

# ***Evaluation of agroecology policy schemes in Andalusia driving cooperation initiatives for the mid-scale distribution and consumption.***

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**Abstract:** More than 80% of the Andalusian organic production is traded with European countries and sold in large-scale channels. This causes a high risk of conventionalization and adoption of the inherent problems of the conventional distribution but can also damage the level of trust in organic values. From 2004 to 2007, the General Direction of Organic Agriculture of the Andalusian Government implemented agroecological policies within the Andalusian Plans for Organic Farming (I and II). Their main objective was to address sustainability of the whole agri-food system. Some of these policies are still implemented. Two of them are analyzed as case studies.

The Social Consumption Program was defined to supply school's canteens with local and organic products. Based on a group of farmer linked to voluntary schools of a specific area, the initiative was centered on a territorial rooted program. This led to develop an innovative and alternative distribution channel of organic products in the region. A regional network scheme for cooperation among local groups was fostered to strengthen the local initiatives and to enlarge the spectrum of products and their seasonality. Participatory Guarantee Systems (PGS), locally rooted initiatives, were connected at a regional level through networks implementation. These systems merged together farmers and stakeholders, ensuring a farmer to farmer/stakeholder and a stakeholder to stakeholder/farmer advisory system based on empiric and professional knowledge. For each study case, goal evaluations, implementation strategies-mainly regarding participatory methodologies involving stakeholders-, and continuity is done in order to assess their suitability at an agronomical, economical and social level.

**Keywords:** agroecology, public policies, local and mid-scale consumption, participatory innovation, organic food chain.

## **Introduction**

For the last couple of years, Andalusia has been well known for the great development of its organic sector. As much as 54,03% of the Spanish surface is allocated to organic farming and it represents 60,58% of the livestock farms and 28,14% of industries (MAGRAMA, 2013). For some specific sectors, it also ensures a high percentage of the whole national production. For instance, Andalusia produces 60% of the total volume of vegetables (134.935Tm) or 90% of bovine meat (22.329Tm) (MAGRAMA, 2012). This development is quite similar to one in the South of France (Alpes – Côte d'Azur) or in the ones in South of Italy where, by 2007, the average of organic farming surface represented 5 to 10% of the Utilized Agricultural Land (European Commission, 2010). Nowadays, in Andalusia, this average is up to 18%. However, market growth is not balanced with the production one. This is due to low fares of local consumption, high percentages of exports and the striking quantities of organic products that finally end in conventional markets. These features are the symptoms of the incapacity to develop specific distribution sys-

tems, which compels the sector to sell its products through the traditional distribution systems that usually use long marketing chains.

Indeed, more than 80% of the Andalusia organic production is commercialized in European countries and sold in large-scale channels (Soler *et al*, 2009). This causes a high risk of *conventionalization* and adoption of the problems inherent to conventional distribution and damages the trust in organic values. Moreover, those long channels are high consumers of energy and raw materials (Infante & González de Molina, 2011) and they set an organic farming with high levels of production that is based upon homogeneous physical standards and principles. And these are in contradiction with the ecological criteria of the agroecosystem design focussed on biodiversity (Sevilla *et al*, 2012).

Livestock is the most striking case. Whereas organic production rises at a quite good level, only 24% of the products are sold as organic (Soler *et al*, 2009; MARM, 2010). That shows how difficult it is, for the sector, to develop alternative marketing channels, but also how easily certain organic producers get conformed to the agri-environmental payments as a complement to their incomes, without seeking to sell at a premium-price. As González de Molina (2009) mentions, organic farming has been converted into a refuge for productive sectors that are in crisis. Indeed, one of the other damages caused by the long-scaled marketing channels is the producers' empowerment losses. By being the first step in the channel, they get removed from consumer's contact, and, at the same time, lose any kind of decision maker power (on prices, qualities, quantities, production delays, production schedules...) handing them over to the other stakeholders of the commercializing chain.

Not without some controversies, the thesis of the organic farming and its distribution model *conventionalization* at a global level is getting more and more important (Buck *et al.*, 1997; Hall and Magyorody, 2001; Darnhofer *et al.*, 2010; Best, 2008).

