

Agriculture

Introduction

Due to its preserved nature and environment, Croatia has an advantage over other developed countries and can produce diverse and safe high quality food. Zadar County stretches over very diverse natural areas: islands, coastline and Ravni Kotari, part of Bukovica, southern slopes of Velebit mountain and Lika. Ravni Kotari is the most important area for agriculture, along with the coast. Three different geographic and climate areas are present in a relatively small area: plains of the hinterland influenced by the continental climate, coastal area influenced with the Mediterranean climate and the mountain area. This enables production of a wide range of agricultural products. Environmental conditions (climate and soil), geographic position, roads and vicinity of the market are favourable for agricultural production.



Most important industries and crops

The most important industries of primary agricultural production are vegetable growing, fruit growing, viticulture, husbandry and fisheries. Processing industry includes baking industry, production of alcoholic and non-alcoholic beverages, farming and processing of fish. Main fruit species of this area (from environmental and market point of view) are: olive, grape, almond (local word *bajam*), Maraska cherry, peach, nectarine, cherry, fig and apple. Main husbandry industries are cattle, sheep and goat breeding, with the sheep breeding as the dominant husbandry industry. Future development

of husbandry in Zadar County will be directed towards development of small farms, intensifying of sheep and goat breeding and better use of pasture capacities.

Structure of Agricultural Land

According to the data from 1999 provided by the Statistics office of the Zadar County, arable land covers 68,976 ha (29.8%), agricultural land 231,746 ha, total 362,973 ha.

Table 1. Structure of agricultural land in Zadar County in 1999

Arable land and gardens	45,868 ha
Orchards	2,515 ha
Olive groves	2,727 ha
Vineyards	5,931 ha
Meadows	11,935 ha
Total arable land	68,976 ha
Pastures	162,770 ha
Total agricultural land	231,746 ha

Source: Statistical office of the Zadar County 1999

93% of total agricultural land is in private ownership, and 7% is state owned. Karst fields (polje) are used as arable land: Vransko polje 4,460 ha, Korlatsko-kulsko polje 2,206 ha, Kožlovačko-morpolačko polje 3,457 ha, Benkovačko 728 ha, Babin dub polje 328 ha, Žegarsko polje 270 ha and Rašinovac polje 966 ha. Apart from above mentioned fields, other important arable land include: Nadinsko and Bokanjačko blato (mud), Baštica i Nova Baštica, Vlačine, areas around Zemunik, Smilčić, Miranj, Nin, Privlaka, Ljubče, Islam Latinski and Grčki, Pridraga and other. However, today 10-15% of arable land is actually used, whereas most areas are neglected and not cultivated. According to the data of the Croatian Extension Service - Branch Office of the Zadar County (2010) areas under permanent crops cover 6.184,93 ha out of which 3,636 ha are olive groves, 977.93 ha are orchards (different sorts) and 1,571 ha vineyards (wine and table grape). Production of vegetables in the open takes place on the area sized approx. 1.000 ha, while in protected spaces production takes place on 22.2 ha out of which 9 ha with hydroponics cultivation.



Production Structure

Today's production amounts to approximately 8000 tons of different fruit, 500 tons of table grapes, 5,000 tons of olives, 12,000 tonnes of wine grapes and 30,000-40,000 tons of vegetables, out of which 9,000 tons in the protected space. Fruit production includes peaches and nectarine, cherry Maraska, apple, and lately cherries and fig plantations are planted. Growing vegetables in the open includes brassicas, lettuce, leek, potato, root vegetables (carrot, celery, and parsley), mangold, spinach, tomato, paprika, watermelon and melon, while in the protected area tomato, paprika, cucumber, lettuce and mangold are grown.

Agricultural Producers

According to the last agricultural census from 2003 there were 14,413 agricultural production units (14,392 households and 21 business entities). Total used agricultural land, according to the 2003 agricultural census was 21,030.44 ha, out of which agricultural households take 18,987.44 ha and business entities 2,043 ha. Register of family agricultural holdings, established in 2003, recorded a total of 6.418 family agricultural holdings (FAH) in Zadar County. The following table provides an overview of agricultural holdings according to types of organisation.

