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GUIDELINE FOR LOCAL GOVERNMENT SUPPORT OF AGRICULTURE-RELATED DEVELOPMENT

CROATIA LOCAL GOVERNMENT REFORM PROJECT (LGRP) II

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PURPOSE

The Guideline for Local Government Support of Agriculture-Related Development was developed by the Local Government Reform Project (LGRP) to support local Economic Development (ED) consultants and local government Economic Development Strategic Plan (EDSP) Task Force members in preparing EDSPs. The materials presented throughout the guidebook can strengthen the processes for building and realizing a community's goals and vision during the phases of "Identifying Strategic Issues", "Selecting Critical Strategic Issues", and "Developing Action Plans to Address Critical Issues".

The guidebook is designed to:

- (1) Provide overview information on the current and probable future trends in Croatian agriculture;
- (2) Help local government EDSP task forces decide whether or not to pursue various agriculture-related development interventions through:
 - Providing definition and purpose for six of the most commonly adopted agriculture-related development interventions included in Croatian local government EDSPs prepared to date.
 - Describing the potential benefits of agriculture interventions.
 - Providing a simple decision path with which to consider possible interventions.
 - Indicating the level of resources required to implement these interventions.
 - Providing experience and lessons learned from Croatia, Eastern Europe and other parts of the world regarding each intervention.
 - Providing references for local governments to find additional technical assistance, training and/or funding related to each intervention.

The guidebook was developed based on the results of field research in Croatia, desk research about international practices and issues, as well as the knowledge and experience of agricultural experts who contributed to the guidelines

WHAT'S HAPPENING IN CROATIAN AGRICULTURE

I. THE ROLE OF THE AGRICULTURE SECTOR IN THE ECONOMY

Agriculture production¹ is a shrinking but still important component of the Croatian economy; however, similar to trends in other emerging industrialized nations, the value-added food processing sector is growing, as evidenced by the following statistics:²

¹ *Agriculture production* is defined by the *Croatian Agricultural Census 2003* as the growing of crops and rearing of cattle, poultry, and other animals. Agriculture Production does not include food processing, forestry, fishery, or agricultural services.

- Approximately 600,000 full and part-time jobs in farming, processing, fishing and agrokombinants (State-run collective farms) compared to 1,258,000 jobs from non-agricultural sectors.
- Food processing is especially important in the Pannonian Western region, where it accounts for over 53% of the industry employment, as compared to 23% in the Pannonian Eastern region.³
- Agriculture's share of GDP has declined from 9.6% in 1999 to 7.3% in 2003
- The production of food, beverages and tobacco generate 20.6% of GDP.
- Agricultural lands cover 3.15 million hectares (ha.⁴).
 - 2.02 million ha.in arable crops and 1.13 million ha of remaining lands consisting of pastures, meadows and fisheries.⁵
 - Corn is currently the most important cereal crop followed by wheat; together they occupy about 50% of cultivated lands. The Croatian Bureau of Statistics reported a drop in cereals produced from 3,207 thousand tons in 1998 to 2,354 thousand tons in 2003.⁶
 - Croatia has over 160 certified organic farmers on approximately 3,500 ha.⁷

Before the Homeland War, Croatia exported half of its food products, and in the early 1990's had a \$16 million annual foreign trade surplus in agricultural products.⁸ Today Croatia agricultural production no longer satisfies domestic consumption. From 1991 to 2001, Croatia imported over \$10 billion in food while exporting less than half that amount.⁹ In 2003, the annual export-import food trade deficit reached \$487 million (10.36% higher than in 2002)¹⁰. Croatian trade with EU countries continues to run at a deficit; with a 2002 agricultural trade deficit of €512 million.¹¹

Croatian Agricultural Census 2003: <http://www.dzs.hr/Eng/Agriculture/Census2003.htm>.

² European Commission-Directorate General for Agriculture: Rural Development; Croatia Agenda 21, April 2004 Report http://europa.eu.int/comm/agriculture/rur/index_en.htm; and Croatian Agricultural Census 2003.

Note: Due to political and procedural changes in Croatia, trend data is difficult to identify.

³ Industry Annual Report, Central Bureau of Statistics, Zagreb, 2002

Pannonian Region includes the following counties: Osječko-baranjska, Vukovarsko-srijemska, Brodsko-posavska, Požeško-slavonska, Viroviticko-podravska, Bjelovarsko-bilogorska, Grad Zagreb, Koprivničko-križevačka, Zagrebacka, Sisacko-maslavačka, Međimurska, Krapinsko-zagorska, Varždinska.

⁴ Croatian Chamber of Economy; Agriculture, Food Industry and Forestry Department. Report on Agriculture, Fishery, Food, Beverages and Tobacco Industry, July 2004. (<http://www.hgk.hr/komora/eng/eng.htm>) accessed 12/5/04, p. 1.

⁵ L. Heron, I. Knight and M. Winter. 2002. Croatia Agriculture/Agribusiness Assessment. Prepared for USAID/Croatia Office of Economic Growth. July 1. Accessed 11/22/04 at http://www.dec.org/pdf_docs/PNACS683.pdf.

⁶ Ibid.

⁷ USDA Foreign Agricultural Service GAIN Report.

⁸ Hedl, Drago. 2001. The Collapse of Croatian Agriculture. AIM (Alternative Information Network). Zagreb. Accessed 11/22/04 at <http://www.aimpress.ch/dyn/trae/archive/data/200112/11213-009-trae-zag.htm>

⁹ Ibid.

¹⁰ USDA Foreign Agricultural Service GAIN Report.

¹¹ European Commission - Rural Development; Croatia Agenda.

- Agricultural/food exports amounted to €487 million in 2002.¹²
 - Main exports were tobacco products, miscellaneous food preparations, sugar, sugar confectionery, and cereals.
- Agricultural/food imports reached €963 million in 2002.¹³
 - Main imports were miscellaneous food preparations, beverages, fruits and nuts, live animals and dairy products.
- Five Croatian food products meet domestic demand: wine, wheat, corn, eggs and poultry.
- Current organic production is not meeting domestic demand; organic products are being imported.

The Croatian Chamber of Commerce predicts that food imports will reach record levels again this year. In the first nine months of 2004, Croatia imported food worth \$1.085 billion, which is expected to reach \$1.4 billion by the end of the year. The level of food exports continued to decrease in 2004. In the first nine months, Croatia exported food worth \$500 million. According to one study, about 70% of fresh fruit and vegetables are being imported.¹⁴

Croatian Imports of Fresh Fruits and Vegetables in Millions of Dollars

	2001	2002	2003
Fresh Fruit	\$56	\$64	\$83
Fresh Vegetables	\$23	\$21	\$45

Source: The GAIN Report HR4019, 10/20/14 (USDA Foreign Agricultural Service)

II. CHALLENGES FACING CROATIAN AGRICULTURE

The Homeland War and the transition to a market economy both had major impacts upon Croatian agriculture, but there are other, continuing forces. Numerous internal and external factors are contributing to decreases in the share of the domestic market commanded by Croatian agricultural products, to increasing imports of food, and to declines in food exports.

INTERNAL FACTORS

High Production Costs. As repeatedly noted in the research, Croatia has one of the highest production costs in Europe, which restricts its competitiveness.¹⁵

¹² European Commission - Rural Development; Croatia Agenda.

¹³ Ibid.

¹⁴ Reardon et al, 2003.

¹⁵ UN FAO Expert Consultation Proceedings on The Impact of Structural Adjustment Programs on Family Farms in Central and Eastern Europe, Budapest, Hungary, 20-23 January 2000, [accessed November 2004]; www.fao.org/Regional/SEUR/ExCon_Proceedin.pdf;

- A key contributing factor to the higher costs is the small size of the average family/privately-owned farm. Farming small, non-contiguous plots adds time and is a major barrier to any economies of scale or cost reductions that could be gained from volume:
 - Over 80% of cultivated land in Croatia is family/privately-owned, with an average farm size of 2.8 ha.
 - 47.5% of rural household farms are less than 1 ha. while 39.4% of farms are 1 – 5 ha.
 - Most farms are made up of multiple parcels per household, with each parcel averaging 0.5 ha.
 - Only 13.1% are larger than 5 ha.
 - Small holdings require small input purchases such as fertilizer, seed, soil amendments, etc. and small production loads increase transport to market costs.
- Accumulating and consolidating contiguous lands is hampered by unclear or absentee ownership, incomplete cadastral records, and the slow pace of privatization of former state-owned lands. In addition, some areas have not been de-mined.
- Farmers lack the means to invest in needed equipment and technology in part because access to financial institutions is very limited and too expensive for low-profit family farms.
- Farming practices that follow family history create resistance to change. These include:
 - Repetition of the previous business year, with simple field rotation
 - Lack of knowledge and data gathering methods to obtain information about business, marketing, cash flow, bookkeeping, farm accounting and overall farm management.
 - Reluctance of some farmers to seek out information from experts and resources available locally.

