



Traditional Food Network to improve the transfer of knowledge for innovation



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Report on Case Studies of Entrepreneurship in the Field of Traditional Food

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PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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1 Introduction

1.1 Project scope and goals

In the European Union, Small and Medium Enterprises (SMEs) of the food sector are increasingly under pressure due to developing open markets, increasing demand of standardized and price competitive food products by the consumers, rising importance of large retailers, and challenges in obeying governmental regulations. This raises the risk of losing many traditional foods as well as traditional techniques of production, processing, preservation, and packaging that are applied by SMEs using regional raw materials and often have a role in the cultural identity of regions. SMEs of traditional foods must extend their skills in modern as well as competitive marketing and production techniques to comply with existing European regulations and to promote the aspects of their products related to nutrition and health.

To support traditional SMEs, FP7 TRAF00N project (www.trafoon.eu) has established a knowledge transfer network of 30 European research institutions, technology transfer agencies, and SME associations from 14 European countries by covering the value chain of four groups of traditional food products based on (1) grains, (2) fish, (3) vegetables and mushrooms, and (4) sweet fruits and olives. These food sectors are traditional, healthy foodstuffs which are essential for a balanced nutrition. Since November 2013 and until October 2016, TRAF00N is supporting European's traditional SMEs in these food sectors to foster sustainable innovation and entrepreneurship in the sector of traditional foods for the benefit of the regions of Europe and the European consumer.

At the beginning of the project, the needs of traditional food SMEs all over Europe have been investigated and collected (Inventory of Needs, IoN). With this purpose, four questionnaires, one for each traditional food category, were developed including issues from the entire food production chain, but also questions related to food safety and quality, and entrepreneurship & legal aspects. All TRAF00N partners contacted the identified SMEs and SME associations via email/phone/visit, extracting the relevant information for the IoN through the corresponding questionnaire. After extract the needs, SWOT analyses of the results for each TRAF00N traditional food category were carried out by country and sector.

Five multi-stakeholder workshops (MSWs) took place between September and October 2014 in Poland, Spain, Switzerland, the Netherlands and Czech Republic. In each MSW, TRAF00N partners, relevant SME associations and external specialist analyzed the results of IoN for the core regions of the food category. The main objectives of the MSWs were: 1) prioritizing the needs collected in the IoN, 2) matching the needs identified in the IoN with the available transferable innovations identified by partners, 3) identifying those needs which do not require in depth research and may be solved without the development of new research

projects, finding the solutions within the consortium experts, external scientists, or in collaboration with ongoing projects and 4) identifying those needs requiring new scientific approaches to be included as recommended research lines/initiatives in the Strategic Research and Innovation Agenda (SRIA).

During 2015 and 2016, based on the results of MSWs, more than 55 Training Workshops (TWs, <http://www.trafoon.eu/training-workshops/>) for SMEs have been held in Europe. During the TWs, the technological, legal, or business-related solutions for these previously identified needs/demands have been transferred, where specifically trained mediators have been used to communicate these solutions in the language of the respective countries.

As additional knowledge transfer tool, a multi-lingual online Information Shop (www.trafoon.org) containing the information gathered and implemented within the TRAF00N network has been created. This free access online tool includes information (PDF files, ebooks, audio and video files etc.) about innovations in primary production, processing and marketing of traditional food using regional raw materials in different languages. The Information Shop also contains databases of experts and organizations to enable potential future collaborations and SME-oriented research projects, and includes all technology/innovation knowledge transferred during the TWs and guidelines for product innovations in diverse European languages.

1.2 Deliverable goals and methodology

The present deliverable consists of a number of examples of entrepreneurship in the field of traditional food, to be added to the aforementioned tools. Actual examples are commonly thought of as an ideal way to put the message across to other (potential) entrepreneurs, which in this sense is related to the methods, conditions and attitudes that turn an interesting idea into a successful business in the "traditional food" sectors.

TRAF00N defines "traditional food" as : "Food that is produced according to the gastronomic heritage by at least three generations , which shows specific features that clearly distinguish it from other similar products in the same category in terms of the use of 'traditional ingredients' (raw materials or primary products) or 'traditional composition' or 'traditional type of production and / or processing method'. Furthermore, it is also associated with a certain local area, region or country." Furthermore, traditional ingredient is a raw material (species and/or varieties) or primary product, either alone or as an ingredient, which has been used in identifiable geographical areas and remains in use today (taking into account cases where use was abandoned for a time and then reinstated) and its characteristics are in accordance with current specifications of national and EU legislation.

The document is primarily based on extensive European-wide desk research and direct contact with the promoters (informal online interviews), in order to provide a deeper understanding of the case's background, focus, approach and results. The information was then used to build case study fiches for each example and presented in chapter 3.

2 Criteria for case study selection

In this chapter a number of criteria are presented and applied to select best practices in entrepreneurship in the field of traditional food in Europe.

Business selection shall be made according to the following criteria:

Table 1. Selection criteria.

CRITERIA	DESCRIPTION
– Artisanal production	Traditional production process as per Trafoon definition
– Coverage of at least one of the Trafoon fields	(1) grains, (2) fish, (3) vegetables and mushrooms, and (4) sweet fruits and olives
– Alignment with recent food trends	Meeting the most recent f customer’s needs (described by Innova Market Insights ¹ food trends - 2015)
– High degree of innovation	Innovation that is transformative in the traditional food field (product, process or marketing)
– Extent of innovation	Innovation across a wide range of activities (e.g. food production, food processing, packaging, marketing, labelling, certification, food quality and food safety, legal issues)
– Sustainability	Increased resource usage, such as companies which use subproducts or “waste”
– Healthy food	Products that are believed to present a health benefit for the consumer (e.g. reduce cholesterol, risk of stroke, reduce progression of osteoporosis)
– Innovation source	Representation of market-pull strategies as well as technology push
– Positive results (2016)	Companies that have presented a positive bottom line

¹ Taken from <http://www.globalfoodforums.com/food-news-bites/2016-food-trends/>

3 Case studies



ORTI DELLA VALLE DEL CARPINA

Biodiversity and Organic Farming

Food Category:

Grains, Fruits, Vegetables & Others

Founded

2010

Website:

<http://www.ortidelcarpina.it/en/>

Email:

info@ortidelcarpina.it

Headquarters:

Vocabolo Caibianchi 75
06026 Pietralunga

3.1 Orti della Valle del Carpina - Biodiversity and Organic Farming

3.1.1 Brief Presentation

Orti della Valle der Carpina was founded in 2010 by Maurizio Carubini driven by his desire to offer the naturalness and authenticity of organic farming. Inspired by his origins (his family has lived for generations in the rural area and cultivated the land for domestic uses), he decided to devote himself to agriculture, producing high quality products using natural methods and contributing to the preservation and improvement of the local environment.