Table 2. Number of agricultural holdings according to types of organisation

	Family agricultural holding	Crafts	Other	Companies	Cooperatives	Total
Zadar County	6 418	55	4	26	12	6 515

Source: Ministry of Agriculture, Fisheries and Rural development, Register of agricultural holdings 2008.

Size of agricultural land in Zadar County

Table 3. Agricultural holdings (AH) and land in ownership, by classes, 2007.

	Classes, ha						Total AH		
	<3		>=3 i <20		>=20		number of AH*	ha	Ø ha
	number of AH	ha	Number of AH	ha	number of AH	ha			
Zadar County	4 552	4 152	697	4 566	53	5 511	6 482	14 229	2.2
Total Croatia	80 073	89 070	62 731	422 951	6 279	522 525	176 027	034 546	5.9

Source: Ministry of Agriculture, Fisheries and Rural development, Register of agricultural holdings 2008.

** difference up to total amount relates to AH without land

Average size of the land owned by an agricultural holding in Zadar County is 2.2ha, which is 3 times less than average size on the national level. Istria County (3.3ha) and Primorje-Gorski Kotar County (3.6ha) are ahead of the Zadar County. Out of total number of holdings as much as 70% are with land ownership of parcels below 3 ha. Private properties are mostly dispersed on ten small parcels. Cause for such dispersion and fragmentation is the traditional distribution of rural households. Such fragmented properties do not allow modern and competitive agricultural production and cannot ensure long term existence of family agricultural holdings. Apart of the property fragmentation problem, there is a problem of insufficient connections between small producers.



ARKOD System

At the beginning of 2010, ARKOD system was introduced on the entire territory of Croatia with the goal of recording all agricultural plots. Agricultural plots of individual farmers are graphically recorded. ARKOD is a reference system for achieving national direct payments for 2011, and also for European subsidies which will start upon Croatia's accession to the European Union. Table 69 gives an overview of data

of over 98% of holdings with at least one plot registered in ARKOD. 900,000 ha of agricultural land is recorded as being in use, or approximately 1,300,000 ARKOD plots. For the purpose of comparison of agricultural land use, data is presented for neighbouring Šibenik-Knin County, Split-Dalmatia and Istria County.

Table 4. Number of AH per Counties

County	Total number of AH registered in the RAH	Number of AH in RAH with ownership	ARKOD (LPIS) number Parcel	Total area in ha
Zadar County	7,408	6,371	34,739	17,843.85
Šibenik-Knin County	6,842	4,451	24,481	5,375.74
Split-Dalmatia County	15,126	11,562	54,064	12,365.47
Istra County	6,771	5,628	36,221	19,153.83

Source: Croatian Chamber of Agriculture, 14 January 2011.

Hydro melioration

Melioration plan for the area of Zadar County, which is part of the Project for melioration and management of agricultural land and waters (PMMAW) identified 8 locations for which the planning documentation is currently being or has already been created. Thus, the projects for irrigation systems are in different stages of development MS Kolansko polje (330 ha), MS Povljansko polje (300 ha), MS Bokanjac – Rašinovac (350 ha), MS Baštica (650 ha), MS Škabrnja (300 ha), MS Kulsko- koraltsko polje (550 ha), MS Lišansko polje (250 ha), MS Vransko polje (4.500 ha). The first phase of MS Baštica, comprising 264 ha, has been constructed and is already operating.