EXTERNAL FACTORS

The Changing Marketplace. Changes are occurring in consumer buying patterns – among individuals, retailers, and the food processing industry - and agricultural producers are challenged to adjust; for example, a shift in shopping habits from green markets to supermarkets:¹⁶

European Commission Report – Opinion, Application of Croatia to the EU, April 2004 [accessed November 2004] www.europa.eu.int/comm/external_relations/see/sap/rep3/cr_croat.pdf, 70;

European Commission - Rural Development; Croatia Agenda.

¹⁶ T. G. Reardon, Vrabec, D. Karakas, and C. Fritsch. 2003. The Rapid Rise of Supermarkets in Croatia: Implications for Farm Sector Development and Agribusiness Competitiveness Programs. September. Unpublished report. [Accessed November 2004]

<http://www.usembassy.hr/usaid/pdf/regional/Croatia%20Supermarket%20Study.pdf>

- In Western Europe, 80% of food sales occur in supermarkets. In Central and Eastern Europe (CEE), Poland and the Czech Republic have already reached the 80% level. By comparison, Croatia was at 25% in 2000 increasing to 50% by 2002.
- Currently 45% of fruit sales and 64% of vegetable sales in Croatia occur in local and city green markets.
- Supermarket chains typically rely on medium-sized farms, with greenhouses and irrigation systems that can supply consistent high quality produce
 - The food processing industry is a major customer for Croatian agricultural products. The number of food processing companies in Croatia increased by 21% between 1999 and 2002, increasing production by approximately 14% between 1998 and 2001.¹⁷ However, that industry is facing its own challenges; for example, net losses were reported by the food and beverage and food processing industries. Only the tobacco industry maintained a net profit from 1999 through 2002.
 - Food processors are turning to imported foods because they are often less expensive than domestic products and provide a consistent supply.
 - Many food processors are operating with outdated equipment and need to implement the best international practices in processing and management.¹⁸

International Agreements. The agriculture sector is facing dynamic changes, both domestically and internationally, from membership in the World Trade Organization (WTO) and the Central Europe Free Trade Agreement and from beginning to harmonize its policies with the European Union (EU). As part of WTO and in preparation for entering the EU, free trade agreements exist with most European countries. Imported foods present greater international competition and have contributed to both the rising imports and the declining food exports described previously.

- **More stringent health and safety regulations for food products** are coming with WTO, EU and the FAO, WHO Food Standards Program, and the Codex Alimentarius. All food handlers will be affected through phased implementation of the 2003 Food Act and the Codex Alimentarius. In addition, the Ministry of Agriculture, Forestry and Water Management formed a new Food Agency in 2003 which will:
 - Manage risk assessment.¹⁹
 - Coordinate inspection activities among appropriate ministries and a central rapid alert system.
 - Implement the 2003 Food Act covering food safety.²⁰

¹⁷ European Commission - Rural Development; Croatia Agenda.

¹⁸ Reardon, et al.

¹⁹ Risk assessment is the process for ensuring that all mechanisms for certification, alert systems and response to food safety issues and food code management are in place and functioning adequately.

- **Other EU accession impacts will** include the effects of required compliance with the Common Agriculture Policy (CAP).²¹ The Agenda 2000 reform provides Member States a choice from a menu of 22 measures that best suit rural needs for inclusion in their national or regional programs. The EU's contribution to the financing of these measures is dependent on the measure selected and other CAP directives. Key CAP elements that will impact farmers, unless Croatia maintains certain elements in its selections, include:
 - A single farm payment independent from production. This will ensure income while guiding production towards market needs and consumer demands.
 - A reduction in direct payments, called “modulation”, for larger farms.
 - Linkage of farm payments to Good Agricultural Practice (GAP) which includes compliance with environmental, food safety, animal and plant health, and animal welfare standards as well as maintenance of farmland in good agricultural and environmental condition, referred to as “cross-compliance”.
 - Water conservation and anti-pollution requirements will impact common irrigation practices such as over-fertilization and over-watering.

Croatia moved towards CAP and GAP compliance in early 2003 and began offering subsidies for organic production that are between 30-140% higher than conventional products.

III. OPPORTUNITIES FOR CROATIAN AGRICULTURE

The sweeping changes in Croatian agriculture provide many opportunities to meet market demands and create a unique niche for domestic products. Challenges facing the agriculture and food sector could become opportunities for new markets if producers can meet market demands and replace some of the growing share of imported food. Agribusiness must move quickly to strengthen its overall competitiveness, expand utilization of domestic inputs, and expand export markets.

- **Import substitution and creating new niches** are possible in multiple channels as Croatia currently produces most of the types of food it imports:
 - Despite the challenges they face, family-owned farms contribute 93% of domestic raw milk, 50% of all live poultry and are the primary source of wine grapes.²²

²⁰ A link to the new Food Agency and Department of Food Industry can be found on the MAFWM webpage.

²¹ Additional information on EU accession countries' agriculture sector and steps in meeting CAP can be found on the website of the European Commission Directorate-General for Agriculture at http://europa.eu.int/comm/agriculture/publi/index_en.htm and on Croatia's Ministry of European Integration web site: www.mei.hr.

²² L. Heron, I. Knight and M. Winter.
European Commission - Rural Development; Croatia Agenda.

- The growth of supermarkets presents a huge opportunity for expanded sales if farmers and their cooperatives can penetrate these market channels and work with suppliers to improve quantity, quality and consistency of supplies.
 - Tourism is widely recognized as a growth sector creating possibilities for expansion of high quality fresh and processed foods.²³ Green markets can serve as major local attraction sites if products are offered that appeal to both tourists and local customers, such as booths that integrate local crafts with food products.
 - Croatia's natural and organic products such as high quality olive oil, figs and wine have wide consumer recognition in the West and, therefore, have great potential for export to fill the organic niche in the European market, which is quite large and expanding.
 - Generous government subsidies for organic production present increased income opportunities for farmers.
- **Privatization of State-owned lands** and reorganization of agrokombinants represent a potentially significant shift in land ownership patterns in rural areas and an opportunity to consolidate fragmented private farm lands. A law on agricultural land, passed in 2001, requires local governments to inventory state-owned agriculture land, to categorize parcels for different use, and to establish clear ownership of private lands. Land assembly and consolidation are necessary steps in lowering production costs and increasing Croatia's agricultural competitiveness in the world marketplace.
 - Agrokombinants hold large contiguous tracts, controlling thousands of hectares. In the Slavonia region, agrokombinants hold 50% or more of the land in many of the municipalities.²⁴
 - Local governments could assist with land consolidation as they play the lead role in developing and submitting land management plans for state agricultural lands as required by the Law on Agricultural Land.
- **Government efforts to enhance competitiveness** are underway through national programs funded by donors or state resources to remove barriers for the agriculture sector. Each of the following programs provide local governments the possibility to follow emerging best practices that may offer future opportunities:
 - **The Consolidation of Agricultural Land in Croatia** seeks to find a better means of compensating retiring farmers so that land is not held as a form of social security. The program proposes to establish a national office for project coordination at the Ministry of Agriculture, Forestry and Water Management (MAFWM) that will coordinate all activity related to

²³ Future guidelines to address local government involvement in the tourism sector are scheduled to be developed and will include specific information on agro-tourism.

²⁴ L. Heron I. Knight and M. Winter.

land consolidation. In addition, three county level offices are proposed, staffed by professionals in legal affairs, agriculture and geodetics (GIS mapping). These offices will work with local government to promote, coordinate, and implement activities and to help establish a county-level committee. The county committee will assume responsibility for implementing the law on behalf of the MAFWM including decisions on privatization of state-owned land, on land transfers between buyers and sellers, and on retirement programs for farmers. Income from privatizing land will be used to buy land for consolidation when an appropriate buyer cannot be found. Although this program is just beginning, it could assist local government in agriculture land consolidation and in monitoring consolidation strategies.

- **SIDA's Consolidation of Agricultural Land in Croatia (2004-2007)** is a pilot project funded by the Swedish International Development Agency (SIDA) that will operate in three municipalities in different regions:
 - Primorsko-Goranska County, the City of Novi Vinodolski, Cadastral Municipality of Novi
 - Zagrebačka County, the City of Vrbovec, Cadastral Municipality of Poljana
 - Vukovarsko-Srijemska County, the Municipality of Tompojevci, the Village of Čakovci.

