



# *Sustainable farming of herbs and honey in C.A. Rosetti*

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*Building up an organic farming, marketing and sales  
cooperative on a local basis.*

Project proposal

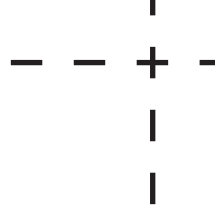
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# 1. Project profile

<b><i>C.A. Rosetti Herbs&amp;Honey: Building up an organic farming, marketing and sales cooperative on a local basis.</i></b>	
<i>Objectives</i>	<ul style="list-style-type: none"> <li>- establishing sustainable organic farming of herbs and honey in the municipality</li> <li>- generate a form of long-time occupation</li> <li>- create a regional brand to increase the level of the municipality's awareness inside and outside of the region</li> </ul>
<i>Description</i>	The project aims to give an impulse for the future agricultural usage of the surface of the municipality of C.A. Rosetti to enable a new economic, social and ecological perspective of the rural region. By the cultivation of herbs and honey within a local cooperative and the subsequent marketing and sales activities, there should be ensured a sustainable and resilient path of development.
<i>Target area</i>	- Municipality of C.A. Rosetti
<i>Target group</i>	- Population of C.A. Rosetti
<i>Project partner / Stakeholder</i>	<ul style="list-style-type: none"> <li>- Local administration</li> <li>- Planning team with spatial planning specialists from Austria and Romania</li> <li>- Local farmers &amp; households</li> <li>- Interested other inhabitants</li> <li>- Various public and private stakeholder concerned with organic farming and beekeeping like associations and NGOs</li> </ul>
<i>Project Costs (Investments)</i>	- ~35.000€
<i>Financing</i>	<ul style="list-style-type: none"> <li>- Crowdfunding: ~10.000€</li> <li>- Crowdlending: ~5.000€</li> <li>- EU Funding: ~20.000€</li> </ul>

## 2. Introduction

The municipality of C.A. Rosetti is situated in the region of the Danube Delta in the north of the town Sulina and between two of the three main canals of the Danube in the Delta. Basically, it consists of 5 different villages: Periprava in the north, Letea in the west, Sîștofca and Cardon in the east and the village of C.A. Rosetti in the middle. It is located in one of the most remote areas within the European Union and therefore threatened by severe emigration of people. Lacking suitable occupation opportunities and education are the main reasons for this negative development.

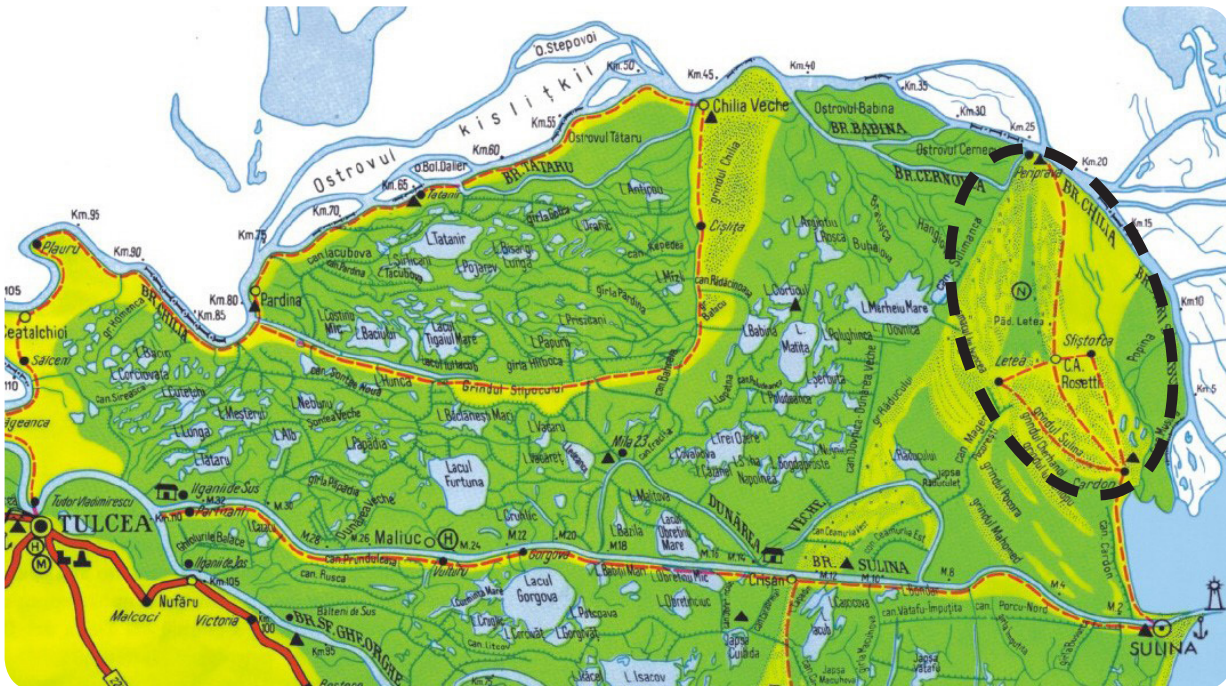
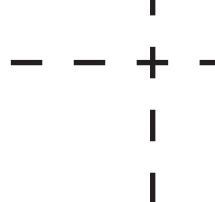


Figure 1: Map of C.A. Rosetti in the context of Tulcea and Sulina.  
Source: Marius Voica 2014.

To face these problems, the project *C.A. Rosetti Herbs&Honey* is trying to install occupation, regional awareness and organic farming methods in the municipality through the establishment of an agricultural production, marketing and sales cooperative for herbal products and honey. This project outline aims to give an impression of the possible procedure and emphasis for the idea and should be seen as proposal. First, there will be given an overview on the current situation for organic agriculture and cooperatives in peripheral area as well as on the special preconditions in C.A. Rosetti. Then the project description is being presented including main objectives, functional structure, possible project partners, the implementation plan and financing possibilities. Finally, the possible threats and effects through the realization of the project which give an outlook on the possible development of the municipality are enlisted and described.



### 3. Project background

#### 3.1. The role of agriculture for the Sustainable Regional Development

According to the *European Commission*, the objective of EU funding programs for peripheral areas is inter alia to support rural regions in their capability of agricultural production, the preservation of the present natural resources as well as the security of employment (cf. 1999 in Knickel 2002: 36). Thus, agricultural development and specialization can empower peripher regions and enable spatial and social trickling down effects. It can be a chance for a regional society. Its functions are variable, but can be summarized as follows:

- + income security and employment
- + environmental protection and biospherical diversification
- + living environment and recreation qualities
- + basic supply
- + cultivated landscape and regional identity

(cf. Knickel 2002: 38f)

Despite its opportunities and chances, agriculture in developing regions tendentially is more vulnerable to changes because of local preconditions. The *United Nations* have defined four major challenges which are worth considering in this context:

##### + *Small producers*

The agricultural structures of developing regions often are operating at rather small scale. Therefore the producers are vulnerable to unexpected price changes and dispose of smaller quantities of produce for sale as well as amounts of capital. On the other hand thus they are much more resilient and able to react to transformations in a flexible way.

##### + *Seasonality*

Due to seasonality of the agricultural production, the output time is dependent on seasons and in Europe usually takes place once at a particular time of the year. special demands in labour and machinery rental markets are preexisting. Also the eventual need for credit to bridge gaps between receipts and expenditures is a factor that has to be calculated.

##### + *Spatial dispersion*

The geographical immobility of land has an influence on the spatial dispersion of agricultural production areas. This can cause higher monetary and time costs in transport, travel and information bound factors.

