

Successful marketing management and rural development in the Mediterranean: a case study from the Turkish organic sector*

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Abstract. *In recent years, organic farming in the Mediterranean has shown an important growth. In Turkey, organic production started with the demand of European companies interested in traditional Turkish export products. Rapunzel, a German company, has been working on organic projects in Turkey since 1985. Relating to the increasing capacity and the intensive demands for healthy food, in 1989 Rapunzel established in Izmir the first official office with 3 member staff. Today Rapunzel Turkey Project has got more than 870 contracted farmers and 50 member staff, producing more than 70 product categories. In some villages the constructive collaboration between Rapunzel and the organic farmers had the effect to transform the entire village from conventional to organic and all people living in them are involved in activities in order to support, in a conscious way, organic farming. Using a qualitative ethnographic approach using in-depth face-to-face interviews the case study aims: to assess the factors of success of the company, both internal and external; to scrutinise the actual problems faced in the past; to build up its network of relations among the different stakeholders involved; to investigate its impact on the rural development of the region and its influence in the evolution of the domestic market, in order to identify and validate a potentially replicable model for the development of similar initiatives in other Mediterranean countries.*

Keywords: Organic Farming, Rural Development, Case Study, Marketing, Turkey, Mediterranean.

1. Introduction

Increasing awareness and sensitivity regarding health and environmental issues have been driving forces for the development of organic agriculture especially in highly industrialised countries like USA, Japan and European Union.

In Turkey, organic production started with the demand of European companies interested in organically grown crops. *Rapunzel*, a German company, has been working on organic projects in Turkey since 1985. Its first organic farming project in Turkey started with a few farmers in order to produce organic dried sultanas, followed by dried figs some years later.

Relating to the increasing capacity of organic production in Turkey and the intensive demands for healthy food all around the world, in 1989 *Rapunzel* established in Izmir the first official organic agricultural

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office with 3 member staff and 2 employees in the agricultural areas, dealing with project organisation, consulting, promoting the alternative agricultural activities, biological control, and quality control affairs. From the beginning the project has grown constantly, from a total area of 105 hectares in the 1989 to 4,500 hectares in 1999.

Today, *Rapunzel Turkey* has got more than 870 farmers, produces more than 70 product varieties, employees 45 administrative staffs, 6 agriculture engineers, 4 food engineers dealing with purchasing of raw material, processing, storing and eventually selling of the final products.

A distinctive element in *Rapunzel* experience and almost unique in the Mediterranean region is the involvement of entire villages in the organic production. In these villages the constructive collaboration between *Rapunzel* and the organic farmers had the effect to transform the cultivations of the entire village from conventional to organic. They are called *organic village project* and all people living in them are involved in activities in order to support, in a conscious way, organic farming.

Tekelioğlu Village is the first successful example of these projects. This village has been chosen in order to achieve the objectives of the present study for the assessment of the impact of organic farming in rural development.

2. Objectives of the study

The present study has two orders of objectives: the first one, more general, is to give a complete and update picture of organic sector in Turkey and to establish a network relation among stakeholders.

The second order of objective is specifically referred to the case of *Rapunzel Turkey Project (RTP)* and intends to:

- ✓ assess the success factors of the company;
- ✓ analyse the actual problems faced in the past;
- ✓ build up the network of relations among the different stakeholders involved;
- ✓ investigate its impact on rural development of the region and its influence in the evolution of the domestic market;
- ✓ find out a model of good and successful experience.

3. Data and methods

The research strategy followed in this work has been a **case study**, which is defined as a development of detailed, intensive knowledge about a single “case”, or of a small number of related “cases”. Its typical features are represented by: i) the selection of a single case (or a small number of related cases) or of a situation, ii) the study of the case in its context, iii) the collection of information via a range of data collection techniques including observation, interviews and documentary analysis.

Case studies give you the entrée to variables and research questions concerning individual, naturally occurring entities, whether these can be individual people, groups, organisations or whatever. They would normally focus on current events and concerns, and while they can provide theoretical generalisations, e.g. about processes, they do not permit statistical generalisations. Case studies differ from experiments and surveys in that they are inherently *multi-method* (typically involving observation, interviewing and analysis of documents and records).

Therefore, case study is a strategy for doing research, which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence^[1] (Colin, 1993).

The main qualitative data of the present case study come from individual in-depth face-to-face **interviews**, conducted in Turkey during the fieldwork.

Interviews were conducted following some **guidelines** prepared in advance, according to collect information about some general topics identified as relevant for the case study, such as:

- ✓ the history of the company;
- ✓ the nature, extent and significance of the respondent’s relationship with the company;
- ✓ the assessment of the company: respondents views of its strengths, weaknesses and the opportunities and threats it faces; how it achieves its own objectives and its links with other organisations.
- ✓ the role of the company in the development of organic agriculture at local, regional and national level;
- ✓ current and future role of organic agriculture on rural development in the region;
- ✓ the respondent’s assessments of the nature, extent and significance of the company’s links with other stakeholder groups (representing various socio-economic and environmental actors and entities).

According to the directions of these main topics, sample questions have been developed for each stakeholder groups in the guidelines.

Prior to fieldwork a period of **desk research** has been done on the case study area, and an **advisory committee** of key stakeholders involved has been set up in order to contribute to the development of the research, through the identification of key issues, location additional stakeholders and their interests, and indication of important socio-economic and political networks.

The **desk research** prior to fieldwork is designed to serve a number of purposes: first, it establishes a preparatory basis for understanding important local issues and concerns; second, it provides the basis for an initial discussion with the advisory committee; third, it informs the development of interview guidelines for fieldwork; and finally, it acts as a development process, to be added to and augmented in the fieldwork phase itself, where possible, in order to contribute to the process of analysis.