The farm is located in the pure and pristine Carpina Valley of Pietralunga municipality, in the northern part of Umbria region. The Carpina Valley is a natural area, nestled between the high valley of Tevere river and Umbria-Marche Apennines.



Figure 1. Valle der Carpina View

The farm covers an area of 32 hectares (25 of them are rented) and is engaged with the production of several agricultural products - all certified as organic, with the rediscovery of ancient varieties of local products and with the enhancement of nutritional and health benefits of many products.

Orti della Carpina is the promoter of a project of rediscovery and certification of a local product, the White Potato of Pietralunga,

who obtained the DECO certification (“Denominazione Comunale di Origine: Municipal Designation of Origin).



Figure 2. Orti della Valle der Carpina

Currently the company has a team of four people, who take the production, sales and marketing areas. The owner is responsible for all the work in the field (assisted by family members) and the management processes (assisted by his daughter). His daughter also deals with direct selling.

3.1.2 Products

The company commercializes two main categories of products: organic and truffle based products. The first group includes different kinds of traditional vegetables and fresh fruit, beans, spelt, saffron pistils, linseed, linseed oil, white potato of Pietralunga DECO (“Denominazione Comunale di Origine” - local warranty), Vitellotta Potato (purple potato), potato, red skin with white flesh, grain, black summer truffle and black truffle.



Organic Borlotti Beans



Carpina Mixed Soup (Salad
of Vegetables and Cereals)



Organic Pearl Barley



Organic Pearl Spelt



Organic Linseed



Linseed Oil



Pure Saffron in Pistil



Organic Purple Potato



Organic Pietralunga White Potatoes

Figure 3. Examples of some Organic Products of Orti della Valle del Carpina.

Besides fresh truffles, the second category includes canned or preserved products that result from the combination of truffles with classic products, such as mushrooms, rice, pumpkin, saffron, vinegar, corn flour, tomato, etc.



Fresh Black Summer Truffle



Imperial White Truffle



*Natural Mushrooms & Truffle 15%
Sauce*



Figure 4. Examples of some Truffle based Products of Orti della Valle del Carpina.

3.1.3 Innovation & Other Relevant Aspects

Orti della Valle del Carpina produces first-class organic products, working as well on the connection between agriculture and culinary traditions. The creation of products such as sauces, creams, vinegars, etc. binds with the desire to recover ancient flavours, through the rediscovery of ancient recipes.

The main innovation consists in obtaining a healthy product joining tradition, territory and quality. The owners are working in a number of projects for the farm aiming to produce and return ancient varieties of products to the market. They are also working on opening a didactic farm and an online shop.

The products are directly sold at markets and fairs, both loose and packaged. The packaging, with farm brand, is external but the farm is already engaged in a project for the construction of its own packaging laboratory and warehouse.

Aiming to meet the needs of customers in terms of variety and quality, the owner abides by the rules of good organic farming practices and production without the use of chemicals. Through cooperation with local entities the value chain is entirely local – which benefits the local economy.

The owners also invest in developing innovative own brands.

3.1.4 Lessons Learned & Reflections

The case study of Orti della Valle del Carpina allows us to draw the following lessons about the growth and development of small farm businesses:

- Close connection with the region and its people - the company set out sustainability and fair trade as business ethos from the outset, thus achieving producer trust and cooperation in a clear win-win strategy.
- Clear identification of needs and opportunities: market contact, and its permanent assessment, allowed goal adjustment, and redirecting target audience in a way as to enhance product marketing.
- Partnerships with other farms and organizations in the area for the development of joint innovation projects.

In the near future, the company will strengthen its communication efforts to support its territorial expansion and so to broaden its support to farmers and social solidarity institutions across the country.

3.2 Aqua4C – Sustainable Fish Farming



AQUA4C

Sustainable Fish Farming

Food Category:

Fish

Type of Organization:

SME

Size:

1-10 employees

Founded

2014

Website:

<http://omegabaars.be/>

Email:

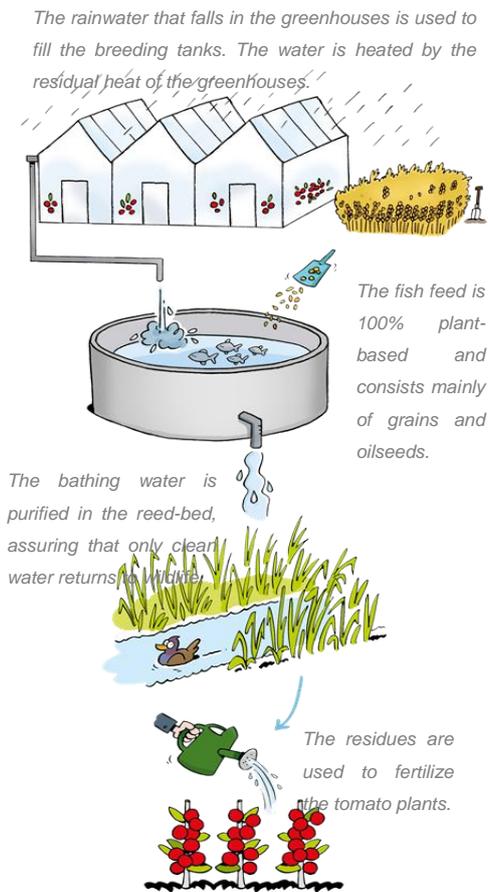
stijn@omegabaars.be

3.2.1 Brief Presentation

Aqua4C, established in 2014, is an aquaculture start-up originated from a PhD research project of Stijn Van Hoestenberghé at the Biosystems department of KU Leuven. The fish farm, formally inaugurated in November 2015 by the Flemish minister for environment, nature and agriculture, intends to bring a new type of fish to the market through a highly eco-friendly breeding process, which involves collaboration with a tomato farm. In other words, Aqua4C is producing Jade Perch in closed recirculation systems and the energy and water of the farm is integrated with a tomato greenhouse from Tomato Masters (www.tomatomasters.be), a small Flemish company founded by the Vlaemynck family in 2012 that produces top-quality tomatoes.