##### + *Risk and uncertainty*

The agricultural sector itself is characterized by various risks which especially affect lower-income and agriculture dominated economies. Yield and market prices are embedded into the globalized market and therefore can change unforeseenly, for example due to weather and speculation. Output prices therefore can vary.

(cf. *United Nations 1991: 17f*)

All four topics do apply for the municipality of C.A. Rosetti, due to its structural weakness. In the project, they have to be taken into consideration for they can be a true threat for its realization and/or for its longterm existence in future.

### 3.2. Organic agriculture in Romania

The consciousness for organic agriculture and farming has spread world wide, as well as the consumption of organic produced food products is increasing. It can be assumed that the usage of the concept is also increasing the value of a product. Globally, in the year of 2006, there were 31 millions of hectares in more than 120 countries farmed with the sustainable farming method. The organic farming of herbal products is described with 0,5% of the total size of all organic farmed available surface in Europe. (cf. Adam et al. 2009: 525f)

In Romania, the total organic agricultural area is 288.261 hectares which are allocated of 15.423 organic operators. Since 2004, an inspection and certification organisation called *SC Ecoinspect* is operating. In cooperation, there have been several control bodies established. Farmers which use organic methods, can receive a conversion subsidy after the Governments's decision 759/2010 from the year of 2010. One risk for the project could be that there is yet little awarness of customers for organic quality products in Romania. (cf. IFOAM online 2014)



Figure 2: Romanian label for organic produced products.  
Source: <http://www.madr.ro/docs/agricultura/agricultura-ecologica/ae2009.jpg>, 11.12.2014.

### 3.3. Framework of agricultural cooperatives in Romania

According to Dincu et al., „Agricultural cooperatives can be a significant pillar of the development of the Romanian economy [...]” (2013: 372). They often build up a structural framework in which products and services are established which otherwise would be unavailable and help enabling small agricultural structures since they prevent monopoly processing of agricultural products. Through established services, the farmers have access to technical, legal and economic know-how and due to its organizational structure, even small family farms can contribute and thus benefit from a cooperative. Besides, applying for EU funds is easier and more efficient within the framework of a cooperative. The different functions of cooperatives can range from interest representation, purchasing, selling and marketing to credit services. (cf. Dincu et al. 2013: 374f) In general, there can be distinguished three basic principles when talking about cooperatives:

- + *The User-Owner Principle*: The cooperative is owned by the people who use it.
- + *The User-Control Principle*: The cooperative is controlled by the people who use it.
- + *The User-Benefits Principle*: The benefits generated by the cooperative accrue to its users on the basis of their use.

(cf. Dunn et al. 2002: 1)

Dunn et al. further conclude: „A cooperative is a business that is owned and controlled by the people who use its services and whose benefits (services received and earnings allocations) are shared by the users on the basis of use.” (ibid)

The Romanian context concerning cooperatives is heavily shaped by its recent history. There have been disbanded a lot of agricultural cooperatives (*cooperativa agricola de productie*) which operated in the socialist system during 1991-92 and their land has been converted in private these days. Nevertheless there are still existing many informal farmers' associations due to their economic security framework. They are preferably organized within at a smaller scale. (cf. Gardner et al. 2006: 8ff)

### 3.4. Social preconditions in C.A. Rosetti



#### Population loss

The municipality of C.A. Rosetti has lost until this day over 40% of its population since the year of 1990. The number of locals has diminished from 1.438 to 839 recently. Many people are leaving the village for job opportunities in the next bigger cities like the close-by Sulina or Tulcea. The population development of the whole Tulcea district involving the whole Delta Danube Region is negative as well, but during the last 24 years the loss added up to 13% which is not as dramatic compared to C.A. Rosetti's. There particularly are employment and education opportunities lacking which might be the major cause for the problem.

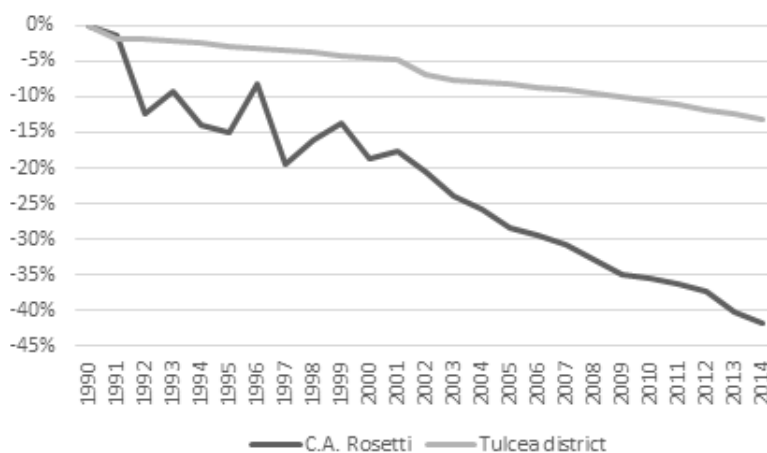


Figure 3: Development of C.A. Rosetti's and Tulcea's population in percentage.  
Source: National Institute of Statistics Romania, online 2014.

#### Inoccupation

Since there could be registered a constant population loss, the occupation opportunities are scarce. The younger generation has no perspective and no impulse to stay in the municipality. Still existing sectors in the Danube Delta are fishing, agriculture, reed harvesting and tourism. But there is a big amount of people retired and in the field trip there could be observed a strong usage of alcohol by the inhabitants. It can be assumed that there are lacking opportunities to be able to contribute in a meaningful way to the collective consciousness and self-awareness.

Summarizing, there can be said that the municipality's persisting is and will be to a great extent dependent on the provision of basic employment occasions.

### 3.5. Agricultural preconditions in C.A. Rosetti



In the Danube Delta, the concept of organic agriculture is already widely spread, even though rather unknowingly. Nearly every household has an own little garden attached which empowers the local population to cultivate vegetables, fruit, herbs and flowers by themselves. Especially the elder population is capable of planting and taking care of this cultural landscape element alongside their ancient and traditional knowledge. Though, agriculture is in general not conducted on a large scale in the region. But this might be an attractive advantage for the realization of small scale projects like cooperatives because the structures are more manageable compared to big ones. The usage of pesticides also never happened to evolve extensively which can be considered a big advantage since it leaves a largely untreated natural site.

#### Why herbs?

It can be assumed that herbs like chamomile, yarrow and sea buckthorn are growing since centuries in the area around C.A. Rosetti as wild plants. Also, usage of this herbs is in general very common in the whole Danube Delta. Locals use savagely growing herbs for tea and wellness purposes like sauna. They thus have a wide knowledge about the methods of preparation and their health effects. The harvesting of herbs and honey also is enlisted as potential and chance for the local population by the *WWF-Danube Carpathian Programme Office* (cf. online 2003: 6). This local resource has potential for a small scale cultivation by households and farmers.



Figure 4: Chamomile.

Source: <http://www.howtogrowstuff.com/wp-content/uploads/chamomile1.jpg>, 23.11.2014.



Figure 5: Yarrow.

Source: [http://t1.gstatic.com/images?q=tbn:ANd9Gc-Quez4SnAWcdcmtGooRnFlj0ybtzfwTmnug\\_gXZa-2WIC64FNXuD](http://t1.gstatic.com/images?q=tbn:ANd9Gc-Quez4SnAWcdcmtGooRnFlj0ybtzfwTmnug_gXZa-2WIC64FNXuD), 23.11.2014.



Figure 6: Sea buckthorn.

Source: <http://ionevoxxi.files.wordpress.com/2014/01/sea-buckthorn.jpg?w=600&h=401>, 23.11.2014.



