

## **BEN – Andalusian Federation of Municipalities and Provinces (FAMP) DESK REVIEW**



# **SUSTAINABLE NETWORKS FOR AGRO-FOOD INNOVATION LEADING IN THE MEDITERRANEAN**

## **D3.1.2. Desk review on studies and projects on MedSNAIL in Andalucía Valle de Andarax, Almería**



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## **1. Summary**

### **1.1. MedSNAIL Project**

The European project MedSNAIL is led by the Andalusian Federation of Municipalities and Provinces (FAMP). MedSNAIL aims to develop small-scale value chains of traditional agro-food products in the Mediterranean, in order to promote local sustainable development through the agro-food sector, to recover and promote the traditional products of the Mediterranean diet. Thus, MedSNAIL will work to preserve the identity and traditional heritage of rural communities, through the enhancement of agri-food products rooted in these local cultures.

This objective will be developed under the approach of the "Slow Food" movement and local food chains, taking into account the balance with local ecosystems, biodiversity' preservation and the ethical commitment to producers.

One of the main results of the project is to build a network of local leaders and communities, who can establish an "Alliance of producers" and traditional Mediterranean products from a "Slow Food" approach, promoting a "new gastronomy" as an expression of their culture and identity.

In this document we review studies and projects related to MedSNAIL's objectives that have already been carried out in the study area, Valle de Andarax (Almería, Spain).



## **1.2. Intervention area**

### **1.2.1. Criteria for selecting the intervention area**

According to the objectives established by the MedSnail project:

1. Preserve the identity and traditional heritage of rural communities
2. Promote local sustainable development through the agri-food sector

The FAMP has decided to establish certain criteria that allow us to identify those areas of intervention most suitable for achieving the project's objectives, and at the same time, that allow us to increase the project's impact on the territory. In this sense, the established criteria have been:

- Depopulation

The depopulation of the rural environment is one of the most worrying realities of our national demographic. In Andalusia, the depopulation does not reach such dramatic figures as at the national level thanks to the network of medium and small cities distributed uniformly throughout the territory. Despite this, we cannot ignore the fact that there are depopulation situations in our territory that must be taken into account and that require new actions to fight against this phenomenon. In this sense, the report "On the subject of depopulation in Andalusia" elaborated by FAMP describes 11 rural areas to be revitalized in Andalusia:

1. Sierra de Aracena y Picos de Aroche (Mountains of Aracena and Picos de Aroche) (Huelva)
2. Sierra de Segura y Sierra Cazorla (Mountains of Segura and Cazorla) (Jaén)
3. Cuenca de Guadix y Baza (Basins of Guadix and Baza) (Granada)
4. Valle de los Pedroches y Guadiato (Pedroches and Guadiato Valley) (Córdoba)
5. Alpujarra y Valle del Andarax (Alpujarra and Andarax Valley) (Granada and Almería)
6. Sierra Morena (Brown Mountains) (Seville)
7. Sierra Occidental de Málaga (Western Mountains of Málaga) (Málaga)
8. Zona del Andévalo (Andévalo Area) (Huelva)
9. Sierra de los Filabres y Sierra Alhamilla (Mountains of Filabres – Alhamilla) (Almería)



10. Condado de Jaén (Jaén County) (Jaén)

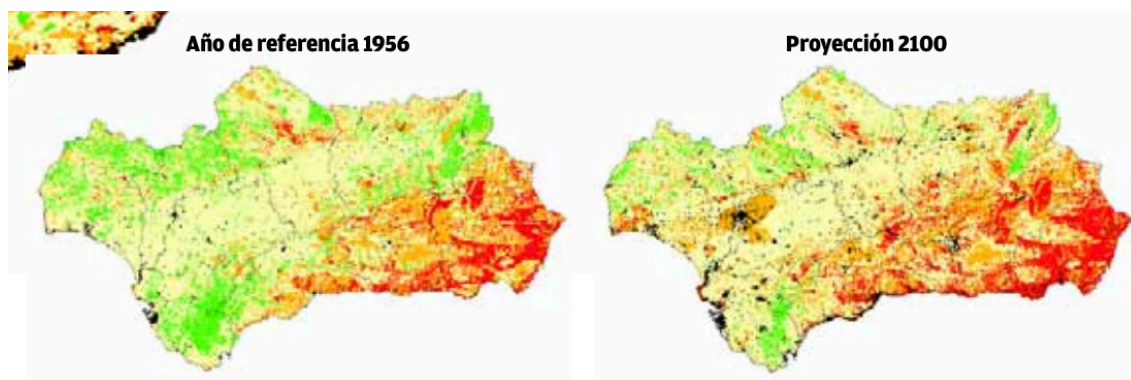
11. Zona noroeste de Cadiz y Valle de los Alcornocales (Northwest area of Cádiz – Alcornocales Valley) (Cádiz)

Population variation rate between 2000-2016 in these areas, among which is the Valle de Andarax, stood at values higher than 12% per year. Specifically, the depopulation rate for municipalities with less than 1,500 inhabitants, which are all those belonging to the Andarax Valley, stood at 14.81%.

- Climate change and desertification

Desertification, as a process of soil degradation accelerated by aggressive and unsustainable human actions in the natural and productive environment. Nowadays is an endemic problem in Mediterranean environments.

The Andalusian Strategy for Adaptation to Climate Change develops indicators related to climatic change and environmental adaptation to be used in territorial planning. Their analysis can be essential to try to minimize the natural, social and economic impacts that climate change can produce.



*Image 1. Desertification in Andalusia*

Source: GD Environmental Planning and Information (2008)

The diagnosis of desertification carried out by this study places practically all the areas affected by desertification processes in the province of Almeria, registering their presence, although to a lesser extent, in the province of Granada.

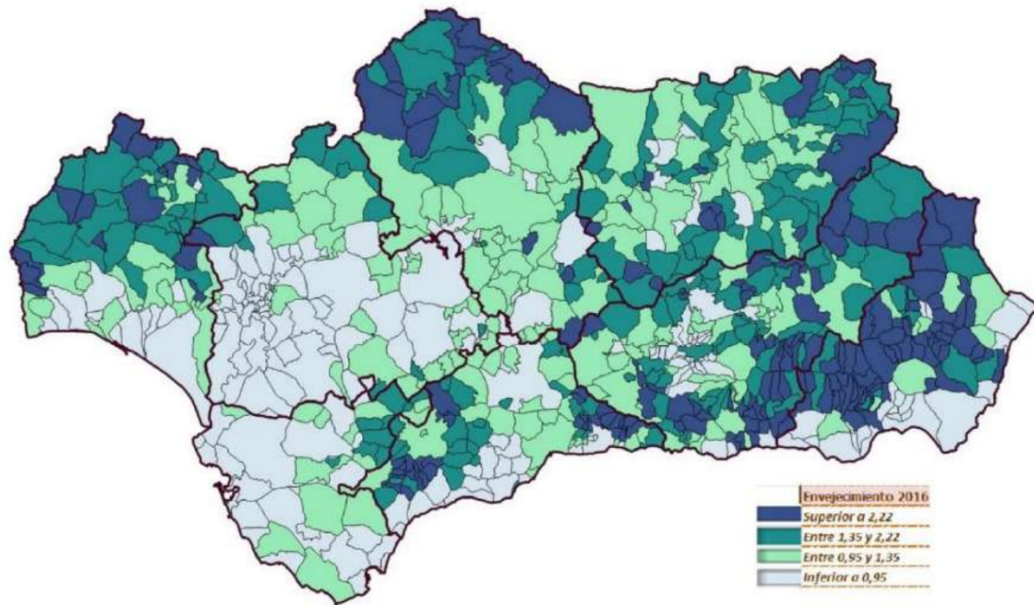
- Aging of population

The aging of the population is another factor that threatens the rural areas of the national and Andalusian territory. Associated with the phenomenon of depopulation, the lack of generational replacement in rural areas leads in many





cases to the loss of health care services provided by the municipalities, as well as the disappearance of crops and traditional techniques.



