Economic Development of Organic Agriculture in Kosovo

– A first Assessment –

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1. Introduction.

This report is based on a five days visit to Kosovo. It took place in the period of 30th September and 1st October 2013. The mission aimed to assess the potential of economic development in the sector of Organic Agriculture. This should be done by getting an impression of farmers, processors and traders of agricultural produce in the country, as well as governmental and non-governmental institutions working in this sector.

Many stakeholders in various parts of the country were visited, mainly companies exporting agricultural commodities or products from wild collection, fruits and vegetables. In addition, discussions were held with representatives from the Ministry of Agriculture, the Agricultural University and from NGO. Organic farmers were not represented. The analysis of various documents completed the picture.

The preliminary results of the assessment were presented in a small workshop and discussed with the partners met. Their comments, suggestions and supplements are included in the findings of this paper.

2. Key Aspects for agricultural development in Kosovo

Only recently, Kosovo declared independence from former Yugoslavia and, it is one of the youngest states in Europe. It has a total land area of 10,900 km² only, is densely populated (166 person/km²) and has a total population of 1.8 Million in the country. Another 2 Million Kosovars are living abroad, mainly in central Europe. Their remittances contribute substantially to the economy of the country.

Geographically, Kosovo is a landlocked country and surrounded by Serbia, Macedonia, Albania and Montenegro. The country is a basin at an altitude of about 500 m, surrounded by mountains. 51% of the surface is defined as mountain areas (>700 m altitude.). Most of the mountain areas are covered by forests, which add up to 42% of Kosovo’s land area.

Since the end of the war in 1999, Kosovo has experienced a solid economic growth, which increased by 4% annually over the past years. But the economic situation remains challenging. There are only few employment opportunities, the un-employment rate is around 45%.

Agricultural production, which used to be the economic backbone of the country is small and has not been replaced by other sectors of production. At present economic activities are primarily in the services sector.

Agricultural production used to account for 25% of GDP in the 1980s and early 1990s. Today its share has decreased to about 14.1% of GDP. Kosovo is a strong net-importer of agricultural products and the balance of trade in agricultural products of Kosovo is highly negative. In 2011, the exports of agricultural products valued 25.8 million Euro, whereas imports of agricultural products amounted to 560 million Euro.
Kosovo has an average farm size of 1.5 ha and only 1,500 farmers can cultivate more than 10 ha of land. Approximately 2% of the land is cultivated by large scale farms. Smallholder agriculture is semi-subsistence based. A significant portion of production is self-consumed by the households and most farmers produce only little surplus for sale.

Despite fertile land and favourable agro-climatic conditions, agricultural productivity and yields are low. Farmers are lacking technical expertise and most of them are applying inefficient, often out-dated farm management practices. In addition, their use of inputs is inadequate. For instance, high doses of fertilizers are used but without corresponding benefits.

Due to the very fragmented structure of farmland, the commercialisation of agricultural products is largely done by contract farming arrangements. Processing and trading companies are contracting smallholders, collecting small bulks of production to supply the domestic market and for export.

With respect to Organic Agriculture, there are only very few farmers in the country, who lobby for sustainable agriculture, for ecological production, for the conservation of biodiversity and against the use of chemical pesticides. The rationale of the large majority of farmers – smallholders and large scale – is dominated by their wish to intensify agricultural production with high conventional inputs (fertilizers, pesticides, irrigation and machinery) without considering possible adverse impacts on the environment and on health.

Similarly and at the other end of the value chain, the consumers have little awareness on the need for healthy food, for regional production and they do not see the link between agriculture and nature conservation. In the wake of the Yugoslavian war, consumers in Kosovo prefer still cheap products and large quantities. There is little perception about the need for food quality and the impact of nutrition on health. This applies to agriculture in general and organic agriculture in particular. Only among the wealthier social strata there is certain awareness concerning quality of food, but even they have little confidence in agricultural products of their country; instead, they prefer imports, if they are affordable.

Both producers and consumers would need thorough education and training to change their attitudes and their behaviour.