*Why honey?*

The establishment of an organic agricultural framework could also be used for the concept of beekeeping. The wide and unaffected landscapes in the surroundings of the municipality are able to provide the best natural nutriment for bees there is - maybe in whole Europe. Bees are an endangered species nowadays due to conditions brought up by industrial agriculture and environmental challenges. Their dying process is discussed heavily in science and also in the media. Since there are plenty of savagely growing plants, the conditions have potential for keeping them and cultivating organic honey in C.A. Rosetti. Additionally, bred bee colonies could be sold and exported in whole Europe by the cooperative, as there is constant need for healthy and organically kept ones. All in all, beekeeping constitutes an important contribution for active environment protection and is a chance for the rural areas' future. It can be learned easily by everybody and helps preserving the cultural landscape as well as the natural balance of the ecological system. (cf. Lang 2014: 125f) Thus, it can be considered a chance for the people in C.A. Rosetti.



Figure 7: Bee on a blossom.  
Source: [http://upload.wikimedia.org/wikipedia/commons/5/5b/Biene\\_Weide.JPG](http://upload.wikimedia.org/wikipedia/commons/5/5b/Biene_Weide.JPG), 13.12.2014.



Figure 8: Bee entering the beehive.  
Source: <http://upload.wikimedia.org/wikipedia/commons/2/27/Bienenstock.JPG?uselang=de>, 13.12.2014.



Figure 9: Honey jar.  
Source: <http://upload.wikimedia.org/wikipedia/commons>, 13.12.2014.

## 4. Project description

The suggested project aims to build up an agricultural marketing and sales cooperative for herbs and honey: the *C.A. Rosetti Herbs&Honey Cooperative*. Therefore it was planned to realize the organisatory framework, the concrete conceptualization for the way from the production to the disposal through the working groups and a bassin of potential project partner. Further on, there have been formulated the single steps which need to be taken for proper realization. By this, it is envisaged to create a framework, where individual households, farmers, elder persons as well as the young generation of C.A. Rosetti are benefitting and have a chance to be employed. They should be stimulated to stay in the municipality and therefore should be accompanied to do so by the local administration, who should be the central coordinator for the cooperative together with a planning team.

### 4.1. Main objectives

The project's main emphases are to install respectively pursue the concept of organic farming in the area, to ensure jobs which can help the community in a financial as well as social way and to generate a regional brand to merchandise the locally produced products as well as to form a regional identity for the inhabitants:

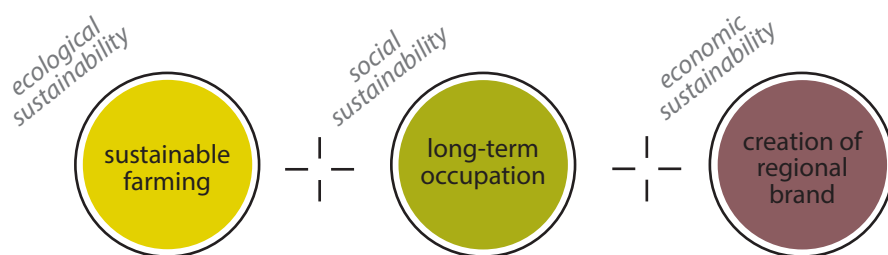


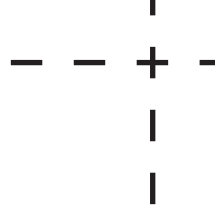
Figure 10: The main objectives of the project.  
Source: Own account.

Summarizing, C.A. Rosetti Herbs&Honey Cooperatives is pursuing the following main objectives:

- + applying the concept of **organic farming** for ecological sustainability
- + creating not only jobs but **long-term occupation opportunities** to generate social sustainability
- + **creating a regional brand** – the *C.A. Rosetti Herbs&Honey Cooperative* - to ensure the value added to the products stays in the region and to generate economic sustainability

Additionally, the project can be able to achieve the following specific goals:

- + building up a project many people of **different age and ethnic groups** can contribute to and work together
- + supporting C.A. Rosetti's **social, natural as well as economic resilience**
- + enabling a **participatory process** of cooperation using the concept of Bottom-Up processes
- + **preserving the natural resources** by maintaining the (agri-)cultural landscape
- + **conserving the ancient local knowledge** about herbs and their effects for body and mind



## 4.2. Functional structure

The 5 major core domains of the C.A. Rosetti Herbs&Honey Cooperative can be divided into the herb growing, the beekeeping, the processing, the marketing & sales and the logistics body. Each one of them contributes to the success of the project and to different extend to the main objectives. The herb growing and the beekeeping domain are ensuring sustainable farming as well as long-term occupation. Latter is also achieved by the processing, whereas marketing & sales as well as the logistic domain are not only creating the long-term occupation but are also mainly involved in the establishment of the regional and identifying brand C.A. Rosetti Herbs&Honey.

The concrete description of each working field is enlisted in the following table:

achievement of objectives	herb growing	beekeeping	processing	marketing & sales	logistics
tasks	<ul style="list-style-type: none"> <li>- preparation of seeds</li> <li>- cultivation of seedlings</li> <li>- plantation maintenance</li> </ul>	<ul style="list-style-type: none"> <li>- maintenance of honey production</li> <li>- quality control</li> </ul>	<ul style="list-style-type: none"> <li>- drying of plants</li> <li>- bottling of honey and packaging of herbs</li> <li>- warehouse guidance</li> </ul>	<ul style="list-style-type: none"> <li>- development of products</li> <li>- marketing</li> <li>- public relations</li> <li>- contact to sales partner</li> </ul>	<ul style="list-style-type: none"> <li>- transport relations of products to the exterior</li> <li>- transport of goods</li> </ul>
occupation opportunities	<ul style="list-style-type: none"> <li>- farmer</li> <li>- collector</li> <li>- harvest hand</li> <li>- botanic specialist</li> </ul>	<ul style="list-style-type: none"> <li>- beekeeper</li> </ul>	<ul style="list-style-type: none"> <li>- warehouse</li> <li>- drying and quality supervisor</li> <li>- packer</li> </ul>	<ul style="list-style-type: none"> <li>- product developer</li> <li>- communicator for sales partner</li> <li>- customer service</li> <li>- finance supervisor</li> </ul>	<ul style="list-style-type: none"> <li>- logistic supervisor</li> <li>- driver</li> <li>- communicator for sales partner</li> </ul>

Table 1: Overview of range of functions of the C.A. Rosetti Herbs & Honey Cooperative.

Source: Own account.



### Proposed herbal plants for cultivation

Since the soil in the area of C.A. Rosetti is poor, sandy and oversalted, the choice which plants are being cultivated is an important one. The following herbal plants would have potential for being cultivated under this circumstances:

- + Sea buckthorn (*Hippophae rhamnoides*)
- + Camomile (*Matricaria recutita*)
- + Yarrow (*Achillea millefolium*)
- + Coneflower (*Echinacea purpurea*)
- + Common marygold (*Calendula officinalis*)

Their exact suitability should be examined by the assigned botanic specialists team in the first year of the project, since the perfect plant species could not be determined within the scope of the project outline.

### Harvest quantity and income per hectare

The harvest quantity of camomile is indicated with 300 to 900 kg blossoms per each hectare and the prices for the selling product are fluctuating between 1,50-3,00 €/kg in Germany (cf. Adam et al. 2009: 543).