The establishment of an **Advisory Committee (AC)** and the arrangement of the AC meetings is done in order that the local stakeholders, who are professional in the sector, may have a voice and an active role in the research. Stakeholders are essentially all people who matter to a system. Since not every member of a stakeholder group can be included in the study, the key stakeholders need to be defined. The purpose of the AC meetings is to create an opportunity for representatives of key stakeholder groups to guide the research process by giving feedback on the findings and to provide further insights about the company, the external context, other stakeholders, and important issues to be considered.

Fieldwork was realised in Izmir during two months. 42 interviews were realised: 11 representatives from internal stakeholders of *RTP* including the management, workers, contracted farmers, certification body working for *RTP* and co-processor company processing *RTP*'s products; 7 representatives of Institutions and NGOs related to organic farming in Turkey; 2 other certification bodies acting in organic sector; some of the competitors of the company; 3 representatives of specialised shop, restaurant and supermarket; some representatives of the local community.

The analysis of the data consisted of two main steps:

1. the coding of the interview data, a methodical identification of themes, actors and relations emerged during the fieldwork. The coding task was carried out manually on interviews transcripts;
2. the interpretation of the data, essentially aimed at assessing the authenticity of gathered data and relating the collected information to the issues and goals of the research strategy (the case study).

In order to determine the links and connections among the stakeholders involved in organic agriculture in Turkey, **social network analysis** has been used as a method.

Generally, the results of an ethnographic research are relational data, consisting in contacts, ties and connections, which relate one agent to another and cannot be reduced to the properties of the individual agents themselves. Relations are not the properties of agents, but of systems of agents; these relations connect pairs of agent into larger relational systems.

The methods appropriate to relational data are those of network analysis, whereby the relations are treated as expressing the linkages, which run between agents. Network analysis consists of a body of qualitative measures of the network structure^[2] (Scott, 2000).

Relational data are central to the principal concerns of the sociological tradition, with an emphasis upon the investigation of the structure of social action.

Social network analysis emerged as a set of methods for the analysis of social structures, methods that specifically allow an investigation of the relational aspects of these structures.

All social research data, once collected must be held in some kind of data matrix. A data matrix is a table of figures, a pattern of rows and columns drawn on paper. When the data set is large or complex, the data matrix may need to be stored on record cards or in a computer file.

A common framework for social network analysis programs is the mathematical approach of **graph theory**, which provides a formal language for describing networks and their features. Graph theory offers a translation of matrix data into formal concepts and theorems that can be directly related to the substantive features of social networks.

Graph theory concerns sets of elements and the relations among these, the elements being termed **points** and the relations **lines**. Thus, matrix describing the relations among a group of people can be converted into a graph of points connected by lines. The graphic result is named **sociogram**.

Points may be directly connected by a line, or they may be indirectly connected through a sequence of lines. A sequence of lines in a graph is a 'walk', and a walk in which each point and each line are distinct is called a **path**. The **length** of a path is measured by the number of lines that make it up. The **distance** between two points is the length of the shortest path (the geodesic) that connects them.

A central concept in graph theory is that of **density**. It describes the general level of linkage among the points in a graph.

The idea of centrality of individuals and organisations in their social networks was one of the earliest to be pursued by social network analysts. The concept of **point centrality** originated in the sociometric concept of the 'star': the person who is the most popular in his or her group or who stands at the centre of attention. A central point was one which was 'at the centre' of a number of connections, a point with a great many direct contacts with other points.

The simplest way to measure point centrality is by degrees of the various points in the graph. The **degree** is simply the number of other points to which a point is adjacent. A point is central, then, if it has a high degree: the corresponding agent is central in the sense of being well connected.

There is a further concept of point centrality named **betweenness**. This concept measures the extent to which a particular point lies between the various other points in the graph.

Furthermore, a network can be divided in cliques, or cohesive sub-groups. People's informal social relations tied them into cohesive sub-groups that have their own norms, values, orientations and sub-cultures. A **clique** is a sub-set of points in which every possible pair of points is directly connected by a line and a clique is not contained in any other clique^[2] (Scott, 2000).

The conduct of qualitative inquiry is always based on empirical research. Nevertheless, good research is not generated by rigorous data analysis alone. It doesn't stop at the coding and retrieval of data fragments, nor is it exhausted by the formal analysis of narrative structures, semantic relationships, accounting devices or equivalent strategies. It's possible to "go beyond" the data and develop ideas^[3] (Coffey, A. Atkinson P., 1996). Having ideas and theorizing about data are central to the research endeavour, but a crucial issue is that theorizing and theory building are part of the process of analysis and interpretation of qualitative data. Glaser and Strauss, the two sociologists that introduced first this methodology in 1967, consider the **grounded theory** as a general theory of scientific method concerned with the generation, elaboration and validation of social science theory^[4] (Glaser and Strauss, 1967). The general aim of grounded theory is to construct theories in order to understand phenomena. According to the authors, grounded theory is said to emerge inductively from its data source in accordance with the method of "constant comparison". As a method of discovery, the constant comparative method is an amalgam of systematic coding, data analysis and theoretical sampling procedures which enables the researcher to make interpretative sense of much of the diverse patterning in the data by developing theoretical ideas at a higher level of abstraction than the initial data descriptions. Furthermore, Glaser and Strauss hold a dynamic perspective on theory construction: the strategy of comparative analysis for generating theory puts a high emphasis on theory as process; that is theory as an ever-developing entity, not a perfect product. From this point of view, the authors advise to be constantly on the lookout for new perspectives that might help develop the grounded theory.

De Burca & McLaughlin (1996)^[5] has recently proposed grounded theory methodology as a fresh approach in addressing some of the research challenges associated with analysing network of connected interdependent business units.

Connectedness is one of the principal characteristics of a network of business relationships and becomes evident, when we consider the numerous interdependent links such as technology, knowledge, social relations, administrative routines and systems and legal ties. In Social Network Theory language such connectiveness may be represented as centrality and betweenness.

Easton (1995)^[6] suggests that this connectedness leads to profound sampling implications for network researchers. The most important of these implications is concerned with representativeness and inference. Since the units in a network study are connected, they do not satisfy the assumptions of independence and therefore cannot be analysed with ordinary statistical inference. Furthermore, analysing a single network of business relationships, albeit large – as is done in a case-study approach – may retain connectedness but raises the problem of representativeness and of the general applicability of the results.

