



## **WP2: State-of-the-art review**

### **SLOVENIAN TEAM**

Andreja Borec and Jernej Prišenk

#### **1. Background information:** (max. 200 words)

Slovenia lies between Croatia (south), Austria (north), Hungary (east) and Italy on the west part. It has approximately 2.000.000 million inhabitants with 20.273 km<sup>2</sup> surface area.

Slovenia is predominately mountain country. Slovenian mountain and hilly regions are spread out over more than 72,3% of that nation's total area (1.467.240 hectares). The hilly and mountain regions fall under LFA (less favored) areas which represent 86,3% (1.750.920 hectares) of all nation's total area. The 74,2% (approximately 449.000 hectares) of agricultural land in use are under LFA. Forests and the forest landscape are the most recognisable spatial elements in Slovenia, which also represent a large market opportunity and a comparable advantage for Slovenia. With forests covering 60% of its territory, Slovenia is the third most forest-rich country in Europe. Animal husbandry is the prevailing activity in Slovenian agriculture. GDP in Slovenia is 35466,0 (in Mio €) in 2012 and 36171,8 (in Mio €) in 2011. Agriculture reaches 2.1% of the GDP in the national economy, it means approximately 1396,1 (in Mio €). From final data in 2010 the agricultural holdings used 474,432 hectares of agricultural area and bred 421,553 LSU (livestock units). In 2010 almost 79% of agricultural holdings in Slovenia bred livestock. An average agricultural holding thus used 6.4 hectares of agricultural area and bred 5.6 LSU. In the past ten years the average size of agricultural holdings in Slovenia increased by 0.8 hectares of utilized agricultural area and 0.1 LSU.

The number of agricultural holdings decreased from 86467 farms in 2000 to 74646 farms in 2010. The size of total agriculture area also decreased from 537249 hectares in 2000 to 507091 hectares in 2010. The same decline could be seen in share of arable land from 170571

hectares in 2000 to 170144 hectares in 2010. The majority of agriculture land in use belongs to permanent grassland which represents 277492 hectares in 2010, in 2000 with 285410 hectares. Meadows and pastures represent us much as 60 % of agricultural land while more than 20 % of fields are used for the production of feedstuff. 30% of agricultural holdings are focusing in grazing livestock and about 20% in animal breeding. Self-sufficiency farming (100% or more) is recognized in hop production, eggs production, apple production, wine production, poultry production and horse meat production. The lowest self-sufficiency could be recognized in the pig meat and vegetable production.

The main development traits in the agriculture sector from 1990s could be seen in rapidly increasing number of organic farms and organic food production (as well as agriculture area for organic production).

## 2. Status organic food production & consumption ( max. 500 words)

In 1997, the Slovenian Organic Farmers' Association (S.O.F.A.) was founded. This was the first national association of pioneer organic farmers who were producing for the market, and who were interested in the development of a certification system. The association adopted the standards for organic agriculture in Slovenia that were prepared by the Institute for Sustainable Development (ISD), a non-governmental organization (NGO), specifically for this purpose. These standards were published by the Slovenian Ministry of Agriculture. They were prepared in accordance with the IFOAM Basic Standards and are similar to the standards of Austrian and German organic farmers' associations (Ernte and Bioland). The most important milestones are:

### 1988:

- Establishment of the Mikrokozmos Society;

### 1991:

- Establishment of the AJDA Biodynamic Society

### 1996—1997:

- First organized lectures and courses for agricultural advisors from Agricultural Advisory Service and non-governmental organizations
- Adoption of Recommendations on organic farming in Slovenia (Ministry of Agriculture, Forestry and Food)
- Establishment of the Slovenian Organic Farmers Association
- Establishment of the Organic Farmers Association of northeast of Slovenia

### 1998:

- Organization of International training for organic farming supervisors (Institute for Sustainable Development)
- First control carried out: internally by the Slovenian Organic Farmers Association and by the

ABG controllers (ABG — Austria Bio Garantie)

- Establishment of an control body under the Institute of Agriculture Maribor (PHARE Project CBC 1977: Biological production in agriculture and forestry)

1999:

- Establishment of the Union of Slovenian Organic Farmers Associations;
- Opening of public organic market in Ljubljana,