Organic production

Most of agricultural production is conventional, with exemption of organic production areas. By decreased use of pesticides, artificial mineral fertilisers and other agrochemicals and with ecological waste management we can preserve the land for future generations and eat good food. Regulation which provides for this area is the EU REGULATION 91/414/EEC which is binding for all members of the EU and imposes introduction of integrated production until 2014. Only last year, Croatia created the legislative framework for implementation of integrated production, and work with producers of fruit, grape and vegetables are still ahead of us, in order to enter the system of controlled production. Zadar County is the leader in organic agricultural production in Dalmatia, and along with Osjek-Baranja County and Sisak-Moslavina County, is the strongest County when it comes to organic production in the Republic of Croatia. First organic olive oil in Croatia was produced in Zadar County in 2004. In April 2009 Register of organic producers of the Ministry of Agriculture, Fisheries and Rural Development recorded 40 producers with total production on 337,879 ha. Zadar County holds two thirds of all Dalmatian organic vineyards under expert control (54.8 ha), thanks to the initiative of the Winegrowers and wine producers' Association from Nadine near Benkovac which for now, implements the only serious organic fruit growing project in Dalmatia.

Table 5. Areas under organic agriculture in Dalmatia, producers registered in the Register of organic producers in MAFRD by Counties, April 2009.

County	Number of organic producers	Total area	Arable land and gardens	Orchards	Olive groves	Vineyards	Meadows and pastures	Other
Zadar County	40	337.8970	11.0310	2.3748	7.5973	54.8211	231.1020	30.9708
Šibenik-Knin County	11	175.5111	17.2500	0.2362	25.0000	/	133.0249	/
Split-Dalmatia County	18	80.4253	2.6177	/	28.5208	26.7930	21.2680	1.2258
Dubrovnik-Neretva County	6	12.5782	/	/	12.5782	/	/	/
Dalmatia - Total	75	606.4116	30.8987	2.6110	73.6963	81.6141	385.3949	32.1966

Source: MAFRD Department for organic and integrated agriculture; AgriBioCert Omišalj Cooperative; Biotechnicon Ltd. Split; Monitoring station of Croatian Forests Ltd.

Zadar County, at the initiative of the COAST project and the competent Ministry, with a goal to develop organic agriculture, founded a Committee for organic production. The committee is consisted of representatives of County administrative offices, branch Extension services, registered organic producers and the Development agency in 50:50 ratio.

Within the COAST project in 2009 an Action plan for the development of organic production in Dalmatia was developed, which is the basis for the activities of the mentioned Committee. Most important activities which are to be developed in the form of organic agricultural production are:

Plant agricultural production at existing (revitalisation) and new plantations in the open and in protected spaces (olive growing, wine growing, Mediterranean fruit growing, herbs and spices growing, vegetable growing, farming);

Extensive semi-intensive sheep and goat breeding and other traditional husbandry industries (revitalisation of donkey and mule breed);

Beekeeping

Production of high quality organic and traditional alimentary products with geographic indication (sheep and goat cheese; smoked meat products, premium and quality wines, extra virgin olive oil and canned domestic olives, honey and other beekeeping products, dried and canned fruit, vegetables, mushrooms, herbs and spices, pharmaceutical and cosmetic natural products made of home-made raw materials).

Registration and protection of agricultural and alimentary products

System of registration and protection of agricultural and alimentary products, whether by designation of origin, geographic indication or traditional reputation is managed by the Ministry of Agriculture, Fisheries and Rural Development of Croatia. According to the abovementioned regulations in the area of Zadar County, the competent Ministry protected *Pag sea salt* with designation of origin; *Pag cheese* is in the process of registration renewal, while Maraska cherry is in the process of registration of designation of origin. In Zadar County there are still a large number of products that

should be protected as autochthonous, with marks of traditional reputation, geographic indication or designation of origin, due to their traditional technological, alimentary and specific organoleptic characteristics.

Use of EU pre-accession funds

From the SAPARD pre-accession programme aimed at development of agriculture and rural areas, entrepreneurs from Zadar County drew most funds in Croatia (26% of totally used funds), in the amount of 31.5 million HRK. Funds were approved to following companies: Arbacommerce Ltd. and OSTREA Ltd. for equipment and construction of facilities for fish processing; Paška sirana JSC. and Sirena - mala sirana Ltd. from Kolani, for construction and equipment of a dairy and cheese production facility. All projects were successfully finalised.