### Seeding material

Concerning the acquiring of seeding material, there have to be considered patent rights for certain breeds. There are existing for example two official breeds of the Marigold or *Calendula officinalis*, which are protected by an EU certificate and therefore have to be bought from certain companies when used for commercial purposes. One of them is the breed *Carola*. It is distributed exclusively since 2006 by the Dutch company *Plant Research International B.V.* (cf. Adam et al. 2009: 615)

### Cultivation method

Organic farming using the way of permaculture and humus soil is planned as cultivation method for the herbal plants and basically is necessary for the creation of the brand and the concept of *C.A. Rosetti Herbs&Honey*. Since cattle breeding is very common in C.A. Rosetti, there is enough dung available which can be transformed into humus on compost heaps. For the growing of the young plants, there has to be made up an appropriate organizational management method. In contrast to the method of direct seeding, the nursing of young plants in a protected surrounding like a polytunnel, is more promising since the risk of the plants' demolition in an early stage is prevented. For this purpose, the investments should also comprise a ~ 9m long polytunnel.



Figure 11: Example for nursing of plants in polytunnel.  
Source: [http://upload.wikimedia.org/wikipedia/commons/e/ec/Polytunnel%2C\\_but\\_with\\_netting\\_-\\_geograph.org.uk\\_-\\_1274787.jpg](http://upload.wikimedia.org/wikipedia/commons/e/ec/Polytunnel%2C_but_with_netting_-_geograph.org.uk_-_1274787.jpg), 14.12.2014.

After the nursing, the young plants can be distributed to the farmers and can be planted outside. The austrian company Sonnentor is recommending to use the fields rotationally and grow the same type of herbal plant on the same field only every 3 years (cf. Gutmann 2008: 40). Supplementally, there is planned to set up a sample field in Sfîştofca since there are plenty of abandoned parcels of land available. It should comprise about 1ha, be maintained by the local administration, the planning team and interested farmers and inhabitants jointly and contribute to a major awareness for organic farming and the project.

### Harvesting

The harvest should primarily be operated by hand, possibly with the help of agricultural accessoires. There should be two different forms of harvesting:

+ *Harvesting of cultivated herbs like Camomile, Yarrow, Common Marygold, Coneflower*

The farmers can harvest on their own fields and then bring the cropped quantity to the warehouse guidance, where it will be weighed and recorded.



Figure 12: Example for the manual harvest of camomile in the hungarian Puszta.  
Source: Adam et al. 2009: 551.

+ *Harvesting of wild grown herbs like Sea buckthorn*

For this method of harvesting herbal and aromatic plants in their natural habitats, sustainable collecting practices have to be used to prevent endangering the local ecosystem. There is a certification for wild plant collection which is made out by the *IMOSwiss AG*, the *Institute of Marketecology*, an international third party certification body. To obtain this certificate, the organic quality of the wild crops has to be proved by the documentation of all activities around the collection. From the collection area to the scale of the products, everything has to be documented in detail. The *IMO* already is an active stakeholder in Bosnia-Herzegovina, giving away certificates to six wild collection companies. From this 6 companies, 2 of this *IMO* certified companies have been nominated for the *FairWild* certification program. This is an even stricter form which can be compared to that of fair traded coffee and supplementally requires the setting up of a democratic structure which represents the collectors. (cf. Schindler online 2014) This structure can be given through the *C.A. Rosetti Herbs&Honey Cooperative*. Especially for the elder population, this form of harvesting could be a good occupation possibility and income source since they have the knowledge about the herbal plants and also could pass it over to the younger generation in the form of seminars and walks in the natural area around C.A. Rosetti.

After the harvest respectively collection of herbs they should be brought to the processing area: the warehouse in Periprava. There could be organised the collection of the herbs from every involved farmer in the harvesting period so that not everybody has to bring the raw products to the warehouse individually. The schoolbus and touristic drivers could be included for this task.



### Qualification course for beekeeping

Before the beekeeping can be realized, there has to be a special training for the interested farmers. The first training for the qualification for beekeeping should be conducted by the *Association for Beekeeping in Romania* and should take place right after the first participatory event in Sfîştofca. Then, regular trainings once a year should refresh the knowledge. If there already are inhabitants keeping bees, they could be assigned as co-trainers supplementary to the *Cursuri de calificare*.

### Beekeeping

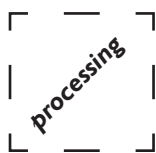
After the qualification course and the acquisition of the bee colonies and bee hives depending on the number of interested farmers and households, there should be implemented the regular beekeeping activity. There is a bee species domestic in Romania which could be used therefore - the *Apis Melifera Carpatica*. According to Lang, it is vital and resilient, even for the hard winter period (cf. 2014: 96). For the keeping of the bees there could be used traditional and natural straw beehives.



Figure 13: A traditional beehive made out of straw containing the the combs.  
Source: [http://upload.wikimedia.org/wikipedia/commons/d/dc/Tchetoere\\_strin.jpg?use-lang=de](http://upload.wikimedia.org/wikipedia/commons/d/dc/Tchetoere_strin.jpg?use-lang=de).

### Harvesting the honey

The best harvest times for honey are in Romania between June and August (cf. Lang 2014: 19). The harvested honey can be brought to the warehouse in Periprava, where it can be extracted from the honeycombs with a machine and then filled in jars.



### Eco-Warehouse

A simply built warehouse should contain the raw, dried and cut product of herbs and honey as well as the packed up and ready to be delivered products. It should be constructed out of wood (i.e. from used shipping pallets), cob and reed and therefore should create ideal climatic conditions inside through its insulation qualities - without using any cooling technology. There could be used synergies with the project of Corinna Schmidt in the building phase. The best logistic position for this facility would be in Periprava, due to its location next to the northern branch stream of the danube and its port.

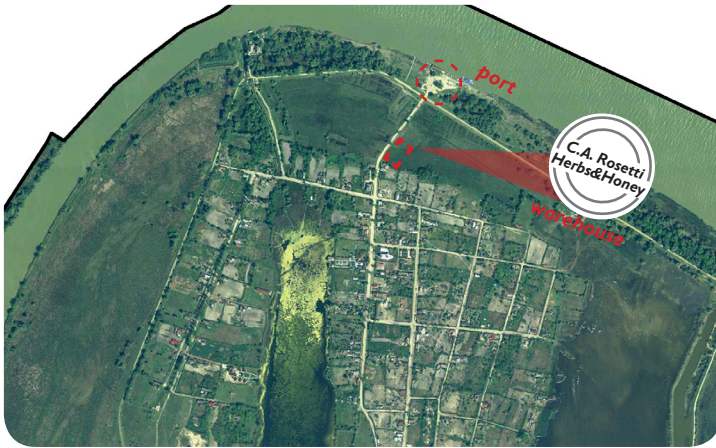


Figure 14: Ortophoto of Periprava and the suggested location of the warehouse.  
Source: Marius Voica 2014, own adaption.



Figure 15: The warehouse's possible framework architecture.  
Source: <http://assets.inhabitat.com/wp-content/blogs.dir/1/files/2012/04/6-Pallet-Architecture-Jellyfish-Theatre-537x357.jpg>

### Warehouse guidance

It is important that the people entrusted with the custody know how to communicate between the herb growing, honey farm and logistics working group as well as the others occupied in processing. When the harvest is coming to the warehouse, the people assigned for the warehouse guidance have to keep a record of the harvested quantity as well as quality per farmer.

### Drying of the herbs

The harvested herbs have to be dried before they can be packaged, cut and sold. Therefore as task there is also the drying suggested. The *Sonnetor* company has used in its early days an old decommissioned bus with a strong vehicle heater to accomplish the drying (cf. *Gutmann 2008: 17*). For C.A. Rosetti the reusage of an old boat could be an option for this purpose. It could be renovated and - if not existing - a heater driven by solar panels could be built inside.