2000:

- Opening of public organic market in Maribor,
- Bio-symposium Alps-Adria in Maribor;
- Agriculture Act (OJ RS No 54/2000);
- First contacts with organic fruit and vegetable producers in Mercator;

2001:

- Regulation on organic production and preparation of agricultural products and foodstuffs (OJ RS No 31/2001);
- Regulation on technical and organizational conditions that must be fulfilled by control bodies for controlling organic agricultural products and foodstuffs (OJ RS No 56/2001);
- Establishment of an control body (OJ RS No 82/2001);

2003:

- Regulation on changes and supplements of the Regulation on organic production and preparation of agricultural products and foodstuffs (OJ RS No 52/2003);
- Regulation on sites identification in the Republic Slovenia suitable for organic beekeeping and map preparation of non-suitable areas for organic beekeeping in the Republic Slovenia (OJ RS No 52/2003);
- Signing of cooperation document within the initiative ALPSADRIA Eco-Region; next to Slovenia the region comprises of Austrian provinces (Carinthia and Styria) and Italian regions (Friuli-Venezia-Giulia and Veneto)

2004:

- Decision on formation of working group for preparation of Slovenian action plan;
- Decision of the Government of the RS on the problem of the GMO coexistence (11 March 2004);
- Adoption of European Action Plan for Organic Food and Farming (10 June 2004);

- Since Slovenia's EU accession, Council Regulation (EEC) No 2092/91 24 June 1991 on organic production of agricultural products and foodstuffs (hereafter referred to as Regulation 2092/91), as amended, applies directly;
- Eco-symposium Alps-Adria in Ljubljana: Organic Farming and Genetically Modified Organisms;
- Active public organic markets in Ljubljana, Maribor, Celje and Novo mesto;
- Designation of two inspection bodies (OJ RS No 138/2004);

#### 2005:

- Participation in the Commission Standing Committee for Organic Farming — amendments to the EU provisions;
- Project initiation “Contribution of Slovenian NGOs to the action plan to organic farming (Institute for Sustainable Development);
- Conference “Strategy of Organic Farming Development in Slovenia”, National Assembly of the RS, 19 May — closing of the project “Contribution of Slovene NGOs to the action plan to organic farming;
- Preparation of amendments to the Slovenian Organic Farming Rules;

#### 2006:

- Official national law number 128/06
- 3 new control organization

#### 2007:

- Official national law number 21/07
- Council regulation 834/2007

#### 2008:

- Commission council 889/2008
- Commission council 1235/2008

In 2012, the number of agricultural holdings in the organic control system and certification scheme was higher for 13% compare with 2011, while the number of new agricultural holdings in the system grew from 179 in 2011 to 417 in 2012. The number of organic farms increased from 115 in 2000 to approximately 2000 in 2011. Utilized agricultural area with organic farming increased by almost 3000 hectares from 2011 to 2012. In 2011 were 28807 hectares of organic agricultural holdings and 4700 hectares of agricultural holdings in conversion to organic, while in 2012 6294 hectares of agricultural holdings in conversion

were determinate. Number of organic farms represent 2,6% of all Slovenian farms and 6,1% of all agricultural land in Slovenia. The average size of the organic farm in Slovenia is 15 hectares (it means more than average size of t conventional farms 6.5%). The biggest growth in organic farming in 2012 was recognized in poultry production, by 78% (from 29558 to 52757 numbers of animals). The number of cattle (about 20500 number of animals) and sheep (about 35000 numbers of animals) remained more or less the same.

Slovenia exports only smaller amount of organic honey, meat, herbs and pumpkin seed oils. In 2005 the company

The organic market in Slovenia has been growing at an annual rate between 10-15% the period between 2005 and 2009. The largest growth was in the category of fresh vegetables and fruits. Organic market values was estimated on 34,5 million euros, while the domestic organic market value represented approximately 6,95 million euros. Direct selling on farm has 11% share while direct selling on the specialized farmers markets amounts to almost 5%. All food products (estimated on 100%) sold on the farm and organic farmers` markets are domestic, while the domestic of food products sold in retail shops was estimated on lower than 5%. The structure of Slovenian organic food market by the sales channels represented with table below:

Sales channel	Market value (in mio EUR)	Channels share (in %)	Share of domestic (in %)
Retail shops ( <i>conventional, discount, specialised</i> )	29.0	84.1	< 5
On-farm	3.8	11.0	100
Organic farmers' markets	1.7	4.9	100
Total	34.5	100	

Table 2. The structure of Slovenian organic food market by the sales channel, 2009. Source (Slabe et al., 2010)

On average, per capita expenditure for organic foods and beverages respectively amounts to 17 EUR. The exactly data of organic products size consumption in Slovenia were not found.

