

This series of informative fiches aim to present, in summary, examples of practices and approaches that EU Member States and Regions have put in place in order to implement their Rural Development Programmes in the current period. These examples want to contribute to the understanding of what has worked well and less well in the delivery of the 2007-2013 RDPs and as far as possible, draw lessons in the view of future improvement of the programmes.

'Fio Dourado' - A Commitment to High Quality Olive Oil



BACKGROUND AND SCOPE OF THE PROJECT

Mr João Vítor Mendes has been in olive oil industry since 1991 and his family has a centuries-old tradition in that activity. In 2000 Mr Mendes was the first to introduce in Portugal the super-intensive olive grove (nowadays called «olive grove in hedge system») following pioneering contact with that practice in Spain. Until 2000 the family's olive mill still worked in a traditional fashion with olive presses. At that point and with the use of EAGGF (European Agricultural Guidance and Guarantee Fund) support the old presses were replaced by a decanter for three-phase separation, that is, between light liquid phase, heavy liquid phase and solid phase (pomace).

Later on in 2004, a second line of olive oil extraction was installed for processing larger volumes of olives at a low temperature in order to produce higher quality olive oil. In the new olive groves using the hedge system, the Arbequina and Arbosana varieties were introduced as more productive varieties. In 2007, the second line was upgraded again by installing a new two-phase decanter for processing olives from the Arbequina and Arbosana varieties as the trees entered their production

phase and the olives of these varieties are characterised by small stone and tough skin.

In 2008 the project 'Fio Dourado – A Commitment to High Quality Olive Oil' was set up in order to further modernize the processing plant (olive mill) and adapt it to the market both in terms of manufacturing equipment and food safety standards. This would improve the quality of the final product (olive oil) and increase the willingness of consumers to pay for higher quality. This would enhance the competitiveness of the company in the Ribatejo region. The investment involved the adaptation of existing buildings and the construction of new ones, purchasing of equipment, construction of facilities for using by-products and managing waste water as well as installing equipment for batching filtering and packaging the produced olive oil.

In this context, the project «Fio Dourado» was part of an on-going process of modernization of a centenary olive mill and complementing investments that have been held with the support of EU funds since at least 2000. Thus, it was not an isolated project in time and space; in fact, the «Fio Dourado» project was coherent with the beneficiary's strategy of permanent innovation and excellence.

EU Member State: Portugal

Keywords: Competitiveness of Agriculture & Forestry
– Quality of farm products

Specific Location: Comeiras de Baixo, Santarém Municipality, Portugal

Main beneficiaries: Fio Dourado – Transformation and commercialization of Olive Products, Ltd. (Fio Dourado – Transformação e Comercialização de Produtos Olivícolas, Lda.) – Beneficiary of Component 2: processing and marketing of agricultural products of Action 1.1.1 of PRODER's Measure 1.1. About 20 olive growers (including Casa Agrícola Antunes Barroso) as beneficiaries of Component 1: investments in farm holdings of Action 1.1.1 of PRODER's Measure 1.1, which complements the Component 2 assured by Fio Dourado, Ltd

RDP Measure(s): Measure 111: Information and Specialised Training; Measure 121: Modernisation of agricultural holdings; Measure 123: Adding Value to Agricultural and Forestry Products; (Action 1.1.1 – Enterprise modernisation and capacity building of Measure 1.1 – Innovation and enterprise development of Mainland Portugal RDP 2007-2013 "PRODER")

Funds Allocated: Total cost: €2 556 352

EAFRD: €768 760

National Public contribution: €256 253

Private contribution: €1 531 338

Implementation Period: Oct2009 to Dec 2013



DEVELOPMENT AND PLANNING

The beneficiary aimed to take advantage of the support opportunities offered by the Action 1.1.1 “Enterprise modernisation and capacity building” of the Mainland Portugal RDP 2007-2013 («PRODER»). The action is targeted at ‘strategic chains’. These were identified by the RDP as integrated food chains that have a high potential for sustainable development, associated with climatic, environmental, natural factors, as well as factors of market differentiation and were insufficiently exploited in the past. Investments in enterprises as part of integrated strategic chains under this Action compared to other investments offered better financing conditions. The olive oil production chain is one of the identified strategic chains along with chains on fruit and vegetables, wine and quality products.

This scheme enabled access to tangible and intangible investments necessary for the modernisation and capacity building of agricultural and agro-industrial enterprises and to the valorisation of their products. In order to implement this action, two distinct groups of support for investment were available for supply chains based on measures 121 “Modernisation of agricultural holdings” and 123 “Adding Value to Agricultural and Forestry Products”. Both measures could be complemented with vocational training funded by Measure 111 “Information and Specialised Training”. Thus, Action 1.1.1 integrated the following two components:



- ◆ Component 1: “Investments in farm holdings” (measures 111 and 121) whose beneficiaries were farm holdings; and,
- ◆ Component 2: “Processing and marketing of agricultural products” (measures 111 and 123) whose beneficiaries were marketing and processing (agro-industrial) enterprises.