The project's purpose is to provide training and technical assistance in developing the administrative and legal framework for land consolidation. The Croatian Agriculture Advisory Service is working with this project. At the county level, the project will organize meetings with land owners and others to create proposals for farmers. A county committee will meet on a regular basis and make decisions on cases prepared by county office staff involving:

- Privatization of state-owned land
- Transfer of land between interested buyers and sellers
- Agreements on swapping land
- Retirement programs for farmers who sell or lease land

These programs seek to build on the current system within the MAFWM and to improve the pension process for aging farmers with the aim at continuing pensions to women over 50 and men over 55 who are no longer able to work their land. Under the current system, once retirement age (60) is reached, farmers qualify for an agro-pension with funds paid as subsidies to their pensions if others, such as a registered farmer or commercial farmer, are allowed to work their land for agricultural production. Farmers who are not registered or are ineligible for this program due to low production volume are encouraged to register with a cooperative. By joining cooperatives, non-registered small farmers can sell

any surplus production from their individual farming efforts and combine it with other small producers in order to supplement their income.

- **A National Committee for Irrigation** was formed by MAFWM to increase current irrigation from nearly 7,000 ha to 30,000 ha, allocating 23 million kuna for the master plan in the next four years. The plan will be in place by May 2005²⁵ and will clarify the current water laws for irrigation, set the stage for implementing a nation-wide plan and may recommend a one-stop shop approach, thereby changing the steps both local governments and farmers take to obtain irrigation. Funding will allow for expanded irrigation across Croatia enabling farmers to increase current production and removing another barrier to competitiveness in the global marketplace.
- **EU Agricultural, Structural and Cohesion Funds** will provide local government opportunities to assist in agriculture competitiveness, as transpired for the last set of EU accession countries.²⁶
 - Upon entry to the EU, Croatia will become eligible for Common Agricultural Policy (CAP) funds, Structural Adjustment Funds and Cohesion Funds.
 - During the pre-accession period, Croatia is eligible for the Phare funds, starting in 2005, which are essentially a “practice” funds for the Structural Adjustment Funds and could finance a wide range of local government infrastructure and economic development initiatives, some of which could support agricultural development.
 - However, the primary pre-accession fund for support of the agriculture sector is the Special Accession Program for Agricultural and Regional Development (SAPARD) which will be funded in Croatia from 2006. SAPARD funds may be used to build capacities necessary to use CAP funding and for development of infrastructure to support agriculture and rural development and to improve the competitiveness of agricultural producers.
 - It is important to note that projects to be financed now from the pre-accession funds, and later from the funds for members, will be allocated to local governments based on the county-level Regional Operational Plans (ROPs). Therefore, it is crucial that local governments strive to have their projects explicitly included in the ROPs or be accepted as priority projects by the ROP

²⁵ The plan will be available on MAFWM’s website: www.mps.hr

²⁶ EU accession boosted farm income in new Member States by more than 50%, and 15 old Member States increased in 2004 by 0.8%. Agriculture in the Czech Republic increased by 108% and Poland by 74%. This was attributed to the new CAP reforms working to increase farm incomes. Eurostat, December 17, 2004: (<http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/1509&f>)

Partnership in the process of selection of discrete projects to be implemented under the adopted ROP measures (i.e. “programs”).

- **National and local agricultural support resources** are available to assist local governments and agriculture producers in the agriculture-related components of their EDSPs. The following four organizations are key resources available to local governments:
 - **Croatian Agriculture Advisory Service (HZPSS)** offers local workshops, information, and individual help to farmers through 170 full-time employees and between 4 - 14 Advisory Agents, with various areas of expertise, in every county. Funded through the MAFWM as the front-line resource to agriculture in Croatia, agents may cross county jurisdictions to provide needed expertise. The service also functions as the portal to many agriculture resources at the national level. Its website is known as an excellent source of information with many publications available online at www.hzpss.hr. The web site features:
 - A listing of county agents, location, and contact information
 - Advice on plant protection and production of crops, livestock, vegetables, fruit, wine growing, agro-economics, machinery, fishing, etc.
 - Information on product supply and demand
 - Publications, forms, guidelines, research papers, legislation, bulletins, lectures, and events
 - Credits
 - Links to the various institutes
 - **Ministry of Agriculture, Forestry and Water Management (MAFWM)** maintains a website at www.mps.hr which includes credit information and resources from its various departments and agencies that are also responsible for informing local governments about changes required to prepare for EU accession. Mayors noted the MAFWM as one of the places to gain agriculture land privatization information.
 - **Croatian Livestock Center (formerly the Croatian Livestock Selection Center)** maintains a website at www.hssc.hr that links to all 27 centers across Croatia and offers information and certification of livestock, breeding, and registration. Centers offer breeding, selection, development information and programs, testing, data collection, exams, subsidies and loans, and eco-production information covering pigs, cows, sheep, goats, horses, rabbits, turkeys, chicken, geese, bees, etc. In addition, the centers offer dairy testing, milk chemical analysis, and safety and control of antibiotics in milk, etc.

- **Croatian Association of Cooperatives** offers information and assistance on forming and registering a cooperative, related laws and regulations, and will work directly with local government to assist in the formation of farmer co-ops. Based in Zagreb, the organization serves cooperatives throughout Croatia. The association partners with the EU Quick Impact Facility (QIF) program to offer training for agricultural cooperative management and workshops on various assistance programs. QIF can fund cooperative infrastructure needs through a combined credit and grant package, loaning up to 80% of the total amount required. Website: www.zadruga.hr.

- **Other agriculture actors with important educational and informational roles:**
 - **Institute for Plant Protection** (zavod-zas.bilja@zg.tel.hr) Information on plant alternatives, crop production, reduced chemical use, Integrated Pest Management (IPM), and general plant health.
 - **Institute for Seeds and Seedlings** (www.zsr.hr) Headquartered in Osijek, offers information on registered plant varieties, plant production, certification, seed quality control, technical support, field control, database design and computer operation.
 - **Institute for Viticulture and Enology** (www.hrzvv.hr) Information and assistance on grape growing and wine making.
 - **Society of Agronomists** (www.agr.hr/had) An organization of professionals involved in soils, crop growth and management. Offers professional education, workshops and certification.
 - **Entomological Society** (www.agr.hr) An organization of professionals involved in insects, including insects helpful to organic crops. Offers professional education, workshops and certification.
 - **Marketing Information System in Agriculture** (www.tisup.mps.hr) This website offers information about market trading of agriculture products.
 - **Meteorological and Hydrological Service** (<http://meteo.hr>) Offers daily reports on weather conditions and forecasts, information on rivers and hydrological stations, water tendency and stages, water flow rates and temperatures.
 - **Croatian Waters** (www.voda.hr) Offers information on general water management including studies, project assignments and revisions, investing and financial issues, water use plan coordination, setup and maintenance of integrated water management data systems, surveys on water conditions, maintenance and regulation of watercourses, ice and flood control, water management construction and maintenance works, protection of water resources, development and monitoring of

water supply, usage control and other protective measures, and enforcement of legal sanctions in water conservation. Croatian Waters is the current official authority for all waters and is responsible for national coordination of irrigation. The National Master Plan for Irrigation may change the role of Croatian Waters in the future and provide much needed clarification of roles and responsibilities of Croatian Waters and local governments.

- **Croatian De-mining Center** (www.hcr.hr) Providing assistance and action in all aspects of de-mining across Croatia, the center is responsible for the overall supervision of de-mining activities.
- **Animal Health Status in Croatia** (www.veterinarstvo.hr) Information on the current status of animal health, alerts to potential diseases, etc.
- **Institute for Agriculture and Tourism** (www.iptpo.hr) Information and assistance in developing the agriculture tourism sector

○ **State resources coordinating sustainable agriculture for EU**

Accession:

In addition to supporting local agriculture, four entities (MAFWM, Ministry of Environmental Protection, Physical Planning and Construction, State Water Directorate, and Ministry of Economy, Labour and Entrepreneurship) coordinate all natural resource aspects of sustainable development to prepare for strict EU requirements and in accordance with the Law on Agricultural Land, the 1995 Croatian Strategy of Sustainable Agriculture Development, and the 1999 Biodiversity Strategy. In addition, they have developed, in cooperation with the World Bank, the National Environmental Action Plan (NEAP), the draft bill for the Law on Ecological Farming, and several other multi-disciplinary strategies to begin to comply with EU CAP directives.

IV. LOCAL GOVERNMENT ROLE AND ACTIONS TO SUPPORT AGRICULTURE-RELATED DEVELOPMENT

The preceding overview describes an agricultural sector that is struggling to modernize and to overcome high production costs to compete with imported goods. Integration into the European Union will bring additional competition and new regulations as well as opportunities.

The EDSP's SWOT analyses, prepared under the guidance of LGRP cost-share consultants, noted weaknesses affecting local agriculture ranging from lands not yet determined to an exodus of young people that left no one to work the farms. Numerous EDSP recommendations call for local action to promote agriculture-related development and a healthy local agricultural economy. Agriculture remains an important part of the economy, especially in rural areas, and local government plays a critical, central role in *facilitating supportive conditions for agriculture* to survive and thrive in today's global

market place. While local governments do not have the resources and/or authority to address all the problems facing the agriculture sector in Croatia, it is important to recognize what local government can do alone as well as in partnership with the private sector and county and national governments.