Figure 5. Aqua4C fish farm (A) and Tomato Masters Stokstorm greenhouse horticulture (B) in Deinze, Flanders.



Aqua4C installed 27 tanks for breeding and growing fish next to Tomato Masters, using approximately 30 hectares on the Stokstorm horticulture greenhouse. Regarding the processes used for fish breeding and vegetable cultivation they are interrelated as follows: once the water from the fish farm is purified, the residual and nutrient-enriched water is transported to the greenhouses, where it is used to grow tomatoes. The water is subsequently filtered and evaporates through the tomatoes, which means that any waste water is produced, and the farm can use less water and fertilizers. The tomato farm will in turn distribute its surplus electricity to the fish farm, where it will be used to heat the water, which will be especially helpful in the winter.

The startup, headed by Van Hoestenberghé with the support of four more elements, set up its operations in 2015 and expects to produce about 200 tonnes of fish per year in order to achieve an annual turnover of €1.5M. The cost to launch the project was €3 million, financed through investments from 25 local partners, including KU Leuven, banks and business angels.

Aqua4C and Tomato Masters farming chain.

3.2.2 Products

Additionally to the breeding process, Aqua4C has also sought to make its operation more sustainable through its choice of fish. As such, the company is raising an Australian species, Jade Perch (omegabaars in Dutch) that presents the highest natural levels of Omega-3 oil in its flesh and carries stomach sacs of Omega-3 oil. Unlike many farmed fish species, Jade Perch does not eat other fish – which requires taking fish from the wild to be turned into fish feed – but has a plant-based diet. Besides being vegetarian, the Jade Perch is very resistant to diseases, so antibiotics don't have to be used in the filtering system, which is rare in fish breeding. A final significant advantage is that water quantities necessary to cultivate the fish are smaller than usual. The Jade Perch naturally acquired these characteristics since its normal habitat in Australia was in a desert area where rivers often dried up, so the fish had to live together in large numbers in small pools of water.

Jade Perch is one of the better grown performers in aquaculture, since it can obtain a plate size of 500 g in under 12 months, if conditions are suitable. Plate size in 18 months is more common and would be what is expected for most aquaponics systems.



Fresh Jade Perch



Cooked Jade Perch

Jade Perch have a firm, white flesh with an oily texture, being excellent smoked, grilled, baked or steamed. This fish takes up flavours well and are great used in Asian style dishes.

3.2.3 Innovation & Other Relevant Aspects

Originated in an R&D project, research and innovation are building blocks of Aqua4C. The company was a result of a PhD research project of Van Hoestenberghé at KU Leuven that has studied the possibilities of using organic farms to grow a healthy, sustainable but also tasteful fish species. In fact, the research led to the plan to grow Jade Perch (OmegaBaars), a new species for the Belgian and European market with some special ecological features. Besides being vegetarian, this high end culinary fish does not require antibiotics and, coming from dry Australian habitats, is capable of surviving in less water than other species. According to Van Hoestenberghé, founder and Aqua4C managing director, "It was the culinary sector that pushed me to commercialise the research findings ... but we wanted to make sure consumers see the difference and can be certain about the quality and sustainability of the fish...It gives us full market control."

Besides bringing a new type of fish to the Flemish market, the fish farm facility is also unique in its focus on sustainability, using a highly eco-friendly breeding process, which involves a partnership with the nearby tomato farm (Tomato Masters). In fact, the main innovation here consists in delivering, at a commercial scale, an efficient and sustainable system of aquaculture and horticulture working side by side for mutual benefit. As stated by the founder this collaboration technique is unique in the world. "There are projects in the US and Switzerland where the residual water of a fish farm is also used to grow vegetables, but the

process always takes place in the same location. We are the first to delink the processes and to carry it out commercially on a large scale.”

The company intends to deliver the first jade perch to the hotel and catering industry and fishmongers towards the end 2015, and eventually to the fish auction also (all in Belgium). Supermarkets could be supplied later too.

Aqua4C may have its roots in research, but today it is an unequivocally commercial enterprise. Based on scientific and corporate key collaborations the company seeks, through the knowledge path, to position itself as a reference in the way as undertakes the development of new products, raising in this way a high level of recognition.

3.2.4 Lessons Learned & Reflections

This case study allows some important lessons about the early development and growth of a start-up as well as about the process of creating a product. The following reflections can be highlighted:

- Identification of challenges/opportunities focused on sustainable agriculture: over-exploitation of the oceans means that meeting current demand for fish by taking to the wild is unrealistic. To sustainably produce fish there will have to be more reliance on aquaculture. This challenge is also an opportunity for fish farmers if they can develop environmentally efficient ways of producing fish. Aqua4C has developed one such a highly eco-friendly breeding process, which involves collaboration with the tomato farm next door and the production of an ecological fish species – Jade Perch, where no dietary fishmeal or fish oil is used and only a fraction of the water, energy and (plant-based) fish food is necessary compared with classic aquaculture;
- Inclusion of scientific knowledge: the Aqua4C project originated from the PhD research project of Stijn Van Hoestenberghé at the biosystems department of the University of Leuven (KU Leuven). Van Hoestenberghé founded and is heading the project, while KU Leuven continues to provide support, including financial assistance.
- Involvement of other startups on company/product development process: the collaboration with the adjacent tomato farm is a win-win situation, making optimum use of energy and nutrient and reducing the ecological impact of the farms;
- Capacity to demonstrate in the market the importance of including Jade Perch in food: The new fish already counts on a lot of interest from top chefs (Show Dierickx of the star restaurant Arenberg from Leuven and TV cook Jeroen Meus, among others). Jade perch contains a lot of fatty acids, and is thus a healthy and high quality protein-rich fish. In terms of taste, it is similar to bream, sea bass, trout or eel.

3.3 Land Pack – Green Packaging Solutions from the Grains Fields



LANDPACK

Green Packaging Solutions from the
Grains Fields

Food Category:

Grains/Packaging

Type of Organization:

SME

Founded

2013

Website:

<http://landpack.de>

Email:

info@landpack.de

Headquarters:

Dorfstraße 27a

3.3.1 Brief Presentation

Landpack is a small Munich-based engineering company, founded in 2013 by Thomas Maier-Eschenlohr and Patricia Eschenlohr to meet the needs of fresh and cooled food suppliers. Supermarkets face the problem of how to get the refrigerated, fresh deliveries to the customer and shops specializing in organic products. For example there is no ecological packaging available on the market. As an alternative to polystyrene boxes, Landpack has developed a complete range of straw-based products - a renewable resource with great insulation properties. To provide eco-friendly plant-based insulation packaging, no chemicals of any kind are used, which makes the straw as pure as possible for the consumer.