As^[5] De Burca and Mc Laughlin (1996) illustrate, the grounded theory approach to the concept of connectedness of business relationships and the subsequent sampling implications are primarily considered under the notion of **theoretical sampling**. Theoretical sampling's primary function is to provide the researcher with the opportunity to discover properties of the core variable. As a result, sample size and sampling is determined by the necessity of theoretical coverage, which by definition caters for representativeness and inference but in a different way. Theoretical sampling is the means grounded theorists collect new data to check, fill out and extend their categories. As a result, it has both deductive and inductive aspects to it. **Snowball sampling**, which has been used in this study, is a type of such theoretical sampling: more units are added to the sample until the contribution of new units brought new information on the network analysed. The process stops when the marginal information contained in the extra sampling unit does not increase the overall understanding of the network functioning.

4. Results

4.1. Organic farming in Turkey

In Turkey, the motivation to start organic farming was the demand of European companies interested in organically grown crops. In 1984-85, the first organic productions were realised in the Aegean region by the production of dried fig and grape, which are traditional export products. After a short while, it spread in different regions by the addition of dried apricot and nuts to the production. In 1990 only 8 products were organically produced. After 1990, not only the volume of production but also the product range increased including processed food and non-food commodities. In the late 90s, organic products appeared in the domestic market, first with unsuccessful attempts at supermarkets, followed by specialised healthy food shops in the big cities.

Legal and institutional framework

At the first stage of application, the knowledge on organic farming techniques was initiated by European consultants^[7] (Aksoy et al., 2001). A first national regulation was issued in December 1994 based on EEC Regulation 2092/91 and IFOAM Basic Guidelines. After a revision, the final regulation was issued in July 2002. The overall control of organic farming is given to the Turkish Ministry of Agriculture and Rural Affairs (MARA). A *Committee on Organic*, composed of 12 members of different general directories, secretariat under research, planning and co-ordination, fulfil the duties given to the Ministry. According to the regulation, the inspection and certification bodies need to get authorisation from the Ministry in order to function in Turkey^[7] (Aksoy et al., 2001).

There are seven different control bodies: five of them are Turkish branches of foreign companies and other two are local. Except for one of the local bodies, which acts only for control, all the other have the certification authority.

In 1992, in order to support a healthy and secure development of organic movement in Turkey *ETO* (*Turkish Association on Organic Agriculture*) was established. Members of *ETO* are coming from different parts of the organic community like producer, exporter, researcher and consumer^[8] (Aksoy and Altindisli, 1999).

In 1996, the *Aegean Exporters Union* was assigned as the co-ordinator to collect data about organic production and market.

Production

The organic production showed a rapid increase after 1990 in terms of both volume and product range. In 1990, the area devoted to organic production was 1,037 ha with 8 different products. 20 years later, in 2000, production area reached 61,000 ha with 95 products. In 1990, the number of organic producers was 4,039 and in 2000 it increased to 18,375. According to 2000 data, the biggest part of organically grown crops is still composed of dried fruits and nuts (65.6% of total), followed by field crops (17.5%) and fresh fruits (9.5%).

The major crops in the composition of organic dry and dried fruits are grape, fig, apricot and hazelnut, which are also the main traditional exportation products of Turkey. In 2000, organic apricot production had 51% share in the total apricot production of Turkey, followed by fig (16%), grape (3%) and hazelnut (1%).

Almost the entire Turkish organic production is exported. European countries are the major market and Germany, with a share of more than 50%, is the leading market, followed by USA and other northern European countries. Domestic market development is seen recently by the opening of specialised shops. Further to this initiative, several supermarkets in the big cities are putting organic products on their shelves.

Training and research activities

In Turkey, formal training on organic farming still consists of few courses offered at undergraduate and postgraduate levels at agricultural faculties. The present system that co-ordinates all of the universities under a common authority, the *Higher Education Council*, limits the development of an interdisciplinary curriculum necessary for organic farming. Today, besides the basic related courses as farming systems, biological control, organic fertilisers etc., few courses are offered on organic farming. Related to in-service training, continuous activities are organised as follows:

- ✓ seminars held for the extensionists of 80 provinces in Turkey

- ✓ training courses (two-three weeks) for agronomists organised by *ETO*, the Ministry (MARA) and *Ege University Faculty of Agriculture* (100 agriculture engineers annually).

Till recently, research projects relevant to organic farming were mainly in plant protection and soil fertility aspects. Interdisciplinary research projects on organic farming started in 1990 with a co-operative research work on organic grape growing, followed by a second on organic cherry production. In 1998, a research network was established within the *Ministry of Agriculture and Rural Affairs*. Abstracts of related research-work were collected to form a database, but later on this group has not been very active. A milestone in Turkish organic farming research is represented by the announcement of funds on research on organic farming by the *Turkish Technical and Scientific Council*. Research projects on organic grape growing for drying and fresh market, greenhouse vegetable production (as a demonstration project in Tahtali area) and citrus production are financed under this scheme^[7] (Aksoy *et al.*, 2001). In 1999, the First National Symposium on Organic Farming was organised through the collaboration of *ETO*, *Aegean University* and *Bornova Plant Protection Institute* in order to disseminate research results. Two years later *ETO*, *Mediterranean University* and *Greenhouse and Citrus Research Institute* organised a second symposium.

4.2. Rural development in Turkey

It has been reported that over the last 30 years, and more particularly during the planned development period, which began in 1963, special efforts have been made for rural development in Turkey. In each Five Year Development Planning Period, particular goals and instruments of policy for both agriculture and rural areas development have been specified. Integrated Rural Development Project Approach and some typical rural development projects have also been implemented in line with the targets given in different Five Years Development Plans^[9] (Türkeku, 2001).