Financial indicators for period from January to September 2010

Table 6. Financial indicators for January-September 2010

Code and description of the activity (NKD National classification of activities 2007.)	Number of Companies	Total income (EUR)	Total expenditure (EUR)	Wages and salaries (net) (EUR)	Number of employees	Investments in fixed assets (EUR)
A.						
Agriculture, forestry and fisheries	122	74,6 mil.	83,1 mil.	6,9 mil.	1,318	5,9 mil.
C10 Production of alimentary products	79	54,5 mil.	50,8 mil.	6,1 mil.	1,457	1,6 mil.
C11 Production of beverages	7	12,4 mil.	13,6 mil.	1,1 mil.	200	0,6 mil.
Total Zadar County	2,612	1063,7 mil.	1053,2 mil.	96,6 mil.	20,132	157,4 mil.

Source: FINA, processing CCE CC Zadar

Financial reports for past nine months of 2010 were submitted by 122 companies whose activities were agriculture and fisheries, 79 companies involved in production of alimentary products and 7 in beverage production. In the agriculture and fisheries sector, the total income amounted to 522.4 million HRK and expenses to 614 million HRK of total. Expenses exceed the income by 92.5 million HRK which is a clear indicator of the low efficiency of this sector. The sector employs 1,318 workers, and total amount of wages and salaries paid is 6,9 million EUR. Investments amounted to 5,9 million EUR. This sector makes for 6.6% of total revenue of the economy, 8% of total expenditure, 6.6% of employees and only 3.7% of investments. Sector of alimentary products production has realised 54,5 million EUR of income and 50,7 million EUR of expenditure. Total income exceeds expenditure by 5,1 million EUR which indicates higher efficiency in this sector. 6,1 million EUR were paid for wages and salaries (which is somewhat lower than in the agriculture and fisheries sector), while the number of employees is 1,457 (somewhat higher than in the agriculture and fisheries sector). Investments in fixed assets amount to 1,6 million EUR which is far less than in the sector of agriculture and fisheries. Share of



the sector of production of alimentary products in total income is 5%, in total expenditure is 5% in number of employees 7% and in investments 1%. Sector of beverage production registered 12,4 mil EUR of total income, 13,6 million EUR of total expenditure, amount paid for wages and salaries is 1,1 million EUR and investments amount to 0,5 million EUR. Total expenditure exceeds total income by 1,2 million EUR, and investments are significantly lower than in other two observed sectors. Number of employees is 200.█

Synergistic effect

Agriculture is connected with the diverse and developed alimentary and processing industry with capacities which do not satisfy only domestic needs, but, also needs of neighbouring markets. Agriculture is complimentary to tourism, another important branch of the economy.

Reasons for investing in agriculture of Zadar County

- Preserved environment and nature
- High landscape diversity
- Care for preserving traditional skills and products
- Development of different systems of agricultural production
- SME sector in services and production with high job creation potential
- Good perspective for rural and agri-tourism
- Structures of local self government have experience in local development planning
- Low costs of working force
- Croatia accepted/signed major international agreements on environment and biodiversity
- Croatian consumers are traditionally oriented to domestic products
- Favourable climate
- Favourable geographic position of the county in Europe
- Stable macroeconomic indicators
- New trends in tourist demand
- New road and telecommunication network
- Availability of renewable energy sources

Fruit growing and olive growing

Area of Zadar County has favourable environmental conditions (climate and soil) for growing numerous types of fruit. Priority fruit sorts from the aspect of ecological and market conditions are: olive, Maraska cherry (autochthonous fruit from Dalmatia), peach and nectarine, cherry, fig and almond. Apart from these, production of summer apples, plums and apricots is possible. Main areas for increased fruit production are municipalities' Škabrnja, Zemunik, Posedarje, Polača and cities Benkovac and Biograd. Olive is the most represented fruit in the County and today, there is a largest interest in its further spreading.