Despite these facts, for many years and in coexistence with the conventional models, some civil organizations and farmer's movements have been developing short distribution systems to guarantee, to Andalusia inhabitants, an access to organic products. This short distribution channels also improve the contact between producers and consumers, and empower the first ones. A recent compilation of them is referred in Sevilla *et al* (2012). In Andalusia, a short distribution channel for food supply, represents a reaction to the current commercialization model, they are "resistance" spots (Doneddu & Torremocha, 2010). But they still represent a very low percentage of the Andalusia organic sector in terms of social and territorial impact.

Therefore, it is important to implement public policies that support shortening of the food supply and that guarantee an equitable access to organic products for the whole population. Public policies, based on Agroecology (that means on the Political Ecology) have already been implemented as fostering strategies for the sector in several countries or regions, as for instance in Andalusia.

### **Public policies for the Andalusia Organic Sector.**

Until a few years ago, Agroecology design was considered at an individual level, it was only related to the "producer social framework" (González de Molina, 2012). Agroecological strategies on farming and commercialization were usually limited to the field or the company itself. Nowadays, the practical implementation of the principles of Agroecology that comes out of the academy, together with the social movement integration that it has promoted, has provoked a new demand in the sector that is spreading at a geographical and social level. Agroecological strategies must also, from now on, be defined at a territorial level (understanding territories as geophysical and social places) and not related to individual sets anymore. They have to keep the focus at a

particular level, but they also have to embrace higher levels of social organization. And this is where Agroecology meets public policies.

In that respect, it must define and launch innovative processes and tools so to ease the concrete application of its principles and attributes (productivity, stability, social equity and autonomy). Or, as González de Molina affirms “it is essential for Agroecology to get endowed to the necessary theory to tackle political issues that is nothing more than a collective decision making process to reach agrarian sustainability”. (2012). That represents the Political Agroecology goal.

As mentioned before, some of the already implemented experiences, as for instance the Andalusia one, can become a basis to analyze the innovative institutional design needed for public policies to meet the principles and attributes of Agroecology, as well as for defining the adequate tools for their implementation.

In Spain, public competences in agriculture are delegated to Regions. Within the Andalusia government, the Consejería de Agricultura y Pesca<sup>115</sup> (CAP) established the first specific department for organic farming (Dirección General de Agricultura Ecológica<sup>116</sup> - DGAE) in 2004. The work team in charge of it, till the end of 2007, had an agroecological profile and background, thus, the implemented policies and applied methodologies for their definition were driven by agroecological principles: Stakeholder’s participation, knowledge exchange and territorially rooted activities were part of any political strategy.

The main focus was done in the stakeholder’s participation in order to establish strategies and to define measures that could fit the real socioeconomic context of production. Stakeholders were invited to participate from the first step (discerning the demand) to the last one (applying the solution) that was defined and proposed during the intermediate steps. When delays and procedures allowed it, the participatory action research methodology (Guzmán et al, 2013) was employed.

Diversity, as a means of complexity and richness, was promoted among practitioners’ profiles so to deal with the largest possible context, in order to prevent the definition of a narrowed solution that couldn’t be extrapolated to the whole territory. Exchanging and integrating together scientific and empiric knowledge was also sought as another way for integrating complexity within the institutional design.

Finally, the territorial and bottom-up approach was also considered to be essential to the stability of the launched activities, once the government’s support would disappear. Other methodologies were also present, depending on the nature, the scope and the objective of the political action.

Within that framework, the DGAE work team developed, together with -and thanks to- stakeholders, a spectrum of activities that were aiming at consolidating the organic sector as a professional one, with a potential for the future, where local consumption would also become the engine of this strengthening.

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<sup>115</sup> Ministry for agriculture and fishery

<sup>116</sup> General Direction for Organic Farming

## Case studies

### The Social Consumption Program.

The public program known as “Organic Food for Social Consumption in Andalusia” was launched in 2005 by the Consejería de Agricultura y Pesca (CAP). Despite the fact it was not included in the I Organic Action Plan for Andalusia (2002-2006), after the setting-up of the DGAE it got converted on one of the most important actions of this administration. Indeed, it was even included as a specific measure in the II Organic Action Plan for Andalusia (2007-2013): (*measure 6.1*) to support the social and institutional organic food consumption development. It counted on 7,43M€ for the 6 year-period of implementation.