In Kosovo, the development of agriculture in general and of Organic Agriculture in particular, are very much at beginning. At present, there is an estimated area of 85 ha organic production under conversion. This concern mainly the cultivation of medical and aromatic plants that shall be exported as organic certified. In addition, there are a few ha of fruit plantation are under conversion. Furthermore, there used to be a beekeeper with around 40 organic certified beehives.
3. **Stakeholders and their involvement in Organic Agriculture**

3.1 **Institutions**

**Government.** The Ministry of Agriculture, Forestry and Rural Development (MAFRD) passed a first law on Organic Agriculture in 2008, and signed a revised version in December 2012. The elaboration of administrative directives for implementation of the law is underway. Their completion is envisaged for the End of 2014.

Since 2010, the Ministry of Agriculture has a small working unit on Organic Agriculture, and there is an inter-ministerial working group in cooperation with the Ministry of Environment on this issue. Other members of the working group are professionals from the University and from two NGO, the Association of Organic Agriculture and IADK (see below). At present, it is planned to institutionalize this activity by creating a Commission of Organic Agriculture.

The Ministry of Agriculture plans to support the cultivation of medical and aromatic plants with a sub-chapter of organic production. A respective plan for the period 2016-20 is in process of elaboration. In addition, organic agricultural production shall be supported. Direct subsidies to producer groups (addressing around 100-300 farmers) are envisaged. Also, the build-up of a national certification body in Kosovo shall be enhanced.

**University.** The Agricultural Faculty of Pristina at the University of Kosovo has included organic agriculture in its curriculum. Meanwhile, organic agriculture is an elective subject in the Bachelor and in the Master Programme.

**Organic Agriculture Association (OAAK).** Pioneer and founder of Organic Agriculture in Kosovo is the Organic Agriculture Association of Kosovo. OAAK was founded in 2002 by university staff and within the premises of the Agricultural Faculty of Pristina. Training courses to farmers, high school attendants and university students were offered, farmer women associations were supported and field trials with farmers (mixed cropping of wheat with clover) were undertaken and the use of composting in vegetable production promoted. Later, after 2006, brochures were elaborated on organic bee keeping, wild collection of medical and aromatic herbs and the production of organic apples. In addition, a newsletter was issued over a few years. But most of all, OAAK’s involvement was pivotal in the development of standards and, finally, in the elaboration of the Kosovar law on Organic Agriculture. Today, the association is education oriented, its 30 members comprise mainly of students and scientific staff. Farmers are trained by OAAK, but they do not play an active role in the association.

**Certifiers.** There are mainly two organisations, who do organic inspection and certification and who are accredited by the EU: Albinspect (Albania) does organic inspection and certification for medicinal plants and wild fruits, and Procert (Macedonia) concentrates on certification of honey production. Therefore and with regard to certification capacity, Kosovo is well equipped.

**Conclusion.** Over a period of approximately 10 years, an institutional framework for Organic Agriculture has been created. An association does exist, the agricultural university has included Organic Agriculture in their curricula and the government has passed a law on Organic Agriculture. The elaboration of administrative directives is underway and the establishment...
of respective working units – for instance an accreditation office for OA certifiers may be next steps. Only then will the institutional support to OA be fully established and functioning.

In summary, the creation of a legal and institutional framework has progressed well. In contrast, there is almost no organic production in the country and a farmer-based movement in this direction is lacking, the latter which is a serious obstacle for the development of this sector.

3.2 NGO in rural development

The Initiative for Agricultural Development of Kosovo (IADK) is the only rural development NGO in Kosovo that supports Organic Agriculture. IADK is a non-profit oriented organisation, which started with emergency aid after the war; inputs such as seeds and fertilizers were distributed to farmers. In 2004 IADK registered as a foundation and changed its focus to rural development. It is supported by various foreign, mainly church based donors and has an annual budget of approximately 800,000 Euro. Today, it works with farmers in horticulture, animal husbandry, food processing. It supports farmer organisations in organisational matters and provides and education to farmers.

IADK works with farmer groups (associations) in various parts of the country and addresses around 1000 agricultural households. Among the many activities, organic agriculture and integrated production represent cross cutting themes; so far, there is no explicit focus on organic production, but a stronger involvement in this field is planned. At present, 23 farmers are supported in the cultivation of medical and aromatic plants, some of them organic. In addition, 30 farmers are supported in organic production of tomatoes and other vegetables. One farmer is in conversion. Supply with organic fertilizers is a main problem. Farmers lack the experience of making compost and using legumes for biological nitrogen fixation; they import organic fertilizers from abroad at high costs.

