by endorsing new societal, financial and physical that counteract the harmful and current global food system. These initiatives can manifest themselves in several forms, but always with the standard view of assisting the local and seasonal to the detriment of the preserved and exotic food ingredients. The farmer's market is a common way to sell products directly to the consumer, where there is a physical interaction between both

subjects. (Bornemann and Weiland 2019)

Additionally, local food initiatives might include green boxes and urban gardening. The growing appearance of these initiatives is a response to the increased globalisation that left a massive footprint on the planet's landscape. Moreover, they are demoted from any interaction between producer and consumer, which consequently creates a lack of information regarding the conditions of the food production process. These initiatives serve as sites to empower the local actors, as they can carve the food environment they are inserted in and be completely independent of large businesses. On the one hand, producers directly modify people's food consumption habits when offering local products. On the other hand, their customers will also need to engage in local food production. (Bornemann and Weiland 2019)

FOOD SECURITY AND HEALTHY EATING

Food security

As mentioned before, a sustainable food system conveys food and nutrition security for everyone. Nevertheless, what does it mean, in fact, food security? Generally, it can be defined as "having physical and economic access to sufficient, safe and nutritious food to meet dietary needs and food preferences for an active and healthy life". It is one of the most fundamental aspirations of impoverished households and an essential component of the United Nation's Sustainable Development Goals. In addition to being a component of sustainable development, food security often interacts directly with other aspects of economic and human development, including labour provision, educational attainment, and health.

Despite numerous developmental successes worldwide, including significant food production strikes, the persistence and scale of world hunger are shocking. More than 820 million (State of Food Security and Nutrition in the World report FAO 2019) individuals suffer from daily hunger, which keeps growing. Moreover, almost 2 billion people face food insecurity, which translates into a deficiency in accessing secure, nourishing and adequate food. Additionally, the numbers of obese and overweight people are increasing and achieving epidemic proportions, which adds to the undernutrition problem and creates an even more severe one. Within the overall population, minorities such as women, children and indigenous communities are particularly vulnerable to this matter. This shows the need for concrete policies that leverage

the advantages of globalisation by simultaneously minimising the threats to reaching the SDGs, particularly SDG 2, correlated to ceasing hunger, enhancing food security and encouraging sustainable farming. (Fanzo 2019)

As expected, food-related problems result from a convoluted cluster of factors that includes climate-related stimuli, usually aggravated by economic problems. The capability of political systems to handle rising food insecurity and stem food emergencies from escalating into starvation is undoubtedly contingent on historical, cultural, monetary and political elements. Likewise, food insecurity is likened to several forms of inequality, classified as gender, revenue, land and adequate food access injustices. Increased attention has been given to the astounding social costs of hunger and the necessity to revise the current local, national and international food systems so they can become enduring, healthy and efficient systems.

Healthy eating

Diet habits are classified as the amounts and varieties of foods and beverages and the commonness of how they are habitually ingested. A balanced diet comprises food that delivers adequate energy and combines diverse and rich food in nutrients. It requires to be of easy reach and affordable, and that enrich and preserve social and cultural traditions. There have been endeavours to define diets or dietary patterns characterised as healthy, but there is little consensus on what is thought to be a healthful or nutritional food. (Fanzo 2019)

"NUTRITION IMPROVEMENT REQUIRES HEALTHY, BALANCED, DIVERSIFIED DIETS, INCLUDING TRADITIONAL DIETS WHERE APPROPRIATE, MEETING NUTRIENT REQUIREMENTS OF ALL AGE GROUPS AND ALL GROUPS WITH SPECIAL NUTRITION NEEDS, WHILE AVOIDING THE EXCESSIVE INTAKE OF SATURATED FAT, SUGARS AND SODIUM, AND VIRTUALLY ELIMINATING TRANS FATS, AMONG OTHERS." THE INTERNATIONAL CONFERENCE ON NUTRITION ROME DECLARATION

The conception of sustainable diets (dietary suggestions combined with healthfuller environments and shoppers), which first appeared in the 1980s, using a distinct terminology, has recently reemerged in the context of sustainable growth. More contemporary notions of these diets foster environmental and financial resilience via low-impact and affordable foods while simultaneously improving public health. Researchers claim that there is a need for better guidance on what forms healthy, sustainable dietary patterns, but it is a struggle considering the existing voids in research on how to achieve such diets. Moreover, it lacks agreement and political will to operate, notwithstanding perceived competing agendas between fostering healthy

and sustainable diets and stimulating financial development. (Fanzo 2019)

The research on the diet patterns in the middle- and high-income countries shows that they are abundant in vegetable oils, sugar and animal source foods, lack dietary diversity and have a high energy consumption. On the one hand, diets can be environment friendly but lack the health element, and on the other hand, they can be classified as nutritional but lacking the sustainability element. Producing tremendous amounts of beef, for example, harms the environment and also the human body, increasing the likelihood of heart problems, strokes, and diabetes. Considering, for example, diets lacking variety, where the energy intake comes from cereals and starches, they happen to have a more low environmental impact. Nonetheless, this sort of diet fails to provide vital nutrients needed to the body and can even sometimes be linked to high sugar and salt consumption levels. (Fanzo 2019) These diets are recurring in low-income nations and are marked as undernourished and holding micronutrient insufficiencies contributing to such levels worldwide. Likely, diets with high ingestion of seafood, dairy derivatives, lean meat and general fruit and vegetables are considered healthy. Nonetheless, depending on the production method, they can negatively influence greenhouse gas emissions and soil and water quality, resulting in the overall population.

So, the question remains: Which diet benefits humans and the environment? The consensus remains on superior ingestion of vegetables and fruits and lower consumption of animal source foods, sugar and vegetable oils. Moreover, replacing animal-based diets with plant-based ones ensures a favourable balance with nature. Current literature considerations summarised the environmental impacts of dietary patterns, explaining that those who replace animal-based foods with plant-based ones grant the most significant environmental advantages. Examples of these alternatives are vegan and vegetarian eating habits that show declines in greenhouse gas emissions and water and land use. Also, diets that consumed pork, poultry and fish at higher levels and fewer ruminants showed likewise lowered environmental effects, but not as much as the plant-based ones. (Fanzo 2019)

Regardless, sustainable diets' benefits for the environment do not unfailingly link with health benefits. Numerous studies commonly convey lower deaths from any cause and the dangers of cardiovascular illness, colorectal cancer and diabetes mellitus through sustainable diets. Nonetheless, these conclusions have been vastly heterogeneous and are frequently not statistically significant. Consider, for example, sustainable diets with low greenhouse gas

emissions. These diets are usually associated with elevated sugar and salt ingestion but lower levels of vital micronutrients. Therefore, recommendations for healthy, sustainable diets can be notably troublesome, especially in low- and middle-income countries that already struggle with nourishment shifts and micronutrient deficits. For some populations, vegan eating habits will not be suitable if they are experiencing undernutrition or micronutrient deficiency. These individuals need to increase their animal-source food consumption to regain the missing micronutrients. (Fanzo 2019)

In summary, diets have the prospect of being beneficial to both humans and the environment. Nevertheless, it is pretty complex to relish such benefits regarding the multiple linkages that one must consider when implementing sustainable food systems; this can only be done by employing a unified methodology that addresses the environment, diets, human health, and the overall food system.

FOOD CULTURES

"BUT IF GASTRONOMY IS, ABOVE ALL, A SPEECH ACT, FOOD REPRESENTS FIRSTLY A CULTURE ACT. THIS MEANS THAT THE WAY WE UNDERSTAND AND WE RELATE TO FOOD, FOOD PRACTICES, IS ALWAYS RELATED TO OUR IDENTITY, IN THE DEEPEST MANNER." BOUTAUD ET AL., 2016

We have discussed food systems, but so far, it is still necessary to explain the first word of such a concept, *food*. This term is a sustainer of human life and a maintainer of healthy patterns through nutrient ingestion. On the one hand, the daily eating habits one practice convey a substantial role in the individual's well-being. On the other hand, a wide-known terminology, culture, encompasses the beliefs, attitudes, and practices taken by the members of a specific group or society. Moreover, it has also been characterised as a social identity linked to shared conduct, a practice that incorporates eating habits, clothing, language, household structure, and occasionally religious association. (Boutaud et al. 2016)

With this, the idea is that food is more than a nourishing aspect; it has an intrinsic cultural value. The surrounding culture sizably defines the ingestion of food, whilst the availability of products within the environment directly influences a community's customs. A people's traditions will then be built accordingly to what nature provides. Thus what does the term "Food culture" speak about? It is not exclusively the nutrients a society ingests but rather the methods it

practices when it uses, obtains, stocks, and prepares food. It also involves how food is served and to whom, and the special celebrations that include specific kinds of foods. (Boutaud et al. 2016) Food culture emerges within individuals' place of birth and from whether they remain living there or not. It is shaped by several factors, namely natural resources, education, ethnicity, colonisation, and health status, among many others. Frequently food habits driven by a cultural spectrum create a strong tie that is harder to change, whether through adoption, assimilation or acculturation. The latter occurs when an individual(s) leaves the original cultural identity and decides to blend in a completely new one—for example, moving into a distinct community characterised by its cultural norms and food. (Boutaud et al. 2016)

It is worth mentioning that there are several aspects of food culture, but for this project, only one will be mentioned, the social aspect of eating. This particular factor conveys to us the idea that food is also a way to meet the sense of belonging that people require. Being part of society naturally unfolds in people's specific dietary patterns that show that they are in some way included in a group. Additionally, food is not entirely demoted of a particular association with social status since people tend to change their eating habits as they climb up the socioeconomic ladder. There is a clear distinction in the products one consumes, and once there is a specific financial advantage, they tend to be more exotic and costly. This purchase provides more prestigious diets that can easily combine with the status they represent. While simultaneously excluding any food considered for poorer people in fear of degrading their social class. Generally, social parity is achieved once dining with a specific group. More importantly, is to mention the certain imparities in some cultures, where the female gender and children eat apart from men. (Boutaud et al. 2016)

The idea behind this particular aspect is that food is a cultural phenomenon, whether by eating alongside someone, preparing food together as a group, or even cultivating. All of these activities are done around the simple need of humankind to eat and be fed. Eating food that one is not usually familiar with can be a door to becoming acquainted with somebody's culture. Furthermore, in recent times where we have watched globalisation bring food from all over the world to a specific country, one could quickly educate oneself regarding the ingredients one is eating. (Boutaud et al. 2016)

Food, culture and community are three concepts that are intrinsically bonded together. One cannot be without the other, and all of them embody each other. Thus, these terms compel

a system that needs balance to proportionate everyone with the possibility of accessing the food it needs, which the practice of biological farming can provide.