Figure 16: An abandoned shipwreck in Sfiștofca which could be re-used.  
Source: Bernhard Siquans 2014.

### Cutting of the herbs

For the quality of the herbal products, the size of the herbal leaves and blossoms is vital. The larger they stay in the processing, the better the quality should be since the essential oils can rest in the plant components (cf. *Gutmann 2008: 20*).

### Honey extraction

After the honey harvest, the honey has to be extracted from the honeycombs. Therefore there has to be purchased a honey extractor for the warehouse.

## Packaging

For selling the products, they have to be packed up appropriately. For the herbs there could be used paper packaging with little viewing panels, whereas for the honey glass packaging is envisaged. For the latter there could be utilized synergies with the glass artists from the *Sfiştofca Art Association* as well as locals that know how to use the glass engraving machines and want to participate.



Figure 17: Possible packaging option for herbal products.  
Source: <https://www.josbinder.at/mediapool/contentimg/teeverpackungen.jpg>, 14.12.2014.



Figure 18: Possible design option for honey glasses.  
Source: Breiling 2014.

The filling process is dependent on the product - the herbs can be packed up by hand using a scale. This could be an occupation possibility especially for the elder population of C.A. Rosetti. Local community centers could be used for this purpose. Further on, for the honey filling process there has to be a honey filling machine acquired.



The marketing working group should realize the product development, communication with sales partner as well as the public relations to advertise the regional brand. Its realization contributes to the objectives long-term occupation and the creation of a regional brand.

## Product development

The development of the herbal and honey products is going to take place in two different categories:

- + The original *C.A. Rosetti Herbs&Honey* products which are going to be sold with the logo. The herbal product line should comprise organic teas whereas the honey products pure organic honey.
- + The intermediate products which will consist of the raw herbal and honey products. They should be sold when production surpluses will occur or when there are favourable contracts available. In this case, the cooperative would be the supply firm for other companies and the brand is faded into the background.



*Communication with sales partner*

For sale activity outside of the region, it is important to maintain the contact to the (possible) sales partners. The marketing working group should arrange new sales partner and at the same time ensure the contact to already acquired partner, in cooperation with the logistics group. There should be sales partner which resell the original product, as well as those which are purchasers for the intermediate product.

Possible sales partner could be:

+ *Bio Romania Market*

The original products could be sold on the sales homepage of the *Bio-Romania Association*:  
<http://www.bio-romania-market.ro/>

+ *Organic Joy*

This company has specialized on the development of herbal products. They could be a possible purchaser of the raw product.  
<http://www.organicjoy.ro/>

+ *Sonnentor*

The Austrian company *Sonnentor* is selling herbal products and also honey. For production surpluses, it could be a project partner for buying the raw product of *C.A. Rosetti Herbs&Honey*.  
<http://www.sonnentor.com>

+ *Organic & Health Shops in Tulcea and Bucharest*

If possible, the original herbal and honey products should be delivered to health shops in the bigger cities of eastern Romania.

+ *Beekeeping and Research Institute Online Shop*

The online shop of the *Beekeeping and Research Institute of Romania*, short *B.R.D.I.*, could also be a potential sales opportunity for the original honey products.  
[http://www.icdapicultura.ro/en/online\\_shop.html](http://www.icdapicultura.ro/en/online_shop.html)



*Product transport*

The logistics team should first of all bring the raw product from the farmers to the warehouse. This task could be operated by the school bus and touristic drivers. The transport of the manufactured products to the sales partners should then be operated weekly, beginning with year 2 of the implementation plan. Therefore the products have to be brought to the Periprava port by the warehouse guidances, where they can be loaded on boats to get shipped. On the way back to C.A. Rosetti there can be transported ordered goods like the raw material for packaging, if it can be organised. By this, resources like gas and time can be saved.

*Representing the brand on the outside of the region*

Every now and then, the process of the delivering should be accompanied by one marketing & sales assistant to ensure the contact to the sales partner. The person should represent the brand of *C.A. Rosetti Herbs&Honey* and make an inquiry about the contentment with the products.

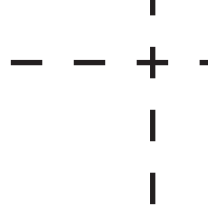
### 4.3. Involved stakeholder

The stakeholder concerned with the project can be separated into formal public and private. The first category comprises official institutions and governments whereas the latter rather combine NGOs and private associations respectively population groups. They are summarized in the following table:

<b>Public</b>			
<b>Level</b>	<b>Stakeholder</b>	<b>Site</b>	<b>Role in C.A. Rosetti Herbs&amp;Honey Cooperative</b>
International	European Union	Brussels (B)	- Funding provider - Potential project partner in coordination
	IFOAM International Federation of Organic Agriculture Movements	Bonn (G)	- Project partner in coordination - Project partner in cultivation methods
National	Romanian Government	Bucharest	- Funding provider - Legislative framework
	Ministry of Agriculture and Rural Development	Bucharest	- Project partner in coordination - Project partner in cultivation methods
	University of Architecture and Urbanism	Bucharest	- Project partner in processing
	NARDI National Agricultural Research and Development Institute	Bacău	- Potential project partner in cultivation methods - Scientific expertise
	Bio @gro Organic Agriculture e-Service System	(digital)	- Project partner for information about funding, legislative framework and cultivation methods
Regional	Tulcea County Council	Tulcea	- Legislative framework
	Agriculture and Rural Development Department of Tulcea County	Tulcea	- Potential project partner in cultivation methods - Scientific expertise
	Danube Delta Biosphere Reserve Authority	Tulcea	- Coordination of objectives with Biosphere Reserve framework
Local	Local Council of C.A. Rosetti	C.A. Rosetti	- Funding provider - Essential project partner in coordination
<b>Private</b>			
<b>Level</b>	<b>Stakeholder</b>	<b>Site</b>	<b>Role in C.A. Rosetti Herbs&amp;Honey Cooperative</b>
International	Sfiștofca Art Association	Vienna	- Project partner in coordination
National	Association of Ecotourism in Romania	Brasov	- Potential project partner in marketing
	Bioterra Organic Farmers Association of Romania	Cluj	- Potential project partner in coordination
	NGO A.R.A.D. Organic Farmer Association for Sustainable Agriculture	Cluj	- Potential project partner in herb growing
	EcoR Partner - Resource Centre for the Promotion and Marketing of Organic Products	Bucharest	- Potential project partner in marketing
	Bio-Romania Association	Bucharest	- Potential project partner in coordination
	Asociatia Crescatorilor de Albine din Romania - Association for Beekeeping in Romania	Bucharest	- Potential project partner in beekeeping
	Beekeeping Research and Development Institute B.R.D.I.	Bucharest	- Potential project partner in beekeeping
Regional	NGO „Vox Delta”	Crisan	- Potential project partner in herb growing and beekeeping
Local	Chess Association	Sfiștofca	- Project partner in processing: packaging
	Women’s Singing Association	Sfiștofca	- Project partner in processing: packaging
	Sfiștofca Art Association	Sfiștofca	- Project partner in processing: packaging and product development
	Touristic Drivers	C.A. Rosetti	- Potential project partner in logistics
	Schoolbus Drivers	C.A. Rosetti	- Potential project partner in logistics
	Local farmers and households	C.A. Rosetti	- Essential project partner in herb growing, beekeeping and processing