*Image 2. Aging of population*

Source: FAMP. About the depopulation in Andalusia. Report. (2018)

As you can see in the image above, the northern area of the Pedroches valley (Córdoba) but mainly the Alpujarras area of the Granada and Almería provinces are the areas with the highest aging index (2.2).

- Certified products

DOs aim to protect agri-food products that have additional qualities of quality, as a consequence of compliance with standards that go beyond mandatory quality requirements.

The different levels of DOs that currently exist are: Denominations that protect geographical indications (DO), which designate foods whose quality, characteristics or reputation is linked to a specific geographical origin; the Traditional Specialties Guaranteed (ETG), which cover foods with specific characteristics derived from the method of preparation, as well as Ecological Production and Integrated Production, mentions that refer to the use of a production system that is respectful with the environment.

Andalusia currently has 58 products with a certified quality designation. Only one (the tomato from La Cañada) is found in the province of Almería. Almería



also has two other products with Protected Geographical Indication in the wine category such as: local wine "Desierto de Almería" and local wine "Láujar - Alpujarra". Despite this, Almería is the province with the fewest certified products in Andalusia

### **1.2.2. Introduction and location of intervention area**

El Valle de Andarax is located in the province of Almeria in Andalusia. El Valle de Andarax is bounded on the south by the Sierra de Gádor and on the north by Sierra Nevada. The Andarax Valley follows the course of the Andarax river which has a west-east orientation to turn at the end of its course towards the northwest-southeast orientation

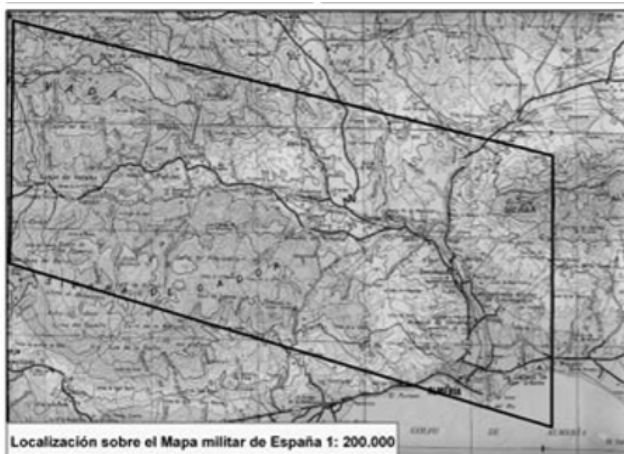
Other authors demarcate the Valle de Andarax to the entire area crossed by the Andarax River from its spring in Laujar de Andarax to its mouth in the Mediterranean Sea close to city of Almeria

For the delimitation of the intervention area within the Medsnail project, we have used two information's sources that delimit the area influenced by Andarax river:

- "El Río Andarax" Agencia Andaluza del Agua, Consejería de Medio Ambiente, Junta de Andalucía, 2010.
- 'Unidades de paisaje del Valle del Andarax (provincia de Almería)' by Emilio Ferre Bueno published in "Baetica. Estudios de Arte, Geografía e Historia" 2006;

We have also completed this information with an analysis of municipalities that belong to the Rural Development Group "Alpujarra Sierra Nevada de Almería" which are linked to the Andarax River.

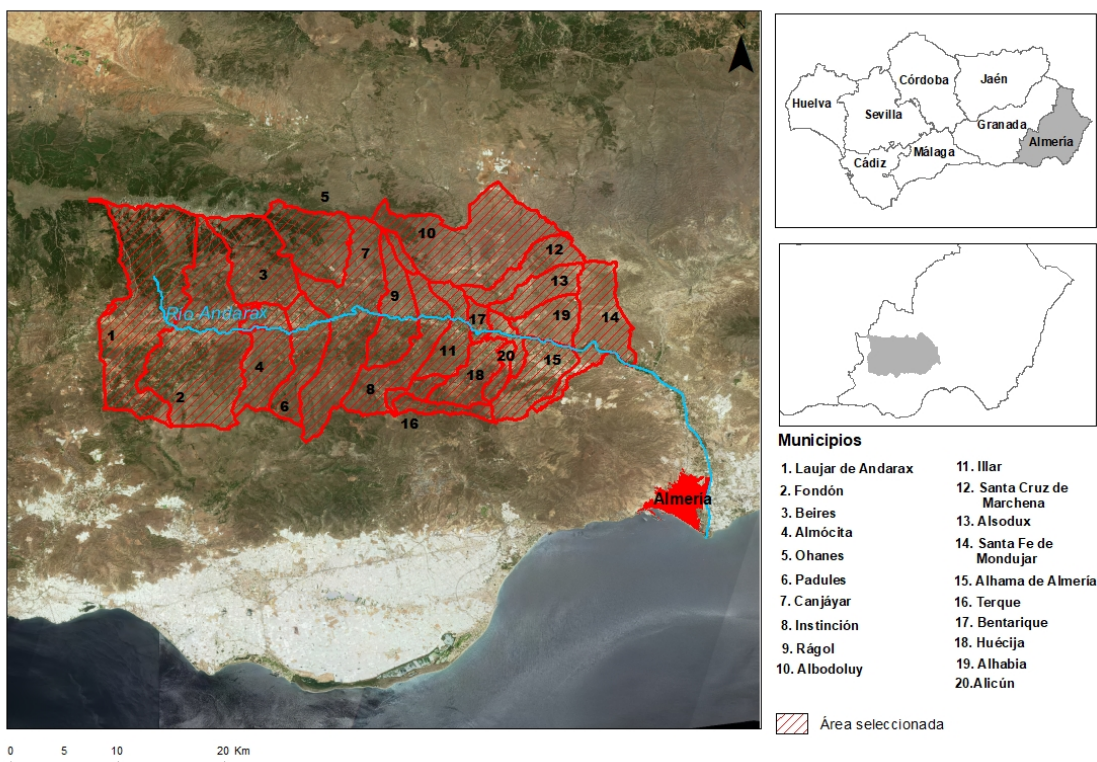
Based on this information, we have delimited our intervention area within the Valle de Andarax with a double criterion: municipalities that are effectively influenced by the Andarax River and also with a marked rural character.



*Image 3. Location of Andarax Valley*  
Source: Ferre, E. (2006)

Taking into account these two criteria, we have selected 20 rural municipalities located in this area that have great potential to participate in the MedSNAIL project: Laujar de Andarax, Fondón, Beires, Almócita, Padules, Ohanes, Canyájar, Rágol, Instinción, Alsodux, Aboloduy, Illar, Terque, Alhama de Almería, Santa Cruz de Marchena, Huécija, Santa Fe de Mondújar, Bentarique, Alhabia, y Alicún.

We have represented the intervention area on the following map:



*Image 4. Selected area*  
Source: Elaborated by FAMP



### **1.2.3. Geographic characteristics**

El Valle de Andarax has an extension area of 2,187.6 km<sup>2</sup>. The hydrographic network of the Andarax river collects the waters of the Sierra de Gádor (north), Sierra Nevada (east) and Sierra de los Filabres in its central section.