In 2008, Mr Mendes thanks to his deep knowledge of the olive industry managed to mobilize and motivate 21 olive producers to jointly submit farm modernisation projects to Component 1 of the Action 1.1.1 in order to complement his application to Component 2 according to the provisions of the scheme. The growers would apply to get support for planting 531ha of new intensive or super-intensive olive groves, improve 106ha of existing ones and purchase new machinery for harvesting olives with little human intervention and high productivity. These projects would make the connection between the new olive groves in hedge super-intensive system and the upgraded olive oil processing facilities.

In the same year, Mr Mendes established the enterprise Fio Dourado, Ltd. This was necessary in order to become eligible to apply for Component 2 of the Action. In addition contracts were signed between the farmers applying for Component 1 and Fio Durado Ltd. applying for Component 2. The contracts ensured that the farmers would use the new facilities and services provided by the upgraded mill and this was another requirement to be eligible to apply for support as an integrated strategic chain.

The application forms for the projects in the two Components (1 for the applications of the olive growers and 2 concerning the investment project itself) were jointly submitted in July 2008 as a strategic chain application supported by the contracts signed between Fio Dourado Ltd. and the olive growers.



IMPLEMENTATION OF THE PROJECT

Overall, the project «Fio Dourado» (Component 2) comprised the following activities or actions:

- ◆ Reception, cleaning, washing, weighing and storage of olives: installing a new line for cleaning and washing of olives with high-capacity (40 tonnes per hour) in order to minimize the time between the reception of olives and the extraction of their oil which should not exceed 24 hours; for the same reason, the storage capacity at the entrance of the extraction lines was later on downsized compared to the originally planned in the project.
- ◆ Extraction of olive oil: modernizing the existent continuous line of olive oil extraction in two phases (from 2004) through the installation of a new decanter with a full capacity of 5,000 to 6,000 kg per hour in processing Arbequina and Arbosana olive varieties; installing a third and completely new extraction line with the same capacity and features, including its accessories and additional equipments; the initial intention of holding a final extraction line at Fio Dourado's olive mill was abandoned as the opportunity arose of recovering the pomace in other plant located nearby, and also because the «old» 2004 decanter would not have capacity to process all pomace coming out from the three extraction lines.
- ◆ Processing and delivering of by-products: constructing a seventh settling pond for the olive mill's waste water, and sealing an existing one; purchasing a 5,000 litres tank for transport and spraying the water in the groves as well as installing an additional pumping system. The olive mill waste water is an excellent fertilizer but, according to the Portuguese law, it can only be applied to olive trees in spring and summer following the crop period which occurs in late autumn / early winter. Initially the project envisaged the strengthening of the storage capacity for pomace complemented by a final extraction line but a better solution in terms of value added for processing and delivering of such by-product was finally selected: direct pumping to a nearby plant specialised in the extraction of olive oil from pomace delivered by Fio Dourado and other mills, thus avoiding the cost and hassle of transporting a by-product with about 70% of humidity.
- ◆ Measurement of olive oil extracted: acquiring new equipment to measure accurately the olive oil produced by the third extraction line.
- ◆ Storage and transference of olive oil: the oil must be stored in separate tanks (or deposits) depending on the variety of olives where they come from and their characteristics; accordingly, 11 tanks were to be purchased, 5 with a capacity of 60,000 litres/each and the remain 6 with 52,000 litres/each; initially, the acquisition of a total of 15 deposits was programmed but the referred desistence of some olive growers from the Component 1 justified downgrading this investment; additionally, a pump would be acquired to transfer the olive oil between the mill and the storage facilities.
- ◆ Allotment, filtration and bottling: acquiring smaller deposits which allow the mix of different oils to obtain the desired lots; purchasing a new filter with a capacity of 4,000 litres per hour because filtering is an important process to obtain high quality olive oil as desired by Fio Dourado, Ltd. It was originally planned to acquire a new packaging line with a capacity of 2,400 bottles per hour but it was decided, to rationalize the project by increasing the filling capacity of an existing packaging line with the acquisition of a second labeller machine.
- ◆ Buildings and facilities: refurbishing and enlarging the olive mill to receive the new decanters and additional equipment; the olive reception area, which was built on landfill because of the slope of the terrain, needed to be reinforced with retaining walls using gabions instead of concrete initially planned, which allowed a significantly reduction of project final cost; building new facilities for storage, filtering and packaging in a plot adja-



cent to olive mill while assuring the segregation between functions as required by food safety rules; improving the conditions in the shipping area as well as the administration offices.