CHAPTER 2 – BIOLOGICAL FARMING CONCEPT

"ORGANIC PRODUCTION IS AN OVERALL SYSTEM OF FARM MANAGEMENT AND FOOD PRODUCTION THAT COMBINES BEST ENVIRONMENTAL PRACTICES, A HIGH LEVEL OF BIODIVERSITY, THE PRESERVATION OF NATURAL RESOURCES, THE APPLICATION OF HIGH ANIMAL WELFARE STANDARDS AND PRODUCTION METHOD IN LINE WITH THE PREFERENCE OF CERTAIN CONSUMERS FOR PRODUCTS OBTAINED USING NATURAL SUBSTANCES AND PROCESSES." EUROPEAN COUNCIL REGULATION (EC) No 834/2007

The concepts, principles and objectives of organic farming have been discussed and described for considerable years by the private sector bodies, which, on a global level, are part of the IFOAM, founded in 1972. Later, some nations created national legislation on the subject. After that, in 1991, the European Economic Community published Regulation (EEC) No. 2092/91, which defines the rules of production, control and labelling of vegetable farming products, and which came into force in all member states on the 1st of January 1993. Moreover, the IFOAM occasionally publishes the primary norms for organic farming. (Ferreira et al. 1999)

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Concepts and Terminology

In 1980, the United States Department of Agriculture tried a definition of Organic Farming that explained that it was a production system free of toxicities or at least attempted to exclude synthetic chemicals (pesticides, fertilisers, among others). Moreover, it is a system that wishes to be feasible as much as possible and that it uses "(...) crop rotations, crop residues, animal manures, legumes, green manures (...)" to ensure good soil production and nourishment. For this, it is also necessary to have all organic practices to ensure healthy soil capable of producing wholesome food, including insects, weeds or crop enemies control. A crucial aspect of this concept is that the soil is seen as a living being and system that embodies the actions of numerous helpful creatures. (Ferreira et al. 1999)

Nonetheless, to complete the former definition, it is possible to divide the concept of

biological farming into a three-structured connotation. This means that through the lens of what organic farming is not, the positive things it uses and the indication of the soil's perspective as a living system that the farmer, in harmony with nature, must develop, it is possible to characterise this sustainable practice fully. This idea points to an essential link between soil, plant, animal and man, a concept that some describe as holistic but can be discussed more practically. Simply put, it is the recognition that anything affects everything else in agriculture, just as in nature. (Ferreira et al. 1999)

Organic farming is a mode of agricultural production that seeks to be as environmentally friendly as possible, based on the functioning of the agricultural ecosystem and using agricultural practices that foster the balance of that ecosystem and the maintenance and enhancement of soil fertility. In addition to the animals and other organisms naturally present in the soil, animal husbandry is also considered in organic farming as part of a balanced whole - soil, plant and animal. Organic farming produces food and fibre environmentally, socially and economically sound and sustainable. It reduces the use of external inputs such as fertilisers and pesticides. In organic farming, mineral fertilisers and synthetic chemical pesticides are not used (with few exceptions). (Ferreira et al. 1999)

This production method is also known differently within distinct nations. For example, in Spain and Denmark, its connotation is known for ecological agriculture, while in Japan is called natural farming. There are also particular methods of organic farming, such as biodynamic agriculture. Moreover, this approach is considered a sustainable or alternative form of farming, even described by a few researchers as the production mode that goes most outlying and adequately fulfils the purposes of sustainable agriculture. Moving forward, this kind of farming shall be practised as long as financial and technological alterations are performed. (Ferreira et al. 1999)

Organic farming is often defined negatively by what it is not or does not use, meaning the kind of agriculture free of chemicals. This vision is one of four misconceptions that ought to be cleared up. Firstly, organic farming uses the chemical compounds present in any living or dead material within the environment, only not those invented by man (with rare abnormalities). Secondly, is the misapprehension that the substitution of production factors (agrochemicals for fertilisers and pesticides of vegetal, animal or mineral origin) unravels the problems of pollution, food quality and others by itself. Regardless, the truth is that authorised fertilisers and pesticides,

when misapplied, have harmful effects. The third is that this kind of farming is a pre-World War II agriculture of the past when numerous modern techniques are already used. It is a knowledge-intensive production method with deep scientific bases, especially in the life sciences. Fourthly and lastly, it concerns the farmer and the supposed change of lifestyle required of him. Indeed there are changes, but they are not required or neither sufficiently. The fourth and last misunderstanding mentioned here is that organic farming requires a change of lifestyle by the farmer. There may be changes, but they are neither necessary nor sufficient. (Ferreira et al. 1999)

Objectives

Within organic farming, apart from knowing its definition, it is equally essential to recognise the specific goals that this practice wishes to achieve, especially in a method that is sometimes put into question regarding its efficiency when feeding large populations. Thus, it becomes fundamental to be aware of its several tasks so that its performance cannot be questioned through unsubstantiated statements that the conventional form of agriculture might use to its detriment. So, the following table will list what can be said to be the main goals of organic farming.

Table 1 - 17 goals of Biological Farming. Source: Organic Farming Manual

1) Produce high-quality food in satisfactory quantity;
2) To act in a constructive and balanced way with the natural systems and cycles;
3) To promote and develop biological cycles within the production system involving microorganisms, soil flora and fauna, plants and animals;
4) Maintain and improve soil fertility in the long term;
5) To enable the correct use of water and the rational management of water resources and life therein;
6) Contribute to the conservation of soil and water;
7) Use renewable resources as far as possible in locally organised agricultural systems;
8) Work as far as possible in a closed cycle concerning the organic matter and mineral nutrients;
9) Work mainly with materials/ substances that can be reused or recycled, both on and off the farm;
10) To give the living conditions to the animals that allow them to reach the fundamental

aspects of their well-being;
11) Minimise all forms of pollution which may result from farming practices;
12) Maintain the biodiversity (or genetic diversity of plant, animal and microorganism species) of farming systems and the surrounding environment, including the protection of habitats and wild animals and plants;
13) To allow people involved in organic production quality of life per the Charter of Human Rights of the United Nations to cover their basic needs and obtain an adequate income and satisfaction in the work carried out.
14) To consider the social and ecological impact of the farming system
15) Produce non-food products based on renewable and fully biodegradable resources
16) To encourage organic farming bodies to operate within a democratic framework and with the principle of separation of powers
17) To move towards a fully organic production chain that is socially just and ecologically responsible.

Organic farming can be put into practice in several contexts, but lately, specific initiatives have brought to light the importance of this practice. Namely, community gardens combine this kind of farming with the importance of cultivating one's food. Through these initiatives, the importance of consuming products that are not altered or chemical infected, which directly affects one's health, became visible.

COMMUNITY GARDENS

"(...) COMMUNITY GARDENS CREATE NEW FORMS OF SOCIAL RELATIONS AROUND WORKING WITH FOOD THAT LEAD TO IMPORTANT FORMS OF SOCIAL EMPOWERMENT FOR INDIVIDUALS." CUMBERS ET AL., 2018

The term itself seems incredibly interesting and fun, perhaps because anything alongside the word community has a positive connotation. Its methodology focuses on social empowerment and creating spaces for strengthening social bonds through activities such as music. Nevertheless, it is necessary to create those spaces, carefully thought to be the home of significant initiatives for this to happen. In this respect, we shall mention community gardens as the topic of study in the following paragraphs. (Cumbers et al., 2018)

"COMMUNITY GARDENS ARE PLACES THAT FACILITATE THE RECOVERY OF INDIVIDUAL AGENCY, CONSTRUCTION OF NEW FORMS OF KNOWLEDGE AND PARTICIPATION, AND RENEWAL OF REFLEXIVE AND PROACTIVE COMMUNITIES THAT PROVIDE BROADER LESSONS FOR BUILDING MORE PROGRESSIVE FORMS OF WORK IN CITIES." CUMBERS ET AL., 2018

In this first instance, community gardens are spaces where people have come together to cultivate, harvest and produce something independently. It is a space that can foster sustainability by producing ingredients from scratch and where one can see how food is produced—appreciating the simplicity and undeniable pleasure of seeing something grow. However, it has become a social space for knowledge sharing, identity building, and ownership empowerment collectively doing so. (Cumbers et al., 2018)

Such places emerge from abandoning urban sites that were once left to oblivion. Now big cities in North America and Western Europe see this as an opportunity to foster and enrich communities regarding their food security. It is an active approach to transforming the relationship between people and food, often one of dependency perpetuated by a capitalist system. Here, individuals are responsible for their food production and consumption, which gives them a sense of autonomy and pride for being able to consume something they have themselves created. (Cumbers et al., 2018) Likewise, the residents of this community are sometimes bringing to life urban sites that are very much neglected, regenerating public spaces for people of different backgrounds to interact.

Furthermore, these gardens can become locations for storytelling, where people share their unique crafts and even for musical activities. Activities are critical for those who are often marginalised and could use a shared space for interacting with people who otherwise would not have any contact. We are speaking, of course, of elderly persons, people with mental diseases, and ethnic minorities. Community gardens are more than recreational environments. Nevertheless, it is also educational and therapeutic, where one can educate oneself about different food cultures. (Cumbers et al., 2018)

Thus, community gardens can be very empowering, whether to forge solid and new connections with nature and food or by creating unseen identities, achieved by vigorously constructing their economic power daily, slightly escaping the capitalists' surroundings. It is pretty simple and at the same time expected that people considerably enjoy creating their products, much more than if it was made by someone else. There is intrinsic happiness to it that

makes these gardens much more valuable to the population, especially when these projects challenge how city citizens live and work together. Overall, community gardens are highly beneficial to both people's and cities' bodies and souls. It lights the paths to more sustainable human living; that is, it recovers the non-toxic relationship one should have with nature. It is an awareness approach that translates into seeing the environment as a living system that one should interact with and not merely exploit its resources for our profit. (Cumbers et al., 2018)

CHAPTER 3 – COMMUNITY BUILDING: ART AND GARDENING IN ONE POT

THE CONCEPT OF ART

Describing art is a challenging exercise; however, several critics, artists and even theorists have taken on such a task to try to discover the most suitable approach to one's understanding of art. It remains a question asked in modern literature. There is no current agreement on what makes art what it is. Nonetheless, there is a significant attraction in uncovering a workable description of art since the majority agrees that something is or is not a work of art. This interest originates from the fact that art is meant for appreciation, even when it causes troubling or contentious sensations. Some researchers have suggested that appreciating art is about understanding and enjoying it. (Isrow 2017)

Moreover, the best way to do so is to know its definition. Quite similar to meeting a person and appreciating them. One can only express the most sincere feelings toward that person once they know them. Once again, for this project, we will take a definition carefully thought by the author.