Plans and national goals and strategies for organic production and consumption (adopted by Action plan for development of organic farming in Slovenia by 2015):

- a. By 2015 an organic farms share in Slovenia of 15 % is to be reached, and a 20% share of utilized agricultural area (UAA) under organic control;
- b. By 2015 a 10 % share of organic foodstuffs of Slovenian origin on the national market is to be achieved;
- c. In the next 5 years the number of organic tourist farms is to triple;
- d. Organic farming is one of the priorities in agriculture for accelerating the sustainable development of agriculture and establishing the conditions for sustainable development of the country;
- e. Providing better integration of non-governmental organizations;

- f. Cooperation with foreign organizations and IFOAM;
- g. Providing for conform, objective and multifunctional information actions on CAP measures to secure the overall policy image;
- h. Establishing close contacts with Member States and exchange of information;
- i. Monitoring the realization of individual measures under the Action plan

### 3. Summary of studies on mid-scale food value-based chains in the organic & quality food sector<sup>1</sup> (6000 words for 3+4+5)

- a. ARE CONSUMERS IN SLOVENIA CONCERNED ABOUT THE MOUNTAIN QUALITY FOOD?: <http://www.mf.uni-mb.si/mf/instituti/IPweb/html/borec.pdf>
- b. MODELS OF PARTNERSHIPS AND ORGANISATIONAL FORMS IN SHORT FOOD SUPPLY CHAINS IN THE SLOVENIAN MOUNTAINS: <http://ageconsearch.umn.edu/bitstream/152807/2/5%20-%20Borec,%20Prisenk.pdf>
- c. A MULTI-CRITERIA ASSESSMENT OF THE PRODUCTION AND MARKETING SYSTEMS OF LOCAL MOUNTAIN FOOD: <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8943659&fulltextType=RA&fileId=S1742170513000197>
- d. FOOD VALUES CHAINS IN SLOVENIA AND THEIR RISK ASSESSMENT: <http://www.agricultura-online.com/portal/issues/issue-9/105-food-value-chains-in-slovenia-and-their-risks-assessment>
- e. A COMBINATION OF THE MULTI-CRITERIA APPROACH AND SWOT ANALYSIS FOR THE IDENTIFICATION OF SHORTCOMINGS IN THE PRODUCTION AND MARKETING OF LOCAL FOOD: <http://www.agricultura-online.com/portal/issues/50-issue-16/154-a-combination-of-the-multi-criteria-approach-and-swot-analysis-for-the-identification-of-shortcomings-in-the-production-and-marketing-of-local-food>

- a. The main goal of the study was to assess the perception and interest of European consumers for mountain quality food products in order to find ways for adding value to mountain food products. The paper explores the role and different forms of partnership by marketing of mountain food in Slovenia.
- b. The aim of the study was to examine whether the implicated multi-criteria method is

<sup>1</sup> In most empirical studies of quality food production and alternative food chains, there are usually cases of both organic food and food with other qualities. This is the reason why we have included “quality food sector” in the heading. Some studies divide between regional or artisanal characteristics and ecological or natural characteristics of quality food (for example Renting et al 2003; Murdoch et al 2000), but many producers may focus on both types.

appropriate for the assessment of the production and marketing systems of local food. Secondly, the study aimed to determine whether the method gives clear directions for overcoming bottlenecks in production and marketing system of local mountain food.

- c. In the article, most important food supply chains and their characteristics, with emphasis on trade streams, are elaborated and the assessment of risks, as perceived by interviewed supply chain operators, is presented.
- d. The objective of the paper is to determine and understand the main shortcomings in the process of producing local food.