- ◆ Hardware and software: purchasing several computers and other hardware, complemented by management support and production software.
- ◆ Information and training: specialized training activities in control of food safety as required by the HACCP – Hazard Analysis Critical Control Point approach; additionally, technical advice to olive growers and visits and technical demonstrations in order to promote the quality of the final product, that is, of olive oil.

One of the most striking features of «Fio Dourado» project was the on-going involvement of the management that extended from the planning and programming phases to monitor the implementation of the investments and continuous financial control. This was achieved with the support of a project manager that was hired for this purpose. The constant monitoring of the construction phase and the respective conjunction with the financial control of the project were fundamental in the sense of promoting rationality of investment, adapting to these and other contingencies and promoting, in this way, a more efficient use of EU funds. The support provided by the RDP Managing Authority also contributed positively as they were very helpful with the appropriate changes to the initial design of the project.



The adjustments that needed to be made on the investments originally planned, concerned either equipment due to technological developments or some civil works that were found to be unnecessary or of lower complexity than originally anticipated. Some modified investments included features that could impair the quality of the final product such as an excessive storage capacity at the entrance of the extraction lines, noting that olives should not wait more than 24 hours to be processed. In addition the storage capacity of olive oil was revised downwards as consequence of the withdrawal of some producers from Component 1.

Regarding the latter, as a result of either economic or other reasons, some olive growers gave up from the support provided by Component 1 to plant new olive groves or to improve existing ones. These dropouts were also due to the long period of about 15 months that elapsed between the submission of the application (July 2008) and the respective approval (October 2009). Additionally, some farmers that were granted support did not use the new facilities and services provided by Fio Dourado, despite the contract made between them. Despite these setbacks, most olive growers remained connected to Fio Dourado and it was even possible to attract new farmers more recently. These efforts reinforced the integration between production, processing and marketing as far as olive oil strategic chain is concerned.

The Casa Agrícola Antunes Barroso, an olive growers' producers group, also granted support under Component 1, emerged to play an important role in harvesting the olive crops from several producers with its three harvesting machines and making the connection between the new olive groves in hedge system and the Fio Dourado's processing facilities. Additionally, Casa Agrícola Antunes Barroso is also one of the biggest providers of olives to Fio Dourado's mill.



RESULTS OF THE PROJECT IMPLEMENTATION

In general, the expected results have been achieved, such as:

- * To adapt the size (or scale) of the plant to respond to the demand of about 1,800 customers without lowering the quality of the final product, which depends on a short wait interval between olive crop (which occurs in a

Current practices across the EU27

very concentrated period of 5 to 6 weeks per year) and the extraction of its oil.

- * To increase the efficiency of the production unit (olive mill) with greater quantity of olive oil extracted from the same amount of raw material (olives) by installing new decanters and additional equipment.
- * To increase the quality of the final product, by i) reducing the waiting time between olive reception and oil extraction, ii) reinforcing the ability to extract the olive oil at low temperatures, iii) making more efficient oil filtration and iv) assuring better storage and packaging conditions, compatible with the European food safety standards.
- * To increase the environmental responsibility by dealing more appropriately with by-products (pomace and olive mill waste water).
- * To improve the office conditions for administrative and management functions.

The induction of positive upstream effects, that is, as far as olive growers are concerned, has been a little short of initial expectations because of some dropouts that even resulted some adjustments in the scale of the original project (especially at the level of a lower storage capacity); nevertheless, Fio Dourado, Ltd. has been able to attract new producers and customers, particularly from the Alentejo Region who travel, sometimes more than 250 km, to benefit from the highest yields that this mill assures in terms of extraction of olive oil, that are sufficient to offset higher transportation costs.



LESSONS LEARNT

Factors that contributed to the success of the project:

- ⇒ Project integration in a clear strategy and commitment of continuous improvement and investment in productivity and quality of the final product (olive oil), which has been pursued by the main beneficiary (as single entrepreneur) and its family at least since 1994;
- ⇒ Experience and deep knowledge of the olive industry by the management of Fio Dourado, Ltd., and consolidation with networks and strategic partnerships over several years;
- ⇒ Permanent and constant involvement of the management at all stages of project development, from the mobilization of support and partners to operations, including planning and control;
- ⇒ Support provided by expert consultants, project manager and others employees and suppliers, with synergies between themselves and with the administration of Fio Dourado, Ltd.;
- ⇒ Intelligent use of intangible investment in the form of specialized training in order to mobilize olive growers and employees for a final product of higher quality;
- ⇒ Combination of a project co-financed by the EAFRD and a certification process in Quality, Environment and Food Security;
- ⇒ Adaptation of the project to technological and contextual changes, promoting the efficiency and the rational use of EU Funds, with the collaboration of services of the Ministry of Agriculture / RDP Managing Authority;
- ⇒ Good financial leverage in terms of mobilizing private funds (60 % of total cost), using own funds and loans granted by commercial banking.