"ART IS INFLUENTIAL. ART IS IMAGINATION. IT CAN PRODUCE A CONNECTION WITH ONE'S DEEPEST FEARS, JOYS, HOPES AND PURPOSES. IT IS AN IMPULSE THAT DRIVES ONE TO DO SOMETHING THAT OTHERWISE WOULD NOT HAVE IMAGINED WAS CAPABLE OF DOING. NEVERTHELESS, WHAT MAKES ART SO POWERFUL THAT IT CAN CONNECT PEOPLE WITH DIFFERENT STORIES BUT SIMILAR FEELINGS? IF WORDS COULD RESPOND TO SUCH A QUESTION, AND THEY ALREADY ARE, THERE ARE INSUFFICIENT TO PORTRAY SUCH A MAGIC CONNECTION. HOWEVER, PERHAPS AN ATTEMPT COULD BE MADE IN THIS EFFORT, AND THAT IS THAT ART CONNECTS US ALL BECAUSE WE ALL ARE CAPABLE OF FEELING, CAPABLE OF EMOTIONS, AND ONCE A SPECIFIC SOUND, IMAGE OR FIGURE ENTERS THE DOOR OF OUR EYES, EARS, OR HANDS IT INSTANTLY TOUCHES ON THAT PARTICULAR SENSATION,

THAT RESULTED FROM A STORY. A STORY OF HAPPINESS, PAIN OR TRAUMA, BUT A STORY. BECAUSE EACH STORY PORTRAYS A FEELING, AND VIBRATION WILL TOUCH THAT FEELING. THUS, ART COULD BE JUST THAT, A VIBRATION." AUTHOR'S QUOTE

The denomination Art comes from the Greek words *techne*⁶ and *poesis*⁷, which refers not only to the fine arts but also to possession of skills, the ability one has to create, and the creation itself. Indeed art can be put in an exceedingly rather broad category, including both these styles of art, or fine arts, as well as more general forms of art, like chair-making, which we may term crafts. These crafts distinguish themselves by the different ends at which they aim and are associated with unique kinds of knowledge. Therefore, art is created by more general classifications, like the art of movement or speech. Here then, a distinction shall be assembled. What is current think to be art – painting, music, dancing, among others – is, in fact, art forms, not art.

Nevertheless, how come this be? What could be then a fair representation of art? (Isrow 2017) In order to comprehend what art is, we need to determine the category under which the two distinct forms of art may be placed, either fine arts or crafts; which means that the two should not be bifurcated from the same art form but only that the art forms shall be categories such that both of these various forms of art can be comprehended as subcategories of art in general. If one would put art into categories such as these different forms of art, like painting, music, and so onwards, then one should ban the craftworks such as basket weaving, considering that it does not suit any of these forms of art, nor any imaginable form of art. (Isrow 2017) Rather, if an art form is thought of as wisdom, then one should recognise that basket weaving belongs as a form of the art of that category.

One theorist's suggestion claim that one should only carry to an artwork appreciation a feeling of form, colour and a piece of three-dimensional space knowledge. Consequently, the aesthetical element in an artwork is merely the colour, shape, and size, among others. Thus, we may suggest that art is a fusion of the broad varieties named art forms, beneath which it is to include both forms of art, fine arts and crafts. (Isrow 2017)

Nevertheless, these art forms are still not provided with an aesthetically pleasing component. Thus, for there will be a factor which makes people enjoy such items more, they need to be more

⁶ A Greek term refers mainly to craftsmanship or a person's ability to create.

⁷ A Greek designation refers to the genuine creation of something or the change of one item evolving into another.

aesthetically enjoyable. Therefore, it is logical to consider that dance represents the art of movement (nowadays) and that singing is an Art of speech representation. These days, these art forms are more aesthetically attractive compared to the past. "However, this is where the history of art leads and where the future of Art rests." (Isrow 2017, 92)

LINKING ART AND GARDENING: FROM A HEALTH PERSPECTIVE

Recently, Arts and gardens have become associated with health benefits, contributing to the well-being and thereby the quality of life of a person; however, how such a link was made is not apparent. The authors Fancourt and Finn completed a scoping review on the WHO global evidence of the effects of the arts on health and well-being. Their definition of the arts contained several typologies of art, which are represented in the following table.

Literature studies reflected an underlying logic model linking arts with health through mental stimulation or social relations, prompting reactions that might be psychological, physiological, social or behavioural. Such responses resulted in health-related developments, such as promotion, precluding, treatment or management. (While 2020)

Additionally, art engagement seems to foster social bonding in different forms. By occurring such a phenomenon, it enhances a more lavish social inclusion in building a community capital; while simultaneously handling imbalances and unfairness at a social level within civilisations. Moreover, collective involvement in activities, such as art classes, dance and volunteering, encourages social inclusion whilst decreasing aloneness among grown-ups. Likewise, the arts stimulate health-promoting conduct, such as healthful eating patterns and constant physical activities, connected with higher levels of one's perception of health (self-perceived health), well-being, and wholesome weight. (While 2020)

The arts also appear to adjudicate between health experts and ordinary people, and since they are community-based, they can build on the current social networks and capital and improve engagement with health services, particularly reaching those lacking health conditions. Some art undertakings have also been linked to enhancing self-care commitment. Further, art effectively reduces barriers to healthcare engagement, extensively among marginalised classes, with its community support approach as the base. (While 2020)

Regarding gardens, there is substantial proof of the relationship betwixt contact with green spaces and extended health advantages, which include physical and mental health effects,

like more elongated lives, mental health and minor income-related imbalance. A garden description could be similar to a portion of ground bordering a home, meaning a private space, or a more extensive private or formal gardens available to the masses and gardens around hospitals and hospices, among others. Furthermore, gardens are also areas for time-out, social relations, training and amusement. Robust evidence on the physical and mental health outcomes that allotment gardeners can proportionate has been provided by collected research. An allotment garden encourages an energetic lifestyle and healthful ageing. (While 2020)

Moreover, gardening appears to have more importance in more senior individuals considering its psychological weight as a cause for living. A few authors have provided a list of benefits that gardening has on one's health, namely cognitive health, producing fruit and vegetables, a sense of duty, bonding with other individuals, acquiring knowledge and helping one another. A growing body of research supports the health benefits originating in arts and gardens regarding its efficacy and cost-effectiveness (the benefits have yet to be quantified). (While 2020)

Table 2 - List of the Arts. Source: The article "Life is for living: the contribution of the arts and gardens."

LIST OF THE ARTS	
Performing Arts	Musical genres Dance Theatre/Acting Magic Singing Film
Visual arts, design and craft	Crafts Design Painting, including posters and murals Photography Sculpture Textiles
Literature	Writing Reading

	Attending festivals
Culture	Going to museums, galleries, art exhibitions, concerts, the Theatre, community events, cultural events and fairs
Online, digital and electronic arts	Animations Film-making Computer graphics

These are two powerful activities that can effortlessly intertwine themselves. One can perform art in any space, in unlimited sites for that matter. Thus, why not combine them? There are already projects that are doing this combination, therefore is not something new. The benefits of art and gardening alone are astonishing, so combining them is the ingredient for a great recipe. It is not required that the art is performed within the gardens, but it can. However, they can even be connected without occurring within a single space. One can quickly wish to explore the gardening concept, particularly the term community garden, and promote such through art. These gardens could testify to what is being done and what could be done. The point is that both must be connected. Art is always a vehicle of emotion and messages, and when the messages one is trying to convey are quickly received in community gardens, the better the outcome. Because one thing is to express one's ideas and thoughts, but another is to demonstrate where and how one can transform the ideas into actions. Therefore, we reach the end of the literature review by simply conveying the project's idea. A movement created for and by people that shows the power of togetherness.

CHAPTER 4 – PROJECT DESCRIPTION: ACTION PLAN

"WE EAT, BUT WE ARE NOT FEEDING OURSELVES." ANA POETA, *IN LOCO* ORGANIZATION

CONTEXT

Vila do Bispo

Geography

Vila do Bispo is situated in the extreme southwest of the European continent, in the western Algarve. The district defines itself as a geological platform formed by the great Cape of *São Vicente / Sagres*, separating two seas: to the south a temperate Mediterranean-influenced coast, to the west imposing cliffs beaten by the Atlantic, in the colourful interior plateaus and fertile valleys. It occupies an area of 179.06 km², a triangle subdivided into four parishes (*Vila do Bispo and Raposeira, Sagres, Budens and Barão de São Miguel*). Its inhabitants, people of the land and sea, occupy a peripheral and low-density territory with only 11 settlements, *Vila do Bispo*, the county seat. 95% of this territory are protected areas, namely the Southwest Alentejo and Vicentine Coast Natural Park.⁸



Figure 1 - Vila do Bispo. Source: Google Images

As tourism is currently the main driver of the local economy, the available tourism offer in this territory is quite differentiated. Around here are more travellers than tourists, people who tend to be more sensitive, informed, demanding and appreciative of the genuine values of their destinations. The Vila do Bispo Council offers the enjoyment of Nature and Cultural Tourism products above all. The strategic sustainability of tourism exploitation thus becomes essential for maintaining and enhancing its differentiated and non-renewable local resources.

Revalued by the action of the "tourist industry", activities considered "traditional", such as fishing, seafood, agriculture and grazing, continue to play a fundamental role in the

⁸ Source: *Site Autárquico Vila do Bispo Geografia (cm-viladobispo.pt)*.

employability and subsistence of countless local families. The effects of the usual and massive flows of seasonal tourism in the Algarve, whose peaks are preferentially manifested only in the summer months, are not reproduced in Vila do Bispo. The combination of favourable factors such as the climate, spatial planning and environmental management constraints, strategic development and promotion of sustainable products translates into an alternative and exceptional destination. It can be exploited throughout tourist activity between March and November, with a "high season" spread from May to September.⁹

Demography, Education and Society

The Vila do Bispo district has a total of 5.147 residents. Every 213 elderly individuals correspond to 100 young individuals, which translates into a very elderly population, even though the crude birth rate is higher than the national average. Moreover, 30% of the population is foreigners, which characterises this district as one of the areas in Portugal with more foreign individuals. (INE¹⁰)

Demografia, Educação e Sociedade Demography, Education and Society			
População residente (2020) (nº) <i>Resident population (2020) (nº)</i>	5 147	Taxa bruta de natalidade (2020) (‰) <i>Crude birth rate (2020) (‰)</i>	9,5
Taxa de crescimento média anual da população (2011/2020) (%) <i>Average annual growth rate of population (2011/2020) (%)</i>	-0,2	Rácio divórcios / casamentos (2020) (%) <i>Divorce / Marriage ratio (2020) (%)</i>	23,9
Densidade populacional (2020) (habitantes / km2) <i>Population density (2020) (Inh. / km2)</i>	28,7	Taxa bruta de escolarização (Ensino secundário) (2019/2020) (%) <i>Crude educational attainment rate (Secondary education) (2019/2020) (%)</i>	..
População ≥ 65 anos (2020) (%) <i>Population ≥ 65 years (2020) (%)</i>	26,9	Despesas dos municípios em cultura e desporto por habitante (2020) (Euros / hab.) <i>Expenditures on cultural activities and sports of municipalities per inhabitant (2020) (Euros / inhab.)</i>	63,2
Índice de Dependência Total (2020) <i>Total dependency ratio (2020)</i>	64,4	Taxa de criminalidade (2021) (‰) <i>Crime rate (2021) (‰)</i>	..