Olive growing█

Olive growing is an agricultural activity which experienced significant progress in past several years, both in the number of trees and in the increase of olive oil production. Several factors influenced this positive trend, certainly, high price of olive oil should be emphasized and positive attitudes about the value of olive oil for health. Due to extremely favourable natural conditions, long tradition in production and especially because this production is an addition to tourism and other activities, there are good preconditions for further development of this agricultural industry. Olive is one of the determinants of the Mediterranean area and one of agricultural crops of the Mediterranean area which has in past ten years experienced a positive trend in planting of new plantations. The fact is that natural conditions for planting a larger number of olive trees than today exists, and that potentials have not nearly been used to the full extent. Zadar County has a satisfactory number of modern oil producers who are geographically equally spread. High quality of olive oil from Zadar County is proven by numerous awards and rewards won at international fairs and competitions. Along with imported sorts, there are numerous autochthonous sorts of olives in Zadar County. A long tradition of olive growing exists in this area.



Viticulture

Zadar County has huge possibilities in wine production. Apart from production of grapes for wine, it is considered that this area is most suited for production of table grapes in Croatia. Possibilities for investments derive from following factors:

- significant domestic market of wine and consumption through tourism
- additional sales possibilities through rural tourism and wine roads,
- high sales possibilities due to well established local market and tourist consumption (Adriatic coast);
- rich offer of autochthonous sorts of wine;
- experience and tradition of grape and wine production;
- high level of knowledge on modern equipment and technology;
- potential for increasing competitiveness and quality;
- creating quality standards in accordance with EU legislation (ISO; HACCP);
- Act on wine and secondary legislation deriving from it is partially aligned with EU regulations.



Products for export must have a quality certificate issued by the Croatian Association Croatian Institute for viticulture and viniculture. Grape, pressed grapes, wine and other products made of grapes and wine which do not meet the EU legislation in the area of vitification and vinification, the provisions contained in the Act on wine and those contained in other secondary legislation cannot be exported, imported or put on the market.

Growing in protected spaces - glass and plastic made greenhouses

Protected spaces ensure intensive production, combined production of vegetables and flowers after the season ends, better control of diseases and pests with implementation of biological control, which ensures healthier food. Although prices of products of early production of vegetables refer more to the products produced in the open, homogeneity of products, quality and speed of fruit bearing creates a good market and a better placement on the market.

Characteristics of the climate in Zadar County

Climate, soil and relief jointly determine agricultural habitat or agro-biotope. Although there are differences between coastal and continental part of the County, the only available data is collected by the meteorological station in Zadar. Data has been taken from the "Melioration plan for the area of Zadar County" from 2007 and cover the period of past 24 years. In the area of Zadar County several types of climate can be found: Mediterranean, submediterranean, continental and mountain. Coastal Mediterranean climate is characteristic for its warm, dry summers and mild, rainy winters. Colder winters and more temperature fluctuations are a characteristic of submediterranean climate in the area of Bukovica, Zagora and Ravni Kotari, whereas, sharp snowy winters and pleasant summers with warm days and cold nights and significant temperature fluctuations describe the continental and mountain climate of Lika and the mountain area.

Precipitation

Precipitation has a dominant impact on plant production. Amount of rainfall is determined by the altitude, influence of the sea, etc. Amount of rainfall grows from areas of southern islands for 800-900 mm/year (Tajerske sestrice, Pašman, Dugi otok), through Ravni kotari and northern islands with 900-1100 mm/year to 1,200-2,300 mm/year in Lika and the mountain area. Minimum rainfall is characteristic for the summer period, and maximum in late fall. Snow is frequent in Lika and the mountains, while in the coastal area and on the islands it is mostly not present. Average annual amount of rainfall for Zadar amounts to 851mm. Rainfall was distributed in a way that during first six months of the year we had approximately 43% of total precipitation and in the second part of the year 57%. Highest average rainfall occurs in September (113 mm), and lowest in July (28 mm). It can be seen from the data that precipitation in the observed period was a very variable climate parameter.

Temperature

Medium annual temperature in the meteorological station Zadar was 15.2°C. The climate is moderately warm. In average, the coldest months of the year are January and February with average temperature of 7.2°C, and the warmest is July with average temperature of 24.4°C. Generally speaking, high temperatures are not as damaging as low ones. Unlike precipitation, temperature is a less variable climate parameter.