In collaboration with the Ministry of Agriculture, IADK engages itself in the elaboration of the administrative directives for Organic Agriculture, and in the development of an Action Plan for Organic Agriculture, In addition, it has founded an umbrella organisation for farmers' organisations in Kosovo. IADK has become a member of the Balkan Organic Network that was founded in September 2013 in Bari/Italy and it hosted the first conference of this network in December 2013 in Kosovo.

Conclusion. IADK is the only national NGO in rural development that supports Organic Agriculture as an activity among many others. However, there are plans to increase the involvement in this field.
3.3 Processing and trade companies interested in organic agriculture

3.3.1 Processing and trade of wild collection

There are various trade companies, who are interested to build up lines of organic products for export. There are, first of all, companies who market production from wild collection.

Wild collection for export is a very successful economic activity in Kosovo. A wide range of medicinal and aromatic herbal plants is collected as well as berries and mushrooms. There are collection centres all over the country with good drying facilities. They work under contract with companies, who do processing and export trade. Mushroom collection has decreased significantly during the past ten years due to adverse weather conditions (climate change). Meanwhile, almost all mountain regions of the country either under forest and other non-agricultural land are covered by wild-collection. The wild collection is split among mainly 6 companies (Table 1). Two of them are meanwhile certified organic, others have considered it, but not yet decided to start conversion.

Table 1: Wild collection trade companies

<table>
<thead>
<tr>
<th>Companies (location)</th>
<th>Products</th>
<th>No of collectors</th>
<th>Status of conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø Agroproduct (Istoc)</td>
<td>medicinal and aromatic plants</td>
<td>3000</td>
<td>organic certified</td>
</tr>
<tr>
<td>Ø Agroproduct Commerce (Podnira)</td>
<td>medicinal and aromatic plants, berriess, mushrooms</td>
<td>3000-4000</td>
<td>prepared for conversion</td>
</tr>
<tr>
<td>Ø Hitflores (Dragash)</td>
<td>various types of berries</td>
<td>unknown</td>
<td>organic certified</td>
</tr>
<tr>
<td>Ø Eurofruti (Mramov, Pristina)</td>
<td>mushrooms, blueberries</td>
<td>unknown</td>
<td>prepared for organic</td>
</tr>
<tr>
<td>Ø Fungo FF (Kamenize)</td>
<td>all types of wild mushrooms</td>
<td>1500-2000</td>
<td>prepared for organic</td>
</tr>
<tr>
<td>Ø Kooperative Bujgasoe Rugova (Pristina)</td>
<td>raspberries, blackberries, blueberries, Juniper</td>
<td>3000-4000</td>
<td>unknown</td>
</tr>
</tbody>
</table>

Generally, wild collection sells at good prices and cannot satisfy the demand. Therefore, the cultivation of medical and aromatic plants in order to increase production is becoming a supplementary activity. Two companies have started organic production (in conversion) on own land and under contract farming.
3.3.2 Processing and trade of fruits

In Kosovo, there is a huge demand for fruit in the country, there is significant demand from abroad, the conditions for production (soil and climate) are favourable and there are suitable varieties. This makes fruit production generally attractive, with apples being the most important crop (there are only 500 ha of apple production in the country). Accordingly conventional fruit production and selling them fresh or processed – either for the national market or for export - has become a profitable enterprise. A number of companies have started within the past ten years to produce various fruits on private land and to build up contract farming schemes with smallholders. Public investments, mainly from international donor programmes (EU, USAID etc.), helped to start such enterprises.

Considering the growing demand for organic fruits from abroad and the expectation that also in future there will be public support for the development of new production lines by donor programmes, there are some companies which consider to build up an organic value chain (Table 2).

Table 2: Selected fruit companies (production, processing and trade) planning to go organic

<table>
<thead>
<tr>
<th>Company (location)</th>
<th>Crops</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Askfood (Gjilan)</td>
<td>apples, raspberries, sour cherries</td>
<td>fresh fruits, various processed goods (for the national market and for export)</td>
</tr>
<tr>
<td>MOEA (Gjilan)</td>
<td>apples, raspberries, strawberries, apricots, sour cherries, blueberries</td>
<td>fresh fruit, juices (national market and export)</td>
</tr>
<tr>
<td>Agropoduct Commerce (Podujeva)</td>
<td>raspberries, blackberries</td>
<td>fresh fruits (national market and export)</td>
</tr>
</tbody>
</table>
3.3.3 Trade of vegetables

Similar to the fruit sector, there is interest among vegetable trading companies to enlarge their portfolio with a line of organic vegetables (Agrocelina and Askfood). In vegetable production, paprika and cabbage are important crops for export. Cropping is done by smallholders under the contract of companies. Farmers have acreages under vegetable production of mostly of 1-2 ha.