The climatic characteristics change between the upper basin and the lower and middle valley. In the upper part of the valley next to the Sierra de Gádor, rainfall can reach 500-650 mm per year, even exceeding 1,250 mm in Sierra Nevada. However, when we descend through the valley the rainfall becomes scarcer (< 250 mm) reaching the extreme where the valley borders the Tabernas Desert.

Temperatures are moderate, although there is a thermal gradient from the eastern zone, warmer, to the western zone more temperate. The same is from the bottom of the valley to the highest peaks of the mountains. Thus the average annual temperature in the lower part of the valley is over 18° C, while in the higher parts of the valley it is 14.5° C. On the highest peaks of the mountains the average temperature barely reaches 10.2° C. The Valle de Andarax combines very cold winters especially in higher valley areas with the hottest summers in the whole province of Almeria in areas closest to the desert of Tabernas.

Following the bioclimatic characterization of Rivas Martínez (1995) the climate of this territory is Mediterranean with at least two dry months in summer.

Andarax River has the characteristics of the rivers in the southeast of the Iberian Peninsula, such as a fundamentally pluvial feeding and an irregular flow that combines scarce flows with sudden floods, especially in autumn, causing natural catastrophes.





## **2. Slow Food and intervention area**

### **2.1. Introduction**

The Slow Food movement was officially launched in 1987 in Bra (Florence) by Carlo Petrini, the founder of this culinary and ecological concept, which has now become a global movement.

The UN and the FAO have recognized the efforts of this foundation to reduce the loss of biodiversity and food waste. Some examples have been seen in cities like Amsterdam, where the Slow Food Youth Network (SFYN) organizes the annual Food Film Festival: three days of documentaries, talks and workshops dedicated not only to cooking, but also to the sustainability of the current food system.

In Spain there are about 1,000 Slow Food members distributed among 39 provinces. The provinces with the largest number of members are Vitoria, Bilbao and Zaragoza.

The increasingly widespread practice of collective catering "which standardizes food, sacrifices quality and is not suited to the nutritionally most vulnerable social groups" was one of the reasons for the establishment of Slow Food Spain. "Our orientation is based on support for local producers and sustainable rural development," points out from Slow Food Spain.

### **2.2. Slow Food in Spain**

The Slow Food movement in Spain has had three different stages.

The first activities of the Slow Food movement took place mainly in Madrid and Barcelona where they were welcomed by a certain social elite of these cities who were interested in these principles. However, the Slow Food movement lacked the strength and confidence that the movement had in Italy where it received thousands of members from all over the country. In Spain, Slow Food was perceived as an interesting movement, but with an elitist component that did not reach wider sectors of the population.

The movement saw a recovery between 1995 and 1996. New organizational ideas coming from the international headquarters encouraged the emergence of associations (convivium) in different provinces that carried out interesting activities. However, some mistakes were repeated, such as the lack of coordination, the poor link with local gastronomy or the economic failure of the first Slow Food magazine in Spanish: a very important instrument for bringing together and offering initiatives to members.

In 2000, Slow Food had only a few members in Spain with little or no activity.



Things started to change in a very positive way between 2002 and 2003. Internationally Slow Food received more and more support since the first Salon del Gusto in 1998. New ideas and new projects were initiated such as: the Foundation for the Defense of Biodiversity, the Slow Food Award, the Ark of Taste, etc.

From these new initiatives, groups of members emerged again in Spain, and local events began to be organized. Examples of this new interest were the appointment of Carlo Petrini, International President of Slow Food, as Honorary Guild of the Basque Gastronomy Guild of San Sebastian in 2002, and a series of international activities he organized in April 2003 in Tarragona around wines of the Grenache variety.

Throughout 2003, there were also other important events for the future of Slow Food in Spain: first of all was the publication in Spanish of Slow magazine in January 2003. Slow magazine is a cultural publication that facilitated in this moment the association of new members and helped to build up an associative structure. On July of the same year in Barcelona, after a day of discussion, exchange and clarification of ideas, the first steps to make Slow Food a reality in Spain were taken with the designation of a Management Committee.

If in 2003 there was only a small organized group in San Sebastian, after Barcelona Slow food groups was created in Barcelona, Valencia, Zaragoza, Cordoba, Madrid, later in the Garraf region, Alava, Lleida, Tarragona, Bilbao, Huesca, Seville, in Asturias, Galicia and few areas of Andalusia.

The result of this new coordination and activities was an increased Spanish presence at events such as the Salone del Gusto and Terra Madre 2004: some Spanish products were recognized as Presidia (products favored by a special protection and dissemination project) and others became part of the Ark of Taste.

There were two Spanish Presidia achieved through the individual efforts of Slow Food International in July 2003: Gamonedo Asturian Cheese and Tolosa beans. Two more products were joined in Salone del Gusto 2004: Saffron from Alto Jiloca (Aragon) and EuskalTxerria / Basque Pig from Guipúzcoa. In 2005, there were already six: the Mongeta del Ganxet / Jewess of Ganxet (Catalonia) and the Malvasia Wine of Sitges (Catalonia). Each Presidia has a person in charge who ensures that the distinction and relationship with the Ark of Taste Commission are properly maintained.

### **2.3. Slow Food in Andalusia**

In Andalusia only three provinces have had Slow Food associations in their cities: Seville, Granada and Jaén, being Seville the most active and numerous of them.



Within our area of intervention, Valle de Andarax in the province of Almeria, doesn't have any physical headquarters of the Slow Food association, but nevertheless products from the province of Almeria and the intervention area are identified.

SevillaySur began its activity in 2006 and is currently the most active association in Andalusia. In 2006 there were no convivium in the southern half of Spain. SevillaySur association was born to become a reference point for the different Andalusian provinces. SevillaySur is a non-profit association with the mission of organizing and collaborating in tasks of information, training and dissemination of Slow Food values in Andalusia.

Currently, SevillaySur has 80 members including producers, housewives, liberal professionals, cooks, teachers, etc. They are united by their concern for food issues: food production, protection of biodiversity, food security, the environment, sustainability of processes, taste education and the preservation of traditional and cultural values of the territories, local development, etc.

They are part of the Slow Food National Coordination, which includes more than 25 association in our country. And they are part of the great international Slow Food movement with nearly 100,000 members in more than 130 countries.

On the other hand, SevillaySur also develops strategies of collaboration with organizations and institutions related to these issues, as is the case of the Ministry of Agriculture and Fisheries of the Andalusian Government or the University of Seville.

Regularly, SevillaySur organises informative, awareness-raising and promotional activities; visits producers and participates in tastings and samplings of local foods; promotes the defence of traditional products at risk of disappearance and collaborates with producers and chefs. They believe that defending biodiversity and protecting the food heritage by asserting the right to pleasure and coexistence is an increasingly necessary and urgent task.

### **2.3.1. Slow Food SevillaySur initiatives**

Slow Food SevillaySur has several initiatives focused on spreading this movement and promoting healthy and sustainable food that protects biodiversity and defends local values and cultures. Some of them are the following:

- Ark of Taste

The Ark of Taste was created in 1996 with the aim of having a catalogue of endangered food products closely linked to specific local communities and cultures.



The aim of the Ark of Taste is to describe the products and to draw the public's attention to the importance of preserving them. The products have to:

- Be of exceptional taste quality.
- Be linked to a specific geographical area.
- Be produced in a small-scale, artisanal manner.
- Be produced using sustainable and fair methods.
- Be in danger of extinction.