Figure 2 - Demography, Education and Societal Indicators in Vila do Bispo. *Source: INE (Instituto Nacional de Estatísticas)*

Social Indicators

As it is visible in the following illustration, in the district of Vila do Bispo, women are more affected by unemployment and low incomes in the 8,2% that is the population affected by such parameters. Regarding the ages of the population, individuals less than 25 years have a

⁹ Source: *Site Autárquico Vila do Bispo Geografia (cm-viladobispo.pt)*

¹⁰ *Instituto Nacional de Estatísticas (Statistics National Institute).*

significant impact on unemployment. Additionally, the population between 25 and 39 years have meagre incomes. This translates into approximately 400 hundred in precarious work conditions within the district. Although the village that is Vila do Bispo, where the project will be conducted, has around 1000 residents but lacks information on the number of unemployed within the village. (INE)

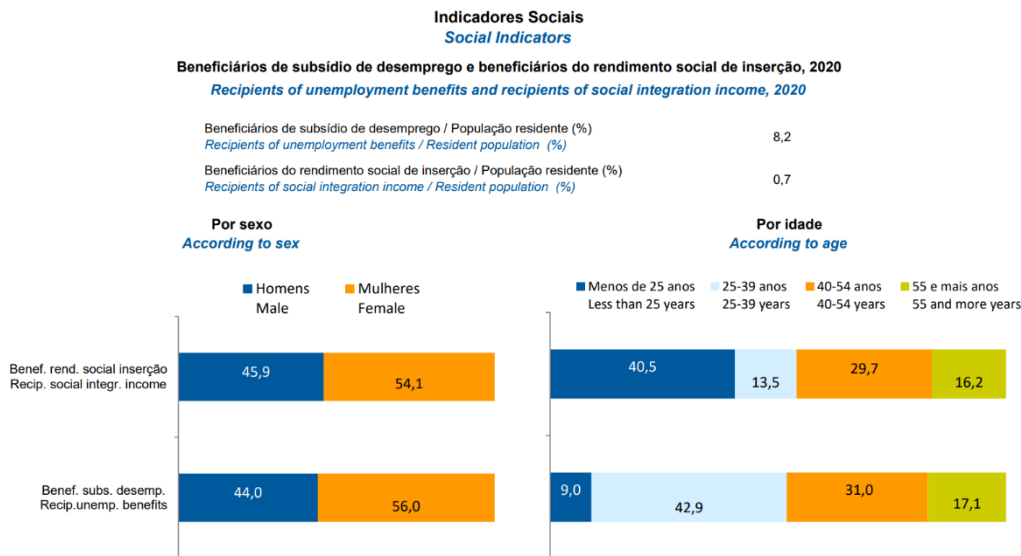


Figure 3 - Social Indicators from Vila do Bispo. Source: INE (Instituto Nacional de Estatísticas)

Why Biological Farming?

As it is already clear, biological farming is one of the project's main components, and it is only adequate to explain the importance of this kind of farming. Organic production is a comprehensive system of farm management and food production that combines the most suitable environmental practices, a high level of biodiversity, the conservation of natural resources, the application of high animal welfare measures and a production method in line with the preference of specific consumers for products produced utilising biological substances and methods. The organic production process thus plays a double societal function since, on the one hand, it supplies a specific market responding to a consumer request for organic products. On the other hand, it delivers public goods that contribute to protecting the climate, animal welfare, and rural development.

The market share of the organic farming sector is increasing in most Member States. The growth in consumer demand in recent years is particularly striking. Recent reforms of the Common Agricultural Policy, emphasising market orientation and providing quality products that meet consumer expectations, are expected to stimulate the organic market further. Against this background, the legislation on organic production plays an increasingly important role in the agricultural policy framework and is closely linked to developments in the agricultural markets. The National Strategy for Organic Agriculture and the respective Action Plan for the production and promotion of organic agricultural products and foodstuffs¹¹ presents ten strategic goals for 2027, among which:

- Doubling the area of Organic Farming to about 12% of the national used farming area;
- Tripling the areas of horticulture, pulses, protein crops, dried fruit, cereals and other vegetable crops for direct consumption or processing;
- Double livestock and aquaculture production in PB, with particular emphasis on the pig, poultry, rabbit and bee production;
- Increase by 50% the consumption of organic products;
- Triple the availability of national organic products in the market.

The "Prado ao Prato" strategy launched as part of the European Green Pact sets the goal of converting at least 25% of EU farmland to organic farming by 2030. However, there are structural problems in achieving such goals, which became evident with the financial crisis resulting from the Pandemic. Those problems are the existence of vulnerable regions and, in these, access to adequate food is hindered by the scarcity of resources and the decrease in food literacy. This consequently limits each person's ability to secure their diet appropriately, from a nutritious point of view and of fair portions.

Moreover, a specific ingredient in Portugal has a solid external dependency on its supply, wheat. The capacity for self-sufficiency has been below 10% for over a decade. In 2021, only 6.3% of the domestic use of wheat (human consumption, animal feed, industrial use) was covered by national production, compared to 59.9% in 1990. (INE) As a result, the Portuguese trade balance of wheat has been in deficit. In 1988 the debt was around 48 million euros, the lowest

¹¹ Resolution of the Council of Ministers No. 110/2017

value of the period, reaching 286 million euros in 2021. At the end of the 1980s, Portugal leading wheat supplier was the United States. Nevertheless, in 1991, this supplier lost relevance, giving way to European Union countries, especially France. (INE)

The political instability had repercussions on global agricultural commodity markets, which reflected in wheat prices the importance that Russia and Ukraine have in world wheat production. Russia and Ukraine jointly produce around 12% of world wheat production (average 2010-2020). In a context where self-sufficiency and food security are becoming increasingly critical, Portugal's enormous reliance on cereal supply has become even more worrying (for over a decade, the degree of self-sufficiency has been below 10%). Therefore, there is a need for Portugal to produce this cereal if it wishes to consume it more sustainably, and there are regions in the country that was once the place of growth of this very much consumed ingredient. One of them is the Algarve, a region with one of the highest percentages of food insecurity in the country but that, with careful planning and creative strategies, has the potential to cover the needs of its population.

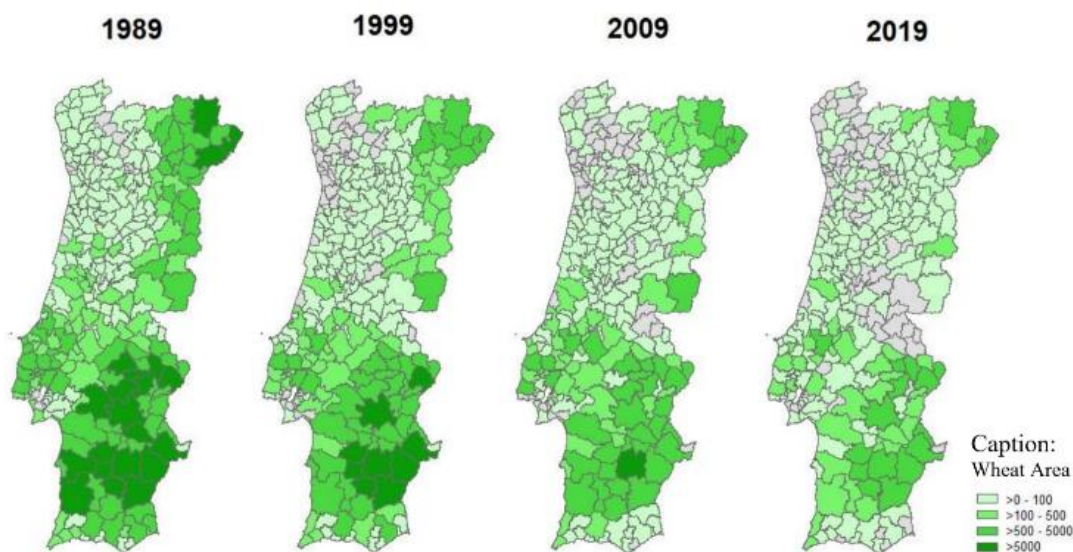


Figure 4 - Area of the wheat production in Portugal between 1989 and 2019. Source: INE (Instituto Nacional de Estatísticas)

Project Brainstorm: Compelling Ideas and Facts

"(...) THE FARMER IS AT THE CENTRE OF RURAL POLICY, AT THE CENTRE OF THE ECONOMIC POLICY OF THE RURAL AREAS, AND WE HAVE TO MAKE SURE THAT CONTINUES TO BE THE CASE IN POLICY AND FINANCIAL TERMS FOR THE FUTURE." PHILL HOGAN, FORMER EU COMMISSIONER FOR AGRICULTURE AND RURAL DEVELOPMENT

In the 2nd quarter of 2021, the population employed in agriculture, livestock, hunting, forestry and fishing is 124,200 people, representing 2.6% of the total. From the 1st quarter of 2011 to the present, the sector lost around 65.6 thousand jobs due to the activity's abandonment and technological modernisation. (INE)

If one compels the several needs occurring within the national environment, that is the need for more balanced systems that can only be achieved if ones eat correctly. Moreover, how can one eat properly? Simply plant and grow food that is free of toxic components and fresh and respects the environment's seasonality. Moreover, this can be done through local biological farming. However, since the farmer's role has been completely devalued, it is essential to know that these people are responsible for feeding each individual.

Furthermore, they need to be valorised because unless people dedicated their lives to agriculture, they would need someone to do that for them. It is as simple as that. For someone to eat, they will need someone dedicated to doing such things. Furthermore, especially the idea that agriculture is a profession for poor people to perform is entirely wrong. It is one of the most demanding professions. It requires physical work, knowledge, and a vast amount of experience combined with theoretical concepts that keep the soil productive and healthy. So, why do we believe this profession is less worthy than others? Perhaps cultural aspects have characterised such a reality, which is the case for many European countries. That is the case of Portugal, which, even though aware of the current agricultural model, knows the way forward and is already creating opportunities for people to enrol and develop initiatives to create this balanced food system discussed here. For this reason, the following project is thought to create and attend to all the previously stated needs.

However, the upcoming project is not exclusively dedicated to biological farming or uplifting the importance of farmers within societies. As seen priorly, there are numerous benefits within Art itself, and lately, projects around the globe have understood that Art can serve as a form of communication between different social groups. Additionally, it also heals people and

brings more joy into their lives, so with this particular initiative, the goal was to include one particular art form, music, within an agricultural environment. The role played by music in this particular context is to incentivise a specific number of individuals to be creative by learning how to play an instrument and applying such creativity to their daily lives. This is because people are often faced with challenging situations, and specifically, in a country like Portugal, where it is more challenging to live, whether because of the life cost or the non-gratification that an employer or the state has for workers, it is pretty easy to feel stuck or lost. More so with people with lower levels of education, and as you will see later on, this project is mainly directed to a certain kind of people that experience harsh financial situations and sometimes become excluded from society. Thus, creating a project that will increase self-determination regarding food must also engage in tackling people's sense of self. Something that is often destroyed when the lack of integration has been a constant factor. Moreover, experiencing music as a group will also enhance the power of cooperation and the magic that occurs when individuals come together to create something. Furthermore, the entertainer factor will fuel the project's dynamization and acceptance by the audience it reaches.