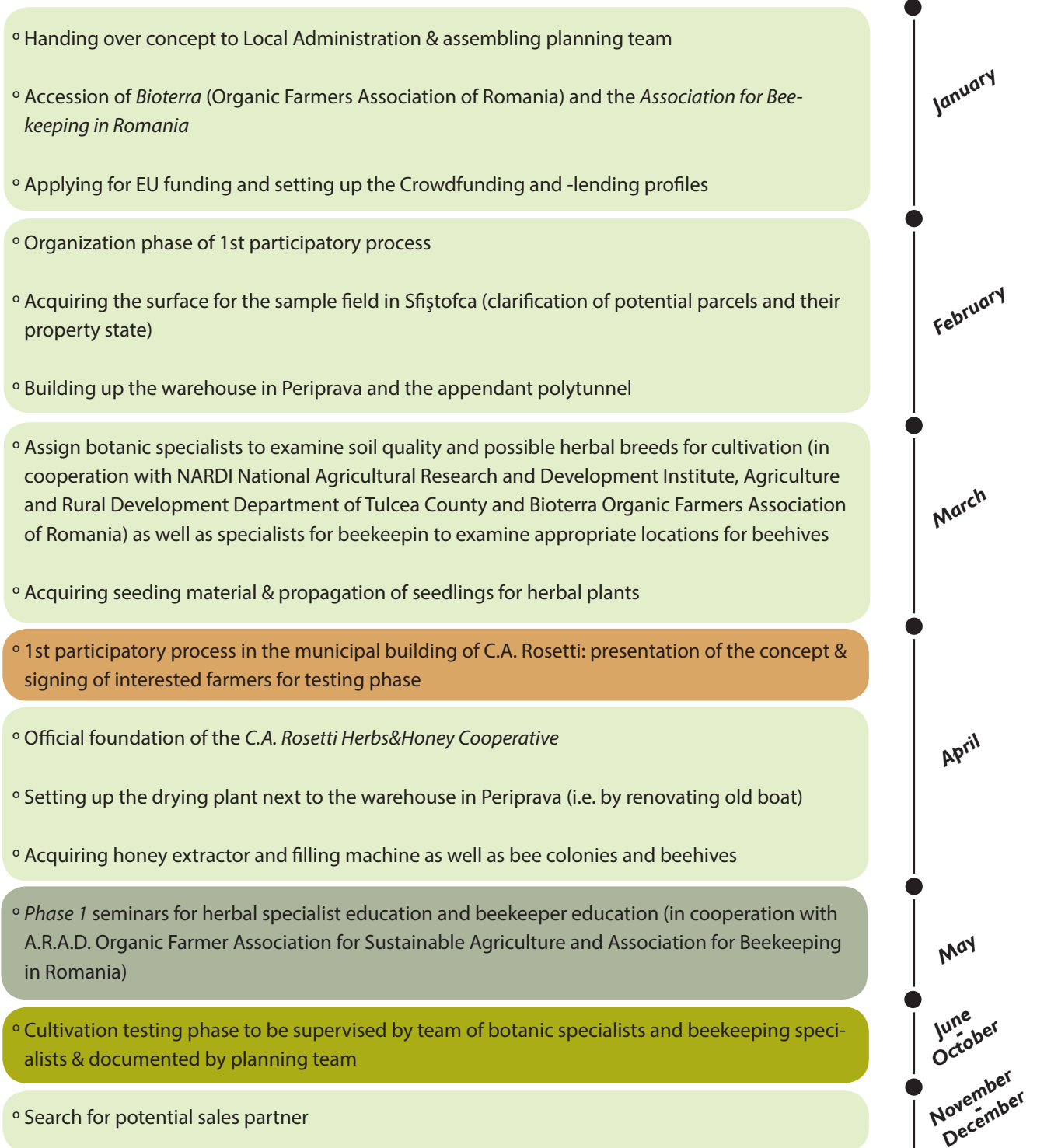
Table 2: Overview of involved stakeholder for the C.A. Rosetti Herbs & Honey Cooperative.

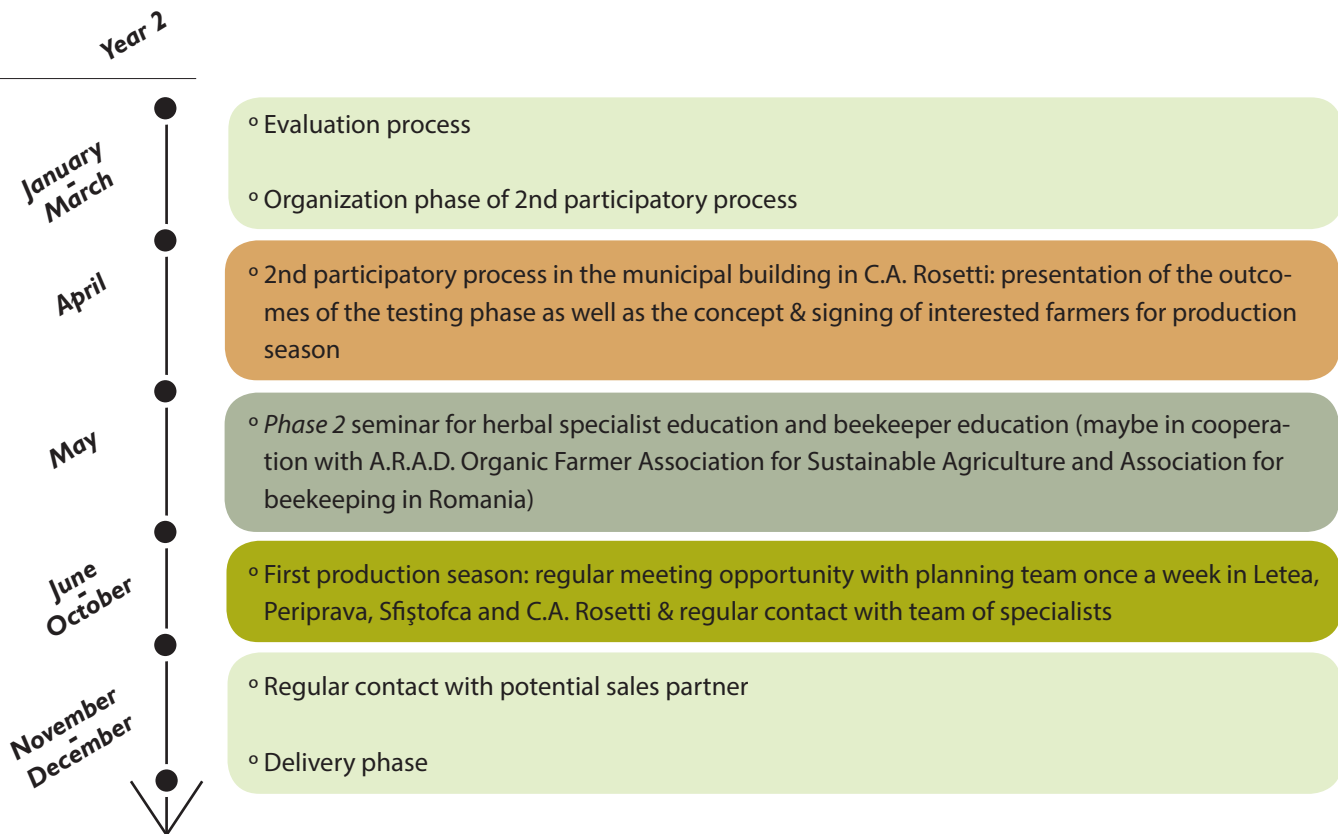
Source: Own account.



#### 4.4. Implementation

The project should be implemented within 2 years. The first year is the organizational and testing phase. The planning team has to be assembled by the local administration and the necessary basic investments have to be done. For the testing phase which should be supervised by a small team of specialists, there should be assigned the first interested local farmers. Thereafter, an evaluation of this testing phase should take place, before additional farmers in the 2nd participatory process can be incorporated.