Following products are included in the Ark of Taste:

- Hinchonas beans
- Pías beans
- Andalusian chicken
- Ecologic pure Iberian pigs
- Chestnuts from Serranía de Ronda
- Sweet Orange Golden grain
- Olive Oil Royal variety
- Roteño tomato
- Cow from Cadiz
- Aloreña olive from Málaga
- Pink tomato from Sierra de Aracena y Picos de Aroche
- Ice Salt (Cádiz y Huelva)
- Extra virgin olive oil from Zuheros. Local varieties
- Ochio doughnuts
- Oil cake
- Purple carrots
- Dry liquor from Rute
- Pear from Ronda
- Black olives
- Canned tuna from Cádiz

○ Recommended foods

Recommended foods include high quality local food that do not belong to Ark of Taste:

- Products with a Quality Certificated that doesn't need a specific support of Slow Food
- Derived products based on Ark of Taste products.
- Other high-quality products but aren't in danger of extinction or doesn't belong to local productions linked to the territory
- Products that are waiting to be approved by the Ark of Taste.





- Chef's network

The Andalusian Slow Food Chefs Network contributes to disseminate the role of Andalusian chefs as taste educators and vector of culinary culture. This network is part of the Spanish and International Terra Madre Chefs Network.

Restaurants can also be part of this movement if they comply with the agreements of the Km 0 Network, which aims to promote the consumption of local, regional or even territorial products produced by small farmers among consumers, restaurants and/or community kitchens. The aim is also to publicize Slow Food Ark of Taste's products to reduce the CO2 emissions produced by food transport.

Actually, there are 60 chefs and 59 restaurants throughout Spain that can wear the Slow Food km0 logo (seven in Andalusia).

- Informal group of experts

This group was created for the first time in Seville in 2009, with the following objectives

1. To improve coordination with institutions, groups and researchers that work in favour of biodiversity and food heritage in Andalusia, by supporting local foods.
2. To promote joint projects and activities that will make it possible to learn about, disseminate and support food heritage.
3. To create an Inventory of Local Foods of Andalusia.
4. To propose nominations for the Slow Food Ark of Taste and to advise on those submitted by other groups or individuals.

- University cafeterias

This initiative was created to introduce healthy and sustainable food into university cafeterias, as an educational and informative experience aimed at the entire university community (students, professors and service staff). It also aims to promote the link between science and arts with food culture (cinema, literature, sociology, etc.).

- Collaboration

SevillaySur association is committed to advancing in coordination with all those professionals, groups and institutions that share its interest in promoting taste education, defending biodiversity and supporting healthy and sustainable local food.



### **3. Selected area, biodiversity, agriculture, food and consumption**

#### **3.1. Introduction**

Most of the municipalities of the Andarax Valley are within the area of influence of the Andarax River, one of the divisions established as a zoning area for the LEADER Programme. This LEADER approach, which has been an important component of the European local development policy, has the initiative to hand over planning to local communities, organising Local Action Groups, which elaborate and carry out development strategies for municipalities.

Within the municipalities, to be found in the area of the Andarax River, Alhama de Almería is the main focus of centrality, reinforcing its position over the years in relation to Canjáyar, a town that continues to be the focus of intermediate centralities or centred on private services. These are municipalities that are in-between enhancing their agricultural production, complementary in many cases, and their recreational function and that present demographic levels that pose a risk of depopulation for these municipalities.

Different subzones can be differentiated based on physical geography. We can talk about the middle course of the Andarax (Almócita, Beires, Bentarique, Íllar, Instinción, Huécija, Alicún, Rágol, Terque, Padules, Ohanes and Canjáyar), the encase Bajo Nacimiento-Andarax (Alboloduy, Alsodux, Santa Cruz de Marchena and Alhabia) and the medium-low section of the Andarax (Santa Fe de Mondújar and Alhama de Almería).

Moreover, we still need to add Laujar de Andarax, in the Alta Alpujarra Zone, which is also a gravitational focus. It has a quality agro-food production, being one of the main potentials of the area. Its geographical structure is essentially rural, and is characterised by an aging population.



## **3.2. Biodiversity**

### **3.2.1. Landscape Units: flora and fauna.**

Regarding the biodiversity of the selected area, we will begin by differentiating the different landscape units that make up the Andarax Valley basin, because this differentiation will lead us to analyse a different type of vegetation along with different land uses.

- Sierra Nevada

At the eastern end, we will find the part of Sierra Nevada belonging to the Almería province. It is a high mountain whose peaks exceed 2,000 m, lowering its altitude to the east. In this area, there is a gradation of the vegetation due to the climatic variations produced by the altitude.

Above 1,800-2,000 metres we find a vegetation formed by thorns and moorland whose dominant species are the *Genista versicolor*, in the most powerful soils, and the *Cytisus oromediterraneus* in the least developed. Mixed with these thorny bushes, species of grassland or thyme appear, which become dominant in extensive areas managed by man, through fire and grazing, and in the summit area as serial vegetation of what may have been the ancient junipers. Wide areas have been repopulated with pine forests with different coverings, with clear areas where scrublands dominate, while in softer topographies the pine forest dominates with considerable density and degree of maturity.

Between 1,500 and 2,000 metres, the potential vegetation consists of holm oak groves of *Quercus rotundifolia* with thorns, currently represented only by thorns, with hawthorn and rose bushes, similar to those on the upper floor, dotted with broom.

From 800 m to 1,600 m, its potential vegetation is also a holm oak of *Quercus rotundifolia*. In the highest areas of the floor it appears in the form of open holm oak groves mixed with substitution stages in which the rockrose, ballast, *cytisus striatus*, and extensive thyme-grassland stains dominate. A little further down, holm oak groves develop in good condition, reaching over 60% coverage, mixed with broom plants.

At altitudes of 800 - 900 m, towards the eastern part of the mountain range, a kermes oak frequently appears, which supposes the passage to semi-arid conditions. In the degraded areas, only a serial vegetation remains made up of broom, *cytisus striatus* with gorse, rockrose, thyme and esparto areas.



Repopulations of pines have been carried out in large areas of this vegetation floor, which currently consolidate considerable forest formations. Similarly, this saw has been cultivated in the most favourable parts with dry land, almond and vineyards.

- La sierra de Gádor (Gador Mountains)

It limits by the south and at its eastern end with the Neogenous Andarax basin. It is a high mountain whose slopes often have slopes greater than 80% and the relative unevenness exceeds 1,000 metres. It has two subunits of landscapes, the summit area and the mountainside and its vegetation also differs depending on the climatic gradation that the altitude introduces, so it is possible to distinguish different plant communities from the summits to the basal areas:

Above 2,100 metres, its potential vegetation would be a light pine forest, under which a sabinal mixed with junipers is installed; but the anthropic action has degraded it and in its place, at present, what it can be found are bushy spinals with rose bushes and thorns.

Between 1,600 and 2,100 metres in height, its potential vegetation would have a sparse forest; at the moment, it is a serial vegetation formed by thorny bushes, plagues and padded bushes.

Between 750 and 1,700 metres, the vegetation should be a holm oak of *Quercus rotundifolia*, of which only isolated areas remain. In its place, there is a high mountain vegetation with kermes, scrub with lavenders, gorse, bowls, rosemary, rockrose, gorse and ballast.

In large areas of the “Sierra” there are pine stock. In addition, the mountainous territory has had a predominantly forest land use, although the relative weakness of the slopes has allowed crops to be planted to dry land and almond trees in some areas.

The northern slope of the “Sierra de Gádor” participates in the vegetation of the Mesomediterranean floor in the highest parts. The general aspect of this hillside is a high, well-developed mountain, in general, with kermes oak, blackthorn and juniper, together with a dense thicket of gorse, rosemary and rockrose. On the other hand, in the areas closest to the foothills it is represented by a thicket of mastic and broom. This landscape unit, not only has not been used for crops, but has been the subject of protection measures to prevent the action of the stream waters, so that in wide areas the slopes are repopulated with dense pine forests.