Relative air humidity

Average annual value of relative air humidity in the coastal area is approximately 71.5%, in area of Lika and Pounje around 79%, and in Ravni Kotari (Smilčić, Benkovac) around 66 to 72%. High air humidity is usual for the period from October to February, and low humidity for the period from June to August.

Wind velocity

Area of the Zadar County has average wind velocity of merely 3.3m/s. Typical winds in the County are the northern wind Bora (especially in the area of Pag, Velebit channel, Vir sea) and southern wind Sirocco. "Levant" is another frequent wind, unpleasant and cold, blowing from the east. In the summer, the Etesian wind is characteristic on the shore (Mistral) and it alleviates summer heat.

Insolation

Average annual number of sunny hours for the area of Zadar is 2,626 hours. Largest number of sunny hours in average was in July (359 hours) and the least in December (110 hours). The coastal area has more clear and sunny (115-118) than cloudy (84-90) days. In the continental part the situation is the opposite, for example in Gračac there are 126 cloudy and 96 clear days. The Zadar area is sunny and receives significant quantities of solar energy, 320-350 cal/cm²/day in average per year.

Edaphic conditions (soil)

In Zadar County brown soil on karst dominates, it is present on 33.3% of the surface, red soil follows covering 12.3% of the surface, and third by representation is the rocky soil with 9.5% of share of the surface. Soils of the Zadar County are very diverse by their physical characteristics, this is a very important component in evaluating their suitability for agricultural production.

Around 55% of arable area is rendzines, coluvial-antropogenized, aluvial-coluvial soil and brown soil as well as regosol characterised by good water permeability, stable structure, and favourable texture and air-water ratio. Approximately 25% of arable land is rocky land where rock and large gravel dominate, it is extremely water permeable, diverse in depth, soil skeleton and water capacity, which makes a part of these soils unsuitable for agriculture, while the other part is suitable for growing some sorts of fruits, vegetables or vineyards. Finally, around 20% of arable land in the County is covered by hydromorphic soil (hypogleic, eugleic, swamp-gleic, vertic), with appropriate depth, but unfortunately unfavourable physical characteristics as heavy texture, weak water permeability and small air capacity.

Salaries in agriculture

Average monthly net salary in agriculture, forestry and fisheries for the period from January to September 2010 in Zadar County amounted to 579€.

Direct payments in agriculture

Direct payments in agriculture are payments to agricultural holdings for performing agricultural activities in order to support their income. Beneficiaries of direct payments are agricultural holdings registered in the Register of agricultural holdings, who carry out agricultural activity, which includes growing agricultural crops, holding

and breeding cattle, production of husbandry products with maintenance of land in the condition suitable for agricultural production. Beneficiaries of direct payments are obligated to fulfil requirements of cross compliance in agricultural production (requirements related to protection of the environment, human health, animal and plant health and animal welfare, determined by special regulations and requirements related to good agricultural and environmental practice.

Direct payments are:

1. basic payment per agricultural area
2. coupled payments

Basic payment per agricultural area for meadows and pastures and all other use of agricultural area (arable crops and permanent crops - vineyards, orchards, and olive groves), beneficiaries receive the same amount regardless of the type of production. Coupled payments are special payments in plant production, other payments in plant production, payment per cattle head, payment for keeping and slaughtering bovine, special payments per head of cattle, additional payments for production of breeding material, payments for milk and other payments in husbandry.