The 8th Five Year Development Plan presents objectives, principles and policies regarding rural development and agricultural development: in terms of agricultural development, the basic target is to establish an organised, highly competitive and sustainable agricultural sector, which considers the dimensions of economic, social, environmental and international development as a whole, within the framework of the principle of efficient resources utilisation as a whole. Furthermore, balanced and adequate nutrition of the growing population will be the essential objective, within the framework of the principle regarding food safety. Rural development projects, which take into consideration the participation and responsibility of the producer and that directly provide financing facilities to the producer, shall be set up and implemented. Within the framework of the principle of sustainable development, increasing income and employment by the activation of local potential is the basic objective. In order to achieve this objective, arrangements shall be made to increase the participation of non-governmental organisations in the development process. Necessary technical support shall be given for packaging, preservation and marketing methods through improving agricultural industry. Emphasis shall be placed on irrigation projects together with the services of land consolidation and in-field improving services. In order to increase income of rural population and reduce unemployment, entrepreneurs shall be supported in the areas having local potential such as tourism, handicrafts, animal husbandry and weaving.

4.3. Company profile: main features and figures

Rapunzel Turkey is an independent company, even if *Rapunzel Germany* is its main shareholder with 90% of shares. The plant is located in Oren Izmir (western Turkey) and it processes only organic products.

The first organic farming project of *Rapunzel* in Turkey started at the beginning of the '90s with a few farmers in order to produce organic dried sultanas, followed by dried figs some years later. From then, the project has grown constantly, from a total area of 105 hectares in the 1989 to 4,900 hectares in 2000. Not only organically cultivated area but also the product range of the company (38 in 2000) and the total number of contracted farmers working with *RTP* (730 in 2000) increased. *RTP* organic projects have spread from the Aegean Region to other regions of Turkey: there are projects in the Middle East Region, in Black Sea Region and in East Anatolian Region.

In 1999, *RTP* established a central building in an area of 4,150 m², which includes administrative offices, shock freezing, cooling room, processing, storing area, social facility and purification. *RTP* works with 45 administrative staff, 6 agriculture engineers organising agricultural projects, 3 food engineers and 1 food technician working in processing and quality control departments. The permanent workers are 60, mainly in the processing units; during busy seasons *RTP* accepts temporary workers and their number can reach 150 units.

In 2001, *RTP* obtained the certification in compliance with ISO 9002 and in 2002 that one in compliance with HACCP.

RTP turnover in 2002 was of 6,279,236 €. 26% of the turnover was represented by fig, followed by grape (19%) and apricot (14%). 86% of the turnover comes from foreign markets. *RTP* started its sales in the domestic market in 2000 and two years later they reached 6% of the turnover. The remaining 8% of the turnover derives from the sale of raw materials in the domestic market.

RTP works independently from Rapunzel Germany concerning export in countries that are not in the list of the European company. The main exporting markets for *RTP* are Germany, France and Switzerland.

In terms of production the main products are grape (43% of the total production), fig (21%) and apricot (15%).

The main characteristic of *RTP* is to work on 100% organic products. Production, processing, storage, marketing, advisory and consultancy services, research and development projects are its main business activities.

Production is carried out by contracted farming and *RTP* gives consultancy to the farmers. Consultancy includes training and education seminars regarding organic agriculture in general and some special subjects important for the farmers, such as composting. During production, necessary inputs are obtained by *RTP* and the agriculture engineers of the company follow their application in the fields. In addition, *RTP* gives advisory and consultancy services to other foreign or domestic organic companies, organisations or people.

RTP is also involved in research and development projects. For this purpose, it has collaboration with foreign and domestic research centres, organisations and institutions. A project on apricot, for example is carried out with *FIBL* and another research, dealing with yield comparison between organic and conventional vineyards, is carried out in collaboration with *Aegean University, Bornova Plant Protection Research Centre* and *Turkish Technical and Scientific Council*.

4.4. Multi-perspective history of *RTP*

RTP is known as one of the most influential pioneer in the development of the organic sector in Turkey. The development of the company is connected with people who completely believe in organic philosophy. Atila Ertem, the general manger of *RTP*, and Tunç Kolatan, agricultural projects and commercial management team leader of *RTP*, are the first two persons who were involved in *RTP* from the beginning. Thanks to the collaboration of other actors and the position Turkey gained in organic market with its production, *RTP* has achieved its present successful situation.

"I met Rapunzel and organic agriculture in 1986. I couldn't forbid my curiosity and interest about organic agriculture to myself. For this reason except my official working periods in Manisa Viticulture Research Centre, I worked for Rapunzel on organic agriculture. Finally I resigned and concentrated only on RTP." (**Atila Ertem, RTP**)

Atila Ertem had the first contact with Rapunzel in September 1986. In the research centre where he worked his main subject was plant protection and chemical solutions for plant diseases and wild plants. So, this background was crucial to understand the importance of organic agriculture and the negative impacts of chemicals on both human health and nature. In 1986, he devoted his spare time to organic agriculture and Rapunzel. In that year the first organic production project started. The project involved 11 grape producers. After the transition period, first organic products were harvested in 1989, as 120 tons of organic grape.

Another milestone in the history of *RTP* was the first contact with Tekelioğlu Village in 1988. Atila Ertem wanted to increase production and product range from the beginning of his commitment in *RTP*. He looked for the possibility to carry on organic projects in the village. Tekelioglu Village is located in the west of the Aegean Region of Turkey. Sesame, legumes, cereals and some other products are the major products produced in Tekelioglu. The village was suitable for organic production with its diversified and important products for exportation. Atila Ertem talked to the mayor of the village in order to introduce organic agriculture to all farmers and organise their production for Rapunzel.

"Atila Ertem came to the village in 1988. He organised meeting to describe organic agriculture philosophy. He caught our attention about most relevant point for us: money. He told us that we would earn a lot of money with organic products. Me and some other farmers didn't believe him. According to us he was lying and he couldn't have paid price difference of about 35-45% that he offered." (**Muttalip Börekçigil, Contracted farmer of RTP**)

After the first contact, a few farmers accepted to produce organic products for Atila Ertem - Rapunzel. One year later, these farmers sold their products and took money as it was promised them. This situation

created reliable conditions for other farmers and they started to convert organic production. The village has been applying organic agriculture and selling products to RTP since that contact.