Figure 6. Straw, the dry stalks of cereal plants, is an agricultural by-product after the grain and chaff have been removed.

To achieve a stable quality, Landpack established close collaborations with local farmers and supervises every production process step, starting at the cereal growth, harvesting, and straw processing. The grain is not specifically cultivated for Landpack, but provides the farmers with supplementary income - besides the sale of grain, they can earn with the sale of straw itself.

Using a total funding of €600.000 from own resources and government funding and after two years working on product and process development (both new and there is no underlying

machines for straw processing) - Landpack has started sales in partnership with Klingele, one of Germany's leading independent manufacturers of corrugated raw paper and cardboard packaging.

Landpack, presently with twelve employees, has already received support and important recognitions, namely from Bavarian Ministry of Economy through BayTOU Program and from Climate-KIC that distinguished the company as one of the best startups in sustainable production systems and climate protection.

3.3.2 Products

Landpack's main product, denominated Landbox®, consists in an ecological packaging box made of pressed straw with ideal characteristics for refrigerated food distribution. The straw panels are encased with a corrugated cardboard box fabricated by Klingele and both can be fully recycled and be returned to a new production process. The whole packaging concept protects scarce natural resources and saves trouble with disposal.



Pressed straw panels



Landbox®

Figure 7. Source material and product.

The main properties (benefits) of Landbox® are related to its excellent insulation, up to 65 hours between 0-4°C; easy disposal in the composting bin/garden or in the residual waste; odorless and moisture-regulating; space-saving in delivery and storage; several standard sizes; customization regarding size and configuration. Combining performance and ecology, this product is also distinguished by its naturalness – a renewable raw material is used instead of plastic, without additives and enabling cost-effective disposal. Of no less significance it is also carbon-neutral and the production process requires minimum energy input, especially when compared with the polystyrene alternative.

Landbox® is specially designed to meet the needs of those dispatching fresh and chilled food (e.g. fish, meat, dairy products or bakery products), as well as heat- and shock-sensitive goods (e.g. vegetables, fruit, chocolates, drinks in glass bottles, food canning glass and all other breakable objects), representing the first

environmentally-friendly alternative to polystyrene packaging. The use of straw also cushions shock-sensitive goods and enables their safe delivery.

Two different packaging versions are available, depending on costumers' temperature requirements. The first (Landbox) has a wall thickness of 25 mm and is suitable for express delivery, since the temperature coefficient of -1°C to 4°C is achieved up to 48 hours. The second version (Landbox +) presents a wall thickness of 35 mm and is appropriate for a prolonged delivery time or temperature sensitive products. In this item, a temperature variation of 1°C to 4°C is achieved up to 65 hours.

Additionally to Landbox®, the company also developed an easy and eco-friendly alternative to plastic ice packs and gel pad. Landpack-cooling elements, filled with pure water, are characterized by their simple handling and disposal, low chemicals usage; and adequacy for direct food contact (prints are made on the inside).



Figure 8. Landpack-cooling elements

Landpack also provides a comprehensive service package for a simple and safe food delivery, including the exact determination of the cooling elements required for shipping (coolant calculator); a time-temperature control for the proper maintenance of the cold chain (time-temperature labels); packaging customization in terms of its shape, size and design, as well as on legal requirements processing (licensing and registration of commodities according to the packaging ordinance).

3.3.3 Innovation & Other Relevant Aspects

The online food purchases sector has been growing in recent years, and packaging plays an important role. A recent study on ECC Club online grocery trade in Germany shows 36% of online shoppers would only order online food regularly if they are to be delivered in environmentally friendly packaging and minimum packaging waste.

The growing trend in the UK, France and Switzerland has now reached Germany: the market for online grocery shopping, known as eFood, is increasing. Nonetheless, supermarkets still face the problem of how

to get the refrigerated, fresh deliveries to the customer. A particular problem for supermarkets specialising in organic products is that no ecological packaging has been available on the market until now.

Located in Puchheim, close to Munich, Landpack manufactures innovative straw-based insulating packaging. Landbox® is the first environmentally-friendly plant-based insulation packaging produced in an entirely climate-neutral fashion and that can be disposed of in the organic waste. It produces the insulation performance of a polystyrene box.

The main innovation is related to the product itself, since it is the first ecological insulating packaging based on the agricultural by-product straw with neutral climate that can be disposed of in the organic waste or garden. This material has also a similar insulation performance as Styrofoam. The manufacture of the Landbox requires a fraction of the energy required for the production of its polystyrene alternative.

Straw is the perfect insulation material, visually appealing, especially in the food sector, and currently hardly used as a raw material. In grain harvests, as much straw is obtained as grain itself. In Germany, around 30 million tonnes of cereal straw are harvested without any relevant usage. However, as a number of studies show, 8 to 13 million tonnes can be collected and used for other purposes without harming the soil.

As a result of the increasing growth in online food purchases, Landpack developed a strategic partnership with Klingele Group, one of Germany's leading independent manufacturers of corrugated raw paper and cardboard packaging. The Group has many years of experience in the development of tailor-made sustainable packaging solutions and knows the branch requirements very well, namely those of product safety and material-use efficiency. The Group's know-how will also allow leveraging the product's commercialization.

The product has been continuously presented across the world, be it fairs or (social) media. Market recognition has reflected in a growing demand for a standard commercial line to be made available in stores.

The company has also had several requests for developing other kind of applications, from motorcycle riders' helmets to sport and horse protections. Realizing the materials potential, and the matching service, the company envisions, in the future, to broaden its business to other protection-related fields.

It should also be noted that the concept promoters were teachers. Business conception and the entire development of this project was achieved "part-time", reinforcing its merits.