3.3.4 Conclusion

There is a general interest among companies doing processing and trade of agricultural produce to build up a line of organic production. But they have no knowledge of or experience with organic technologies and economics for organic production are unknown.

4. Crops and their suitability for organic production

4.1 Medicinal and aromatic plants

Smallholders, distributed in the catchment area of Istoc are cultivating such crops, such as chamomile, malva, salvia, menthe, thyme on small areas of land (around 10 ares and as partial conversion) for the Company Agroproduct. The company plan for a group certification of the contracted smallholders. However, they are widely scattered, their acreage is rather small and internal control systems may be difficult to implement. First farmers are in conversion, but it remains an open question, whether under these circumstances a group certification approach will be accepted by the certifier.

With partial conversion, technological problems are no less difficult to solve. Organic agriculture requires organic manures and their origin from organic systems. Farmers would have to produce fertilizers from plant residues, green manure, animal manures and composts that are based on organic management. The import of cow dung for instance from a conventional farm would not be accepted, or only to a small degree and as an exception. As there are not other organic farms in the country, from which organic fertilizers could be obtained and buyings from abroad can be excluded due to the high costs involved, partial conversion with no possibility to produce own fertilizers is not an option.

Last but not least, economics of organic production are unknown. Higher costs and lower yields of organic in comparison to conventional cultivation are to be expected, and it remains to be seen, whether higher prices for organic can compensate this sufficiently. In general it can be said that the cultivation of medical and aromatic herbs on the basis of contract farming with smallholders on partially converted land is not a very promising strategy to introduce organic agriculture.

In summary, there is a high demand for organic medical and aromatic plants and there are established marketing channels that could be utilized for increased produce. On the other hand, the organic production on small plots of land without considering the conversion of the
farm as a whole is difficult to achieve. The supply or production of organic fertilizer is unsolved, and there is no experience in group certification. Therefore, the organic cultivation of aromatic and medicinal herbs organically, offers very little potential.

4.2 Fruits

With respect to organic fruit production in Kosovo, the favouring and the constraining factors for organic production display a differentiated picture. General aspects against an organic fruit production are:

- There is a high demand for conventional fruit in the country and even export of conventional fruit is favourable. Therefore there is no immediate need for search of new products.
- Most companies are still in the start-up phase and busy in developing fully their product lines. To start with organic now might be too early and may surmount their capacity.
- Most companies see the prospect of producing premium products and the high prices that are being paid for organic products, but have little perception of organic agriculture and its requirements with respect to technology and certification. In addition costs and benefits are unknown.

On the other hand, there are also enabling factors for organic fruit production. For a number of fruits, there are favourable agro-climatic conditions, labour is available at comparatively low cost. Assuming that organic fruit production will be based on a contract farming arrangement with farmer groups or farmer associations producing on many small pieces of land, there are two crops, which seem to be of particular interest: raspberries and blueberries. Such berries could be marketed fresh or deep-frozen. Respective cold chains and the experience to market fresh products do exist.

Similar as with medical and aromatic herbs, the berry-producing smallholders would have to be organised in groups and organic certification should follow a group-certification approach. Technically and with respect to generating organic fertilizers, the conversion to organic for blueberries and raspberries might be easier as with medical and aromatic herbs. Raspberries and Blueberries are permanent crops with moderate fertilizer requirements. It would be possible to apply green-manure practices and start nutrient cycles within the organic cropping system.

4.3 Vegetables

The idea, to start organic vegetable production with a small number of smallholders on partially converted land, for instance 10-20 farmers, preferably organized in an association meets even bigger problems as the organic cultivation of aromatic and medical plants. Appropriate organic fertilization and biological plant protection requires that crops are rotated with other crops, that organic fertilizers (from plant and animal residues) of the farming sys-
tem as a whole are developed. But full conversion of such smallholdings requires sound knowledge and experience of farmers towards organic agriculture as well as the conviction and willingness to do so. Therefore, contract based smallholder production of organic paprika on partially converted plots is not an option at present.