“Our relation with Atila Ertem is based on trust. We trust Atila Ertem himself. We know that he will pay our money in any case. Now, his company is well-developed and it is more strong but still now in our dialogs we use name of Atila Ertem instead of RTP.” (Muttalip Börekçigil, Contracted farmer of RTP)

“RTP gave trust to the farmers and paid their money on time. It was the most important success factor of RTP.” (Tamer Sever, BCS)

In 1989, Atila Ertem resigned from the research centre and concentrated only on Rapunzel and organic agriculture. There were two main aims for him at the beginning: the development of organic agriculture in Turkey and the enlargement of RTP. So, RTP started to increase its production and product range. Of course the main difficulty was to be able to persuade farmers about organic production because they were told about importance and advantages of chemicals for a long time. People needed to understand that organic production system can work and they can earn money. According to Atila Ertem the best method to convince farmers was to show them that organic could be a valid and alternative production method. So, he applied organic agriculture techniques in his own land and showed people that it worked.

“I bought a land in Manisa and established an organic farm with my transfer payment to Rapunzel to be able to show farmers that it worked. I did all these things with 2 agriculture engineers who are still working for RTP. If RTP have achieved an important level today, it is because of its actions not because of its words.” (Atila Ertem, RTP)

Another important actor in the development of RTP is Tunç Kolatan who was involved in RTP for more than 12 years. When he joined RTP, he didn't have any idea about organic agriculture. This new production method was not known in Turkey and starting this kind of job represented a risk for him.

“When I met Atila Ertem, RTP was not established officially yet and its activity was done under an old company called Mustafa Haydar Nazi. Although I am an agriculture engineer I was working in a bank. I was not satisfied of my job and I accepted to work with Atila Ertem who needed people to work with him. So I entered into the organic world. My motivation to continue in this job was to earn money thanks to organic agriculture which has an important philosophy.” (Tunç Kolatan, RTP)

Atila Ertem and Tunç Kolatan established RTP officially in 1991. Rapunzel Liaison Office was established in order to give education and consulting services to farmers.

One of the important problems RTP had to face was the lack of researches on organic agriculture in universities and research centers. Even in governmental context there was no frame in order to give support to organic agriculture.

“There were no ready information or researches in those years and they were the most important requirement for us. We wanted to do some research projects to be able to solve problems but except a few researchers from universities we couldn't find any support. Unfortunately there was also no support coming from government.” (Atila Ertem, RTP)

Another constraint in those years was the accessibility of organic inputs. There were commercial handicaps to import them and the management of RTP tried to have them from abroad in any way.

“Until 1995, it wasn't possible to find the inputs for organic farming. We were obliged to bring them by ourselves in our bags while we returning from foreign countries. Today accessibility of necessary inputs is better but it is still not enough to meet all requirement.” (Atila Ertem, RTP)

In 1992, RTP was one of the actors in the establishment of Turkish Association on Organic Agriculture (ETO). It was an important step for the development of organic agriculture in Turkey.

“ETO is a non-commercial organisation with the aim to support healthy and secure development of organic agriculture in Turkey. Members of ETO are representatives of producers, researchers, exporters, certification bodies and consumers. It tries to be like an IFOAM for Turkey.” (Ahmet Altındışli, ETO)

In 1996, the Turkish Ministry of Agriculture and Rural Affairs (MARA) and ETO started to organise education seminars and courses about organic agriculture in collaboration with Aegean University. These courses were oriented on technical staff of the ministry in different regions, agriculture engineers working in private sector, new graduated or unemployed. RTP had an active role in this initiative, supporting the courses with some lectures.

“ETO gave importance to education programs and projects regarding organic agriculture. Since its institution, it has been carrying on training activities in collaboration with different organisations, universities, government and private companies.” (Uygun Aksoy, Aegean University)

“RTP gave supports to the organic agriculture courses and, after the establishment of its processing plant, technical trips were organised there.” (Azmi Akbaytürk, MARA)

In 1997, the exporting company Rapunzel Organik Ltd. was established in Izmir and by this way RTP started to manage its own purchasing, storage and processing beside consultancy services.

In 1998 RTP entered into domestic market in Turkey with its first sales to natural product shops (specialised shops) followed by some supermarkets.

“The attempt of RTP in domestic market is another feature, which have positive impacts on development of organic farming in Turkey.” (Uygun Aksoy, Aegean University)

“Attempts to enhance the domestic market show that RTP was not only established in order to meet demands of Germany or other countries. Today in supermarkets and specialized shops it is possible to find RTP products even if product range is still limited to exportation products.” (Ramazan Ayan, ECOCERT).

In 1999, RTP established its plant in Izmir: a 4,150 m² area includes administrative offices, shock freezing, cooling room, processing, storing area, social facility and purification.

“The origin of the company is German but investments in Turkey and the establishment of the plant created new work opportunities to local people and economic input to the country.” (Uygun Aksoy, Aegean University)

Plant experience was new for RTP and it had to face some difficulties. Organisation of different departments and division of responsibilities among people were the main problems of the company management.

“In the company there were some problems due to the lack of plant experience at the beginning. For instance, in some departments responsibilities were given to people who couldn't fulfil them. The problems were passed by education of the staff and sometimes by trial and error method.” (Emin Turgut, Ex employee of RTP)

“In the past there were some problems about the organisation of departments. Many changes were made because of lack of experiences. For example responsibility of the Purchasing Unit was given to different departments. Today everything is more stable and well organised.” (Serpil Doğan, Ex employee of RTP)

Before the establishment of its own plant, RTP worked for all kind of products with other co-processor companies. Today, there is still collaboration with co-processor companies, but product range processed in the plant is increasing. The establishment of the new plant with good facilities represents an advantage of RTP in order to obtain processed products with high quality.