This guideline was developed to offer additional resources in developing the agricultural component of an EDSP at the local government level. The sections that follow provide detailed practical information about six interventions that were most frequently suggested as options for increasing the profitability or competitiveness of the local agriculture sector in local government EDSPs prepared to date. It is not a complete list of possible interventions and should not limit the creativity of local government task forces in selecting interventions to include in their EDSPs.

DRAFT

INTERVENTIONS

This section provides six sample agriculture interventions to aid in decision making during ESDP “Critical Issues” group work. These examples are designed to assist in the discussion and selection of the top issues facing the community and to aid in determining which type of intervention might be most appropriate for a local government’s strategic plan. The guidelines can also help task forces begin the planning phase; for example, by identifying the pre-existing conditions that should be incorporated into the LogFrame matrix for proposed interventions. The following table aligns the interventions with a list of common issues that each can help address.

ISSUES THAT HINDER AGRICULTURE AND RELATED DEVELOPMENT	POTENTIAL INTERVENTION					
	I GREEN MARKETS	II LAND ASSEMBLY AND CONSOLIDATION	III INCREASED IRRIGATION ACCESS	IV FOOD PROCESSING	V ORGANIC ECOLOGICAL FARMING	VI FARM COOPERATIVES/ ASSOCIATIONS
Farms are comprised of multiple, non-contiguous parcels and/or are too small to be farmed efficiently.		◆				◆
Agricultural land lies fallow.		◆				
Ecological regulations limit farming on land surrounding drinking water sources.		◆			◆	
Input costs (fertilizers, seeds, feed, etc.) are very high.						◆
Farmers lack knowledge of markets and trends.						◆
Farmers lack business skills and/or access to capital.						◆
Access to local markets is problematic.	◆					◆
Competition from imported products.	◆			◆	◆	
Pricing of products is too low relative to production costs.				◆	◆	◆
Reliance on traditional crops and outdated farming technologies.			◆	◆	◆	◆
Periodic drought.			◆			
Production season too short.			◆	◆		

INTERVENTION I: ESTABLISHING LOCAL RETAIL GREEN MARKETS

Definition:

Green Market: A local agriculture retail market place offering fresh fruits, vegetables, and other farm products usually in open-air stalls. Some green markets allow only organic produce to be sold to offer the customer product variety and quality. Others may allow only local family farms and their co-ops, rather than brokers, to provide family farmers an opportunity to sell their goods to the public. Usually, a small rental fee is paid for each stall space to cover the cost of operating the market.

Possible Purposes:

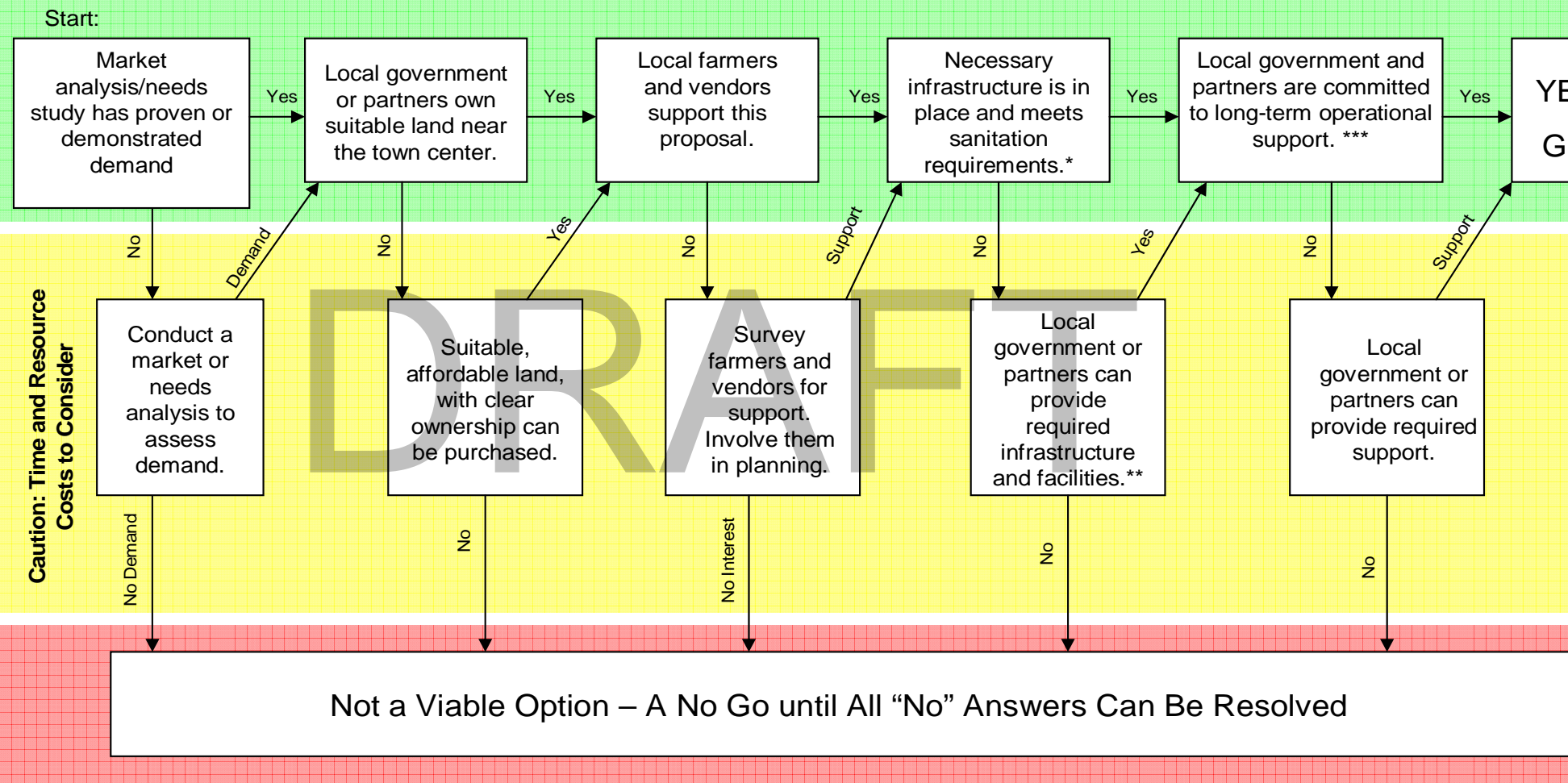
- Offer the public fresh, high-quality, locally-grown safe food.
- Provide a convenient retail outlet for local farmers
- Offer fresh food to the public at lowest possible prices
- Attract customers to the location where they also shop for other goods from shops and restaurants area near the green market.
- Provide a community gathering space where other events can be held.
- Increase opportunity to enter into sales agreements with local restaurants.

Local government must clearly define the purpose, which may include one or more of those listed above or one unique to the local market. Note that the above-listed possible purposes may be mutually exclusive (e.g “Offer the public fresh, high-quality, safe food” may not be compatible with “offer fresh food to the public at lowest possible price”). Once the purpose for developing a green market has been clearly defined, proceed through the decision tree on the next page..

Things to Consider:

Current trends in Central, Southern and Eastern Europe indicate that farmers in Croatia who sell their produce at green markets face competitive challenges from supermarkets and from imported food. However, green markets thrive when they meet local customer needs and demands and are competitive in price and quality. With proper planning and adequate support, green markets can make a significant contribution to the short and long-term sustainability of small farmers. A green market can be implemented by a public-private partnership, including a co-op. In addition, land owned by either local government or its partners can be utilized.

Green Market Decision Tree



* Infrastructure requirements include adequate water, electricity, sewer, roads, etc.
 **Sanitation requirements include water for washing, sinks, toilets and refrigeration or heating to keep foods within temperature safety zones.
 ***Operational support includes rent collection, site clean-up before and after market, securing vendors, marketing, administrative systems such as bookkeeping, etc.

By providing a market place with easy access, all necessary infrastructure, and operational assistance such as the market's management and marketing, local governments can enable farmers to focus on production and customer satisfaction.

Local Governments' Role:

Construction and Operation: Local governments have historically played a central role in the construction of green markets to create an alternative or complementary venue through which local farmers reach customers. The local government role in operation includes providing help to maintain the green market area so it is attractive and safe for residents and tourists to visit and shop. Local governments can also ensure that services and resources are available to green markets to attract vendors who can successfully market their products. Typically in Croatia, a municipal enterprise is established to operate the green market but this may also be done by cooperatives or the private sector.