This project's concerns do not circle only around food empowerment, even though it is already a decisive goal. Here the mission goes further, as it conveys personal growth among a particular group of people who will be playing and those who will be listening. Music is powerful no matter the form portrayed and can spread a message more manageable and faster. One could even say there is no better marketing tool. To sum up, this project will be building gardens and creating a music group that will improve the work done in the gardens and promote it. Here, individuals will build themselves up from precarious life conditions into higher states of self-esteem, food empowerment and self-determination, which are vital to living a balanced and more prosperous life.

Project Description

The current project is an initiative created to address the goals of the National Strategy for Environmental Education 2022, which focus on setting a collective commitment to the promotion of active citizenship in the field of sustainable development and the building of a low-carbon society, rational and efficient in the use of its resources, translated into sustainable models of conduct in all dimensions of human activity. Moreover, this strategy wishes to convey projects

that ensure and develop one of the following topics:

- Active public participation (e.g., education-action activities, idea contests)
- training and capacity-building, with a multiplier effect that enhances the dissemination of knowledge
- Environmental awareness (excluding advertising campaigns)
- Passive public participation (e.g. exhibitions, teaching materials, practical digital guides, sustainability plans, conferences/seminars).
- Participatory science actions and active volunteering, in particular among young people.

In this line of thought emerged the WHeat Project (Figure 5). An initiative that inserts itself in the majority of the previous guidelines and intends to tackle issues such as national and local production, the valorisation of farming and the importance of community building. It wishes to join local people with food insecurity alongside local farmers in developing two Community Gardens in *Vila do Bispo*. Moreover, it will also involve artistic activities that will serve as a self-promoting methodology and a strategy to empower the community.

The project was thought to mobilise the capacities, motivations and resilience of the local community living in *Vila do Bispo*. Additionally, it wishes to foster a participatory design and implement a strategy for community empowerment within the agri-food productive capacity, promoting inclusion. This will base itself on a model of self-organisation, promoting inclusive social dynamisation and cooperation between farmers and local people.

The denomination "WHeat Project" comes from a minor curiosity that served as motivation to decide on the project's location and to shed light on the low production of wheat in Portugal, which is currently dependent on cereal from foreign countries. In the 19th century, *Vila do Bispo* became known as an essential centre for grain production, called *Celeiro do Algarve* (Barn of the Algarve); therefore, this project also wanted to plant the seed to revive the production that was once done in the village.



Figure 5 - Project's Logo. Source: Canva

PARTNERSHIP

For the project implementation, it is crucial to count on the support of the following entities: *Camara Municipal de Vila do Bispo*, *Escola de Música de Vila do Bispo* and *Carpintaria e Marcenaria Santos*. These institutions have been contacted via email and phone, and the project details have been discussed and coordinated. These local institutions will directly interact with project members by educating them on specific techniques, such as the music school or the carpentry office, or by providing the construction materials for the gardens and lending the spaces for the realisation of the fairs (municipal council). Also, the village town hall will help with the dissemination of the project and will provide the inscriptions for the project members.

MAIN OBJECTIVES

The WHeat Project was thought to respond to the food insecurity needs of the Portuguese population in the area of *Vila do Bispo* in *Algarve* and to enhance the role of the farmer in the food production process. The project was initially created to only attend to the needs of a malnourished population, but it quickly redirected its focus on the farmers, who are increasingly undervalued within the Portuguese nation. This shift mainly occurs from the necessity to adopt a discourse where the farmer's needs can also be discussed and considered.

Therefore, this project will create two community gardens with different functions. One will

dedicate itself to producing wheat and forming 30 amateur participants. It will be coordinated by two hired farmers of the region, preferable from *Vila do Bispo*. The second community garden will be coordinated and used by the previously mentioned participants, who are village residents who will produce vegetables and greens throughout the year. The food produced in this garden is for the residents to take home and cook meals for themselves and their families. Within this project, there are general objectives to be delivered, such as the following ones:

GOAL 1 - Create a participatory empowerment strategy for food self-determination.

GOAL 2 - Organise two community gardens for the residents of the Vila do Bispo village.

GOAL 3 - Inspire the community to the principles of sustainable development goals (Figure 6)

GOAL 4 – Strengthen the social relationships within the community through artistic expression.



Figure 6 - Sustainable goals. Source: Google Images

OPERATIONAL OBJECTIVES AND ACTIVITIES

Empowerment - Mobilise and empower participants for sustainable agricultural production, strengthening their food literacy and self-organisation.

Production/Consumption - Set up an educational/training garden for wheat production and a vegetable garden at *Vila do Bispo*.

Communication – Develop a social media campaign, fairs and talks to share the project's results and raise community awareness.

Valorisation – Support and attend to local farmers' needs, precisely two farmers in the production/ coordination part of the project. They will be the active and dynamic leaders of the project.

Creation – Form a drum music group to celebrate and promote the project's achievements. Also, it fosters creativity and communication skills.

Activities

1. Community mobilisation

Alongside the project's partnerships, involve the residents in capacity-building strategies and analyse which intervention priorities they would like to address. Gather information on food-related problems and define the future lifestyles of the population. This should be done by creating strategies to improve the local food system, create healthy lifestyles, develop personal and social skills and foster community self-organisation. Moreover, explain to the participants the project's structure and what goals shall be delivered. Create open debates on future additions to the project guidelines the farmers and locals suggested. This activity is not directed to one particular garden; instead, it is a goal of the overall project, intended to mainly promote the project's guidelines by educating people on them.

How

Monthly meetings will discuss important topics for the community to know. These themes will focus on the participants' and acquaintances' current habits. Provide an analysis of these habits and explore how they have been conditioned. Discuss the role of financial conditioning in purchasing good products and how an organisation can play a fundamental role. Replace the poor eating habits with healthier ones by and through the products cultivated in the community gardens, furthermore, by educating on daily food choices.

Who

These meetings are for the project participants¹², but not exclusively. They are open to the community of the Vila do Bispo village. Both the farmers and the project technician will be responsible for coordinating these meetings.

When

The first meeting will occur in December and will happen bimonthly, so there will be a gathering every two months, preferably on the first Friday of the month.

Where

These meetings will be conducted in the wheat garden, specifically in the greenhouse, where there is enough space for both organisers and listeners to attend the meetings/debates.

¹² Later on, in the section “Participants” it will be explain who are these individuals.

2. Agricultural Planning

A fundamental part of the project is coordinating the wheat and vegetable garden production process with the farmers. Here, it is essential to define and implement the agricultural calendar for wheat and vegetable production. Also, to coordinate the timelines for the formation of the 25 residents given by the farmers on biological agriculture. Moreover, define the deadlines to sell the wheat to local businesses and the processes.

Define and implement strategies that promote the growing of wheat in the *Algarve* by building a community bond between the region's farmers. Incentivise the importance of Farming among the population by making the farmers the project's active subjects.



Figure 7 - How the moon stages influence the time to cultivate. Source: *Revista Actual | Agricultura e Mar*

How

A calendar will be drafted through scheduled encounters to organise the food production, considering the crop rotation (Figure 8). For the amateur participants to know what and how they are planting, they will be instructed on basic agricultural techniques. These theoretical formations shall enhance the knowledge of the involved and ensure better plantations.

Regarding the promotion of wheat production, it will be done through summer fairs, with one of them exclusively dedicated to the wheat harvest (Figure 9). This way, we are associating the cultivation of this ingredient with a social event that will sensibilise people for its importance.

What is crop rotation?

Plants have different needs, withdrawing and supplying different elements to the soil. Therefore, crop rotation on the same plot is essential to maintain the balance of nutrients in the soil and prevent depletion, obtain good yields, and avoid deficiencies and diseases.

In general, repeated planting of plants of the same family in the same place in consecutive years should be avoided. Crops and crop rotations in the organic garden should be chosen according to several factors, including the garden's size, the gardener's objectives, the nature of the soil and the climatic conditions. The traditional crops in the region must also be taken into consideration.

It is essential to rotate the garden because it increases soil fertility - if the crops and the period of the rotation are the right ones. Additionally, it helps in weed control - some crops, such as pumpkins and potatoes, have much foliage that prevents them from growing. Likewise, other vegetables such as carrots allow weeds to germinate quickly. Lastly, by alternating crops, different soil layers are exploited in depth by roots with different characteristics and facilitate pest, disease and weed control with different characteristics.

There are several criteria for planning the rotation in the garden, defining which plants to use each year, such as the part of the plant we will use: leaves, fruit, root or pod, moreover, accordingly to the family of plants or the nutrient requirements of a given crop.

Figure 8 - Definition of crop rotation. Source: Organic Farming Manual



Figure 9 - Poster for the Harvest Party. Source: Canva

Who

The farmers and the project technician will be responsible for scheduling the amateur's formations and organising the food production calendar.

The residents and specialised members will organise the summer fairs for the people of Vila do Bispo and the regional residents of the Algarve.

When

The food calendar shall be prepared on the 6th of October. The formations on agricultural techniques should be done in the second and third week of November, three days each week. Each formation will have a three-hour duration. One of the fairs will be on the 8th of July and the second on the 12th of August.

Where

The fairs will be located in *Praça da República*, a reference location for the Residents and easily accessed. The formations and the food calendar organization will happen in the greenhouse of the wheat garden.



Figure 10 - Location of the fairs (*Praça da República*). Source: Google Images

3. Installation of the community gardens

A wheat garden (2500m²) will be constructed to teach the basic philosophies of biological farming and incentivise cereal production. This garden will have an irrigation system, a warehouse of agricultural tools and materials and a greenhouse that will serve as a place for practical training and for the growth of determining plants that are more sensitive to temperature variations. The second garden to be constructed is a vegetable garden (2500m²), ensembled near the wheat garden and will be cared for by the participants. Both gardens will be ensembled by the participants, meaning they are responsible for cleaning and delimitating the area to be used. Fences will delimit both gardens to limit the entry of animals. Moreover, the farmers will assist in both gardens, being entirely responsible for the production of the wheat garden and its maintenance.

How

Firstly, it is necessary to clear the area where the gardens will be located. Then it is necessary to measure both gardens by delimitating the area to ensemble the gates and fences that shall cover both spaces individually.

Who

This task will be performed by all those involved in the project.

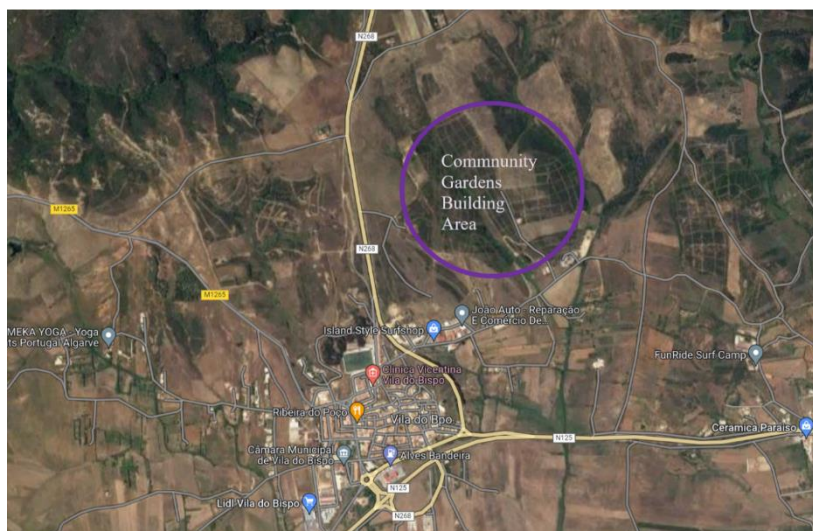
When

The installation will occur three days in a row, on the 10,11,12th of October 2022.