This program has been launched as a mean to foster the internal organic food consumption [...], trying to guarantee a sustainable growth of the regional organic productions. Efforts were done in shortening the distance between producers and consumers so to ensure a fair price for both parts (Tobar, 2010).

The most interesting part of the process has been on the intense participation of stakeholders. Under the goal previously stated, and upon the basis of a local organic food supply for public schools canteens, nurseries, socio-educative centres, nursing homes and hospitals, the focus was done in:

- **Active participation of Andalusia organic producers** that had to organise themselves at a productive level (in order to have the wider possible range of products to offer), but also at a territorial level (to ensure a local and continuous supply). As a consequence of that, the Andalusia Network of Organic Producers was created in 2007. (García *et al*, 2009)
- **Participation of schools and other public centres** that had to compromise themselves, not only with the distribution of the ecological menus, but also in other diffusion, promotion and educative tasks about the benefits of an organic diet. Educative activities were not only organised for the canteens users, but for all the students of the centre as well as their families. Cookers and people responsible of the kitchen within the centres were also involved, and specific actions were implemented for them. They participated together with nutritional professionals in the design of the daily healthy and organic menus
- **Participation of others Public Regional Administrations** so to ensure the importance of an organic food consumption for the agrarian production and the rural development (Agriculture and Fishery Ministry), but also and in a transversal way for health (Equity, Welfare and Health Ministry), environment (Ministry of Environment) and education of future generations (Ministry of Education). All these departments of the Andalusia government worked together and supported producers and public centres that were participating in the program,
- The program included several different actions:  
The main one was to allow the centres to have a guaranteed supply with local and seasonal products. Exception was made for products for which the region has deficits (milk, pasta, some fruits, preserves) that were bought out of Andalusia. Producers were asked to organise a network and to generate a logistical structure that would ensure the more local possible supply to centres. The CAP supported the initiative through direct funding allocated to the centres in order for them to offer an affordable menu price for families, and a fair price for farmers. It also financed and provided technical advice for the creation of a logistical gathering centre in the province of Granada, common to all the producers groups participating in the project.

- At the same time, many and diverse diffusion and formative activities (meetings, conferences for cooking and alimentation professionals, nutritionists, teachers, families) were organised to encourage the local consumption. Newsletters and an eco-dietary were published and diffused all over Andalusia

A specific teaching material was also provided to teachers and students. This program was implemented in the 8 Andalusia provinces, although in Huelva, Cordoba and Almería it was a bit weaker.

From the first year of implementation (2005) participation raised. During 2008-2009 courses, 119 centres were participating, including two hospitals (Virgen de las Nieves Hospital in Granada and Alta Resolución Hospital of Puente Génave in Jaén). Almost 12.500 people were feed daily in the educative centres and around 1.200 patients in the hospitals. That same year, 12 producers groups (Tobar, 2010) were involved. The volume of consumption was also rising each year. The last published data are from 2009, a year in which the average of organic products in the centres was 47,32%, although some centres reached 63%.

Producers that took part in the program, before it came out, were not commercializing their products in long food supply chains, but selling to consumer's groups, specialised stores and other short channels. Their participation to the program represented up to 26% of their incomes. The total turnover for them with public canteens channel during the 2008-2009 courses was 1,74M€. Mainly, stakeholders were producers of fresh products (fruits represented 32% of the distribution within the program and vegetables 26,5%) but processing stakeholders have also participated in it with meat and derived products, oil, preserves, bread and others (Garcia *et al*, 2009)

Several impacts have been observed among producers: they have diversified their production, they reached higher level of self-sufficiency in the commercialisation and distribution of their products, and above all, association and cooperation among them, for establishing common rules were boosted.