The reference - (c.) study, describing the numbers of farms and companies including into the food chain. The subject of the paper is focusing in describing ten non-organic but traditional high quality local food products from mountain areas in Slovenia. Data below were recognized in the survey:

Actors in production system: In 6 food chains 0-150 actors; in 2 food chains over 350 actors; in 2 food chains 151-350 actors

Actors in Processing system: In 7 food chains 0-150 actors; in 2 food chains over 350 actors; in 1 food chains 151-350 actors

Actors in Marketing system: In 8 food chains 0-25 actors; in 1 food chain 51-75 actors; in 1 food chain over 75 actors

The same paper also described the customers for all ten food products:

Local/regional consumers: in all 10 food chains

Tourists: in 7 food chains

Chain of sales companies: in 4 food chains

Other target groups of consumers: 0 food chains

All ten local food products are sold on the local or regional level.

The main finding of the study d) explains that the combination of the trust and affordability can be reached through improvements in trade processes and in the communication of trustworthiness between trading partners along the chain. The negative influence of bureaucracy and lack of key intermediaries were commonly noted among these barriers by the majority of supply chain sector.

Growth of the mid-scale food value-based chains was not described in analyzed studies.

What are the major logic regarding value:

Was not described in the papers



Product strategies & product development for growth:

Was not described in the papers

Farmers/Suppliers:

Was not described in the papers

Distribution channels:

Was not described in the papers

Quality differentiation strategies:

i. Communication of qualities to customers and consumers:

1. Are labels & logos part of a differentiating strategy and eventually which types (regional branding, quality standards, certifications, protected designations, etc.)?

In paper c) designations represent the one of the major attribute of the developed model for assessing marketing process of local food. Results show that protected designations as PDO and PGI can make a good contribution to food product successful selling (i.e. product sales quantity). However, from the obtained results we cannot conclude that labels represent the tool for communication between customers and consumers, but we can make inferences that selling success depend on consumers trust for a quality of food and labels (with PDO and PGI quality designations).

Does the study mention other important partnerships & networking for development and growth of the value-chain, describe those?

Paper b) describes the partnerships between the sectors involved into the local quality food supply chains. Three different types of the partnership appear: the pure public-private partnership (also known as PPP), non-public-private partnership and conditional public-private partnerships. The partnerships were analyzed in the sphere of production and marketing systems. Results shows that production and marketing processes of local food products are more successful if the private sector is involved into food chain, although this was acknowledged only by few products. The reasons for the lack of private interest are very diverse: from individual reasons (actors are not willing to collaborate, financial profit of individuals is in average low) to more sophisticated reasons connected to local policy, and last but not least, reasons connected to the special taste of these products.

Does the study describe changes in the organization/network/chain actors as part of a growth process (for example changes in organizational form, board, management, employees, network actors, quality standards, etc.)?

Was not described in the



Are challenges and possibilities for growth in mid-scale food value-based chains described?

No, there are no descriptions of challenges and possibilities for growth in mid-scale food value-based chains.

Does the study conclude with success criteria for mid-scale food value-based chains, and strength & weakness of different organizational forms and pathways?

In paper e) the shortcomings/bottlenecks of food chains with SWOT analysis approach was elaborated. Results represented below show the points of success of production and marketing in mountain regions in Slovenia.

**STRENGTHS:**

- Amount of agricultural production on farm
- Purchasing sources
- Orientation of farm production
- Farm types
- Technological equipment on farms
- Technological equipment in companies
- Complex processing
- Designation
- Success of product sales
- Price
- Organization of marketing: farmers
- Consumers: Local/regional consumers
- Consumers: tourists
- Consumers: other target groups of consumers

**WEAKNESSES:**

- Number of farms: production
- Number of farms: processing
- Number of farms: marketing

- Percentage of sales
- Processing in companies
- Final products on farms
- Final products in companies

**OPPORTUNITIES:**

- Organization of marketing: local public institutions
- Organization of marketing: alternative ways of marketing
- Consumers: local shops, supermarkets

**THREATS:**

- Size of cultivated area on farm
- Processing on farms

The strength of organizational forms was explained in the paper b.) The most positive marketing and sale is recognized by the mountain food products with high production (high quantity) and with the longest food chains (in the context of Slovenia conditions and food chains features) and with pure PPP both in the phase of production and marketing.