Where

Considering that 95% of this region is considered protected areas, the location of the gardens will be in an area that is still included in the Vila do Bispo municipality and that is adequate to cultivate, but that is not a protected area.

Figure 11 - Location of the community gardens. Source: Google Images



4. *Change behaviours*

Work with project participants and their families on promoting healthy lifestyles and good eating habits. Educate younger generations about the importance and role of agriculture, including them in the transformation¹³ process. Give the educational and practical tools to foster a self-motivating attitude amongst the overall population, so they too can be the organisers of possible projects.

How

Within the theoretical agricultural formations (mentioned previously), one of them will focus on subjects such as the importance of a balanced diet and the steps to achieve such a diet. In this session, the invitations are exclusive to the participants' families and the participants. So they too can be part of the change to a more balanced lifestyle. Moreover, the fairs will display the farm products and induce conversations on the topics addressed in the formations. This way, the project philosophies can reach a wider audience.

Who

The specialised members will be in charge of such talks. However, the project participants are invited to share their testimony with the attendants of the fairs.

When / Where

The exact locations and dates of the theoretical formations and fairs, respectively.

5. *Promote the ongoing outcomes*

Through social media and product fairs resulting from the project, share with the community of *Vila do Bispo*, not exclusively, the results of the project and the commitment and dedication of its participants.

Moreover, create activities that aim to demonstrate (with pride) how the inhabitants and farmers involved in the WHeat Project can lead a process of change in the food paradigm that can inspire the rest of the community to look at agriculture as a way of social evolution towards more sustainable and balanced levels, within everyone's reach. That is to foster the importance of agriculture in society to promote a greater enrolment of citizens and create awareness of the working conditions that need implementation within agricultural activities. Highlight the crucial role of public entities as facilitators of this change process since these transformation processes

¹³ This transformation is referring to the sustainability goals and process that Portugal wishes to achieve.

can only occur when the state, the communities and local entities work together.

How

By sharing the results on social media and in the respective fairs, this activity is meant to demonstrate the project's successes. Moreover, here it is of extreme importance to enhance the fact that local businesses are buying the wheat so that people can see that it is possible to produce the wheat in the natural territory. During the fairs, there will be a power-point presentation with photos and videos of the residents and farmers working in the gardens.

Additionally, there will be a few vegetables to show how different is the aspect of biologically grown ingredients. This is very important because people (in general) seem to have forgotten the fundamental aspect of fruits and vegetables, customs that they are very used to the typical appearance that is showcased in supermarkets

Social media aims to inform about the project and inspire people to take action instead of just creating alarming and negative content. It is vital to see action in order to create a reaction.

Who

Once again, farmers and the project technician shall be responsible for dynamising this to a wider audience (social media) and the local people of the Algarve (summer fairs).

45

When

The social media platform shall be created in October. Nevertheless, the results shall be posted from June forward.

The products and power-point presentation shall be presented during the fairs.

Where

Virtually (social media), using both Instagram¹⁴ and Facebook. A specific account with the name “WHeat Project” for both platforms will be created. Additionally, the fairs will occur in the previously designated location.

6. Workshop on Carpentry and joinery

The participants will join the workers in Carpentry and joinery Santos for two consecutive days to learn how to build wood drums. The idea is to include ten of the 30 participants alongside the project technician to learn how to create the instruments that will eventually be part of the drum music group. These instruments will be constructed from new wood pieces that will eventually be thrown away. This collaboration is also a form of promoting the local business in

¹⁴ Annex 1,2 and 3

the village since all collaborations will be mentioned in the communication promotion process

How

Here, the idea is to build the instruments that the biological drum group will use. The owner of the Carpentry and joinery will teach how simple it is to build instruments from wood materials that would be thrown away. The owner shall exemplify the construction of the wood drums, giving specific instructions to the participants on how to perform such tasks.

Who

The shop owner will instruct the ten members of the musical group on their tasks. Apart from its participation in the construction task, the project technician will priorly schedule the days for the workshop that better suit the project calendar and the shop owner, but preferably for November.

When

The workshop will last two days and will be scheduled for November.

Where

The workshop will occur in the Carpentry and joinery Santos in *Vila do Bispo*, located in the industrial zone.

7. Form the Biological Drum Group

Within the participants, it is intended to create a musical group that fosters social, creative and communicative skills that benefit self-development. This group is thought to promote the activities of the project but also to give The Biological Drum group will then be present in the project promoting activities and the social reunions organised by the WHeat project participants.

How

Select the residents participating in the group and then begin the musical classes. These classes will train the participants to play an instrument and play together as a group. The designated teacher will assist the students in the learning process and will be responsible for putting up the musical group together as one.

Who

Ten of the participants will assist in the musical classes given by the professor of the musical school.

When

The classes will begin on the 9th of December and continue each Thursday until the 16th of June, which gives a total of 56 hours, considering that each class has a two-hour duration.

Where

The classes will be taken in the Music School of Vila do Bispo.

8. Organise exclusive monthly meetings/social gatherings¹⁵

How

Define and implement the calendar for the monthly gather rounds. Each meeting is intended to reflect on the positive and negative aspects of the ongoing process. Also, to analyse the impact of the gardens on people's day-to-day routine and how it has changed their daily organisation. In the lack of any particular comment, the meetings will be set to share a social gathering round, and once the drum group feels confident enough to begin performing what they have learned, they will share it with the group. Here it can also address any personal concerns one might be experiencing, creating a community bond through sharing personal ideas or experiences. The idea is then to mark these meetings as places for community sharing, which will directly create and strengthen the relations between those involved in the project. These gatherings will be complemented through food eating.

Who

The project technician will be responsible for establishing the dates for the meetings and then discussing with the residents if they agree with the dates or if an alteration is needed.

When

The meetings will ideally be at the end of each month.

Where

The meetings will occur in the greenhouse.

Organisational Activities Table: Target, Time, Location and Context

The following table enhances the previous information regarding the activity implementation, adding detail in four different components. One of them is the time, which is the “when” the activities will be performed. Moreover, the target, meaning the people who will benefit from each activity. The location where each activity will occur. Finally, each event's context defines the garden for which it was designed.

¹⁵ These gatherings differ from the first arranged meetings previously mention (Activity 1). These are meant to be more private and exclusive to the participants.

	ACTIVITIES	TARGET	TIME	LOCATION	CONTEXT
1	Community mobilisation	The project participants (30 individuals) and 20 guests (people outside of the project that lives in Vila do Bispo)	The first Friday of the following months: December, February, April, June, August and October	Greenhouse (Wheat Garden)	Not specific to any garden.
2	Agricultural Planning	The project technician and the two farmers will determine how to organize the food calendar carefully and then share it with the project participants. Moreover, these three specialised integrating members of the project will also be in charge of preparing agricultural formations that instruct the participants on modern techniques that can be applied in the vegetable garden. The fairs are open to	October 6 th (Food calendar) 2 nd and thi rd week of November (days 7, 9, 10, 14, 16 and 18) will be for the agricultural techniques formations Summer fairs, on the 8 th of July and 12 th of August	The fairs will happen in <i>Praça da República</i> . The formations and the scheduled day to organize the food calendar will occur in the Greenhouse (Wheat Garden).	Specific for both gardens.

		anyone who passes by Vila's square and wishes to inform itself about the project. These events will be organized by the project technician and the project participants.			
3	Installation of the community gardens	All the project members will be responsible for the construction of the gardens (Project technicians, farmers and amateurs participants).	10,11,12 th of October 2022	The gardens will be located outside the village centre but nearby. They are closely located to <i>Vale do Nobre</i> , a hiking trail that limits the extension of the gardens.	Specific for both gardens.
4	Change behaviours	This activity is directed at the participants and their families. Additionally, with the realization of the fairs, this activity reach extends to the Algarve residents.	This activity will occur on the dates of the fairs, and the session regarding healthy diets will occur on the 14 th of November, one of the dates of the six agricultural formations.	This activity can be performed in the location of the formations, meaning the Greenhouse and in the fair's location, in <i>Praça da</i>	Specific for both gardens.

				<i>República.</i>	
5	Promote the ongoing outcomes	This activity is meant for the <i>Vila do Bispo</i> community. But also for the Instagram and Facebook followers of the social media account of the project.	The results on social media will begin to be presented in June until the end of the project, that is, in October 2023. Moreover, the project outcomes will be presented on the 8th of July and the 12th of August.	The promotion through social media is done virtually, and the fairs are in the above location.	Specific for both gardens.
6	Workshop on Carpentry and joinery	This activity is exclusive to the Biological Drum Group and the project technician.	This workshop shall be done in November and according to the shop owner's agenda. So, if possible, it should be done on the 21 st and 22 nd of November.	Located in <i>Zona industrial lote 17, 8650-405 Vila do Bpo.</i>	Specific to the vegetable garden.
7	Form the Biological Drum Group	This activity is exclusive to the ten participants who showed interest in being included in the project's musical group.	It will occur between the 9 th of December and the 16 th of June. At this time, each Thursday from 17:00 to 19:00, the participants will be participating in drum lessons.	Located in the <i>Vila do Bispo</i> Cultural Centre.	Specific to the vegetable garden.
8	Organise exclusive	These gatherings are exclusive to the	These gatherings are meant to happen at	Located in the Greenhouse	Specific to the

monthly meetings/social gatherings	project's members. That includes participants and the project technician.	the end of each month.	(Wheat Garden)	vegetable garden.
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PARTICIPANTS

The number of participants was defined according to the space available for the gardens and previous similar projects¹⁶ that occurred in Algarve. For this reason, there will be a total of 30 participants in charge of the vegetable garden. For the selection of the residents, the project will count on the support of the *Camara Municipal de Vila do Bispo*, which will provide applications for the local people and will hold a brief meeting, where the project technician and the farmers will explain to the locals the idea behind the project and the goals that wish to reach. In these applications, there will be information on the project and the tasks the selected candidates would have to perform. Moreover, it will also include a section where the applicant would have to respond if they would be interested in learning a musical instrument or if they have already had any musical experience in the past. In this way, it is easier to select the candidates then. The preferential recipients of the project are unemployed people or low-income families¹⁷ (18-65 years) that have poor eating habits or struggle to ensure a good and balanced diet. These can include native or foreign people and people from any religion, culture or social background. Thus, discrimination is put aside since it is intended to unite people living in *Vila do Bispo*. The participants are not merely beneficiaries of the project; they are dynamic and active players that shall be included in every step of the project implementation. Once the participants are selected, there will be given the project's contact¹⁸ so they can easily reach the coordinators.