4.4 General aspects

All crops are confronted – more or less - with the problem that partial conversion limits or even hinders important methods to be applied in organic agriculture. There is – first of all – the insufficient provision of organic manures and fertilizers to be solved. According to the organic standards all types of fertilizers such as composts or animal manures have to come from organic production systems. For instance, cow dung from a conventional farm is not accepted as manure for organic production. The same applies of plant protection. In production systems of partial conversion (for instance one field with one crop) all these measure would have to come from the same plot alone, which offers very few possibilities.

A second main constraint is certification. Certification in a system of smallholder production can only be done cost effectively with a group-certification approach. But group certification requires an elaborate internal control system, in which the group itself does supervision and monitoring and follows a detailed documentation procedure. Only then will the group as a whole be certified. The establishment of such a system takes time and it requires a strong group that is willing and finally capable to apply the internal control system. Secondly, group certification requires significant investment. Associations have to be trained over a period of several years, until they can manage the system by themselves. Most probably, the smallholder associations will not have the resources for this. It will have to come from the trade company, for whom they produce under contract.

5. Summary and conclusions

(1) The majority of farms in Kosovo are smallholdings. This excludes a priori the production of bulk products such as cereals or oil crops. Only special niche products can be produced that are cropped on small acreages.

(2) Smallholdings in Kosovo are mostly semi-subsistence oriented and their commercial production is small. Therefore they produce little surplus for the market. This calls for system of contract production in cooperation with processing and trade companies. This system does exist and needs to be improved further. Capacity building of producer associations and technical training of their farmers are important aspects.

(3) In a system of partial conversion, organic production for most crops is difficult to achieve. The conversion of smallholder farms as a whole is preferable if not inevitable. Only then will it be possible to build up supply of organic manures (from livestock and cropping systems) and develop a system of farm based soil productivity management. Accordingly, farmers have to be motivated and supported to convert their whole farm to Organic Agriculture. Awareness
creation and sound technical training are important steps to achieve this. There is sufficient evidence that Organic Agriculture (un-certified) does no depend on premium prices to be competitive. Notably for subsistence based smallholders it can be even be more profitable than conventional agriculture.

(4) Economically, there is no knowledge on expected costs and revenues from organic production in Kosovo. This is another argument to experiment with organic production systems and to assess their performance.

(5) With respect to certification, important organisational investments of farmer groups or associations are necessary. Organic production under the conditions described requires organisation of many producers in cooperatives or associations and group certification with an internal control system. All this puts high requirements with respect to organisational capacity, internal monitoring and evaluation of farmer associations, which at present are rather weak.

(6) At present, only raspberries and possibly blueberries seem to be promising from the crops discussed earlier. Both – raspberries and blueberries - have little demand with respect to fertilizers and can, therefore, be cultivated easily organic on partially converted land, even on small acreages of 10-20 ares. Raspberries are easy to manage, a good variety (Polka) is available and it may not be difficult to establish producer groups that grow them under contract. There is a high demand for Raspberries – fresh or deep-frozen – and prices are attractive. Blueberries are still in the experimental phase but may be a second crop worth supporting.

(7) Experiences in many countries have shown that developing a sub-sector of Organic Agriculture cannot be achieved by export production alone. A domestic market has to be build-up. This in turn requires the creation of awareness and demand from consumers.

**Final conclusion**

At present, the possibilities to support enterprises and their economic activities towards increased organic production, processing and trade are very small and do not represent an entry point for organic farming development on a broad scale. Instead and with respect to overall rural development, it would be preferable to address producers and consumers first. A support to producers would be necessary, which helps to develop a general understanding on need and possibilities of organic production, and enhances technology development and organisation in associations. This could be done by the already existing NGO (IADK and OAAK) or by an (integrated) expert seconded to the agricultural extension service and with the exclusive mandate to develop and run advisory and training programmes in Organic Agriculture for farmers in Kosovo.

Similarly consumers should be educated in order to get awareness about the need for organic food and environmental friendly agriculture. On the foundation of skilled farmers and educated consumers a support to economic development of processing and trading companies would offer much more potential and expected returns.
ANNEX: Documents used


Ministry of Trade and Industry (2008): Agriculture and food processing industry. IPAK and ECIKS.