**Theoretical approach: What theoretical approaches are used in the study?**

Theoretical approaches are based on the references below:

1. Bratec M. Slovenian Gastronomy: Through issues of quality or communication. Assignment for the course of Strategic Communication. University of Southern Denmark, 2007.
2. Bratec M. Aiming towards sustainable (tourism) development: The case of the slow food movement and its impacts in Slovenia. Assignment for the course of Sustainable Tourism Development. University of Southern Denmark, 2008.
3. Majkovič D, Borec A. Are consumers in Slovenia concerned about the mountain quality food? J. Geography 2010;5(1):115-24.
4. Ilbery, B. and Kneafsey, M. 2000. Producer constructions of quality in regional speciality food production: A case study from South West England. Journal of Rural Studies 16:217–230.
5. Marescotti, A. 2003. Typical products and rural development: Who benefits from PDO/PGI recognition? In 83<sup>rd</sup> EAAE Seminar (Food Quality products in the advent of the 21st Century: Production, Demand and Public Policy), Chania, Greece.
6. Galli, F., Carbone, A., Caswell, J.A., and Sorrentino, A. 2011. A multi-criteria approach to assessing PDOs/PGIs: An Italian pilot study. International Journal of Food System Dynamics 2(3):219–236.
7. E-Trust: Building Trust for Quality Assurance in Emerging E-Commerce markets for food chains. DoW (Description of Work). Contract No.: FP6-CT-2006-043056. 2006.
8. Marsden, T., Banks, J. and Bristow, G. (2000). Food supply chain approaches:

Exploring their role in rural development. *Sociologia Ruralis* 40(4), 424-438.

**What methodological approaches are used? Do you have any critical reflections on these choices?**

Methodological approach used in studies mostly base on the multi-criteria assessment approach and SWOT analysis. In the fourth (d) paper the tool (risk portfolio diagrams) for risks assessment was employed and used. The results of this paper were elaborated within the risk portfolio diagrams.

There are no critical reflections on the choice of methodology and all approaches described in the papers are suitable for discussed thematic.

**What are the main lessons learned from all the studies you have reviewed? (max. 800 words)**

After studies reviewed it could be recognized that represented studies do not give all relevant answer for questions above. Analyzed studies (especially b), c) and e) described the mid-scale food value-based chains from mountain region in Slovenia, but do not include any organic food products (no organic mid-scale food value based chain was not described yet). Analyzed studies mostly describe high quality food products. Mid-scale value based chains as described in one point of the definition („build long term strategic alliances between business enterprises) are almost not present in Slovenia as the food chains (specially for domestic organic food) are mostly short. No relevant studies about the major conditions for growth, major barriers and healthy growth strategies with describing the distribution channels where found. As well as for WP2 the case studies selected for WP3 satisfy to criteria for organic mid-scale value-based food chains except “build on long term strategic alliances between business enterprises”. In generally, the organic food chains in Slovenia have not been discovered in details yet but through several national projects in last few years without a lot of studies corroborated with relevant papers.

However, the analyzed studies mostly describe the local and also mountain quality food products without organic label but with national and/or EU protected designations. From this point of view these studies could represent quality food sector. The analysis of Slovenian study cases has led us to assume, that local food production can make a good contribution to new way of networking and cooperation between small producers in rural areas. When describing the characteristics of local (and mountain) food chains could be pointed out:

- Small scale production
- Lack of coordinated management at all levels of supply chain – lack of closer cooperation of actors along the SC.
- Direct selling on the farms.
- Supply often lower than demand.
- Lack of use of European and domestic designation by producers – small scale farmers are reluctant to increase

the promotion as they fear they will not be able to increase volume.

- Mountain image used as a marketing tool for differentiation more often than as a prevalence of true mountain origin.

**Make a summary of studies of expansion pathways from conventional food or non-food sector which might be of interest for our purpose**

The most regular studies which could go into our project scope are b), c) and e) and potentially d). From the contents aspect we suggest the paper d) might be very interesting for our purpose, which describes the food chains in Slovenia in generally and disclose that combination of trust and affordability can be reached through improvements in trade processes and in the communication of trustworthiness between trading partners along the chain.