Despite the program has positive impacts on coordinating local activities for enhancing local organic food consumption in Andalusia, for the last years it has lost part of its impulse. After 2009 no more data have been published. The financial support allocated to centres has been redirected from direct funds for the food supply to activities for diffusion and education.

In 2005 to 2006, though the measure was not yet included in the action plan, more than 1M€ had been assigned to the program (Ramos, 2009) however, and despite the fact that stakeholder number increased, from 2007 to 2009, the total amount scheduled for the program (3,14M€) (CAP, 2007) was not fully spent (personal communication).

Moreover, during 2010, the number of producer's group decreased from 10 to 8 because of bureaucratic requisites that prevented a couple of them to fulfil the requirements and therefore to supply the centres. That same year, 55 centres were only in the profitability threshold for farmers, because orders were too low and they didn't pass over the 30% quota of total consumption. (Tobar, 2010).

### Participatory Guarantee Systems (PGS).

European regulation only accepts third part certification schemes as the procedure to guarantee the right application of the organic regulation. In Andalusia, the system is private. The administration has delegated the activity to private companies that are in competition for the market (farmers and processors). Their profitability depends on the service they provides as well as on its quality, but they are tributary of their customer base that they can lose if they don't have the certificate.

The aforementioned DGAE was committed to receive stakeholders' demands. During 2005, 2 different groups of farmers expressed their disagreement with the current certification system, because they considered it was not fitting well their production context: diversity was taxed with higher certification prices, services were not always provided (oral communication) and prices were too high for their diversified and small-scaled production system. They wish to have it adapted to their circumstances system.

After checking the accuracy of such a demand, as a first step, the DGAE decided to work with the groups interested in building an alternative certification system from a bottom-up approach.

The overall project was split into five stages.

Step	Goal	Term	Costs
1	Checking accuracy of the demand	08-12/2005	1 technician
2	Defining the alternative system		3 facilitators (1/territory)
	Independent work in each territory	01-06/2006	1 coordinator
	Sharing & collective work	07-2006 – 06/2007	Meetings and travel cost for stakeholders
3	Implementation as pilot project	07 – 12/2007	Same than 2 + promotion costs
4	Regulation proposal	2007	1 technician
5	Promotion and diffusion in Andalusia	2008	1 technician

It is important to note that the academy was also involved in the process through the collaboration of a PhD student that provided guidance for the participative methodologies.

These methodologies were following the high level of participation that any agroecological initiative requires. The first more bibliographic analysis was enriched with interviews and participation in congress and meetings in order to widen the range of opinions and experiences. All the different stakeholders' categories (from farmers to certification bodies, going through Civil Society organization, professional organization, Administrations and consumers) were tackled. Once the accuracy of the demand kept proved the DGAE launched the bottom-up process which involved producers, consumers and any other person/entity that wished to take part in the process.

In order to ensure the serviceability of the final proposal, it was made sure that it included the wider diversity of geographical and socioeconomic contexts possible. Therefore, three territories to work with were identified: the two demanding ones and a third one in which several initiatives with an agroecological approach had already been implemented. Features for each of them are presented in the following table:

	<b>Castril</b>	<b>Sierra de Segura</b>	<b>Serranía de Ronda</b>
<b>Extension</b>	1 municipality	22 municipalities	16 municipalities
<b>Orography</b>	plateau	mountainous	mountainous
<b>Distance from consumption centre</b>	2h30 road-trip (Granada)	4h00 road-trip (Granada)	45' / 1h30 (Costa del Sol / Málaga or Sevilla)
<b>Production systems</b>	Vegetable – adapted to drought cultures	Olive monoculture, sheepering livestock, few vegetables gardens	Diversified, fruits, vegetables, winter production (subtropical fruits & veg), livestock integrated, forestry products
<b>Landowner scheme</b>	Small-scaled (e.g. 4Has splitted into 22 parcels)	Small-scaled for olive production (5 Has average)	Small-scaled (1 Ha average)
<b>Group profile</b>	8 people - farmers	35 people (80% farmers)	30 people (70% consumers – 30% farmers)

In addition to the diversity of agronomic and socioeconomic contexts, working groups were differently sized and composed. Moreover, and in order to explore the widest range of possibilities, for the first six months of the second period, each territory was working on its own without contacts with the other groups. Each one had to define which would be its ideal certification process and scheme. Participation of consumers was considered to be essential because the aim was also to build a process that could provide the organic products to the local population. Having complementary interests to the farmer's ones was also a way to balance the results.