3.3.4 Lessons Learned & Reflections

Landpack, positioned in a competitive industry, is an example of successful business venture, allowing the drawing of some important lessons and reflections about the process of creating a successful startup:

- Identification and characterization of a real need – while the dispatch of fresh food presents a fundamental packaging problem, the e-food sector has a great potential to growth. The perception of

consumer's needs and market trends allowed the mapping of a number of essential requirements that not only framed business inception and product development, but also enhanced its acceptance. Market analysis and knowledge of customer requirements were identified as fundamental aspects of the final solution;

- Alliance with strategic stakeholders – the establishment of strategic partnerships in different areas of expertise for the co-development and commercialization of its products and services, allowed the realization of projects with a lower risk factor for the company, access to specialized know-how and increased potential for market penetration;
- Usage of leading ICT applied to the interaction between user and equipment, provided a greater level of acceptance by business customers.
- Future vision based on an internationalization strategy: the creation and planning of a commercial strategy based not only on the domestic market (notwithstanding its high potential), but also on the international scene, broadens the geographic scope of the company and fosters recognition as a major international player.
- Simplification – user monitoring and opinion collection allowed the identification of a need for simplification of communications, services and payment models. From clear service definition, the reduction of entropy and introduction of simplified and fixed fees, the whole process of simplification attracted customers and improved the satisfaction of both the user and the farmer.
- Innovation by design – the relevance of design as an innovation vehicle. The result of design considerations in a traditional area translated into new usages to materials and product differentiation.

Landpack intends to follow up its new product development policy, with a continuous identification of market opportunities which will soon materialize in new projects.

3.4 Nono Sentido – Food and Wellness



NONO SENTIDO

Food Category:

Olives and Sweet Fruits

Type of Organization:

SME

Founded

2010

Website:

<http://www.nonosentido.com>

Email:

marketing@nonosentido.com

Headquarters:

3.4.1 Brief Presentation

Nono Sentido – Alimentação e Bem Estar, Lda (Ninth Sense - Food and Wellness, Ltd.) was created in December 2010 by Ricardo Viveiros driven by a strong determination to find marketable noble Portuguese products, boosting their value and redirecting them to the international market. Headquartered in Bombarral, Portugal, Nono Sentido's mission involves the development, production and distribution of food products of natural origin, which by their nature contribute to a healthy diet, improved well-being and better health.



Figure 9. Quinta Da Várzea da Pedra – Bombarral.

In addition to the promotion of Mediterranean food and Portuguese culture, Nono Sentido is focused on stimulating the advantages of traditional products consumption of superior quality, as well as the different forms of its usage in day-to-day consumption, aiming at a lifestyle characterized by sophistication and balance, which fosters the rediscovery and sharpening of the *senses*.

Positioned in the Gourmet segment and with a strong penchant for innovation, the company is committed to developing distinctive products, in partnership with universities and scientific institutions

that complement the traditional Portuguese portfolio of products, and, above all, exhibit quality and exclusivity.

From development to production and from distribution to sale support, Nono Sentido considers their customers and partners as structuring elements of their value proposition and as an integral part of their *Operating System*. Nono Sentido is a company of people to people, who believe human capital is the enabler to face future challenges with determination and resilience needed to ensure success.

3.4.2 Products

Nono sentido commercializes the following types of products:

- Olive Oil - a natural product, produced from olives groves in Northern Portugal. Often referred to as the “Transmontana” Hot Land, this region benefits from a very special microclimate that together soil unique characteristics, and time-refined extraction processes, makes it possible to obtain a product of high quality. Mediterranean herbs, and a flavoring process developed by the company itself, are additional pillars that ensure the high quality of olive oil.
- Jam - The fruit jams area made with fruits of the western region of Portugal - a prime area for orchards. The jams are produced according to traditional recipes, utilizing in some cases natural flavouring elements, whose knowledge the company acquired and deepened with the production of the Olive Oils, in particular Basil and Ginger.
- Patés – the olive “Negrinha de Freixo” is produced in olive groves in the steep slopes of the Douro valley, where a warm and dry weather, schist soils and a unique genetic heritage, join up to produce a unique olive. Characterized by an age-old crop process, this olive is grown without pesticides and the harvest is done manually. The patés are flavoured and enriched with Natural Marine Antioxidants – Seaweed -, originated from the Portuguese Atlantic Coast. The combines a sea flavours and a freshness and taste of the Green Olive.
- “Scrackers” – thin crackers prepared with olive oil and seaweed. The crackers are specially made to supplement the olive patés, jams or as appetizers.

3.4.3 Innovation & Other Relevant Aspects

“Taking advantage of the best that Portugal has to offer” was the motto at the time of the creation of the company. According to its founder “the company rose from an innovative idea in a difficult socio-economic context (...) that involved finding a noble Portuguese product, increasing its value and redirecting it to the International market, where more thriving economies than Portugal will be able to afford the quality.”

The development of innovative products was realised in partnership with Universities and Scientific Institutions that were able to complement the Portuguese portfolio of products, and, above all, exhibit excellence in quality and exclusivity. The emphasis lay on rediscovering the essence of the elements, in order to deliver new organoleptic experiences, ensuring a balanced diet and a consequent healthy lifestyle.

The research work led to the development of products using the Olive Oil “matrix”: Olives and the Algae of the Atlantic coast. All of the products were based on Extra Virgin Olive Oil and Olives from the Northeast of Portugal, Trás-os-Montes, a good region for the production of Olive Oil. The fruit originated from the West region of Portugal – known for the quality and particular flavour.

3.4.4 Lessons Learned & Reflections

The following reflections can be drawn from this example:

- Usage of unique raw materials – e.g. the Negrinha variety of olive tree, with different properties in terms of quality and taste of olive oil
- Innovative combinations – seaweed and patés e.g.
- Social responsibility as a source of innovation and competitive advantage, particularly in terms of capture and security of local supply networks.
- A business response to worldwide food consumption trends such as:
 - The need to create a genuine link with the producer.
 - A commitment to sustainable means of production – local sourcing for example.
 - Consumption of better fats and better carbohydrates.

3.5 Terrius – adding value to protected designation of origin products



TERRIUS

Adding value to PDO/PGI Products

Food Category:

Fruits, Vegetables & Mushrooms

Type of Organization:

Cooperative

Founded

2011

Website:

[http://www.terrius.pt /](http://www.terrius.pt/)

Email:

geral@terrius.pt

3.5.1 Brief Presentation

TerriusS was created in 2011 driven by the desire of a group of young farmers to build a distinctive and innovative project in the agro-food sector, based on the establishment of local partnerships of trust and fair trade with small producers and industries in the region.

TerriusS was born in Marvão, in the Natural Park of São Mamede Mountain, one of the largest biodiversity reserves in the Iberian Peninsula, having as main objective the sustained production, preservation and commercialization of top quality fruits and vegetables from the region.



Figure 10. Marvão View - Natural Park of São Mamede Mountain.

TerriusS' mission involves adding value to local products, including the recovery of the Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI) certifications, particularly Marvão Chestnut and Bravo de Esmolfe Apple, based on a local sustained development which promotes the preservation of natural heritage and the recognition of the region.

