

# BEST PRACTICES

***“Cherry cultivation, production, sorting, standardization and marketing, under the rules of integrated crop management, in Rachi Pieria”***

## Institutional information

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Region and Country where the case study took place: **Greece, Region of Central Macedonia,**

**Prefecture/Regional Unit of Pieria, Local Community of Rachi**

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## Summary

### Explain your case in one or two sentences

*Agricultural Cooperative of Rachi Pieria “Agios Loukas” (St. Loukas) is a cooperative enterprise, which was initially founded in 1978 as an informal group of thirty (30) cherry growers who came from the Local Community of Rachi, Pieria, and today counts about 250 members, consisting mainly from cherry producers (210) and growers of other cultivations, as well. The cooperative enterprise is located in the Local Community of Rachi (Pieria, Greece), in privately owned modern facilities equipped with a state-of-the-art machinery, and deals with mass cherry cultivation, harvesting, sorting, standardization, packaging and marketing/promoting of the produced cherries, in a total crop area of 250 ha, which extends in the fields of four different Local Communities of Pieria County.*

*The members/cherry growers of the Cooperative after a long-term testings, cultivate today up to thirteen (13) different cherry varieties, and keep experimenting in the new types, in order to increase the quality of the final product, to offer new capabilities for standardization, to improve the organization of production, to achieve a satisfactory degree of uniformity of the selling cherries and to increase the Cooperative’s turnover, disseminating at the same time their efforts and making their region popular to traders, to farmers, to stakeholders and/or to simply visitors.*

### Background information: How was the situation previous to your actions?

*In the past and before the installation of the cherries, the barren land of Rachi Community was covered with grain crops, with a very low output, because of the serious lack of water. Only the few fertile fields, and specifically those which located close to water (e.g. rivers, streams) and were*

cultivated almost exclusively with tobacco, were giving a remarkable income to the farmers, as this crop was the most profitable in Pieria County during the 70's and 80's decays. Other small sized crops such as vegetables and greens, tree crops and limited in extent vineyards were also active, in order to cover the family needs, but only in land been close to water forms.

In 1979, with a common decision of Larisa and Pieria prefects, and due to the great efforts and pressures of the informal group of growers, which, in the meanwhile was founded, as a Management Committee of Rachi growers, a big water transport pipeline started to be constructed, in order to transfer water from Kokinoplos Larisa to Rachi Pieria, and in the early 1980's the first big water tank was ready to irrigate all the fields o Rachi Community.

It was that year when the Management Committee of Rachi growers decided to install a pilot massive cherry orchard, in an area of 35 ha, in total co-operation and beneath the guidance of the local prefecutual authorities. This initiative was honoured by the Greek Ministry of Agriculture, as a successful pilot project, and turned out to be the beginning of everything.

### **What were the needs you identified?**

*The needs that the cherry growers/members of the cooperative spotted, and were necessary to be covered, had mainly to do with the cultivation methods, in order to:*

- *increase the size of the produced cherries, so the products would become more attractive and competitive to the markets*
- *ensure the uniformity of the size and, if possible, of the taste of the final products and the small alternation of the used cherries varieties*
- *follow the same or similar methods of plant protection and fertilization, under the guidance of specialized agronomists, so the produced cherries won't have pesticide or other residues, above the specified approved limits.*

*Other things that had to be done regarding to the rest sectors of the holistic procedure from the harvesting to selling, were:*

- *the further development of the Management Committee in professional standards*
- *the construction of the infrastructure which would be the cooperative's headquarters*
- *the mechanization and the automation of the production processes (e.g. sorting)*
- *the acquisition of storage ability, in cooperative's infrastructure*
- *thorough market research and finalization of the appropriate cherries varieties, for the region's fields*
- *the solution of small-sized fields and fragmentation of land properties problem, which was making difficult the cultivation and the profit making as well.*

### **What solution you found to cover those needs?**

*As the pilot massive cherry orchard became widely known almost in all over Greek territory, the Management Committee continued to operate with a few members, not well organized and in an amateurish manner. So, the members of the Committee started to participate and to attend national and international exhibitions, workshops and conferences regarding to the rural sector, in order to have an idea of what is new and how a partnership of cultivators, is functioning in other European regions.*

In the same time, and after addressed and consulted to sufficiently qualified agronomist and to stakeholders with long-term experience in cherry crop sector they decided to review the agricultural practices, they used until then, and follow the same updated agriculture practices during all the crop stages, in order to achieve homogeneity of their production with the ultimate goal of standardizing and certifying their products.

The members also, in cooperation with Research Institutes (e.g. Faculty of Agriculture), were determined to reduce the number of cherry varieties, that were coming as proposals to the growers, for the obvious reason that only a few of these varieties were appropriate for the local soil and climate conditions and to define the best ones.

Finally, the problem of land fragmentation, has not been possible to be solved, for example with land reparation, because of the highly variation of the region's relief and the land use categories. So, this problem would be solved only with the attainment of a high level production uniformity.