Request for direct payment is submitted by the nominee of the agricultural holding to the Paying Agency for Agriculture, Fisheries and Rural development

Legislative Framework

[Agriculture Act \(NN 149/09\)](#)

Act on State support in agriculture and rural development ([NN 83/09](#), [NN 153/09](#), [NN 60/10](#))

New Act on State Support to Agriculture and Rural Development ([NN 92/10](#))

Ordinance on Direct Payments in Agriculture ([NN 33/10](#), [NN 63/10](#), [NN 106/10](#), [NN 133/10](#), [NN 141/10](#))

Ordinance on registration in the Register of agricultural holdings ([NN 128/02](#), [NN 122/03](#), [NN 189/03](#), [NN 02/05](#), [NN 129/05](#), [NN 152/05](#), [NN 38/06](#), [NN 27/08](#), [NN 29/09](#))

[Ordinance on cross-compliance in agricultural production \(NN 10/10\)](#)

Ordinance on areas with aggravated conditions of agricultural management ([NN 154/09](#), [NN34/10](#))

[Ordinance on register of use of agricultural land \(NN 87/09\)](#)

Most important agricultural business entities in Zadar County

„**Vigens**“ d.o.o. **Kožino-Primorje** – 4.5-5 million litres of milk (484 ha of arable land leased for production of feedstuffs, and 290ha of other land intended for planting permanent crops),

„**Vrana**“ d.o.o. **Jankolovica** - total of 872 ha leased, out of which vineyard for production of table grapes 30 ha, olive grove 10 ha, production of vegetables in the open 58 ha, production of vegetables in protected spaces 7.7 ha, other land, production of feedstuffs, production of milk approx 3 mil./lit. annually, 24 mil. eggs annually (100,000 hens), production of sauerkraut 1000 t/annually,

„**PIK Vinkovci**“ d.d. **Sv. Filip i Jakov** - production of vegetables and crop on 200 ha,

„**Maraska**“ d.o.o. **Zadar** production of alcoholic and non-alcoholic beverages and 212 ha of agricultural land leased, plantation of Maraska cherry.

„**Badel 1862**“ d.d. winery **Benkovac** – production of alcoholic beverages, 250 ha of agricultural land leased, 130 ha planted wine grapes in Korlati, 70 ha Dubrava (Miranje) and 50 ha Pristeg (clearing for cultivation),

„**Paška sirana**“ - **Pag**, production of cheese 700-800 t/annually,

Sirana Gligora – Kolan, island Pag, production of cheese 250 t/annually.

Agricultural cooperatives

63 agricultural cooperatives are enlisted in the Register of the Croatian Association of Cooperatives, 16 war veteran cooperatives, 3 fishermen cooperatives, 3 oil producers and 14 craftsmen, transport, service and tourist cooperatives in the area of Zadar County. The more active cooperatives are the following:

PZ "PIK Vinkovci" from St. Filip i Jakov - on cca 50 ha produces brassicas, carrot and leek.

PZ "Maslina i vino" from Polača - on 40 ha of land an olive grove, vineyard and fig orchard was planted, construction of winery is in progress.

PZ "Korijeni" from Podgradina (family cooperative) - on one part of the agricultural land cca 10ha fruit and vegetables are produced (peaches, nectarine, cherries), and on the other part planting of a vineyard is planned.

PZ "Drobnica" from Preko - along with the olive oil production and processing facility they leased 3.0 ha of agricultural land with an organic olive grove.

War veteran cooperative "Apis Dalmacija" from Zadar deals with honey production.

Local Action Groups of the Zadar County

Establishment of local partnerships, known as "Local Action Group" (LAG), is the main and important characteristic of the LEADER programme. LAG has a task to identify and implement the local development strategy, make decisions related to allocation of its financial resources and management. LAGs are often more efficient in stimulating sustainable development because they:

- aggregate and combine human and financial resources from the public sector, private sector, civil and voluntary sector;
- join local stakeholders in joint projects and multi-sectoral activities with a goal to achieve synergies, joint ownership and critical mass necessary for improvement of economic competitiveness of the area;
- strengthen dialogue and cooperation between different rural stakeholders, who often have little experience in joint work, by reduction of potential conflicts and facilitating negotiation solutions through consultations and discussions;
- facilitate, by interacting with different partners, the process of adaptation and change in the agricultural sector.