After 6 months, working independently, but with coordination at the facilitator level in order to couple rhythms, the different groups shared their results to the others. Although none of the participant had heard anything about Participatory Guarantee Systems (PGS), the alternative they proposed in each group was fully fitting the PGS principles. After the collective stage work in which a minimum basis common to each territory (and thus likely to be adaptable to others) was settled, the system got implemented among participants. Evaluation was done, courses on regulation and technical issues (compost, livestock, health) were organised on their demand, and the procedures and materials (a visitor guide, a commitment form, a certificate) proposed during the first part of that stage, revised and improved

The two last stages were not fulfilled because of a cessation in the administration support to the project due to a government change. That's why it remained at a pilot project step and there is no data on the reached results. However, the project ran for enough time to demonstrate the potential that PGS have in strengthening a territorial development from an agroecological perspective. By promoting farmers and consumers cooperation (but also each category in between them) PGS becomes a formative tool in which knowledge is exchanged and where farmers can find a support to find solutions to their technical or commercialisation troubles (Torremocha, 2012)

There is no economical data available, but results of the Andalusia PGS implementation went out during the project and even after. Nowadays, the project is still having an impact because it inspires other initiatives, many PGS are spreading in Andalusia and in Spain (Torremocha, 2011) Three organisations in Granada are running a PGS and networking to reinforce them at a provincial level (personal communication). Moreover, the PGS process launched two conversions of consumers into organic farmers, 3 transitions from olive monoculture to a more diversified production system that included vegetables and fruits, a distribution cooperative was launched and it participated in the organic food for social consumption program in Andalusia, and itinerant weekly markets were implemented in rural areas in order to provide the local population with the local organic production. They are no longer running but a permanent specified organic store has been open in that territory as the result of the implementation of several agroecological projects during that period.

To conclude, the two main points of this initiative to highlight are the meeting and gathering through farmers and with consumers, and the bottom-up process that has provided continuity to it, even once the administration's support has disappeared.

## **Conclusions**

Measures undertaken by Andalusia administration are clear examples of the spreading effect that public policies can have in a specific sector. In that case, the organic farming one.

Public procurement through short food supply chains has produced a direct and positive effect on farmers but also on the whole population by facilitating consumers to access to organic products as well as improving their knowledge on organic farming. It has also contributed to enlarge the organic and local product offer range and has increased the internal consumption, improving the regional commercialisation structures. Both, this project and the PGS one, also allowed tackling the rural areas in order to walk towards a more equitable access for organic and local food in the whole Andalusia territory.

The Organic Food for Social Consumption in Andalusia and the PGS definition and implementation project also had direct effects in farmers' empowerment. They have facilitated cooperation among farmers' groups which have been stimulated to diversify their production in order to encompass wider markets. They also have supposed a gathering and exchanging platform in which crop scheduling and complementation, prices fixing and solution building were made collectively and by stakeholders themselves as a mean of empowerment and autonomy. (Tobar, 2010) (Cuéllar & Torremocha, 2009)

Relation among farmers and consumers in the social consumption project can be considered to be a direct one, because even non local products are not charged with intermediation percentages (CAP, 2007). In the PGS project, both – farmers and consumers- work together and establish local and direct marketing channels. At the same time, in both projects, farmers received a fair price for their products. It is a way to establish a more autonomous production and consumption model. Autonomy and remuneration are really essential to ensure the continuity of farming activities in Europe.

Public policies are therefore likely to be an excellent tool for transiting towards a more sustainable agrifood system. But the expansion of this kind of agroecological measures all over the European Region is still depending on the political willingness to do so. It is still a long way but the path has already been opened in some regions, as Andalusia, and the experience and lessons learnt must be taken into account to achieve more.

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