In order to get use from the advantages of the new plant, RTP gave great importance to the education of its staff working inside the plant and in the field. Besides the education, the opinion of employees and workers were important in order to improve quality of the work. The general environment of the plant is already beautiful and inside the plant RTP succeeded in creating democratic and relaxing working conditions for all its staff.

“Education seminars are organised in RTP for us and we learn a lot of things. Beside general information about organic agriculture, some of us improved about special subjects. For example, we learned to use computer and took some responsibilities, which need computer skill.” (Workers of RTP)

“I didn't have any work experience before working RTP and I was afraid that I can't be successful. For the time being, everybody encouraged me in RTP and I learned a lot of things. Now, I know my work very well and I feel relaxed.” (Nilgün Gürbüz, RTP)

“You have chance to improve yourself in RTP. If you are interested in a special subject RTP gives you a chance to learn more. For example, I wondered about organic apricot production, especially its drying period. RTP sent me to Malatya in order to see apricot production.” (Ferah Koyun, RTP)

The certificate in compliance with ISO 9002, obtained by RTP in 2001, represents an important step in the organisation of work.

“After ISO certificate, everything in the work was clearer than before and well determined. Everybody knows his or her role very well and everything is planned as annually, monthly and weekly.” (Mine Öner, RTP)

One of the main issues in RTP is to be able to achieve high quality products with good agricultural projects and processing lines. For this purpose, RTP developed internal control system and in 2002, HACCP system started in RTP.

“RTP has its own working style and philosophy. It means that RTP not only applies rules written in the regulations in order to get certificate but also it controls itself according to its own control system to have high quality products.” (Mine Öner, RTP)

Internal control system, which starts in the field with consultancy services to the farmers and continues in the plant and in other co-processor companies during processing of RTP products, is undoubtedly a crucial and positive element for the company image but, at the same time, it generates high costs reflecting on final prices. This situation represents a disadvantage in the market, but the company doesn't want to change its philosophy. According to RTP, every company in the sector should try to obtain high quality production. By this way it can be possible to increase the standards and fair competition in the sector.

“RTP presents some advantages that become, at the same time, economic disadvantages for the company. For example, it makes many additional analyses apart from that ones necessary for the certification. On

the other hand it has well-educated technical staff and this kind of investment on human resources increases costs.” (Serpil Doğan, Ex worker of RTP)

In 2003, RTP started to build a new building that includes an additional cooling room, processing units and administrative staff offices.

“We are very happy that RTP will establish a new plant and it will create new work opportunity.” (Workers of RTP)

Besides processing and commercial activities, today RTP goes on in considering among its priorities the research and development projects, consultancy services to other companies, the implementation of other organic village projects.

“RTP is one of the first companies, which started to organic production and it has accumulated knowledge and experiences. Consultancy services of RTP are important from this point of view.” (Uygun Aksoy, Aegean University)

“Research and new scientific developments are important for RTP. It doesn’t escape from the investments on research projects. Such being the case, besides improving itself it contributes to improve organic agriculture in general.” (M. Tolga İllez, IMO)

Future aims of RTP are to find new markets and to increase production. Also it intends to continue to sell organic products in the domestic market. In order to achieve these aims, RTP attends national and international fairs to reach consumer directly.

4.5. Impact of RTP on rural development

The impact of RTP on rural development is essentially assessed referring to Tekelioğlu Village and the nearby region. Tekelioğlu is located in the west of the Aegean Region of Turkey. It is 18 km far from Salihli county of Manisa province. There are 115 houses with a total population of 376. The Marmara Lake occupies the north side of the village. In 1960, a building for the primary school was established. Today there are 37 students continuing this school and 21 students going to the secondary school in another village.

About 150 years ago, 7 families came and started to live in the village. At the beginning of settled life, families lived in tents and feed animals in order to sustain their life. For the time being, they established houses and started to practice agriculture. Also fishing became popular and it took place as one of the most important way of maintaining life after agriculture and animals.

The main agricultural productions in the village are sesame, grape, wheat, chickpea, barley, cotton, maize and tobacco. Cows and sheep are the animals bred by families for maintaining their own needs and earning money from their products.

The village is very near to the antic remains of Lydian times. Around the village there are tumulus called *One Thousand Hills*, which represent an attraction site for tourists.

The evaluation of RTP impact on rural development has been carried out by assessing its performance against a range of selected indicators, seen as relevant in the investigated context, related to the key dimensions of rural development: the socio-economic and the environmental one.

Since RTP activities started in Turkey, the company had a great impact on the local economy through the creation of employment opportunities. It is known that at the beginning only few employees and producers were involved in the business. The continuous development of the projects and the establishment of the plant gave work opportunity to local people. In fact, the houses of most of the workers are only 15 minutes far from the company building. The impact of RTP on local employment is going to grow even in the future because of the investment of RTP in a new plant.

RTP not only contributes to enhance local employment opportunities, but also makes healthy and safe working conditions possible to its workers. In fact, its present building is a new and well built one. It is located in a silent large area with a nice garden. All employees interviewed are satisfied with their job and the working atmosphere, which is friendly, clean and beautiful.

“I like working conditions and relations among people here and sometimes I don’t want to go home. During busy seasons starting in September, we work more than normal time and we have to stay in the plant for a long time. If in each season we have to work like in the busy seasons, I will not complain.” (Nilgün Gürbüz, Worker of RTP).

RTP contributes also to improve economic conditions of employees and farmers of the region thanks to its policy to guarantee a high premium price to contracted farmers. This activity has assumed a high income to farmers. In recent years, even if the premium price for organic production decreased, due to the increasing production volume, farmers are still satisfied having a guarantee market.

The improved welfare of farmers of Tekelioğlu is a real indicator of RTP contribution to the socio-economic conditions of local people. Today, each house of the village has at least television, washing machine, and telephone.