Factors that contributed to the success of the project:

- ⇒ Requirements originally imposed by the RDP Managing Authority (changed in the process) in terms of the legal

nature of the promoter (company/legal entity rather than single entrepreneur), which conditioned the project design and its later development (need to lease equipment from the owner to his company, introducing costs and inefficiencies in the investment process and functioning);

- ⇒ Some difficulty in fully leverage upstream economies and innovation as far as olive growers are concerned; however, this effect was minimized because the promoter is also an olive (and innovative) producer, some strategic partners such as Casa Agrícola Antunes Barroso kept their key role in Component 1 and Fio Dourado, Ltd. has been able to capture new clients for its olive mill, namely in other regions (e.g. Alentejo);
- ⇒ Lower profit margins of olive oil compared to other agricultural processed goods like wine which makes difficult the full development of an exports-oriented marketing strategy;
- ⇒ Economic (and social) crisis that has affected Portugal (and Europe) since 2008.

Resolution of problems:

- ⇒ High persistence of the managers of Fio Dourado, Ltd. and their team (employees, consultants and suppliers);
- ⇒ Good relations key partners (Ministry of Agriculture / RDP Management Authority, farm houses, laboratories, banks, etc.);
- ⇒ Flexibility and ability to adapt to technological and contextual changes;
- ⇒ Regular contact with other territorial realities in olive oil production (e.g. Spain, Greece and Italy).



WHAT'S NEXT?

The «Fio Dourado» project is clearly sustainable, not only because it was related with a centennial family activity, but also by its coherence and commitment to a strategy based on productivity and high quality of the final product (olive oil). Fio Dourado, is in an advanced stage to obtain the triple certification for Quality, Environment and Food Safety (ISO 9001, 14001 and 22000, respectively), scheduled for early 2014.

A sign of sustainability was the way the beneficiary handled with the desistence of some growers that initially took part into the Component 1 of the project and then dropped out: not only the investment was adapted (downsized) to this change of context (also motivated by the economic crisis), but also it was possible to capture new producers and customers in order to explore the economies of scale assured by the investment supported by the EAFRD.

Another example of sustainability relates to a second project applied by Fio Dourado, Ltd. to be co-financed by the EAFRD. The project aimed to increase the delivery of olive oil from pomace by creating a new plant for its composting. Despite some administrative constraints related with negative opinions of public bodies which prevented the development of this new project on time, it was possible to find a workaround that involves the direct pumping of pomace from the Fio Dourado's olive mill to a nearby plant where a second extraction of olive oil is made.

Not being into question the sustainability of commercial activity of Fio Dourado, Ltd., it should be recognized that this is an area that needs more work in the future, despite the reduced margins in the olive oil business. In fact, the important investments already made either in the olive mill or in storage, filtering, packaging and shipping facilities might be important to face new challenges in the future, particularly in terms of deepening Fio Dourado's export focus.

Case study on a Portuguese centennial olive mill that has been developing a strategy to modernize the olive oil extraction lines and the additional storage, packaging and commercialization facilities in deep articulation with olive growers and other key partners (row project logic).





SUMMARY

A case study about a Portuguese centennial olive mill that has been developing a strategy to modernize the olive oil extraction lines and the additional storage, packaging and commercialization facilities in collaboration with olive growers and other key partners.

Tips/lessons related to the beneficiary:

At the project inception phase:

- ⇒ A clear strategic vision about what is expected from the activity;
- ⇒ Deep knowledge and experience in the industry;
- ⇒ Strategic partners and consolidated relationships in networks;
- ⇒ Good identification of needs and productive investments already on-going (or realized);
- ⇒ Perseverance, flexibility and ability to overcome obstacles and difficulties.



At the project planning and development phase:

- ⇒ Personal involvement of company managers / administration;
- ⇒ Mobilization of expert consultants and key partners;
- ⇒ Mobilization of past experience in conducting similar investments.

At the project implementation phase:

- ⇒ Permanent attendance of the execution by the managers;
- ⇒ Dedicated project manager;
- ⇒ Adaptation of the project to technological and contextual changes.

Tips/lessons related to managing authorities and other public sector actors:

- ⇒ Do not excessively penalize promoters with very short deadlines for submitting applications in the event of a significant delay in launching the RDP (as happened with RDP 2007-2013 in Portugal);
- ⇒ Consider conveniently every future proposal to amend the conditions of access to EAFRD support, in particular with regard to the legal nature of potential beneficiaries who develop traditional activities typically in family and/or by own account (single entrepreneurs);
- ⇒ Rethinking the model for support innovation through joint projects to ensure greater involvement and commitment of upstream producers, avoiding situations of voluntary renouncement of farmers (or other beneficiaries) that may jeopardize the profitability and sustainability of activities supported by the EAFRD .