CALENDAR

Here it is essential to mention the two main calendars used throughout the project: the scheduling of the main activities to be performed and the other more specific to the agricultural

¹⁶ The information of such projects was provided by the Portuguese non-governmental organization *In Loco*.

¹⁷ Meaning families that live from state subsidies and do not have any other income source.

¹⁸ Email: wheat_sustainable22@gmail.com. Phone number: (+351) 244 000 111 / (+351) 910 333 666.

production.

Project Calendar

The project will have a twelve-month duration, beginning in October 2022. Although it seems short, the project's duration was carefully analysed alongside other local organisations that have executed projects of the same type and succeeded in their tasks. Performing the previously mentioned activities is possible with detailed and organised planning.

Agricultural Calendar

Farming calendars have long been used to guide those who work the land and grow their food. So that the experience of a year's agricultural work would not be lost in oblivion, humankind started to record chronologically the sowing, weeding, pruning, harvesting and all the agricultural activities he carried out. Knowledge, know-how and experience were recorded and passed on from generation to generation. So we know that together with the seasons, the moon's phases have great importance in the right time to sow, plant or harvest certain foods. The best-known agricultural calendars in Portugal that disclose this knowledge are *Borda d'água*, published by Editorial *Minerva* and *O Seringador*, published by *Lello Editores*. In this line of thought, the agricultural planning of the following cultures shall be done according to the chosen criteria.

Table 3 - Crops to plant in the vegetable and wheat garden

CROPS TO BE PLANTED	Butternut Squash
	Lettuce
	Aubergine
	Beetroot
	Chives
	Coriander
	Chinese cabbage
	Courgette
	Basil
	Black watermelon
	Wheat (Exclusive to the wheat garden)
	White melon
	Cucumber
	Malagueta pepper
	Pepper
	Salvia
Bullock's heart tomato	

	Plum Tomato
	Thyme

BUDGET

The following budget (Figure 12) expresses the costs of the project's employees and resumes the costs for each activity's performance. To break down the budget in detail, we must begin by explaining the yearly payment of the two hired farmers and the project technician. Anyone who is slightly familiarized with the salaries within the Portuguese agricultural sector can affirm that it is relatively low (Table 4) compared to the work these workers provide. Thus, since this project is focused on highlighting the farmer's role, there was no possibility of paying them the same as they are being paid now. However, the monetary value set is still insufficient (1000€/monthly), which enhances the importance of projects that put the farmer at the centre of the dynamization so that they can become more and more rightly paid. Concerning the project activities, it was necessary to make a list of the materials used. The material used is mainly equipment and tools to ensemble the gardens or safety equipment used in the Workshop (Figure 13). Once the material was defined, it was necessary to tag each with a specific price. To this, it was necessary to search the material within stores, so it was relatively easy to do through the Portuguese store, *Agrijoja*. Other costs are related to transportation, Fair materials and even a symbolic payment to the Drum teacher; since he is not a project employee, this monetary value will contribute to him and the school.

Two specific activities do not have any cost, namely the "Change behaviours" and "Promote the ongoing outcomes", because some of the objectives of these events already insert themselves in some other activities. Moreover, for unexpected costs that might come ahead, it was defined as the amount of 800€ that can cover any additional material requirement or any specific cost. Additionally, the execution of this project proposal had as a model previous similar projects, such as the Projeto SEMENTE¹⁹, which has a partially similar structure, so it merely served as a guide. However, it was helpful to recognize what agricultural tools are used within biological farming. Practising this kind of farming differs from the conventional model of agriculture, not only in its purposes but also in the material used.

¹⁹ Previously mention as a project executed by the local organization inLoco.

Table 4 - Monthly, hourly and daily pay scale and meal allowance applicable to the agricultural sector in 2022 in Portugal.
 Source: Portuguese Farmers' Confederation News Report

LEVELS	PROFESSIONAL CATEGORIES	MINIMUM MONTHLY SALARIES
1	Senior Technician	836,00
2	Agricultural Production Technician Winegrowing Technician Forestry and Environmental Resources Technician Gardening and Green Spaces Technician Quality Technician	808,00 €
3	Agricultural Operator Forestry Operator Irrigation Operator Garden and Green Spaces Operator Agricultural machine operator	760,00 €
4	Warehouse Operator	715,00 €
5	Agricultural Labourer Poultry Worker	705,00 €

Project's Budget

1. Budget for the Action	2022/2023				
	Costs	Unit	# of units	Unit value (in EUR)	Total Cost (in EUR) ³
1. Human Resources					
1.1 Salaries (gross salaries including social security charges and other related costs, local staff)					
1.1.1 Project Technician	Per year	1	1200		14400
1.1.2 Administrative/ support staff	Per month				
1.2 Salaries (Farmers)	Per year	2	1000		24000
1.3 Per diems for missions/travel					
1.3.1 Abroad (staff assigned to the Action)	Per diem				
1.3.2 Local (Meetings with the project's involvents)	Per diem				
1.3.3 Seminar/conference participants	Per diem				
Subtotal Human Resources					38400
2. Travel					
2.1. International travel	Per flight				
2.2 Local transportation	Per year				100
Subtotal Travel					100
3. Equipment and supplies					
3.1 Material acquisition		5			300
3.2 Machines, tools		27			9150
3.3 Spare parts/equipment for machines, tools					
3.4 Other (safety equipment)		33			300
Subtotal Equipment and supplies					9750
4. Local office					
4.1 Vehicle costs	Per month				
4.2 Office rent	Per month				
4.3 Consumables - office supplies	Per month				
4.4 Other services (tel/fax, electricity/heating, maintenance)	Per month				
Subtotal Local office					
5. Other costs, services					
5.1 Publications					
5.2 Studies, research					
5.3 Expenditure verification/Audit					
5.4 Evaluation costs					
5.5 Translation, interpreters					
5.6 Financial services (bank guarantee costs etc.)					
5.7 Costs of conferences/seminars		12			500
5.8. Visibility actions					
Subtotal Other costs, services					500
6. Other					
6.1 Services acquisition					
Subtotal Other					
7. Subtotal direct eligible costs of the Action (1-6)					48750
8. Indirect costs (maximum 7% of 7, subtotal of direct eligible costs of the Action)					800
9. Total eligible costs of the Action, excluding reserve and volunteers' work (7+ 8)					49550
10.1 Provision for contingency reserve (maximum 5% of 7 'Subtotal of direct eligible costs of the Action')					
10.2 Volunteers' work	Per day				
11. Total eligible costs (9+10)					49550
12. - Taxes - Contributions in kind					
13. Total accepted¹¹ costs of the Action (11+12)					49550

Figure 12 - Project's Budget

COST DESCRIPTION	
2.2 Local transportation	Travel expenses by the project technician for the bimonthly meetings. Community mobilisation activity
3.1 Material acquisition	The city council will give some of the materials needed for the summer fairs, but it is still needed to purchase equipment for the product and project exhibition (wood boxes, projector, projection screen, awning and towels). Agricultural planning activity
3.2 Machine, tools	Agricultural tools and machines required for agricultural production (Plough, subsoiler, brush cutter, among others). To ensemble, the gardens need 27 units of different materials to ensure the proper use of the soil. Installation of the community gardens activity
3.4 Other	The sum of the essential safety equipment required during the Workshop realization (earplugs, gloves and glasses ²⁰) and the symbolic payment for the music teacher of the Drum Group. Workshop on Carpentry and joinery activity. Form the Biological Drum Group activity
5.7 Costs of conferences/seminars	Purchasing food to be collectively appreciated for the exclusive meetings will be necessary. Exclusive monthly meetings/social gatherings activity

Figure 13 - Activities Cost Description

²⁰ The material was though according to the task that the participants will be doing. Considering that this activity only wishes to build instruments it is not necessary any additionally safety equipment.

RESULTS

Initially, we defined four main goals (Figure 14) that were meant to be achieved through the project activities. So, having now explained those activities, it is easier to explain how such goals will be achieved.

Within the first goal, the project can significantly improve the residents' diet by providing them with a space to cultivate all the vegetables they need to ingest, free of any chemicals. These vegetables are a significant portion of their diet; therefore, they will spend much less money on this kind of food and can even improve their health. Moreover, these gardens provide much value, as the ability to grow something gives them a tremendous sense of self-worth. Because it is one thing to buy something, but it is entirely different from knowing how to make the goods or, in these cases, food that one is eating. Additionally, this strategy of cultivating food alongside other individuals empowers and elevates people to a greater sense of partnership, considering that 30 individuals (probably with similar struggles) are improving their lives together and creating bonds that will directly affect their mental health.

Once again, people (in general) are already demanding solutions for a more ecological lifestyle, so this project tackles a few principles of sustainable goals. Regarding the second goal, the project is creating two spaces to grow food through biological farming, which is already contributing to the growth of biological spaces in Portugal that are meant to increase within the following years. It is decreasing the use of pesticides and caring for the soils of Vila do Bispo, considering that biological farming is a non-prejudicial way of cultivating. The residents will be affected health-wise by this type of farming, perhaps even reducing the use of specific medication or supplements, considering that ingredients they will eat are local, fresh and chemicals free. The gardens also preserve the local environment, which is essential in this area since it is close to the natural park.

The third goal will be achieved through the organised fairs and the educational formations given to the residents. Also, the project's recognition among locals and even the residents outside the village will directly affect them once they become familiarised with the process. The structure of the project is thought to reach not only the community of Vila do Bispo but also wider audiences, which inspires people to begin change within their lives and to be aware of the importance that local food systems have on a healthier planet.

The fourth and final objective is deeply connected with creating a musical group that

intends to not only provide a group of people the opportunity to be creative and enhance their learning curve but also raise awareness for the project. Music has always connected people. A message is always clear and easier to spread when musical performances are involved. This will be enhanced, especially with the Harvest party, which intends to celebrate wheat growth in the region and mark the day as a cultural tradition. The musical experience is meant for those who are playing and those who listen. The village should be proud to have talented musical groups associated with environmental initiatives that promote their region as a national example of sustainability.

Briefly, the project will empower the small community of *Vila do Bispo* by promoting the use of local food systems (through biological farming), resulting in balanced and healthier lifestyles. This translates to a diet richer in nutrients and less harmful to the organism. Additionally, it will educate on the importance and current term of sustainability and the role of food systems in achieving such balance within the environment.

Moreover, a fascinating outcome is the regrowth of wheat in the region by introducing it into the local production and valorisation and endorsement of the local farmer.

Lastly, a cooperative, united, inspired, and educated community that fosters creativity and amiability through the power of art turns Vila do Bispo into a regional example of collective effort, strategic solutions and creative ideas of what a future Portugal could represent.

Figure 14 - Description of the four main goals of the project.



CONCLUSION

The creation of the "Community gardens as places for community building using artistic approaches" emerged from the necessity of improving health in society. Mainly because more and more individuals are being diagnosed with all sorts of diseases that often originate from poor eating habits. It is pretty simple if one considers it. Humans need water and food to survive, and it is only natural that the quality of such necessities should influence the organism's function. Nevertheless, people often underrate the power of a good healthy diet, especially younger generations, considering that they believe their bodies are at the prime of their lives. Therefore they can put them to the test; this is, of course, utterly untruth.