- La sierra de Alhamilla (Alhamilla Mountains)

It is a mountainous alignment with direction West-East that in the summit area reaches almost 1,400 m. It is constituted, fundamentally, by the stacking of mantles



of two of the tectonic complexes that form the Internal Units of the Betic Cordilleras (mountain range): the Nevado-Filábride complex and the Alpujárride complex mountain ranges.

Regarding the vegetation, it is currently represented by a well-preserved holm oak, although not very dense, between 850 and 1,000 metres, and by a thicket of gorse, gorse, canes, cytissus striatus and gorse. In the most degraded areas there are only broom, ballast, sticks to which palm hearts and asparagus are attached in the more heated areas.

Further down, between 400 and 800 metres, what exists is a thicket of the thermomediterranean floor formed by esparto areas and thyme where the esparto dominates, accompanied by boleas plant (*santolina rosmarinifolia*), tumbleweed salsolas and bojas plant.

In this part of the mountains there is little evidence of crops, as the territory has been dedicated to mining, forestry and livestock uses.

- Los piedemontes (The Piedmonts)

This is a unity of landscape easily perceptible by the abrupt change in the value of the slopes, by the different lithology and by the less abrupt morphologies, by the coloration of the rocks, by the vegetation cover and by the use of the soil. The slopes range between 12 and 20% and the relative unevenness is between 50 and 200 metres.

They are landscapes with moderately steep topographies with numerous hills made up of the remains of important staggered accumulations that have been carried by the river elements that come down from the mountains.

There are differences between the foothills of Sierra Nevada, the Sierra de Gádor and the Sierra de Alhamilla.

- The foothills of the southern Sierra Nevada are the least extensive. It is only recognised in the headwaters of the Andarax, where we find an intramountainous basin in the surroundings of Laujar and Fondón municipalities. However, between Beires and Ohanes, the ravines that descend from the Sierra de Beires have built wide alluvial fans currently destroyed by the erosion of the ravines themselves and reduced to elongated platforms.
  - The potential vegetation of this foothills would be represented by holm oak groves, of which there are deformed remains dominated by rosemary, mixed with boleas plant (*santolina rosmarinifolia*) and esparto grass. The areas with more powerful soils support broom.



## MedSNAIL

- The Laujar-Fondón basin, traditionally, has had an agricultural use with mixed crops of rain-fed and irrigated crops, with olive, almond and fruit trees. The piedmont between Beires and Ohanes, apart from the olive grove, has been the cradle of the cultivation of table grape vines that have lasted until the last decades of the 20th century. The piedmont of “Sierra de Gádor” It is the most extensive, finding it from the western end of the basin to the city of Almería. It has two floors of vegetation.
- The foothills of the “Sierra de Gádor” is the most extensive, finding it from the western end of the basin to the city of Almería. It has two floors of vegetation.
  - In the western part, its potential vegetation is a holm oak forest of *Quercus rotundifolia*, from which isolated individuals remain and a high mount of scrub and hawthorns that, in the most degraded areas, is a thicket of gorse, bolina plant (*santolina rosmarinifolia*), rosemary and broom. The central-eastern part, from Canjáyar downwards, its current vegetation is a discontinuous scrub formed by mastic, gorse, asparagus, capers, tumbleweed salsoles, esparto grass and thyme.
  - This landscape unit is largely occupied by irrigated crops. For 100 years its main cultivation has been that of table grape vines with an export orientation. But this was changed by the economic situation, which is why in recent years this space has been occupied by olive groves, vineyards and even greenhouses.
- In the foothills of the “Sierra Alhamilla” it belongs to the thermomediterranean vegetation floor, whose current communities form a thicket of gorse, rosemary, boleas plant (*santolina rosmarinifolia*), asparagus, capers, esparto grass, boxwood and thyme. The territory has not been very cultivated, except in some recent alluvial fans with rain-fed crops, now abandoned. However, in recent years, greenhouses are beginning to gain space.
  - The gullies system of the neogenous basin

It originated in a post-orogenic distension stage and separates the “Sierra de Gádor” to the south, the “Sierra Nevada” to the northwest and the “Sierra de los Filabres” to the north.

The landscape is dominated by a thyme aresa, with a low degree of coverage and very altered by livestock use, alternating with esparto grass and albardinal area (*Lygeum spartum*). In the most removed and nitrogenous soils, communities





consisting of *Haloxylon tamariscifolium*, *Atriples glauca*, *Artemisia barrelieri*, *Salsola genistoides*, *Salsola vermiculata*, etc. are frequent.

The use that man has given to this territory has been more livestock than agricultural, due to its structural nature. Being a region with the highest aridity index, agricultural use has been limited to those areas where water has been channelled for irrigation.

- The river terraces of the Andarax river

They are located in a strip near the main channel of the Andarax river and its main tributaries such as the Nacimiento river, the Gérgal dry river bed and the Tabernas dry river bed.

The channel of the Andarax river, as well as those of its tributaries, are accompanied by riverside vegetation, partly natural and, on the other, planted by man, consisting of poplar groves, willows, and reeds on the banks; while inside the channels (especially in those of the ravines and the dry river bed) oleanders, olive groves and reed beds appear.

All the levels of river terraces have been traditionally used for crops, which, during the 20th century, have followed one another from the vineyards, in the first half, to the citrus fruits in the second half. At the beginning of the 21st century, the greenhouses and, in the area of influence of the city of Almería, the housing developments are pressing hard in the lower part of the valley.

Regarding the fauna found in this area, it can be very diverse, since on the one hand we have the Sierra Nevada National and Natural Park area belonging to the province of Almería, which preserves protected animals and other varieties of fauna existing in the Park. Among them the mountain goat stands out.

On the other hand, the fauna is better represented in the upper part of the channel, far from the recreational area which is mainly made up of stone flies, dragonflies and numerous invertebrates, such as the butterflies that stand out in this area.

The vertebrate fauna includes birds such as the oriole and the common nightingale. The squirrel, very common in the area as there are pine forests in the vicinity of the birth. We will also find in rural areas other mammals such as wild boar, deer, wolves, etc.



### 3.2.2. Site of Community Interest (SCI)<sup>1</sup>

An outstanding aspect of the study area is its geographical location, since it is located in an emblematic area where many of its areas are established as a Site of Community Interest (SCI), being an environmental protection figure classified according to the framework of regional, state, European and international regulation.

- The SCI Tabernas Desert, with an official area of 11,459.37 hectares, was declared a Special Bird Protection Area (SPA) on October 1, 1989, prior to its declaration as a Place of Community Interest, on the 1st of December 1997. The percentage of municipal area occupied by this SCI in each of the municipalities in the study area are:

*Table 1. % of municipal Surface SCI Tabernas Desert*

Alboloduy	7,80
Alsodux	0,57
Santa Fe de Móndejar	0,29

- The SCI Ramblas de Gérgal, Tabernas and South Sierra Alhamilla with an official surface of 22,853.07 Ha., was declared a Special Conservation Area on May 13, 2015. The percentage of municipal surface occupied by this SCI in each of the municipalities of the study area are:

*Table 2. % of municipal Surface SCI of Ramblas (dry river basin) of Gergal, Tabernas and South of Sierra Alhamilla*

Alhabia	75,98
Alhama de Almería	0,41
Alsodux	48,01
Santa Fe de Móndejar	71,90
Terque	0,02

- The SCI Sierra de Gádor and Enix with an official area of 50,343.76 Ha., was declared a Special Conservation Area on May 9, 2015. The percentage of