Visiting the village, you are attracted by children who don't work in the field, but play in the streets, even with new and expensive model of bicycle or other toys. A little park in the village, near the school, has been set up in order to let them play in security.

"I have been working in Tekelioğlu Village for 2 years. I can't tell the differences between before and after RTP involvement in the village but I am from this region and I know some other villages. When I make comparison among them it is obvious that economic situation of Tekelioğlu village is better than the others. This situation is reflecting from the students in the village school. Necessary tools for lectures are complete and they can buy from the village shop whatever they want. Until now I didn't meet any problem related to children because of lack of money." **(Ramazan Aydoğan, Teacher in Tekelioğlu Village)**

These good contributions to the improvement of life standards have been a further motivation to induce people not to abandon the countryside. Apart from few families in the past, because they didn't have land, there is no immigration to near cities.

"If someone can't sustain his life in the village how it can be possible in the cities? We have everything here and life is cheaper in the village than in the city for us." **(Kerim Sezen, Contracted farmer of RTP)**

Compared to other villages in the region, Tekelioğlu appears in a more attractive way. Arriving from the main road, it is possible to notice two ordered lines of trees on both sides of the road. They were planted in a good order by the inhabitants with the collaboration and the economic support of RTP. Entering into the village, it is possible to notice that the houses are well built and have a nice view. Of course the presence of the lake and the combination with agricultural and green areas creates a special view of the village, but the care of the inhabitants for their properties is evident. One of the farmers established a new well built house on the coast of the lake thanks to Atila Ertem.

"Atila Ertem persuaded me to build a new house here because, according to him we were very lucky having this wonderful lake and environment. So, we should use this chance by protecting first and then establishing good houses for ourselves. I built the house and I prepared a separated room for him in case he wants to share this view with us." **(Muttalip Börekgiril, Contracted farmer of RTP)**

Another important change in the village life, started with organic agriculture activities and the presence of RTP, is represented by the diversification of the activities. On the main road leading to the village, RTP put a signboard indicating Tekelioğlu as an "organic village". This signboard attracts the attention of tourists who visit near historical remains. They come to see the village and try to have contact with local people.

Inhabitants of the village are used to see new people and they are helpful to their needs. After organic farming projects with RTP, visitors of the village increased in terms of both foreign and domestic. For example, each year visitors from Europe come to the village and stay some days in the houses of the farmers. These visitors are the representatives of the companies that buy products from RTP. Also some tourists come by themselves while they visit the historical places nearby. The involvement of RTP in research and development projects gives also the opportunity to Turkish people to see and visit the village.

"Our village is the first organic village project of RTP. So, from the beginning it was attractive for all interested people. We are very famous not only in Turkey but also in Europe." **(Yusuf Kaygisiz, Tekelioğlu village)**

"After meeting many tourists my sister started to be interested with foreign languages. Now, she wants to be an English teacher." **(Muttalip Börekgiril, Contracted farmer of RTP)**

The company organises also some farmers exchange programs that give farmers the chance to see different domestic or foreign experiences. For instance, some of the farmers visited organic farms in Italy thanks to RTP.

The introduction of new crops in the village gives farmers the opportunity to improve their agricultural knowledge, skills and experiences. The organisation of training courses on organic agriculture and on some specific subjects are an indicator of the real involvement and participation of farmers to these new activities.

A participatory approach has always been followed by the company. Farmers are involved in any decision regarding the production aspects, the technological innovations, the village life. On the wall of the main building of the village a blackboard gathers all kind of information and all the main events day by day: everyone can feel part of a community, acting for a common aim. Meetings are organised periodically.

RTP not only persuaded people to convert to organic production but it also helped directly the village by supporting the establishment of the main village buildings -included a medical service room, the mayor room, RTP village office, a shop-, the construction of the canalisation system of the village and offering all the chairs for the wedding saloon. The company offered also a computer for the primary school.

Tekelioğlu Village has been the first and the most important organic village project of *RTP*. This successful experience attracted the attention of other villages nearby, enhancing the conversion rate of the area but also giving other villages idea for other similar projects.

In terms of environmental effects, the visual impact of the premises in the village is obvious. Trees planted in a good order on both side of the main village road, big bird nests and different birds around the lake, new orchards are clear pictures showing healthy and beautiful environmental conditions.

RTP and farmers together decided to install a common compost plant and to buy also a new machine for composting. This initiative allows recycling the village wastes and using compost in the field.

4.6. Assessment of the company

RTP and his leader have been forerunner of organic farming in Turkey in most aspects: techniques experimenting, processing activities, penetration of domestic market, organic institutions networking, integration of organic farming with an area-based rural development project. The conversion of entire villages, rather than farmers spread in different areas, gives the company the opportunity to establish a strict link with the territory and to contribute to improve the sense of belonging of everyone to the project.

The successful elements of this experience can be summarised as follows:

- ✓ the manager's personality: pioneering, committed, reliable, open minded;
- ✓ the reliable relations with farmers based on trust, care for their training and advisory service, payment always on time;
- ✓ the democratic and participatory attitude of the management, which contributes to create a relaxing working atmosphere and a great involvement of all the staff in the company affairs;
- ✓ the engagement in research and development projects, in order to find solutions for local problems;
- ✓ the establishment of good relations with institutions and NGOs: ministry, university, research centre, exporter union, associations (as the social network analysis will show).

RTP has contributed to develop the organic sector in Turkey in several ways:

- ✓ expanding the number of farmers converted to organic and the range of products;
- ✓ promoting the establishment of ETO, an umbrella organisation created in 1992. It can be considered a bridge among all the stakeholders involved in the sector and the flow of information regarding organic agriculture. It had an important role in the first national regulation issue and continues to have a crucial voice in the debate with the public authorities for the future development of the sector;
- ✓ improving quality of life in the rural areas of Turkey, supporting new infrastructures and services to population;
- ✓ developing domestic market rather than remaining only an export oriented company. Today, in 22 out of 81 provinces of Turkey *RTP* sales its products through different channels: specialised shops, supermarkets, hotels, restaurants, beauty centres and the point of sale inside the company.