#### 4.4. Financing

##### Options

###### + Crowdfunding: 10.000€

This form of funding can be a financing option for the *C.A. Rosetti Herbs&Honey*, with the potential to raise 10.000€. The concept of *Crowdfunding* is based on the concept of *Crowdsourcing* and basically a form of online collaboration where people can contribute by means of financial aid to suggested projects worldwide (cf. Howe 2008:). They either are based on the principle of donations (donation-based crowdfunding) or offer the contributors something in exchange (rewards-based crowdfunding). According to the European Commission, there have been raised 735 million euros with this method in Europe to help realize some half a million European projects. (cf. European Commission online 2014) On [www.kickstarter.com](http://www.kickstarter.com), the leading platform for projects which search to be crowdfunded, there could be found an appropriate reference example for *C.A. Rosetti Herbs&Honey*: The *Ariadne Pure Organic Honey* from Washington, USA could raise over 6.000\$ in 15 days in the year of 2013<sup>1</sup>.

###### + Crowdlending: 5.000€

*Crowdlending* is a form of *Crowdfunding* where private microcredits are given away by private investors. The loans have to be repaid with the agreed upon interest within a pre-declared time period. (cf. WKO online 2014) The platform [www.kiva.org](http://www.kiva.org) is providing a service which connects project developer and investors to get individual projects financed.

###### + Microinsurance

Since the most important component of *C.A. Rosetti Herbs&Honey* is organic agriculture, it bears the financial threat of crop failures. To lower this risk anticipatorily, there should be taken out insurances by means of using the concept of *Microinsurances*. In cooperation with Gerold Ludwig's project there should be figured out how it would be possible to safeguard the project.

<sup>1</sup> See: <https://www.kickstarter.com/projects/1874931887/ariadne-pure-organic-honeys-and-honey-spreads/description>.

+ *European Structural and Investment Funds 2014-2020: 20.000€*

Competitiveness, convergence and cooperation are the three main cores of the Eu's Structural and Investment Funds ESIF<sup>1</sup> of the European Union, which have an important impact on investments. For the upcoming period, there have been formulated five funding priorities for the national authority of Romania, whereof three have relevance for the proposed project:

- Improving human capital through higher employment and better social inclusion and education policies
- Promoting economic competitiveness and local development
- Optimising the use and protection of natural resources and assets

(cf. European Commission online 2012: 3ff)

The local administration of C.A. Rosetti can make an application for funding within the *National Program for Rural Development 2014-2020*, where the national priorities have been incorporated within the funding priorities. There is i.e. a package of measures for the conservation and maintenance for biological agriculture in rural areas, which includes 236,1 mil euros and could be convenient. (cf. Ministry of Agriculture and Rural Development online 2014: 10) Support for the application process could be given through the *Operational Programme Technical Assistance* and its homepage [www.poa.ro](http://www.poa.ro).

Another option would be a financing opportunity through the instrument of the *Integrated Territorial Investments ITI* within Cohesion Policy. It is a more flexible instrument for „the implementation of parts of programmes in a cross-cutting manner“ and has the ability to implement integrated actions within EU funding. But therefore, it is first necessary to build up national structures like an appropriate governance structure and a designated management body. (cf. European Commission online 2012: 17)

## Costs



1 polytunnel ~10m	3.000€	10 beehives	300€	building simple wooden warehouse	18.000€	1 computer	~500€	1 used commercial vehicle	4.000€
seeding material for 1ha (2,5 kg needed)	~5.000€	10 bee colonies	700€	500 honey glass packa- ges	~500€				
2 seminars	sponsored	2 seminars / qualification courses	sponsored	500 herbs cardbord packages	~500€				
sample field	-	1 filling machine	1.000€						
		1 honey extractor	200€						
<b>8.000€</b>		<b>2.200€</b>		<b>19.000€</b>		<b>500€</b>		<b>4.000€</b>	
<b>Total investment costs: ~35.000€</b>									

Table 3: Overview of investment costs for the C.A. Rosetti Herbs & Honey Cooperative.  
Source: Own account.

<sup>1</sup> Summarizes the European Regional Development Fund ERDF, European Social Fund ESF, Cohesion Fund CF, European Agricultural Fund of Rural Development EAFRD and the European Maritime and Fisheries Fund EMFF.

## 5. Conclusion

The project *C.A. Rosetti Herbs&Honey* not only has the ability to change the local inhabitants' perspective on their local resources and their future, but could also contribute to a mitigation respectively even reversion of the municipality's recent negative development. At the same time, there can occur considerable problems within the realization process, especially due to the structural weakness of the whole Danube Delta region. The following two chapters are giving an overview on both.

### 5.1. Potential threats to the project

Because of its peripheral location and general state as developing area, the project is threatened by various potential problems which can be categorized into fundamental issues based on the given conditions and on the other hand into threats which can occur during the phase of implementation. The first three are basic fundamental threats whereas the last two concern C.A. Rosetti and the realization of the project.

- + *Further salination of soil through increasing sea level of the Black Sea*  
A major threat for the success for the growing of herbs is the condition of the soil in the area. It is characterized by increasing salination and therefore the appropriate plants for the cultivation have to be chosen carefully and in advance. Therefore, a special team of botanics should conduct an investigation at the beginning of the project to minimize the danger of the obstacle.
- + *Lacking knowledge and human resources for funding applications in rural areas of Romania*  
As reported by the mayor of C.A. Rosetti, the human resources for funding purposes are scarce, similar to the concrete knowledge about it. A general lack of interest for the position of community assistant is further showing the untrust towards Romanian politics by its population, especially in rural areas. According to her, there is more politics than policy going on and this is discouraging many people. But to develop the project, the chance of participation has to be taken by all involved stakeholder, above all the inhabitants.
- + *Risk and uncertainty as a result of climate dependency and a globalized agricultural market*  
The vulnerability of the agricultural sector itself is characterized to a great extent by uncertainties. Sudden price changes on the international market are not uncommon nowadays and have effects on local farmers. Additionally, appropriate climate conditions are a basic need to be able to economically rely on agriculture as income opportunity. But due to climatic change and its already noticeable consequences for the natural resources, agricultural expectations have to be more flexible than ever. Crop outputs can vary and there has to be found a way to deal with this like with using microinsurances.
- + *Communication problems due to the spatial structure of C.A. Rosetti*  
The spatial dispersion between the individual villages of C.A. Rosetti constitutes a major obstacle for the ongoing operation of the cooperative. Especially since the farming structures are conducted on a small scale, there are many different stakeholder which have to find a way to work together and organize themselves constantly for a project success. For now, the process has to rely on simple organization and arrangement through mobile phones and regular meetings. A future solution for this could be an online platform for communication matters but therefore the establishment of further internet connections in the region would be necessary.
- + *Dependency on planning team*  
In the end, the success of the whole project is indeed dependent on the planning team and its collaboration with the local administration. It should accompany the process and evaluate the testing phase in the first year. Participants can be professionals from spatial planning from Austria and Romania. If it is not working as expected, a failure of C.A. Rosetti Herbs&Honey cannot be fully preemted.

## 5.2. Effects

If the project would be launched and implemented as suggested, the effects of the project affected various spheres of life for the inhabitants of the municipality C.A. Rosetti.