As a producers group, TerriusS works daily to develop new products based on the quality and excellence of the local raw materials which, by having the innovation and the image as a differentiating factor, allows the valorisation of its products

and of the Alentejo region.

TerriuS is installed on Moinho da Cova, an ancient watermill reconverted into an environmental and cultural interpretation space, where the cooperative carry out several additional activities: regional products and wine tastings, cooking classes, mycological and cork handicraft workshops with local artisans, guided tours or picnics.



Figure 11. Tour and tasting of British journalists.



Figure 12. Cooking Class

The company is member of APTECE - Portuguese Association of Culinary Economy and Tourism, whose mission is to contribute to the preservation and promotion of national culinary heritage and focus on the development, in particular, of the Culinary Tourism in Portugal. In partnership with this association, the company has collaborated in events and projects for the promotion of its products. TerriuS is also part of the Portuguese Economy Ministry's Program – Portugal Sou Eu ("Portugal I Am") that aims the valorisation of the national supply.

The company consists of four people that are responsible for the direction/management of each of the four departments of the company: General, Marketing, Quality and Logistics. All the elements have level 7 qualifications.

3.5.2 Products

TerriuS commercializes dehydrated, milled, canned, processed and fresh products. Applying simple transformation processes such as dehydration and natural preservation to local raw materials, TerriuS bring to consumers the original flavours and aromas of Marvão region, offering new food products with added value and distinctive character.



Figure 13. TerriuS product range.

Wild mushrooms are one of the greatest riches of São Mamede Mountain and TerriuS is dedicated to its selection throughout the region, with the maintenance performed really carefully, to preserve exquisite characteristics of each varieties. TerriuS is also dedicated to *saprophytes* mushrooms production (*Shitake – Lentinula edoddes*) in wood trunks by conventional and organic farming to preserve all the flavours and characteristics of these products in harmony with their natural habitat.



Boletus Edulis Dehydrated Mushrooms



Ceps Porcini Mushroom Flour



Shitake Mushroom Chutney

Figure 14. Examples of some São Mamede Mushroom Products

Besides mushrooms, TerriuS commercializes special quality-certificated fruits such as the Marvão Chestnut and Bravo Esmolfe Apple, all unique Portuguese varieties offered by exclusive production conditions and already recognized with DOP and IGP, respectively. More recently, TerriuS has also been dedicated to the sale and promotion of acorn based products. The chestnut, apple and acorn flour are made from dehydrated product without addition of any starch or other ingredient and allow the use of these fruits at its full capacity throughout the year.



Dehydrated Marvão Chestnut



Fresh Bravo de Esmolfe Apple



Acorn Flour

Figure 15. Examples of some São Mamede Fruits Products

Also, the partnerships with local producers allow Terrius to offer vegetables such as wild thistles, Trigueiros asparagus, Piquillo pepper, Chucha Tomato, in the form of cans, dehydrated, and chutneys.



Trigueiros Asparagus in Brine



Piquillo Pepper Mustard



Dried Tomato in Olive Oil

Figure 16. Examples of some São Mamede Vegetables Products

In this context, it is also important to mention other products commercialized by Terrius such as aromatic herbs, snacks and cosmetics products based on the previous raw materials.



Aromatic and Medicinal Plants



*Natural Soap with olive oil and Apple
aroma*



*Mushroom Crackers Grissinis
Biscuit*

Figure 17. Examples of other Terrius' Products

3.5.3 Innovation & Other Relevant Aspects

TerriuS is an innovative company since its foundation. Although there is no R&D department, the company carries out new product development activities since 2011, having developed more than twenty innovative products based on the use of simple transformation processes such as dehydration, milling, conservation, etc. Innovation activities, supported by three main elements - tradition, quality and image are actually of special importance in the company's strategy whose main objective is linked to the enhancement of endogenous products and to the revitalization of traditions. In particular, the idea behind product development was to recover the PDO and PGI (since certification was in danger of disappearing for lack of use) and recuperate products and ancient traditions, yet in a way adjusted to the present time. However, according to the General Manager of the company, Rita Beltran Martins, *"in general, it is very difficult to make innovative products because the consumer is not capable of using and enjoying this innovation at home. The first question they ask us is what I do with this"*. Although it seems straightforward to TerriuS, consumers need to be educated on the use of most products. In this sense, rather than products, TerriuS was forced to develop support services for the use of its products such as recipes (that are provided in each package, on the site and in e-book), tastings, cooking show and cooking classes. The development of products is always thought to reach the international market and can be done in different ways. TerriuS product may arise from the need to drain a raw material, or product, or to meet specific customer requests. Generally, recipes are developed intuitively, by trial and error method, and calculated taking into account the feedback received from customers and stakeholders. Examples of these developments are the pepper jelly, a very expensive product that is only produced on demand to specific customers and jelly organic peppermint, under development for a Norwegian client who defined product requirements before being developed.

For the development of these (product and services) innovation activities, the company has collaborated with some scientific and technological organisations, namely the Agrarian School of Elvas and the University of Trás-os-Montes and Alto Douro, especially for carrying out studies of (new) product.

Presently, TerriuS products are sold in Portuguese speciality shops, high food, wine and gin bars. Besides that, the company decided to project its expansion into the international market, especially for the Northern European markets where the product penetration capacity is higher. Currently, the company's products can be found in Norway, Poland, France, Andorra, Angola, Mozambique although there are current

Besides that, the company decided to project its expansion into the international market, especially for markets where the product penetration capacity and purchasing power is higher. As such, the company's products can be found in Central and Northern Europe (Germany, France, Luxembourg, Belgium, Switzerland, Poland and Norway), USA, Colombia, Brazil, Angola and Mozambique.

The company has already received several awards for its quality and innovation in traditional food production, including “The 2014 National Agriculture Award” in the new projects/start-ups category; the 1st Prize of Innovative Product of the year with the TerriuS Bravo de Esmolfe apple flour in the I InovCluster Contest - fruits and vegetables category and the Innovation Award at SIAL Paris 2014, the world’s biggest Agrifood Fair with its TerriuS acorn flour.

3.5.4 Lessons Learned & Reflections

The case study allows to hold different relevant lessons on the growth and development of a company as well as about the process of creating a product/service.