Tourism: Green markets can serve as a major local attraction site if they offer products tourists seek, such as local crafts. Local governments can provide coordination with green markets and other tourist industries to support a thriving niche market and indigenous agricultural sector. Local governments can encourage the green market sellers to continue to provide what customers demand and to be ready to increase products that tourists prefer as the tourism sector increases.

Links to Wholesalers and Supermarkets: Local governments can help local growers and producers gain access to supermarket supply chains by taking an active role in marketing green markets to suppliers and wholesalers and inviting these potential customers to visit the green market and talk with local producers.

Initial Steps and Investment Cost Factors to Consider:

- Conduct market analysis of potential end customers and potential vendors
- Identify a central, accessible site served by an existing or possible parking area
- Establish mechanism to involve farmers and vendors in project planning and execution
- Conduct feasibility study; develop a business plan
- Update land use plan, as necessary
- Develop detailed design; prepare tender documents
- Obtain location permit
- Secure land (communal land; acquire land)
- Obtain building permit
- Establish communal company (*optional*)
- Apply for external funding (grants, loans) (*optional*)
- Issue construction tender. Costs may include:
 - Land clearing, leveling and drainage
 - Paving
 - Road improvements to site
 - Water (main distribution to site and on-site)

- Wastewater (main distribution to site and on-site)
- Solid waste facilities
- Electricity (main distribution to site and on-site)
- Lighting
- Sanitation facilities
 - Toilets
 - Sinks and washing facilities
- Administrative office space, furniture and equipment
- Facilities for inspection
- Fencing (*optional*)
- Building, roof cover (*optional*)
- Enclosed space for meat and milk products
- Refrigeration facilities (*optional*)
- Storage facilities (*optional*)
- Restaurant construction (*optional*)
- Obtain usage permit, health permits required (obtain forms from county level)

Recurrent Steps and Operating Cost Factors:

- Administration
 - Marketing activities to potential customers and vendors
 - Establish administrative systems, accounting, etc.
 - Establish fee structure
 - Establish market rules and regulations
 - Inspection of food products as required by law/regulations
 - Collect fees
- Site cleaning, especially sanitation facilities
- Solid waste management services
- Plan optional workshops for vendors/farmers on meeting customer needs, finding their niche, marketing, etc., with the Croatian Agricultural Advisory Service

Examples:

- *Croatia Best Practice- Pakrac Green Market:* The city government of Pakrac developed an overall plan for an enterprise zone and a new green market after conducting a feasibility analysis. The old market, which did not have toilets or hand washing sinks, could not meet current sanitation conditions for selling safe food to the public. The new market was designed to host 12 shops and 150 stalls, with a milk product market area and plans for air conditioning and electricity for refrigeration. The analysis also noted the need for a new electrical transformer, to be located between the enterprise zone and the new green market area, as a prerequisite to proceed with planning. The funding for the transformer was obtained for the enterprise zone with European Commission funds. The space for both the green market and Enterprise Zone was obtained through purchase or swap of private lands or conversion of state land to city ownership. The green market plan required

approximately 3.95 million HRK,²⁷ of which 1.65 mil was provided by the city, approximately 1 mil HRK by USAID, and the remaining 1.3 mil HRK by an SME credit line for two bank loans. A city-owned company was formed. It named the green market “Market Place”, hired a manager and three employees, and set a fee structure for stall and shop rentals. Forming a city-owned company allows a recurring refund of the value-added tax paid on certain goods for the green market. The VAT refund and rental fees contribute toward costs related to the ongoing operation of the Market Place. The Market Place is a gathering place for the city and surrounding area. The city continues to subsidize the market when necessary. Senka Strehovac, Head of the Business Department for Pakrac, noted that the city has helped pay the interest payment on the loans when expenses exceeded income. Pakrac is also offering a line of credit to the co-op, Vočko, to build a cold storage facility. Local government’s commitment offered stability as the Market Place developed their organization to meet demands for long term success.

Other Croatian Best Practices: Other Croatian cities and municipalities have assisted green market development. Novska’s local government provided some of the needed financing and the land for its new green market. Belisce also provides an excellent example of a successful public - private partnership. Its local government provided the land, performed all the organizational tasks, completed all the permit paperwork, provided the infrastructure improvements to the land, and advocated with the local Privredna Banka Zagreb to obtain a group loan for Belisce’s green market owners which represented over 15 different individuals and companies. The local government’s contribution of land, infrastructure, administrative support was valued in excess of 1 million HRK.

(Senka will later input Best Practice from LEDA Feasibility Study of the Okucani Green Market)

- *Croatia Lesson Learned:* The experience of a municipality provides an example of the importance of a feasibility study prior to implementation. In 2000, a municipality was searching for a means to help local agriculture producers who had formed two cooperatives. A donor was ready to provide funds. It was decided to build a green market in the center of town that could accommodate 15 stalls and would serve as an additional outlet for the new co-ops. Although water and toilets were lacking at the site, plans moved forward to lay asphalt and build produce stalls. The grand opening involved all the municipalities’ dignitaries. All fifteen stalls were open and featured a variety of local products. The green market operated for three weeks before closing, leaving an empty asphalt area and abandoned stalls.

The market failed because a feasibility study was not conducted to determine the need. The green market did not have a customer base as very little need for such a market existed in the area. Area residents hold the tradition of tending a small plot that yields sufficient produce to fill their needs. Small roadside areas by their property are used to sell any extra produce. The municipality also has five small grocery stores. To succeed, every green market needs a strong, loyal customer base that wants and needs its products.

²⁷ Interview with Mayor of Pakrac.

- New York Best Practice, USA - Selling Only Locally-Grown Products.*

There are many best practices across the world on successful green markets. In New York City, the Council on the Environment has, since 1976, sponsored a program called *Greenmarket* to promote regional agriculture and ensure a continual supply of fresh, local produce. By providing regional, small family farmers an outlet to sell fruits, vegetables and other farm products, Greenmarket supports farmers and preserves farmland for the future. The program operates 47 markets in 33 locations in Manhattan, Brooklyn, Queens, Staten Island and other locations; 23 operate year-round at 16 locations. Greenmarket staff is responsible for market operations, farm visits, publicizing, securing permits for the markets, and collecting the fee farmers pay to sell at the markets. The fee is based on the location and display size. Only growers from the region may sell at the markets; no middlemen or brokers are allowed. Farmers produce fruit, vegetables, fish, meat, eggs, dairy, honey, maple syrup, plants and other foods. All items must be grown, raised, foraged, caught, or otherwise produced by the seller. Over 250,000 customers frequent the markets each week. More information is available on Greenmarket's web site at: <http://www.cenyc.org/HTMLGM/maingm.htm>.
- Thailand Best Practice –Local Meetings to Identify Customer Needs.*

The Hat Yai-Satun green market has been promoting alternative agriculture in the southern section of Thailand since 1999. Its goal is to induce farmers to convert from chemically-intensive farming to environmentally-friendly, sustainable practices. This required ensuring connections to customers because, without a reliable market, farmers were unwilling to change. In June 1998, through a special project grant from the Canada Fund, a community-supported pilot project was initiated to form a coalition of farmers and consumers. A number of meetings were held to bring consumers and farmers together to describe needs and desires. It was decided to establish a consumer-producer green market, where only organically grown produce would be offered for sale, along with products ranging from herbal teas to handicrafts. The market opened in March of 1999, and has been quite successful by meeting the wants and needs of its customers, even in a very rural area. More information about the formation of the green market can be found at <http://www.geocities.com/RainForest/7813/12/greenmar/htm> which includes a link to current stories and research on green markets in the region.