The most relevant relations linking the different stakeholders interviewed during the fieldwork have been analysed through the tool offered by the Social Network Analysis (SNA). For this purpose, data have been organized in a *binary collaboration matrix*, indicating with '1' in the corresponding cell of the matrix the existence of a sort of collaboration between the agents and with '0' a non collaboration. 18 actors have been identified, corresponding to the institutions or entities all the respondents belong to.

The main results of the SNA are the following:

- ✓ MARA and ETO present the highest degree of centrality (76.471), followed by *RTP* (70.588) and Aegean University (64.706). This confirms the central role of *RTP* in the network but, at the same time, it gives some evidence of the centrality of public institutions in the organic sector.
- ✓ the network is well connected: in fact the average distance found is 1.719 and the maximum number of edges in the shortest path between two agents is 3.
- ✓ according to a density matrix, constructed in order to find the *core actors* of the network, *RTP*, ETO, the University, the Research Center, MARA, the Exporters Union and two of the competitors of *RTP* –Good Food Foundation and Isik Tarim- are the central actors of this network. The density index (the possibility the actors have to reach each other directly) for them is 79%. This index is of 38% regarding their relations with the second group formed by all the other component of the network. The density index for this last group is of 13%, showing their peripheral position in the network.
- ✓ 19 cliques have been found. This means that no dominant clique does exist in this network and all the actors are linked among them. In details, analysis shows that MARA, University and ETO is the basic sub-group at which all the other actors linked themselves.

The descriptive result of SNA is the following sociogram in which all the relations among the stakeholders are drawn.

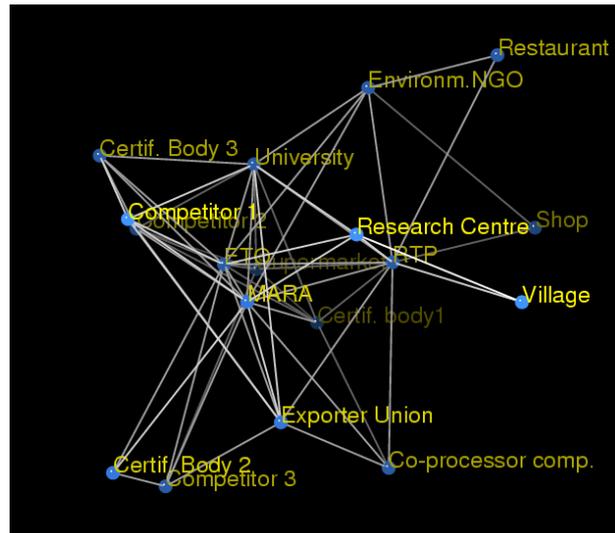


Figure 1. Sociogram of the network

Conclusions

The motivation at the base of the concepts of organic farming and rural development share a similar vision of agriculture and of its role in local development processes.

Through rural development, agriculture moves beyond modernization. Multifunctionality and diversity become of central significance for the growth of rural economies, together with the creation of alternative sources of income and a better rewarding of farmers for the range of services they provided, including countryside and rural heritage.

In the case of Rapunzel Turkey Project (RTP), the choice of organic farming, which is essentially a life long project, is formed by an alternative vision of agricultural work and of rural life rather than by business goals and market opportunities. Market success has been achieved indeed, primarily thanks to the entrepreneurship and dedication of its leader, always supported by trusted people sharing the same values, difficulties and success.

RTP has largely contributed to preserve and improve local rural landscape. The diffusion of organic farming methods in the area, adopted after RTP example, is an important indicator of this contribution.

Thanks to RTP, many families have been kept on the land, living in very good conditions. Many young people found interest in improving their knowledge, apart from agriculture, but remaining in their village. The possibility to diversify the village activities and to open to tourist and foreign people is a precious occasion to improve welfare and knowledge.

The exchange programs with other farmers give the opportunity for people living in a village of rural Turkey to be in contact with different habits and customs, to know people from abroad, to be more open minded.

The farmers taking training courses and advisory services from the company find a chance to improve their agricultural knowledge. Besides agricultural practices to be aware and informed about organic farming philosophy in general, has had effect to continue to practice organic production in a conscious way. Farmers understand the importance of their local values and, by sharing experiences with local community, they become important communicants for the dissemination of organic farming in the region. Even if at present, the presence of RTP is undoubtedly very strong (everything has to be approved by Atila Ertem or RTP) this could be considered an obligatory step in a long-term process in which the local identity of the village will be able to act independently.

Self-development of RTP in order to achieve its targets related to organic farming has had a strong impact on organic sector in Turkey. The involvement of the company in the institutional frame, with its active role in the Turkish Association on Organic Agriculture (ETO) has created an area in order to share its experiences with all stakeholders involved in the sector and capable to have a strong voice in the institutional context to defend its own interests.

Research and development projects of RTP, carried out in collaboration with different institutions, give a great contribution to find solutions for local problems and understand local conditions.

The entrance of the company into domestic market and the involvement in activities related to find a way to reach domestic consumers, show that RTP is eager and committed to enhance organic farming at national level.

In Turkey, the initial framework of organic farming was developed by the private companies through specific projects and contracted farming system. The experience shows that, in order to have a further development of the sector, this first approach needs the contribution and the support of the governmental institutions. The results of this case study show that the role of the public sector is crucial in the network of relations of the stakeholders and it can be considered a successful element in drawing a model for other countries.

Even if the recommendations for other Mediterranean countries could be different, according to the specific situation of each country, the model of Turkish organic farming should be considered as an example for countries that are at their earlier stages of development of organic farming. Specific measures including training, research, advertisement and promotion activities for consumers and foreign markets, development of domestic market parallel to the export market and support for the farmers, organic inputs and basic commodities for the domestic market could be essential elements in a successful development policy of the sector.

The success of organic farming and its integration with different activities can be crucial for the benefit of the environment and the sustainable development of the rural areas.

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