We highlight the following lessons to be learned from the analysis of TerriuS’ activity:

- Clear definition of objectives: the company has set as main objective the recovery of PDO and PGI certifications and the revitalization of local products and remained faithful to it throughout their path;
- Engagement with experts/research centres: to address the need for knowledge and lack of human and technical resources, the company makes use of external support (establishing partnerships and protocols) for the development of RD&I activities;
- Model of development based on experimentation: product development is based on successive experimentation and evolution, at the same time that inputs collected from customers, importers, service providers, and other stakeholders are being incorporated. This process proved to be an asset, enabling an optimized product development;
- Commitment on service innovation, not just product: in order to maximize the purchase and consumption of its products and add value to their offer, the company did not neglect the service component. Differentiation by connecting the gastronomic tourism provides added value to products and promotes an emotional connection to them.

3.6 Liá - extra virgin olive sealed in a white bottle



LIÁ

Food Category

Fruits

Founder(s):

Cristina Stribacu

Year of Foundation:

2013

Website:

<http://liaoliveoil.com>

Email:

info@liaoliveoil.gr

Headquarters:

Navarinou 18 Filiatra-Messinia
Greece

Phone:

+30 6932940882

3.6.1 Brief Presentation

The company, recently founded by Cristina Stribacu and his brother (2013), produces premium olive oil from the area of Messenia, Greece. The first olive trees were inherited by their parents in 1975 and since then they have been growing olives. The trees belong to Koronèiki variety which is a native one in Greece. Its fruit ripens between November and December and generates olive oil of excellent quality whose special features comprise a combination of a fruity, bitter and pungent taste and flavour apart from its exceptionally low acidity.

3.6.2 Products

The company produces LIÁ, a premium extra virgin olive sealed in a white special bottle. They combine traditional methods of cultivation with modern techniques in order to respect the sustainability of the ecosystem. The product has already received three prizes: Great Taste 2014, Best Olive Oil in the World 2015 by the new York International Olive Oil Competition and Terraolivo International Olive Oil Competition 2015.



Figure 18. Packaging of LIÀ Olive Oil

The company is looking for resellers: delicatessen shops in European cities that would like to feature the product. At the moment, they are present in shops of France and Belgium and are negotiating with shops in the Netherlands and in Germany.

In the future, they want to serve restaurants, but for that they need to design different packaging.

3.6.3 Innovation & Other Relevant Aspects

The main innovation is to provide a premium healthy product joining tradition and marketing (better design bottle). The white bottle design is based on that from ancient Greece.

“The bottle is very contemporary and chic yet rich in tradition and cultural history and the artwork is also inspired by classical design. We have received a lot of attention based on our innovative design. We also believe our olive oil has extra health benefits. Virgin oil is high in antioxidants and our non-transparent bottle preserves these better than the typical glass or plastic bottles.” The company has plans to start a blog about food and health and to make a better use of IT (developing an app that tells the users the weather conditions at their farms, in order to get users more connected to their brand).

3.6.4 Lessons Learned and Reflections

The brand and packaging design for LIA olive oil is a standout feature of the product, essentially related to the uniqueness of the bottle. Designed by BOB STUDIO, the matte white bottle can stand as an art piece by itself. The design's aim was to achieve simplicity and purity through a clean form colour palette. The idea to print directly on the bottle brands LIA as a premium and high quality product, which oozes elegance and sophistication.



Figure 19. Various aspects of the brand.

The logo refers to the traditional way and means used to produce olive oil. Multiplying the logo creates a pattern, used to decorate the packaging, which resembles ways used to decorate objects in ancient times, bringing out Greece's great cultural history.

However, notwithstanding the package, the oil is of great quality. The oil is made exclusively with Koronéiki olives, a native Greek variety. A combination of exceptional soil quality and a unique microclimate and Liá's dedication to traditional agricultural methods, has had the result of an exquisite oil of extreme character. The aroma is "rich and sweet, with a ripe avocado background and a herby note reminiscent of crushed basil leaves". On the palate the oil has a "satisfyingly creamy texture, with green almonds, more avocado and a pleasant red chilli finish".

According to the owners, the novelty of Liá resides in the notion, early on, to communicate the olive from the region as a premium product. The first thing that was done was to design an exquisite bottle. The white bottle design that we have chosen is based on bottle design from ancient Greece.

The connection to the land was paramount. The olives grow in Filiatra, a picturesque provincial town in Messenia, Greece - situated close to Mount Egaleo and cooled by the breeze of the Ionian sea. Olive oil is produced since immemorial times and traded olive oil ever since the Mycenaean period. For their trade they have invented an entire script, Linear B. Inspired by this, the company created a modern logo-symbol which is conceivable, comprehensible and it embodies the land's connection with the Olive Tree and the Olive Oil. It refers to the traditional way and means used to produce olive oil. The bottle is contemporary and chic, yet rich in tradition and cultural history. The artwork is also inspired by classical design.

The company also has had a constant focus on the export business, and an ambition to scale. Unlike a traditional olive oil producer in Greece, Liá has a website and other marketing materials in English, and the owners travel regularly in Europe in order to meet customers and sales partners.

Cristina Sribacu has also a strong connection with the European start-up scene. She is a member of Orange Grove, the incubator in Athens. This organisation is tantamount to provide Liá with a large network: potential business partners, coaches and mentors and even access to politicians.



Figure 20. Cristina Sribacu talking at an Orange Grove event.

3.7 Yonest - homemade natural Greek yoghurt



YONEST

Food Category

Grains, Fruits & Others

Founder(s):

Filipe Botto

Year of Foundation:

2013

Website:

<http://www.yonest.pt/>

Email:

3.7.1 Brief Presentation

Yonest True Yogurt, Ltd. is a Portuguese company, founded by Filipe Botto in 2013, originally as a food truck selling homemade old fashioned Greek yogurt.

Graduated in management, Philip left at age 33 a promising career in investment banking to create the homemade yogurt brand. Yonest was the first services company arising from "Startup Lisbon" – which the owner describes as an incubator to allow young entrepreneurs to have an office space in the premium areas of Lisbon.

At the time, the crisis was not a problem, and Filipe created Yonest in December 2013. The first years of activity have proven that the market believes this product to be very interesting. According to the owner "Large global companies were born out of crisis scenarios," adding that the financial scenario had some unexpected advantages. In their case, the company benefitted from state aid as well as warm receptivity on the part of people regarding a project who had the courage to come up with an idea.

The store started as a small yogurt selling truck elling - Yogurtman - a tricycle based in central Lisbon. The company also had several dealers across the country, namely El Corte Ingles, one of the main retailers names in Europe.



Figure 21. Yonest Tricycle shop in Lisbon.