### **near-term (within 5 years)**

- + employment for all aging groups
- + new form of cooperation through cooperative
- + cultural landscape benefits from organic farming

First of all, as near-term effect, there would be implemented a form of employment possibility for all aging groups. The elder generation has a wide knowledge of herbal plants in the area which would be useful for the whole cooperative and which the younger generation could learn of. Secondly, there would be developed a new cooperation possibility and „heart“ for the municipality which requires regular communication and meetings. The inhabitants would have to cooperate and pull together which would enhance their community sentiment and their regional consciousness. Further on, the establishment of conceptual organic farming would have a positive influence on the cultural landscape of the region and thus contribute to the objectives of the *Danube Delta Biosphere Reserve*.

### **intermediate-term (within 10 years)**

- + establishment of the regional brand *C.A. Rosetti Herbs&Honey*
- + increasing level of awareness for C.A. Rosetti outside of the Danube Delta
- + new perspectives for tourism
- + chance for more policy and participation

The intermediate-term effects would be on the one hand the final establishment of the regional brand. Through increasing sale figures, the popularity of the herbal products and the honey will augment. On the other hand, new perspectives for tourism are going to evolve. The tourists will know C.A. Rosetti better and can inform themselves in advance about the cooperative for example. Furthermore, The project can constitute an opportunity for more self-awareness, vertical cooperation as well as knowledge transfer concerning funding possibilities.

### **long-term (within 20 years)**

- + improvement of the living quality in C.A. Rosetti through better income
- + immigration of interested families
- + trickling down effect on whole region

Finally, the long-term consequences will be noticed approximately after 20 years. The first crucial effect will be the improved living quality in the municipality, triggered by the better income and the increasing level of infrastructure the community can afford through the tourism. This is attracting new families which also aim to live in close communion with nature and maybe want to be part of the cooperative. The whole region surrounding C.A. Rosetti will be prospering again.

## 6. Sources

### 6.1. Print

Adam L. et al. 2009: *Handbuch des Arznei- und Gewürzpflanzenbaus. Saluplanta - Verein für Arznei- und Gewürzpflanzen, Bernburg.*

Dincu A.-M., Brad I., Ciolac R., Gherman R., Gavruta A., Dumitrescu C. 2013: *Perspectives of Agricultural Cooperatives in Romania. In: Animal Science and Biotechnologies, 46 2013. Banat's University of Agricultural Sciences and Veterinary Medicine, Timisoara. 372-375.*

Dunn J. R., Crooks A. C., Frederick D. A., Kennedy T. L., Wadsworth J. J. 2002: *Agricultural Cooperatives in the 21st Century. United States Department of Agriculture, Washington D.C.*

Gardner B., Lerman Z. 2006: *Agricultural Cooperative Enterprise in the Transition from Socialist Collective Farming. In: Journal of Rural Cooperation, 34 (1) 2006. The Hebrew University of Jerusalem, Jerusalem. 1-18.*

Gutmann J. 2008: *Auf der Sonnenseite: Leben und Genießen mit Kräutern und Gewürzen. Residenz Verlag, St. Pölten.*

Howe J. 2008: *Crowdsourcing: Why the Power of the Crowd is driving the Future of Business. Three Rivers Press, New York.*

Knickel K. 2002: *Die Bedeutung multifunktionaler Landwirtschaft im Rahmen nachhaltiger Regionalentwicklung. In: Müller K., Dosch A., Mohrbach E., Aenis T., Baranek E., Boeckmann T., Siebert R., Toussaint V. 2002: Wissenschaft und Praxis der Landschaftsnutzung: Formen interner und externer Forschungsk Kooperation. Margraf Verlag, Weikersheim. 35-52.*

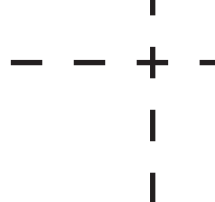
Lang K. 2014: *Honighandbuch. Walter Lang GmbH, Bremen.*

Müller K., Dosch A., Mohrbach E., Aenis T., Baranek E., Boeckmann T., Siebert R., Toussaint V. 2002: *Wissenschaft und Praxis der Landschaftsnutzung: Formen interner und externer Forschungsk Kooperation. Margraf Verlag, Weikersheim.*

Panighiant E., Ionescu D. 1967: *Das Donaudelta. Meridiane, Bucharest.*

United Nations 1991: *The role of public and private agents in the food and agricultural sectors of developing countries. Food and Agriculture Organization of the United Nations, Rome.*





## 6.2. Web

European Commission 2012: *Position of the Commission Services on the development of Partnership Agreement and programmes in ROMANIA for the period 2014-2020*. [http://ec.europa.eu/regional\\_policy/what/future/pdf/partnership/ro\\_position\\_paper.pdf](http://ec.europa.eu/regional_policy/what/future/pdf/partnership/ro_position_paper.pdf), 19.12.2014.

European Commission 2014: *Unleashing the potential of Crowdfunding in the European Union*. <http://eur-lex.europa.eu/legal-content/DE/TXT/?uri=COM:2014:172:FIN>, 18.12.2014.

IFOAM 2014: *Organic farming in Romania*. <http://www.ifoam-eu.org/en/romania>, 13.12.2014.

Ministry of Agriculture and Rural Development 2014: *National Program for Rural Development 2014-2020*. [http://www.fonduri-ue.ro/res/filepicker\\_users/cd25a597fd-62/2014-2020/po/Prezentare.PNDR.2014-2020.pdf](http://www.fonduri-ue.ro/res/filepicker_users/cd25a597fd-62/2014-2020/po/Prezentare.PNDR.2014-2020.pdf), 18.12.2014.

National Institute of Statistics Romania 2014: *Tempo Online*. <https://statistici.insse.ro/shop/?lang=en>, 21.10.2014.

Schindler H. 2014: *The certification of wild plant collection*. In: *Leisa Magazine 23.3 2007*. AgriCultures Network, Wageningen. [http://www.agriculturesnetwork.org/magazines/global/healthier-farmers-better-products/the-certification-of-wild-plant-collection/at\\_download/article\\_pdf](http://www.agriculturesnetwork.org/magazines/global/healthier-farmers-better-products/the-certification-of-wild-plant-collection/at_download/article_pdf), 14.12.2014.

WKO 2014: *Crowdfunding für österreichische Unternehmen*. [https://www.wko.at/Content.Node/Service/Unternehmensfuehrung--Finanzierung-und-Foerderungen/Unternehmensrechnung/Finanzierung/Crowdfunding\\_fuer\\_oesterreichische\\_Unternehmen.html](https://www.wko.at/Content.Node/Service/Unternehmensfuehrung--Finanzierung-und-Foerderungen/Unternehmensrechnung/Finanzierung/Crowdfunding_fuer_oesterreichische_Unternehmen.html), 14.12.2014.

WWF Danube Carpathian Programme Office 2003: *A vision for the Danube Delta, Ukraine*. WWF Danube Carpathian Programme Office, Vienna. <http://www.wildernis.eu/pdf/danubedelta/Danube-Delta-english.pdf>, 22.11.2014.

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Source: [http://upload.wikimedia.org/wikipedia/commons/5/5b/Biene\\_Weide.JPG](http://upload.wikimedia.org/wikipedia/commons/5/5b/Biene_Weide.JPG), 13.12.2014.

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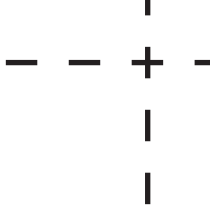
Source: Own account.

Table 2: Overview of involved stakeholder for the C.A. Rosetti Herbs & Honey Cooperative.

Source: Own account, <http://www.ifoam-eu.org/en/romania>.

Table 3: Overview of investment costs for the C.A. Rosetti Herbs & Honey Cooperative.

Source: Own account.



**C.A. Rosetti  
Herbs&Honey**