### **What actions did you take to reach the solution?**

The main actions and measures that the members of the Management Committee of Rachi growers took, in order to manage their exploitations in a massive, proper, modern, profitable and, above all, a sustainable way, were:

- In 1991 Agriculture Cooperative was formally established as a Cooperative Business of Common Purpose and Mutual Benefit, which was renamed and reshaped in 2007, to the AGRICULTURAL COOPERATIVE OF RACHI PIERIA "AGIOS LOUKAS", including almost the absolute majority of the farmers of the Local Community, acting from then on, in professional standards.
- In 1994 the Cooperative constructed a 600 m<sup>2</sup> fruit processing plant, which was partly funded under the framework of "LEADER 1" Community Initiative, where the Agriculture Cooperative included as a beneficiary. This first unit was comprised by a processing unit for the sorting, branding, and packaging of cherries, and a chilling unit, whose total capacity exceeded 200 tn. Today the unit occupies an area of 0,75 ha and is fully equipped with 6 chilling units and a state-of-the-art and fully automated sorting line, beyond the storage space, the calibration machine and the strapping machine, as well.
- From 2004 AGRICULTURAL COOPERATIVE OF RACHI PIERIA "AGIOS LOUKAS" has developed and fully implemented an Integrated Crop Management System, in collaboration with the consulting company "NOVACERT Ltd." The GAP system has been certified by "TUVHELLAS" in according to the national protocols "AGRO 2.1-2.2" and EURERGAP. The integrated management concerns and strictly defines the approved and appropriate agricultural practices in all the stages of cultivation such as: avoiding milling or plowing the fields but only removing of the weeds, avoiding using herbicides and constant monitoring of pesticide spraying and fertilization processes, regulating the proper time and quantity of implementation, and of course complying with the Codes of Good Agriculture Practice.
- In the year 1987, and after suggestions and proposals of agronomists, traders and other stakeholders, the Cooperative's farmers introduced in their agricultural practices the pruning of the cherry trees, which was not common in cherry cultivation and definitely hasn't been used in the cherry crops of Greece, until then. This innovative cultivation experiment, made the big difference in cherries production, as the size of the produced cherries grew bigger and bigger,

*and made them very attractive and competitive in the national and especially in the international market.*

- *From 2017, there is a specialized programme in progress, in collaboration with the Faculty of Agriculture of Aristotelian University of Thessaloniki, which project is to determine and to define the best cherry varieties for the region, so that they will be used exclusively in the future, from the local cherry growers.*
- *Finally, the Cooperative started to disseminate its new operation status and all the additional services, such as sorting, standardizing and packaging by social media networking (e.g. google, facebook, youtube), by participating in national and international exhibitions and conferences, by co-operating with travel agents and by spreading information brochures and newsletters in traders, visitors, stakeholders and other individuals.*

**If any, which partners or other organizations did you involve during the process?**

- 1) Aristotelian University of Thessaloniki – Faculty of Agriculture
- 2) Directorate of Agriculture - Regional Unit of Pieria
- 3) Ministry of Rural Development and Food - Department of Protected Geographical Indication (PGI)
- 4) Certification Body – TUV HELLAS
- 5) Agricultural and Business Consultants - NOVACERT
- 6) Personal Agronomists of the Cooperation

**What were the main problems or difficulties you had to face?**

- 1) *The main problem was the completely lack of any infrastructure, so for example the sorting of the cherries was taking place in the fields, over a simple table, wasted in this way many working hours and plenty of precious time, or there wasn't any possibility to conserve the cherries in the refrigerators, so the transaction with the traders was being done in a hurry and often accompanied with a economical damage.*
- 2) *There wasn't enough national research about the varieties of the cherries, so the Cooperative had to carry out and to fund this research, in co-operation with the Faculty of Agriculture of Aristotelian University of Thessaloniki, and this process cost a lot in time mainly and in money as well, to its members.*
- 3) *There wasn't enough fund, therefore the Co-operation Business proceeded both in a lending procedure from banks and in participating and inclusion to co-funded EU and national programmes, as a beneficiary.*
- 4) *Bureaucracy in all the approving and licensing procedures*
- 5) *A lot of money and time spent, in order to promote and marketing the products.*
- 6) *Serious difficulties that arose from rough weather conditions in specific times, especially from raining in flowering and harvesting time and of course the hail dropping.*

**What is the situation now, after your actions?**

*Today, AGRICULTURAL COOPERATIVE OF RACHI PIERIA “AGIOS LOUKAS” is a very healthy and absolutely sustainable cooperative business, which counts 250 members and cultivates about 250 ha, mainly covered by cherry crops. The cooperative produce, standardize, package,*

*promotes and sells an average of 800 tn of cherries every year, and its turnover amounts to 1.500.000 to 2.000.000 €/year. Is managed by a 5-membered Management Board and employs three permanent employees, one of which is an agronomist. In addition to its usual processes, and in collaboration with other agricultural cooperatives, is running a promoting project, participating in many international exhibitions of Rural Sector. AGRICULTURAL COOPERATIVE OF RACHI PIERIA “AGIOS LOUKAS” sells its production in the native market, but a significant amount is exported to many European Countries and in other Continents as well, specifically to countries such as India, Indonesia, Singapore, Thailand, Malaysia, UAE, and others.*

*AGRICULTURAL COOPERATIVE OF RACHI PIERIA “AGIOS LOUKAS”:*

- has the main responsibility to guide the farmers during the cultivation and inform them for the accepted cultivation methods and the new varieties*
- determines the policy for the product*
- determines the plant protection and nutrition processes and provides to its members all the needed products for the above mentioned processes, and*
- provides all the needed stuff and materials to the members, in order to harvest/collect their production in a proper way.*

#### **Main lessons learned along the way?\***

- 1) Co-operation between Management and members*
- 2) Mutual respect and appreciation*
- 3) Good co-ordination and right selection of actions*
- 4) Patience*
- 5) Experiences*
- 6) The presence of St Loukas protection*

#### **Annex:**

Max 3 Images

Other related resources

## **Photographic Documentation**



**Photo 1:** View of the new sorting line, where the cherries are grading on size and colors



**Photo 2:** The end of sorting line, where the graded and separated cherries, are put canals of similar size



**Photo 3:** Sorted, standardized and packaged cherries, ready for selling



**Photo 4:** A view of the «endless» cherry crops, along the way from Rachi to Cooperative's headquarters