A global food system is much more distant and demoted from any direct human contact, apart from its harmful effects. The urgency for projects that transform the current global food systems is apparent. Not only because of the climate but also for one's quality of life. The greater one eats, the more energised it will become. Moreover, local food systems create community bonding and strengthening because people need to be in contact for such systems to work. They naturally come together to construct and maintain such systems. Moreover, people can combine initiatives that encourage local farming with artistic performances that enhance one's ability to create.

The main message that this paper wishes to convey is essentially to become aware. To become sensitised and educated about the importance of eating good and how a poor diet results from harmful environmental and human activities. Additionally, invest and share knowledge amongst the nearby community. Be aware of the community around the block and engage in the necessities of that same community. It is not necessary to be informed about what is happening in the whole world because, often, people tend to be overwhelmed and continue to do nothing. No one can save the world or save anything for the matter. However, it is possible to engage and improve what is damaged. Food ties 7,6 billion people, a connection that will possibly grow within the following decades. Reaching the SDGs will depend on humanity converting the conventional food system into a more sustainable one. It is naïve to consider that we can continue ingesting and growing food like we do today. One could confirm that protecting life on land is undoubtedly necessary to adapt the system to the planet's limitations. Alternatively, simply, by keeping humankind's greed to the side.

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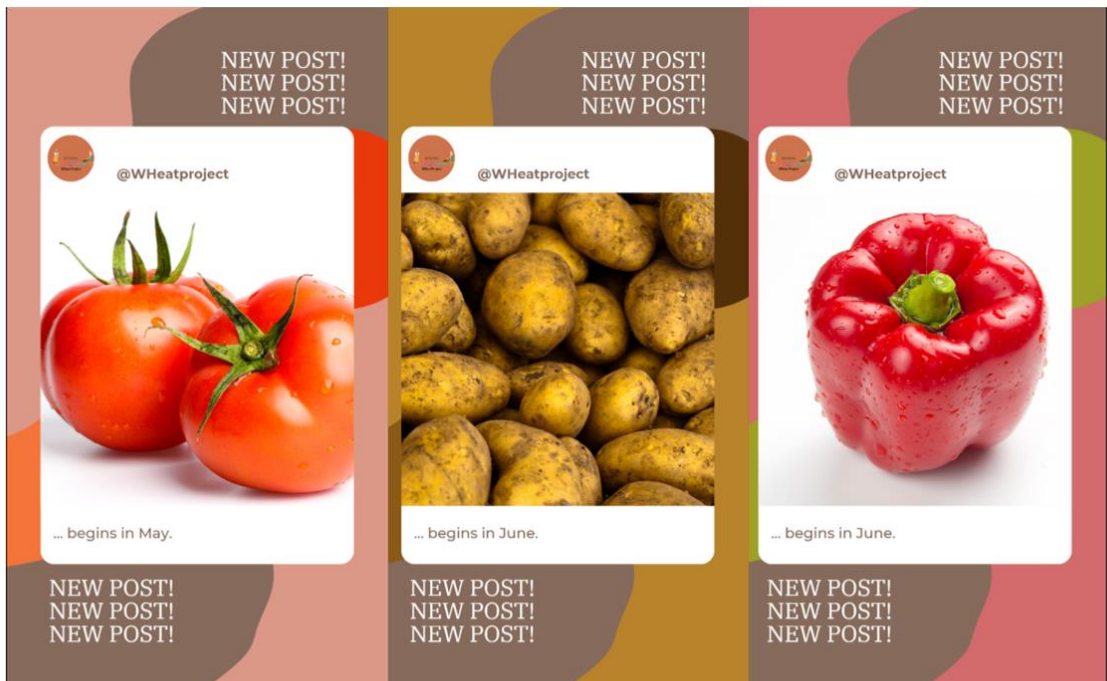
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ANNEXES

ANNEX 1 - EXAMPLE OF THE INSTAGRAM POSTS REGARDING THE BIOLOGICAL FARMING

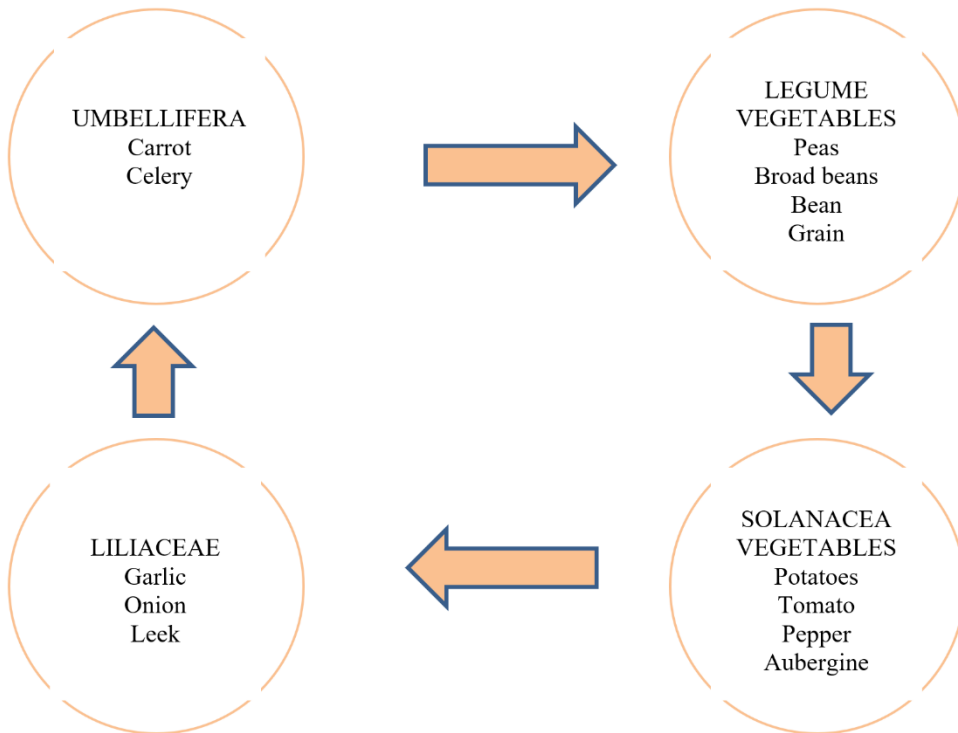


ANNEX 2 - EXAMPLE OF THE INSTAGRAM POSTS REGARDING THE PROJECT PARTICIPANTS, LOCATION, MUSICAL GROUP AND FARMING TECHNIQUES

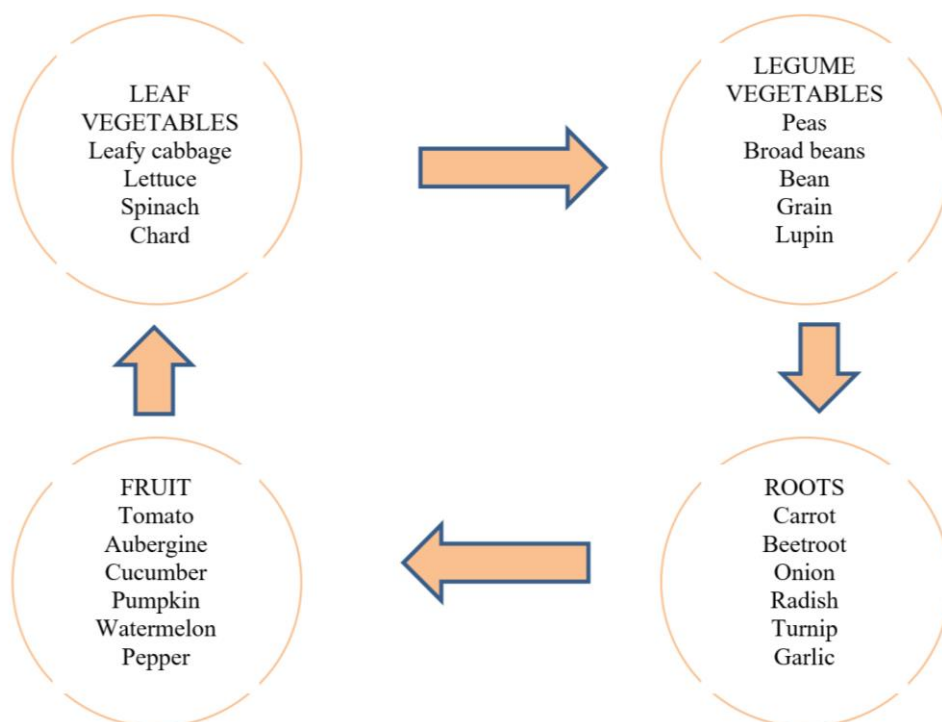


Chicory	Yellow				Brown	Brown						
Coriander	Yellow					Brown	Brown	Brown	Yellow	Yellow	Yellow	Yellow
Courgette			Yellow	Yellow	Dark Brown	Dark Brown	Brown	Brown	Brown	Brown		
Cucumber			Yellow	Yellow	Yellow	Yellow						
Garlic	Yellow					Brown	Brown				Yellow	Yellow
Kale	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Kohirab				Yellow	Dark Brown	Dark Brown						
Lamb's lettuce	Brown	Brown	Brown							Yellow		Brown
Leek	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Lettuce	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Lupin	Yellow	Yellow	Yellow				Brown	Brown	Brown			
Maise			Yellow	Yellow				Brown	Brown	Brown		
Melon/Melon			Yellow	Yellow	Dark Brown		Brown	Brown				
Dried Onion		Dark Brown	Dark Brown	Dark Brown		Brown	Brown					
Onion and chive	Brown	Brown							Yellow	Dark Brown	Dark Brown	
Parsley	Yellow						Brown	Brown				
Peas	Brown	Yellow		Brown	Brown				Yellow	Yellow	Brown	Brown
Peppers	Yellow	Yellow		Dark Brown								
Potato		Yellow	Yellow			Brown	Brown	Brown				
Pumpkin			Yellow	Yellow	Dark Brown	Dark Brown	Brown	Brown	Brown			
Purslane	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Radish	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Spinach	Brown	Brown	Brown	Yellow	Brown	Brown						Brown
Strawberry	Dark Brown	Dark Brown	Dark Brown	Dark Brown	Brown	Brown	Brown					
Tomato	Yellow	Yellow	Dark Brown	Dark Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	
Watercress			Yellow	Yellow	Yellow	Yellow	Yellow					
Watermelon			Yellow	Yellow	Dark Brown	Brown	Brown	Brown	Brown			
Wheat	Yellow					Brown	Brown	Brown			Yellow	Yellow
Sowing/planting all year round												
			Sow			Plant			Harvest			

ANNEX 5 - 1ST CROP ROTATION CRITERION - BASED ON THE PART HARVESTED FOR CONSUMPTION: LEAVES, FRUITS, ROOTS OR PODS



ANNEX 6 - 2ND CROP ROTATION CRITERION - BASED ON THE PLANT FAMILY



ANNEX 7 - 3RD CROP ROTATION CRITERION - BASED ON PLANT NUTRIENT REQUIREMENTS