<sup>1</sup> All the Tables in this section have been taken from the Rural Development Group of the Alpujarra-Sierra Nevada of Almería





municipal area occupied by this SCI in each of the municipalities in the study area are:

*Table 3. % of municipal surface SCI Sierra de Gádor y Enix*

Alhama de Almería	32,06
Alicún	47,64
Almócita	54,92
Bentarique	53,99
Canjáyar	46,24
Fondón	49,81
Huécija	76,80
Illar	46,96
Instincion	64,91
Laujar de Andarax	19,39
Padules	38,37
Rágol	42,25
Santa Fe de Mondujar	5,40
Terque	51,81

- The SIC Sierra Nevada with an official area of 172,238.05 Ha., was declared a Special Conservation Area on 12<sup>th</sup> of October, 2012 and a Special Protection Area for Birds (ZEPA) on 1<sup>st</sup> of October, 2002. The percentage of municipal area occupied for this SCI in each of the municipalities of the study area are:

*Table 4. % de superficie municipal LIC Sierra Nevada*

Alboloduy	45,60
Alhabia	2,57
Almócita	23,88
Alsodux	25,55
Bentarique	37,09
Canjáyar	48,56



Fondón	35,66
Illar	31,45
Instinción	24,22
Ohanes	100,00
Laujar de Andarax	60,93
Padules	25,09
Rágol	49,46
Terque	51,81

### 3.3. Agriculture

The first aspect to comment on agriculture in the Andarax Valley is the useful agricultural area found in each municipality, this surface is expressed in number of hectares used in agricultural activity. With this data, established as a percentage of the extension of the municipality (expressed in square kilometres), information is offered about the degree of agrarian specialization of a territory.

These data have been obtained considering the comparison with the total area of the municipality, converting the square kilometres into hectares.

The agrarian function of each municipality is mainly determined by its orography, and by the type of agriculture that takes place in an area, which constitutes a pattern of agrarian extension.

In the case of the Andarax Valley, farms belonging to mountain farming systems coexist with significant concentrations of intensive crops, with Alhama de Almería being the main example.

Another factor to consider influential in agriculture is the proportion of surface integrated in Protected Natural Spaces, relevant in the region, underlining the ecological function of this territory.

The regional area devoted to agriculture is less, in relative terms, than the agricultural area of Andalusia and the province of Almería. The municipalities of Alboloduy, Canjáyar, Laujar de Andarax, Ohanes, Padules, and Santa Cruz de Marchena exceed the regional average.

<b>Municipality</b>	<b>Surface area (ha)</b>	<b>Agriculture Surface area (ha)</b>	<b>Agriculture Surface area %</b>
<b>Alboloduy</b>	6.970,0	1.978,62	28%
<b>Alhabia</b>	1.640,0	179,13	11%
<b>Alhama de Almería</b>	2.620,0	424,91	16%
<b>Alicún</b>	590,0	32,15	5%
<b>Almócita</b>	3.080,0	3.150,95	102%
<b>Alsodux</b>	2.010,0	172,46	9%
<b>Beires</b>	3.880,0	864,62	22%
<b>Bentarique</b>	1.130,0	77,9	7%
<b>Canjáyar</b>	6.690,0	2.560,88	38%
<b>Fondón</b>	9.120,0	480,79	5%
<b>Huécija</b>	1.900,0	271,27	14%
<b>Illar</b>	1.920,0	331,15	17%
<b>Instinción</b>	3.350,0	663,31	20%
<b>Laujar de Andarax</b>	9.280,0	2.720,77	29%
<b>Ohanes</b>	3.240,0	2.497,46	77%
<b>Padules</b>	2.650,0	1.429,41	54%
<b>Rágol</b>	2.690,0	42,11	2%
<b>Santa Cruz de Marchena</b>	2.000,0	1.362,86	68%
<b>Santa Fe de Múndujar</b>	3.490,0	184,77	5%
<b>Terque</b>	1.570,0	116,18	7%

Table 5. Useful Agricultural Area

Source: Local Development Strategy of LAG Alpujarra-Sierra Nevada of Almería (2016)

Agriculture in our field of study has been affected by a global agro-food system, which promotes a single strategy that is the same for everyone without taking into account its geographical area, weather or its own traditions, both cultural and culinary. This has led to the loss of a number of local production species, both plant and animal.

An example of the development of agriculture and which also had an impact on cultivation was the use in the 1960s of many pesticides, which were not suitable for food and which later had to be withdrawn from the market. This has led to the global struggle of the markets to produce GM crops, which, in search of an improvement in products, are often studied without prior evidence of the impact to be generated.



This unfavourable situation for agriculture has led to the abandonment, on many occasions of the new generations, of agrarian structures, generating rural depopulation.

Despite this situation, one can see a part of the population that still choose traditional agriculture and that has not been influence directly or indirectly by modern technology in the agricultural sector.

Before the war to the 1960s, the most developed crops were wheat, grapes and potatoes. Over the years this underwent a modification, and with the disappearance of the wheat tradition, its varieties became extinct, such as the “candela” wheat, which according to farmers was the most select variety of all, “raspinegro” wheat and durum wheat.

When people started to emigrate from this area, another food that disappeared was the potato of the “sierra”, currently 100% of the potato that is planted is commercial.

On the contrary, in the case of the vineyard the situation has been reversed, diversity has increased due to the entry of commercial varieties, but traditional farmers have not replaced their local varieties with these varieties, but have implemented and integrated them into their systems. production, also because these varieties are more productive.

Therefore, the species and varieties that have been maintained over time have been those that productively have required less effort, and those that, due to their use or organoleptic quality, have been key in the culinary tradition. As an example, we can point out the colouring peppers (Marcone peppers), the Totana squash and the country's tomato.

Another change to point out over time in agriculture in the area is the use of multinational seeds in order to obtain plants with defined characteristics, higher yield and genetic uniformity.

Formerly, everything that was consumed in this area came from the surrounding environment. Being rural and mountainous areas, cultivation zones were differentiated according to the climate and altitude levels, and the seeds were recovered, conserved and replanted. With the opening of the market and industrialisation in agriculture in Almería, improved varieties began to be introduced.



*Image 5. Vegetables from Andarax Valley*  
Source: Pexels



*Image 6. Milk and wine products from the Andarax Valley.*  
Source: Pexels

### **3.4. Food and Consumption**

This is an area where gastronomy has a special interest and is notable for the quality of its products. One of its most characteristic aspects in the kitchen is the use of local products, preserving the traditional and homemade recipes of the place. Among the variety of products we could highlight meat, vegetables, wine and desserts. And some of their typical recipes.

#### **3.4.1. Foods**

Here we will highlight the different local agricultural varieties with greater meaning and strategic value for different farmers.

##### **○ Cheeses and wines**

The Alpujarra cheeses from Almería deserve a special mention as the region has been characterised for manufacturing this type of food in the most traditional and ecological possible way.

On the other hand, the wine of the area has obtained awards. In fact, oenology is one of the most practiced activities in the area and one of the main reasons for which this region has become known.



- **Pumpkin**

Pumpkin is a very common product in traditional dishes, it is an easy crop, handle and uses moisture more than other types of crops. Those that remain are also used for animal feed. The most used pumpkin is the Totana or Totanera, along with commercial varieties that are most in demand by the market.

- **Onion**

The onion comes from the amaryllidaceae family. It needs several years of cultivation, taking first the formation of the bulb during the first year, and the reproductive phase in the second year. There are different varieties of cultivation, the most typical are the "Easter, winter or white" onions which is smaller than usual and white in colour.

The summer onion "Valenciana or Matancera" that lasts longer due to the thickness of its skin and is the variety that resists the most the rest of the year. Lastly, it is worth noting the "Babosa" onion, which is less widespread, but can be planted at any time of the year.