Where to go for help and more information:

Croatian Agriculture Advisory Service offers workshops, education and expertise on farmers' green markets (specialty crops, extending the season, organic farming, marketing, meeting customers needs, value-added products, etc.). Their web site offers a list of all advisory agents in Croatia with links to related articles and resources. www.hzpss.hr

Croatian Agency for SMEs, Ministry of Economy, Labour and Entrepreneurship, provides small grants for enterprises to cover the cost of business registration, feasibility studies, valuation of collateral and other expenses associated with loan proposals. Green markets qualify as an SME. The agency also manages state properties and act as a

clearinghouse for various institutions and ministries concerned with SME development.
www.mingorp.hr

Croatian Agency for Small Business is an institution for development and promotion of small business. The agency can offer business organizational assistance and information for forming a green market operation. www.hamag.hr

Ministry of the Sea, Tourism, Transport and Development (MSTTD) and Ministry of Environmental Protection, Physical Planning and Construction (MEPPPC) can assist with local government infrastructure needs in developing green markets. MSTTD's web site is at www.mmtpr.hr. MEPPPC's web site is at www.mzopu.hr

DRAFT

INTERVENTION II: LAND PLANNING, ASSEMBLY AND CONSOLIDATION

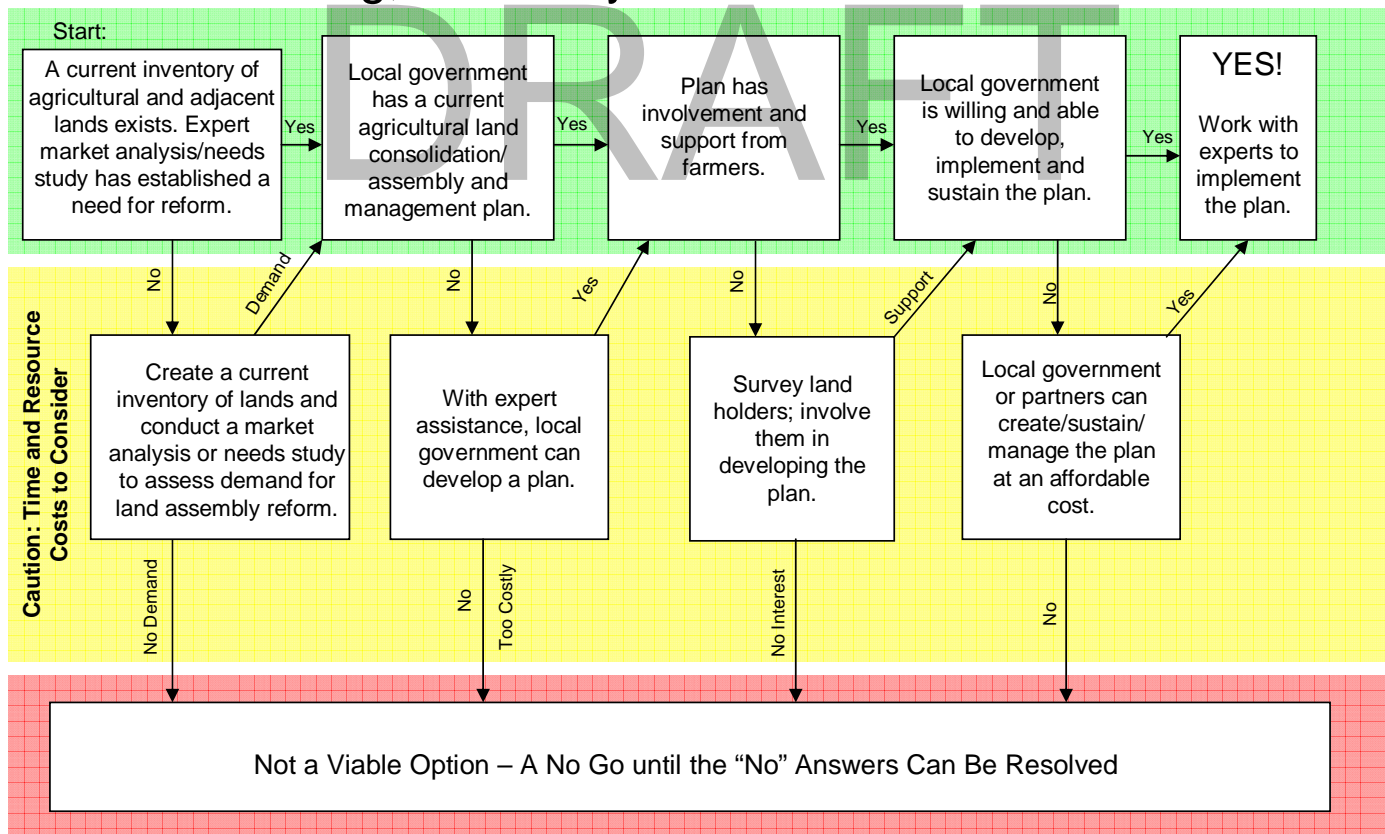
Definition:

Agriculture Land Assembly and Consolidation: Consolidation of small adjacent plots of land into larger agricultural land units with sufficient scale.

Purpose:

- Provide legal and policy framework for farmers to adjust farm size to respond to market conditions
- Develop large agricultural land units thus increasing:
 - Efficiency – and thus the potential competitiveness - of agricultural production
 - Market value of the agriculture land
 - Ability of farmers to use land as collateral

Land Planning, Assembly and Consolidation Decision Tree



Things to Consider:

The average size of a family-owned farm in Croatia is just under 3 hectares, comprised of non-contiguous multiple plots averaging 0.5 ha each. The average operational size is larger – almost 12 hectares in X plots, because farmers are leasing land, but this size still is very small. Farming multiple small plots and leasing additional plots places farmers in a non-competitive position in terms of production time, costs and increased input levels, earning Croatia a reputation for one of the highest production costs across Eastern, Central and Southern Europe.

To lower input costs and provide food at competitive EU prices, farmers need help to consolidate farm lands into viable productive units.

Finally, agriculture land mortgages and land-based collateral loans cannot occur without secure land rights and an active land market. Lack of access to capital to modernize equipment, improve farming practices, make bulk input purchases, or expand farm size adds additional barriers to competitiveness.

Local Governments' Role:

Local governments can play a key role in establishing a system to clarify legal rights and transfer property into productive use. Local governments across Croatia and in neighboring countries have submitted agricultural land management plans to assist agriculture in land consolidation and expanding adjacent lands by:

- Converting former state-owned land to private farmland through sale, lease or swap.
- Clarifying ownership of lands adjacent to private farms.
- Organizing and facilitating land swaps between adjacent farmers and property owners.
- Taxing fallow lands to encourage agricultural use, sale, lease, or swap.

Land Swapping: Local governments can connect adjacent farmers with private owners to facilitate land swaps. For example, Bosnia and Herzegovina have used land swaps and “non-tax land transfers” to assemble agricultural land into larger adjacent parcels.²⁸

De-mining Certification: Local governments stalled by de-mining certification of potential agriculture lands can advocate with the Croatian De-mining Center and send a copy of land consolidation plans to demonstrate de-mining priority.

Taxing Fallow Lands: Local governments in Croatia are authorized to levy taxes on fallow land. However, local governments should keep in mind the administrative costs may be excessive. The local government would have to identify fallow land, identify the owner, bill the owner and then collect the tax.

Land Leasing: Local governments are required to develop a land use program for agricultural land owned by the State and to facilitate its sale or lease.²⁹ Land is leased through a public tender, with local government obtaining approval from the Ministry of Agriculture to issue the

²⁸ See Bosnia and Herzegovina land swaps for consolidation in the Best Practices and Lessons Learned Section.

²⁹ Law on Agriculture Land, NN 66/01, 87/02, Articles 32, 36, and 54.

tender and select the best offer. For lands within the territory of multiple local governments, the process is managed by the municipality with the largest holding. The County Office of Economy provides services to collect required documentation. Rent revenue is allocated 25% to the state, 25% to the county, and 50% to local government.

Initial Steps and Investment Cost Factors to Consider:

- Conduct land inventory to assess availability of adjacent farm lands, state-owned lands, fallow lands, etc.
- Establish mechanism to involve farmers, cooperatives and experts, such as geodetic engineers, in project planning.
- Involve Croatian Agriculture Advisory Service agents to conduct a cost/benefit analysis of crop yields needed, land requirements.
- Identify sites with potential for swap, sale, lease, donation, etc.
- Establish mechanism to involve farmers, current land owners, government representatives, and legal experts.
- Establish priority areas for assembly and consolidation.
- Establish land ownership and availability in priority areas.
- Determine pricing mechanism for purchased or leased lands.
- Utilize current system to redistribute state-owned land; update land management plan to include a land consolidation plan.
- Facilitate transactions.
- Consider future local government authorization to prohibit the subdivision of small plots to ensure ability to consolidate.³⁰
- Investigate eliminating transaction costs for land swaps.
- Establish a land exchange program, providing county-wide information on land available for swap or sale.

Recurrent Steps and Cost Factors:

- Update land consolidation and land management plans annually.
- Establish administrative structure to facilitate long-term land consolidation.
- Establish changes in fees and costs related to transfers.
- Develop land use planning policies that reasonably promotes the preservation of agricultural use for the future.

Examples:

- *Croatia Best Practice - Prelog Land Records, Land Consolidation:* Prelog identified state lands to be privatized or transferred to local government ownership and used court records to clarify ownership issues when the cadastral records were unavailable or incomplete. A plan was developed to consolidate smaller plots and swap plots to create a size favorable for development. After the plan was submitted to the State Office of Land Management,

³⁰ SIDA project will examine this strategy as a tool for land consolidations along with other tools.

the municipality actively tracked the approval process and frequently communicated their need for a decision. The municipality was also able to accelerate the process for agricultural lands after learning from the land office that agriculture was a current priority.