LAG is specific by its organisation and decision making. On the level of decision making the governing body of a LAG represents interests of different public and private groups and the rural population from the area of the LAG, ensuring that at least 50% of the members are social, economic partners, civic societies and non-governmental organisations. Minimum 20% are representatives of local government. Governing body of a LAG should be representative and ensure age diversity (at least one member younger than 25) and gender equality- minimum of 30% women. Until now in the area of Zadar County, on LAG was established in Biograd and Benkovac

area (LAG "Laura"). In the process of establishment is the LAG of Velebit channel (LAG "Bura") and there is a plan to establish a LAG for islands. By this the larger part of the County area will be covered, and municipalities which remain outside the LAG area can join a LAG later or establish a new one.

Educational institutions in agricultural sector

Table 8. Students who graduated 2005-2009

	2005	2006	2007	2008	2009
Faculty of Agriculture, Zagreb	138	195	226	308	299
Faculty of Veterinary Medicine, Zagreb	91	110	92	119	81
Faculty of Food Technology, Osijek	42	39	53	82	100
Faculty of Food Technology and Biotechnology, Zagreb	139	137	160	149	129
Faculty of Agriculture, Zagreb	66	55	55	105	115
Interuniversity Study of Mediterranean Agriculture, Split					15

Source: Statistical Yearbook 2010 CBS (Croatian Bureau of Statistics)

Zagreb University

Faculty of Agronomy
Svetošimunska cesta 25, 10000 Zagreb
Telefon: +385 (0)1 239 3777
dekanat@agr.hr
<http://www.agr.hr/>

Veterinary Faculty in Zagreb
Heinzelova 55, 10000 Zagreb
tel. +385 (0)1-2390-111
<http://www.vef.hr/>

Faculty of Food Technology and Biotechnology
Pierottijeva 6, 10000 Zagreb,
Tel: + 385 (0)1 4836 047, 4605 000
dekan@pbf.hr
<http://www.pbf.hr>

Osijek University

Faculty of Food technology, Osijek
Franje Kuhača 20, 31000 Osijek,
+385 (0)31 / 224 - 300
office@ptfos.hr
<http://www.ptfos.hr>

Agricultural Faculty in Osijek
Trg. Sv. Trojstva 3., 31000 Osijek
Tel: +385 (0)31 224 200
www.pfos.hr
dekanat@pfos.hr

University in Split

Interuniversity course - Mediterranean agriculture
Livanjska 5, Split 21000
tel: +385 (0)21/43.44.90
fax: +385 (0)21/43.44.91
office@medp.unist.hr
<http://www.medp.unist.hr/>

Contacts

Ministry of Agriculture, Fisheries and Rural Development

Ulica grada Vukovara 78, 10 000 Zagreb

Tel. + 385 1 6106 600

Fax: + 385 1 6109 200

www.mps.hr

Paying Agency for Agriculture, Fisheries and Rural Development

Ulica grada Vukovara 269 d, 10 000 Zagreb

Tel. +385 (0)1 6002 700 – Switchboard

+385 (0)1 6002 742 – Public Relations Department

Fax: +385 (0)1 6002 851

E-mail: info@apprrr.hr

Web: <http://www.apprrr.hr>

Croatian Agricultural Agency

Kačićeva 9/3, p.p. 604, 10000 Zagreb

Tel. + 385 (0)1 4846 655

Fax: + 385 (0)1 4847 946

Web: www.hssc.hr

Croatian Chamber of Economy

Rooseveltov trg 2, 10000 Zagreb

Tel: + 385 (0)1 4561 555

Fax: + 385 (0)1 4828 380

Web: www.hgk.hr

Sector for Agriculture, Alimentary Industry and Forestry

Božica Marković dipl.ing., director of the Sector

Tel. +385 (0)1 48 26 066, +385 (0) 48 26 068

Fax +385 (0)1 45 61 545

E-mail: bmarkovic@hgk.hr

Croatian Agricultural chamber

Fra Andrije Kačića Miošića 9/III, 10 000 Zagreb

Tel.: +385 (0)1 4882 700

Fax: +385 (0)1 4882 701

E-mail: info@hrpk.hr

Web: www.hrpk.hr, www.hzpss.hr