- **Green bean**

In many of the cases, most farmers sow beans with corn together, a technique from Latin America, which was an agronomic revolution because corn is a nitrogen consumer that provides beans to the soil by be a legume.

- **Pepper**

Pepper is a very common crop along with tomato, cucumber and aubergine that we can find in many of the orchards. The most common is the Marcone pepper, with its characteristic red coloration and thick skin.

- **Tomato**

The local variety of this crop is the so-called "country tomato", it is a very fat fleshy tomato with thin skin. Later, different varieties have been added, such as the popularly called "bull's egg" or "pear tomato". The tomato has been one of the main vegetables in the cultivation of the fertile plain.





Image 7. Vegetables products from the area  
Source: Pexels

Table 6. Products from intervention area included in the Ark of Taste of Slow FoodSevillaySur

Food	Category	Historic/Traditional Area	Marketed
<b>Garlic (Alliumsativum L.)</b>	Vegetables	Very concentrated in the Eastern part of Andalusia. Specifically in the Alto Andarax Valley, Almería	Yes
<b>Desert Olive Oil</b>	Olive Oil	Tabernas Desert, Almería	Yes
<b>Roman pumpkin</b>	Vegetables	Alpujarras in the province of Almería and Granada	Yes
<b>Water Pumpkin</b>	Vegetables	Alpujarras in the province of Almería and Granada	Yes
<b>Honeh of Filabres Alhamilla</b>	Honey and beekeeping products	Filabres- Alhamilla region, Almería	Yes
<b>Mead</b>	Honey and beekeeping products		Yes



*Image 8. Healthy products from the area  
Source: Pexell*



*Image 9. Honey products from the area  
Source: Pexell*

### 3.4.2. Recipes

#### ○ Migas alpujarreñas (Alpujarra Crumbs)

Migas Alpujarreñas stand out for being a dish that depends on the ingredients with which it is accompanied. Using native meats such as bacon, chorizo or loin, Alpujarra Crumbs, traditionally cooked with wheat semolina, make up one of the most characteristic dishes of this area and common during all times of the year.

#### ○ Alpujarreño plate

This is the most typical dish of the area. It consists of a preparation that includes “poor potatoes”, fried eggs, blood sausage, loin of dagger board, sausage and serrano ham. It admits various variations such as using Iberian pork instead of loin, but the most typical is to make it with these Alpujarra ingredients. A simple mixture in which there is no lack of calories, protein, or flavour.

#### ○ Patatas a lo pobre (Poor potatoes)

One of the most deeply-rooted dishes of the Almerian culinary tradition: the “poor potatoes” is a dish of the townspeople of yesteryear that has been reinvented and survived the passing of time, being one of the most typical dishes of area today. It is an easy and cheap dish. The ingredients are onions, peppers, oil and salt.





- **Tabernero (Innkeeper)**

In this land of large greenhouses, a dish based on vegetables cannot be missing from the list of typical foods. It is the Tabernero, a tapa that is a kind of ratatouille with tomatoes, peppers, onions and a spicy touch due to the chillies.

- **Gurullos con conejo (Gurullos with rabbit)**

It is specially prepared in winter, during the hunting season. It is a stew-type dish with rabbit and an artisanal pasta made from wheat flour.

- **Olla de trigo**

Another wheat-based stew, one of the most used cereals in Almeria cuisine. It is said that this dish was created for the first time in the town of Las Tres Villas and, in fact, the tastiest wheat pots continue to be prepared in this town.

- **Acelgas esparragás (Swiss chard)**

A dish from the peasant tradition that survives today thanks, above all, to the great importance of agriculture in the economy of this area. It can be made from different types of ore, but the most popular ones of course include chard, chickpeas, broad beans, bell pepper and dry bread.

- **Conejo al ajillo (Rabbit with garlic)**

It is a rabbit-based dish, more typical in the hunting season, garlic, white wine and dressings.

- **Ajo colorao (Red Garlic)**

It is based on potatoes, red peppers, tomato, cumin, saffron as well as fish, usually cod or ray. All these ingredients are cooked to make a consistent puree or soup, very healthy and with a really exquisite flavour.

- **Pastries**

The variety of desserts offered by the area is wide and delicious. Like typical dishes, pastry recipes have passed from generation.

The puffs, for example, are traditional sweets from the area that have Arab origins and are made from cinnamon, lemon, egg whites and sugar.

Other varieties worth mentioning are: blueberry cheesecake, calatrava bread and, of course, cottage cheese with honey. There is also the almond nougat, the anise bagels, the pestiños and the fig bread.



Image 10. "Soplillos" Tradicional Dish

Source: Wikimedia Commons

### 3.5. SWOT Analysis. (Agriculture, livestock and agro-industry)

Table 7. SWOT Matrix

S.W.O.T Analysis	
Agriculture, livestock and agro-industry	
Weaknesses	<ul style="list-style-type: none"> <li>- Aged population</li> <li>- Lack financial resources for an entrepreneur</li> <li>- Small Business Size (Company structure, machinery, investments)</li> <li>- Lack of irrigation water</li> <li>- Isolation of companies and entrepreneurs</li> <li>- Location and distance to distribution and logistics centers</li> <li>- Lack of reusable products</li> <li>- Agricultural abandonment</li> <li>- Depopulation of Young people. Young people haven't their own farms</li> <li>- Agricultural unemployment</li> <li>- No presence of agricultural labor unions in the region</li> <li>- Unknown marketing channels</li> <li>- Low consumption of local products</li> <li>- Lack of sparkling wine culture in Andalusia</li> <li>- Low consumption and marketing of ecological local product</li> <li>- Low level of training and innovation in business management. Low investment capacity</li> </ul>

<p><b>Threats</b></p>	<ul style="list-style-type: none"> <li>- Drought, adverse weather conditions and lack of water</li> <li>- Competitive sector</li> <li>- Lowering and instability of prices, intermediaries, high commissions</li> <li>- Lack of quality human resources</li> <li>- No synergies between agricultural sector and tourism</li> <li>- Lack of awareness of organic and local products' consumption</li> <li>- Low economic resources and investment due to public administration</li> <li>- Lack of awareness for the rural environment (agrochemicals and pesticides)</li> <li>- No harmony between agriculture and protected species</li> <li>- Low quality controls of handmade products</li> <li>- Inefficient supply transportation network</li> <li>- Low price for farmers.</li> <li>- Lack of incentives for young people</li> </ul>
<p><b>Strengths</b></p>	<ul style="list-style-type: none"> <li>- Location</li> <li>- Production and elaboration of quality products: handmade, ecological, innovative, etc.</li> <li>- Synergies among companies, public administration and producers</li> <li>- Quality raw materials</li> <li>- Product differentiation</li> <li>- Traditional family businesses with a strong ties between its members, ownership of the land, relying on their own entrepreneurial capacity.</li> <li>- Nature and landscaping</li> <li>- Knowledge of the market and direct relations with customers</li> <li>- Positive vision of rural life and local consumption</li> <li>- Participatory population</li> <li>- Rural heritage</li> <li>- Diversification</li> <li>- Climatology</li> <li>- Increased of organic product demand</li> <li>- Production process' control</li> <li>- Diversity of resources</li> </ul>
<p><b>Opportunity</b></p>	<ul style="list-style-type: none"> <li>- Increased awareness of consumption of natural products without additives, ecological and healthy</li> <li>- Improvement of rural infrastructures, communications, etc..</li> <li>- Improvement of the marketing and distribution channels. Mediterranean corridor of the coast</li> <li>- Improvement of the economic situation and financing of companies</li> <li>- Promotion campaigns in the media about organic production, agro-tourism, wine tourism, etc.</li> <li>- Organization of agricultural fairs by municipalities in the region or public administrations</li> <li>- Subsidies for agriculture, industry and tourism</li> <li>- New customers and markets interested in local products</li> <li>- New crops in the region</li> <li>- Environment capable of attracting new visitors and investors</li> <li>- Internationalisation of companies</li> <li>- Availability of qualified labour</li> <li>- Fomento de la artesanía, la tradición, la conservación</li> <li>- Promotion of local and traditional species</li> <li>- Sierra Nevada Natural Park</li> <li>- Increased natural awareness of citizens</li> <li>- Improved competitiveness</li> <li>- New technologies.</li> </ul>



## **4. Main projects**

### **4.1. Projects related to agriculture, livestock and agro-food industries**

In order to improve the quality, production and trade of the food sector in this area, different projects have been carried out related to the creation and modernisation of agricultural or livestock farms, as well as the transformation of products derived from them, such as dairies, oil mills, wineries, factories of jams, liqueurs, etc.