3.7.2 Products

Yonest is “homemade” natural Greek yoghurt. It follows the recipe of real Greek yoghurt made with fresh milk, with no addition of cream and 100% natural ingredients. The yoghurts are sold in pots of 350g, 500g, and 1600g, skimmed milk or whole milk, both without added sugar and lactose. Furthermore, the company also sells pre-made recipes for breakfast – yoghurt with granola, lemon cream, apple roast, mango pulp and passion fruit. Partnerships with other traditional food manufacturers have resulted in original products such as yoghurt and Fundão cherry, yoghurt and pie, and yoghurt and chocolate cake. All used fruit is Portuguese. Kept in a refrigerator, the product can withstand up to three weeks. If opened they keep their freshness for 3 to 4 days.

Yonest can be found in select stores in the main cities of Portugal.



Figure 22. Yonest products.

3.7.3 Innovation & Other Relevant Aspects

Yonest mission is to bring original and quality products that fit the taste of demanding consumers, looking for authenticity.

The production process takes place entirely through traditional methods, which excludes any industrial process or artificial additives. Additionally to the yoghurt, Yonest has also developed fruit and cereal recipes for breakfast, with low calorie count.

Yonest presents novelty products almost every month. Partnerships that add value to the product are an intrinsic part of the premium brand model the company is pursuing. Portuguese staple brands such as Fundão cherry and “best chocolate cake in the world” in Portugal have been sought, partnered and combined in exclusive recipes.

The company also develops pioneering savory recipes, such as yoghurt and tuna recipes. These efforts serve not only new the development of new products but also an attempt to market yoghurt as a substitute of cream or mayonnaise, with lower calorie intake.

3.7.4 Lessons Learned and Reflections

The case study of Yonest allows us to draw the following lessons about the growth and development of small producer of dairy products:

- Differentiation based on product quality, authenticity, old recipes.
- Target of people with health concerns – less fat, no sugar, no lactose, no additives.
- Focus on communication of „missing ingredients“ such as sugar.
- Added value through partnerships with other successful and landmark brands (ex. Fundão Cherry, "the world's best chocolate cake")
- Response to worldwide trends in the food sector:
 - Search for transparent products; be it used ingredients or production processes.
 - Search for a “genuine link”– telling of a story about the recipe's origin, preparation or presentation.
- Relevance of business diversification – along the production of quality yoghurt the company also constantly develops new recipes, usually with an innovative approach (e.g. savoury yoghurt), searches new clients (cafés and restaurants), and also organises events.

3.8 Frutaformas – reshape fruit



FRUTAFORMA®

Reshape fruit

Food Category

Fruit

Founder(s):

João Azevedo, Anabela Sá

Year of Foundation:

2012

Website:

<http://www.frutaformas.pt/>

Email:

3.8.1 Brief Presentation

Frutaformas® is a Portuguese business dedicated to dehydrated fruit, through a natural process. The product proceeded from Certificate of Origin sources, i.e., fruit that is obtained, produced, manufactured and processed in a particular region - Alcobaça apple, Rocha pear, Açores pineapple and Fundão cherry.

The motto of the company is “we reshape fruit”, a project initiated by a team made of João Azevedo, from Azevagro, and Anabela Sá, from NSProjects. In this consortium, João deals with the production and new product development areas, and Anabela is responsible for marketing and communication.

The idea to dehydrate fruit is centuries old, and was used as a means to conserve. Following a number of attempts and iterations, the consortium developed a new method to dehydrate fruit, ready to be eaten. This project was presented for LEADER funding which provided the necessary initial support to launch the products and brand. Rocha pear and Alcobaça apple are the main raw materials.

3.8.2 Products

According to the owners, Frutaformas’ mission is to develop products without artificial additions, nutritionally balanced and fit to be consumed safely by all consumer groups (including the group of celiacs and diabetics) at any time of day.

Frutaformas products are dehydrated fruit snacks made from Certificate of Origin fruit. Products are marketed in different

shapes: slices, lingots and hearts, and are available in two varieties: gourmet and healthy. Targeted at younger audiences, there is also the “Little Fruit” product, which presents the fruit in a “healthy and fun way” to children. In fact, according to the owners, Frutaformas was primarily developed in order to cater for an younger audience, and encourage them to eat fruit in a healthy, 100% natural way.



Fig. Frutaformas products – pouches and lingots.

3.8.3 Innovation & Other Relevant Aspects

Frutaformas is underpinned in two main pillars: Health and Nutrition. These are closely related with the perception that the public needs a new generation of products to respond to the growing problems associated with bad eating habits (e.g. Childhood Obesity), namely natural products, without any added sugar or preservatives, and exhibiting a nutritional intake similar to fresh fruit.

The company was initially focused on making the act of eating more fun and appealing to a young demographic, which was bought about through the development of different shapes and textures given to the fruit that bore the same nutritional value as fresh fruit. In time, the project grew for a more general audiences, especially given the success of such products as Apple Croca ® and Pear Croca ®. Fruit in lingots was later added to appeal to an up-scale audience, whereas dried pears, apples, cinnamon and pineapple were simply pressed in the shape of bars.

Promoting Frutaformas’ range of products has been ensured by active participation in social networks, through partnerships with blogs (special focus on those who devote their communications to health or healthy lifestyles) as well as participation in various events (directly or indirectly) where the brand is promoted. According to the owners, the tasting / sampling sessions are paramount as they allow the promoters to be in contact with consumers (to listen to their opinions and suggestions) but also because they allow to reach them in a personalized way.

The route of Frutaformas has been quite safe and supported the mission and values that this project presents. With an upward growth since the beginning, the company set out 2015 as the year to initiate internationalization attempts. In 2016 the product is exported to the UK, Norway, Belgium and Luxembourg. For the future, the company is setting its eyes neighbouring Spain, as well as on the Middle East.

3.8.4 Lessons Learned and Reflections

The following items were an important element to the successful path of the company:

- Dehydrated fruit snacks.
- Healthy and attractive alternative to sugary snacks for children.
- Artisanal production, no additives or preservatives, no added sugar or oils.
- Certified fruit with designation of origin - Apple Alcobaça, Pera Rocha do Oeste DOP, Pineapple from Azores.
- A product that fits the following worldwide trends:
 - Increase in demand for fruit-based snacks and fruit ingredients.
 - New appetite for nutritional greens / fruits.
 - Snackification of everything – replacing conventional breakfast foods with breakfast pouches, bites and biscuits.