Given the lack of information on the particular projects, for now only the list of projects identified is included:

1. Sierranevada Productions, S.L.U.
2. Improvement of livestock farming
3. Improvement of profitability of agricultural exploitation
4. Modernisation of production process in oil mill
5. Modernisation of agricultural farming
6. Modernisation of goat farming
7. Modernisation of sheep farming facilities
8. Agricultural warehouse to support honey production
9. Improvement of irrigation facilities of rural property
10. Acquisition of machinery to improve farm performance and high-quality wine
11. Modernisation of machinery and furniture set
12. Agro industrial warehouse for production of sausages
13. Facilities to cultivate and sell mushrooms
14. Improvement and modernization of the winery
15. The Canjáyar winery
16. Acquisition of agricultural machinery for livestock farming.



## **5. Slow Food communities in the selected area**

Currently there are no Slow Food communities that operate in the municipality, however, we find a wide variety of gastronomic associations in the province of Almería included in the Andalusian Federation of Gastronomic Brotherhoods and Associations (FECOAN) in order to promote quality Andalusian agro-food products, as well as the preservation and dissemination of the gastronomic traditions of the community.

### **5.1. List of gastronomic associations collected in FECOAN in the province of Almería**

Regarding the list of the different gastronomic associations found in the province of Almería, only information on some of them could be found:

- Andalusian academic association of gastronomy and enology.

The Andalusian gastronomy academy aims to value and promote Andalusian gastronomy linked to tourism in the community, this is done by carrying out several objectives, such as maintaining and publicizing culinary traditions by studying its history and defending its values, increase knowledge of Andalusian gastronomy, by improving products and services. They also promote healthy and balanced nutrition with responsible and sustainable agro-food and fisheries production. This association contributes to an improvement in the sector of the provision of catering and hospitality services. Without forgetting their training, research and development work.

- Peña gastronomic cultural association "the wooden spoon"

The association "The wooden spoon" has as its main objective the defence and dissemination of the Culture of the Olive Tree, making known the excellence of extra virgin olive oil.

- Brotherhood Association "and they come together"

This association owes its name to the fact that they meet one day a month, since the members of this association aim to meet to share different healthy recipes, especially stews.

Other associations:

- "El Rapo" gastronomic and wine brotherhood - Vera
- Cultural, gastronomic and oenological association "four or five in a rock"
- Gastronomic Association "the good paper"
- Association "Peña los Cabales"



- Peña gastronomic association "from ajoblanco to paprika"
- "Gaudeamus" gastronomic association, friends of good eating and better drinking
- Cultural, sports and gastronomic association "el enjuague"
- Association "el choto pelao y la buena mesa"
- Cultural gastronomic society association "garum"

## 6. Promotional activities

Related to the projects that we saw previously in section 4, we will highlight at this point those projects that have been implemented with the idea of improving the development of their products, with a component to promote their food.

- **Competitiveness Improvement of Valle Laujar Winery**

The Valle de Laujar Winery was founded in 1991 and opened in 1992. It is located in the valley of Laujar de Andarax. They produce high mountain wines and their name is Laujar-Alpujarra Protected Geographical Indication. Its wines have the Quality Certificate of the Junta de Andalucía.

- **Canned vegetable and liquor factory. Albentillas.**

Created in 1993 and based in Bentarique, it is mainly dedicated to the production and marketing of citrus and table grapes. Since 2001, it has been recognized as an Organization of Fruit and Vegetable Producers (OPFH). It has also bet in recent years on the transformation of its products, turning citrus, grapes and vegetables into artisan jams, canned vegetables and natural liqueurs, through an environmentally friendly crop without preservatives or dyes in artisan production of your products.

- **Improvement of waste management of the Ecological Winery "Cortijo el Cura".**

It is located between "Sierra Nevada" and "Sierra de Gádor", specifically in the municipality of Laujar de Andarax. In 1998 the Sánchez Vizcaíno family founded the winery with the aim of offering the first organic wines from Almería.

The Cortijo El Cura Eco-Bodega presents an organic wine made exclusively from home grown grapes from its farm. They also make high quality and strictly ecological products, respecting the environment and betting on sustainable development.

- **Creation of mini-dairy. Laujar Medal.**

The Rural Development Group (LAG) supported the construction of the structure that forms the mini-dairy within the livestock building itself, as well as the





acquisition of various machinery and facilities necessary for the implementation of this activity.

Medal Laujar, is the result of a dream of farmers, who in 2010 decided to give way to the low prices they obtained for the milk produced by their goats, building a society that managed both the farm and the cheese factory. The differentiation lies in the manufacture of dairy products made by hand with the own milk of their goats and in the research and rescue of the flavours of yesteryear.

- **Promotion of products from Almería County Council.**

On the other hand, in the province of Almería, activities are carried out by promoting the agro-food industries seeking the development of the municipalities of the province, since it is an essential factor in job creation and the sustainable development of the place.

For this reason, after 20 years supporting companies through agro-food promotion actions, “Sabores Almería” is created, a promotional brand that serves as a tool to recognize the efforts of these companies and their products from Almería.

The purpose of this brand is the collective promotion of agro-food and fishery products in the province of Almería, jointly supporting businesses and establishments of restaurants, hotels and tourism that use and / or market these products in a prominent way.

Finally, point out the variety of activities that we can find in the province of Almería and that are developed in order to promote its gastronomy and enhance its quality products



## 7. Preliminary Considerations

Both the province of Almería and specifically the Andarax Valley are areas that stand out for their agro-food production, due to the variety of their products and their quality.

The introduction of the Slow Food methodology in the selected area would not only entail reinforcing the protection of biodiversity, today clearly threatened and with clear symptoms of desertification, through ecological products for rural municipalities, but also local and economic development such as fundamental engine in the local economy of this area and the fight against depopulation.

MedSNAIL should represent, for this area, the promotion of organic products and artisan products associated with their production and the development of tourist activities related to gastronomy and consumer awareness.

- It seeks to preserve identity through these products that have a strong local roots, and thus create a link with the locality and social pride in valuing local quality products, promoting their gastronomy and being aware of this importance to the whole community.
- In order to improve the production chain, it is also sought that the development of this process leads to an organizational strengthening as well as a political and social positional improvement.

With this, the benefit will not only be for the producers in the area, but it will also allow the creation of a local network of consumers aware of the importance of good nutrition that leads to an improvement in the quality of lifetime.

Thus, betting on an effective network will be essential to carry out all these objectives and guarantee an ecological, local, clean and environmentally friendly production in the future.



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