Belisce is in the first phase of publicizing its program. Its EDSP consultant, Mijo Rencevic, along with several prominent local residents and local government are connecting parties and promoting the concept of land consolidation. These kinds of efforts are the first steps to inform farmers about the possibility of using land swaps to consolidate farm plots and lower the cost of farming non-adjacent lands.

- *Bosnia and Herzegovina Best Practice- Land Swaps for Consolidation*³¹: Government programs sanctioning land swaps are most likely to succeed when they are transparent and involve farmers in the region. In Bosnia and Herzegovina, the program began with a pilot project in communities where voluntary land consolidation was highly desired and feasible. Land swaps were transacted through contracts developed by lawyers and registered in the local cadastre. The courts have generally recognized the land swaps. Bosnia and Herzegovina also eliminated the transfer tax for transactions that lead to farm land consolidation. Today, land consolidation plans typically use non-tax transfers to facilitate successful land swaps. More information can be found in the *Land Reform in Eastern Europe* report to the FAO at http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/007/AD878E/AD878E00.HTM
- *Croatia Best Practice - Leasing Arrangements Between Older Farmers and New Commercial Farms*³²: To address the problem of an aging small farm population and to stimulate commercial farms, small farmers who meet an age requirement (women over 50, men over 55) and are no longer able to cultivate their land may lease it to commercial farmers. Lease periods can vary from one year to perpetuity. The fees from leased lands offset or supplement State-provided social security benefits and compensation for retirement which cannot be obtained until age 60. Because aging farmers can lease their lands to family members, such lease arrangements protect the asset. In addition, older generations pass control of the land to younger generations, facilitating consolidated control which leads to new commercial farming techniques.
- *Estonia Best Practice- Taxing Fallow Lands*:³³ Several countries, including Croatia, allow local government to tax lands that are left fallow or to assess fees on all landholders, including restituted owners, who have not taken possession of the land, regardless whether it is registered in the cadastre. Estonia has utilized this approach to identify available land to stimulate the land market. By assessing land taxes and fees, Estonia encourages owners who are city residents to make definitive decisions about their land rather than leasing it to former cooperatives or farmers at a low cost or leaving it fallow. This practice has allowed

³¹ Renee Giovarelli and David Bledsoe. *Land Reform in Eastern Europe: Western CIS, Transcaucuses, Balkans, and EU Accession Countries*. Rural Development Institute. Seattle, Washington. October 2001.

³² Based on an interview with Dr. Ivan Danjek, Croatian Agricultural Advisory Service.

³³ Giovarelli and Bledsoe.

land to re-enter the market or lead to swap arrangements to help farmers consolidate their lands. Estonia controls its fee to minimize the burden on the average family farm. More information can be found in the *Land Reform in Eastern Europe* report to the FAO at http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/007/AD878E/AD878E00.HTM.

Where to go for help and more information:

The Consolidation of Agricultural Land in Croatia Project seeks to find better means of compensating retiring farmers so that land is not held as a form of social security. The program proposes to establish a national office for project coordination at the MAFWM that will coordinate all activity related to land consolidation. In addition, three county level offices are proposed, staffed by professionals in legal affairs, agriculture and geodetics (GIS mapping). These offices will work with local government to promote, coordinate, and implement activities and to help establish a county-level committee. The county committee will assume responsibility for implementing the law on behalf of the MAFWM including decisions on privatization of state-owned land, on land transfers between buyers and sellers, and on retirement programs for farmers. Income from privatizing land will be used to buy land for consolidation when an appropriate buyer cannot be found. Although this program is just beginning, it could assist local government in agriculture land consolidation and in monitoring consolidation strategies.

SIDA's Consolidation of Agricultural Land in Croatia (2004-2007) is a pilot project funded by the Swedish International Development Cooperation Agency (SIDA) that will operate in three municipalities in different regions:

- Primorsko-Goranska County, the City of Novi Vinodolski, cadastral municipality Novi
- Zagrebačka County, the City of Vrbovec, cadastral municipality Poljana
- Vukovarsko-Srijemska County, the Municipality of Tompojevci, the Village of Slavoniš Čakovci.

The project's purpose is to provide training and technical assistance in developing the administrative and legal framework for land consolidation. The Croatian Agriculture Advisory Service is working with this project. At the county level, the project will organize meetings with land owners and others to create proposals for farmers. A county committee will meet on a regular basis and make decisions on cases prepared by county office staff involving:

- Privatization of state-owned land
- Transfer of land between interested buyers and sellers
- Agreements on swapping land
- Retirement programs for farmers who sell or lease land

Both of these programs seek to build on the current system within the MAFWM and to continue pensions to women over 50 and men over 55 who are no longer able to work their land. Once retirement age (60) is reached, farmers qualify for an agro-pension with funds

paid as subsidies if others, such as a registered farmer or commercial farmer, are allowed to work the land for agricultural production. Farmers who are not registered or ineligible due to small production volume are encouraged to register with a cooperative thus enabling small farmers to pool resources and qualify as business.

Ministry of Agriculture, Forestry and Water Management (MAFWM) is in charge of implementing and monitoring regulations and laws related to rural development, agriculture, and agriculture land. Several address the issue of land consolidation:

- 1994 Law on Agriculture Land specifies conditions and procedures for granting credit to farmers to use in land consolidation efforts and provides for land protection in when its use changes.
- 1994 and 1995 Strategy for Sustainable Agricultural Development promotes enlargement of family farms and plans to provide rural finance in the future.
- 1995 Strategy of Croatian Agriculture Development encourages farm size increases through purchase or lease via land management plans.

Along with the State Directorate for Strategic Reserves, MAFWM is creating an Agricultural Development Fund to provide interim support to farmers through subsidized credit used to consolidate agriculture lands. Land registration is administered at the regional level with land use plans developed at the local level and approved by the ministry. Local governments can utilize the state land fund or the current system for purchasing and redistributing land and can advocate for other policies to consolidate land. Local government can expand its current land use plan to include land consolidation and submit the plan to the MAFWM. Website: www.mps.hr.

The Croatian Agriculture Advisory Service offers information and workshops on crop production, competitiveness, and farming practices. Advisory Agents based in every county, with sub-offices in the local governments, can be a partner in developing local land plans that incorporate best crops for fallow lands and for expanding adjacent lands. The service is also working with the SIDA consolidation pilot project described previously. Website: www@hzpss.hr.

INTERVENTION III: EXPANDING AGRICULTURE IRRIGATION

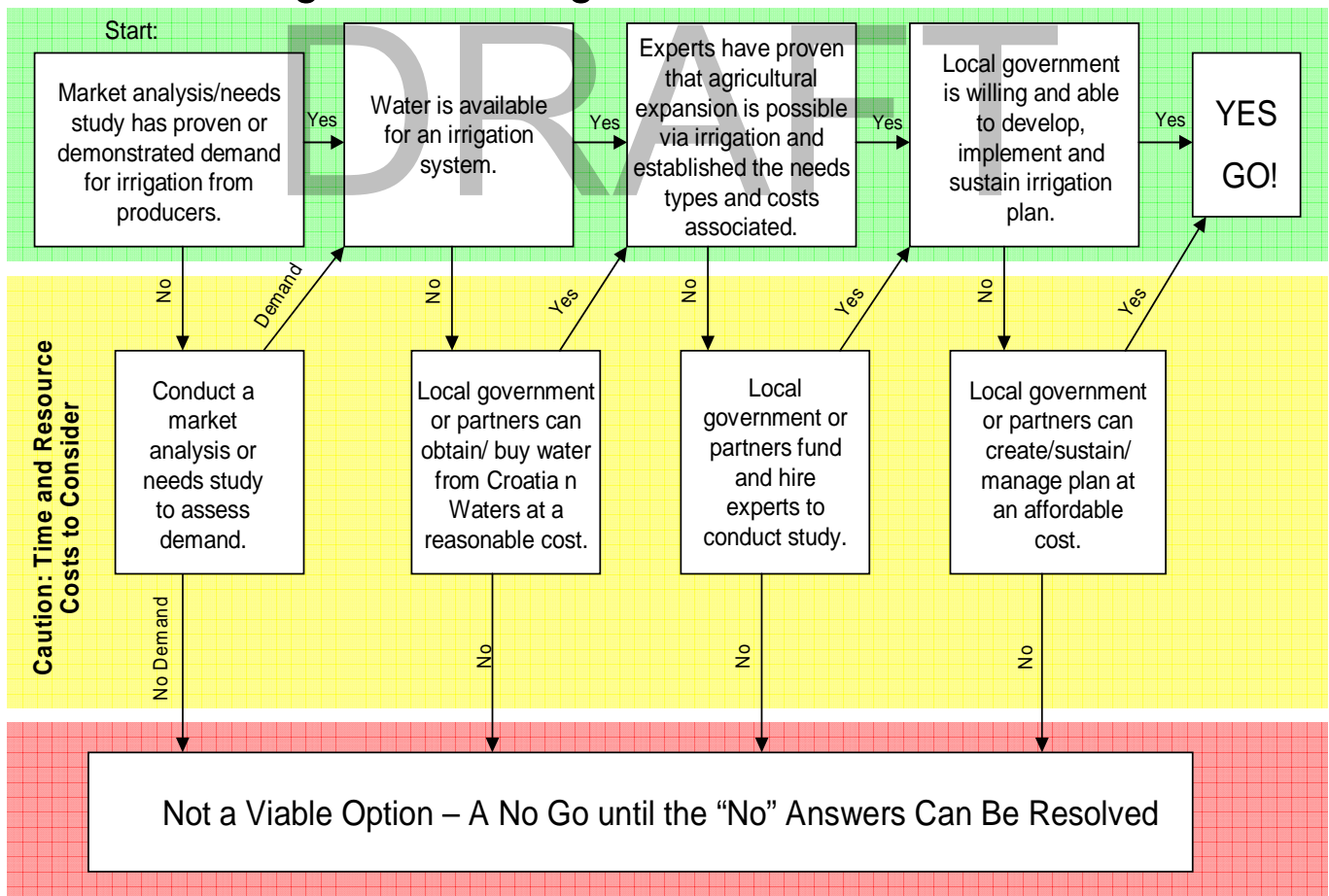
Definition:

Agriculture Irrigation: The collection, storage and delivery of water to land areas to assist in crop growth and production.

Purpose:

- Improve and expand productivity of agricultural land.
- Make land suitable for agricultural production
- Maintain required soil moisture threshold for maximum crop yields.
 - Supplement precipitation by artificial means to expand agricultural lands.
 - Supply water to plants during dry periods.

Agriculture Irrigation Decision Tree



Things to Consider:

Croatia is relatively rich in water with several water basins throughout the country. This availability poses challenges in designing irrigation systems to protect water quality from nitrate pollution caused by over-fertilization and over-watering.

Directives to meet the EU's Common Agriculture Policy (CAP) and Good Agriculture Practices (GAP) by 2007 will affect Croatia as many relate to environmental protections and require water quality monitoring and nitrate-vulnerable zone designations. Environmental Impact Studies (EIS) will become a part of Croatia's future when designing irrigation systems. As local governments assist agriculture expansion through extended irrigation systems, they must plan studies to identify potential problems and match system design to meet all needs.

Local Government Role:

While Croatian Waters and the counties currently play the predominant role in irrigation, local governments can play an important role in effective water use by sponsoring or advocating for comprehensive studies on agricultural irrigation. Such studies require area-specific technical information such as crop water requirements, irrigation withdrawals and affect on the water table, soil types and runoff potential, nitrate leaching potential, and weather conditions. Local Governments must conduct a study to explore fully all issues related to irrigation before planning any irrigation system.

The role of Croatia's local government concerning irrigation is changing due to the development of a Master Plan for Irrigation by the National Committee for Irrigation and the MAFWM. The plan, to be completed in May 2005, will clarify irrigation roles and detail a plan for increasing irrigated lands from 7,000 ha to 30,000 ha.³⁴

Local government can take the lead in sponsoring, organizing and advocating for water management and conservation through local users' water management cooperatives or farmer-managed irrigation systems. An irrigation system plan must be developed and methods determined to manage the system while working toward meeting CAP water conservation requirements.

Initial Steps and Investment Cost Factors to Consider:

- Establish mechanism to involve farmers and experts, such as Agriculture Advisory Service agent and Croatian Waters, in project planning and implementation.
- Conduct market analysis, feasibility study, and environmental impact study to:
 - Determine demand for agricultural products requiring irrigation.
 - Assess water needs for high value crops.
 - Assess water quality (e.g. chemical residues) if considering irrigation for organic agriculture.
 - Assess soil type, absorption capacity, run-off factors, etc.

³⁴ See the resource section for more information on accessing the Master Plan for Irrigation.

- Assess availability and location of regional water resources.
- Assess vulnerability of sensitive areas for potential environmental impacts from irrigation waters.
- Assess water rights through Croatian Water or new authorities identified in National Irrigation Plan.
- Assess type of irrigation (flood, drip, sprinkler) most appropriate and feasible for location and crop needs.
- Assess system installation costs.
- Identify possible funding sources.
- Assess electricity costs.
- Apply for loans or grants.
- Form irrigation district to finance system maintenance or work with authorities identified in National Irrigation Plan.

Recurrent Steps and Operating Cost Factors:

- Establish priority system for water use.
- Establish pricing mechanism for water use (required of EU Member States)
- Establish administrative structure or work with authorities identified in National Irrigation Plan for assessing and collecting water use fees.
- Establish mechanism for system maintenance.

Examples:

- *Croatia Best Practice– Prelog-Medjmurje - Countywide Irrigation Project:* One of the 21 municipalities and 3 cities in the county of Medjmurje is also the site of a plastics factory that produces tubs and pipes used in irrigation systems. Thus developing a county-wide irrigation system would also create demand for those local products. A feasibility and water management study, co-financed by the county and national governments, established needs and requirements from which the county developed a comprehensive plan. The county and MAFWM split project costs, each committing 500,000 HRK. Medjmurje County now has the only active agricultural irrigation project in Croatia and is implementing the pilot project on 2200 ha. The State Administration for Water under MAFWM approved the project with one of its staff (Mr. Ivezic) serving on the implementation committee.
- *Croatia Best Practice – Belisce:* This local government initiated a review of its irrigation needs in July 2002. In addition to lobbying local banks for future implementation loans, they successfully recruited every farmer in the plan area by stressing the cost efficiency of continuous piping if everyone participated at inception. Plan approval from MAFWM is anticipated upon adoption of the national Master Plan for Irrigation, which is expected to occur in May of 2005.
- *India Best Practice – Shavare - Transfer of Government-Owned and Operated Irrigation Systems:* Although the village of Shavare is located at the head of the main canal from a dam built to handle high flows from the Bhima tributary of the Krishna River, a reliable water supply and equitable distribution were poor. Village farmers could not grow a quality sugarcane crop due to water restrictions. With help from the local government’s irrigation

department, the Laxmi Narasimha Water Distribution Cooperative Society was organized in 1991. A total of 93 members contributed towards share capital at the time of registration. The Society now has over 100 members. Water is obtained from the irrigation department on volumetric basis and supplied to members on a crop area basis. Sugarcane production has increased from 15 ha to 65 ha, replacing less profitable cereal crops. These results demonstrate that participatory management can lead to significant increases in the value of irrigated production as well as efficient water use. Farmers now think more seriously about conservation and the value of water. Other noteworthy outcomes include improved crop yields, increased water availability and supply reliability, equitable distribution, and reduced conflicts.

Although India is a long way from Croatia, this example is relevant because the EU recognizes locally-owned and managed irrigation systems as a best practice in water conservation. More information on the Shavare irrigation project is available at <http://srdis.ciesin.org/cases/india-038.html>.

- *Indonesia Best Practice: Farmer Managed Irrigation Systems (FMIS):* Countries ranging from the US to the EU to Indonesia have transferred state-owned and operated irrigation systems to the local level. The Croatian National Irrigation Plan to be released in May 2005 may include FMIS or water user associations. The objective of a FMIS is to raise agricultural productivity. FMIS have become a development priority because of the large differences in agricultural production using state-operated versus farmer-managed systems, for a relatively low investment. Key factors to developing successful FMIS include:
 - Readiness and capacity of county and local government staff to involve farmers and to develop an evaluation process to identify potential sites for expanded irrigation.
 - Providing training and institutional development support to Water Users Associations (WUAs) to assist farmer groups in formally registering WUAs, designing small-scale physical irrigation improvements, and improving agricultural production.
 - Providing training, assistance, and guidebooks to county water resources services to administer projects, to standardize simplified engineering designs, and to develop a simple project benefit monitoring and evaluation system.

The World Irrigation Information Network www.irri-net.org has guidebooks on forming WUAs and FMISs.

Where to go for help and more information:

The Croatian Agriculture Advisory Service has an irrigation expert, Dr. Ivan Danjek, Head of the Department of Crop Production, who works with its county Advisory Agents on irrigation projects. Dr. Danjek is involved in the National Irrigation Plan and is seeking funding for a large-scale irrigation study. Local governments can access the Service's crop irrigation resources through local advisory agents or its web site at www.hzpss.hr.

National Committee for Irrigation: Davor Romic, Ph.D., University of Zagreb, Faculty of Agriculture, is the lead contact for this committee. According to Dr. Romic, the committee is currently developing a six-month project to clarify current water laws on irrigation and set forth stages to prepare for implementing a country-wide plan. The plan may recommend a “one-stop shop” approach for irrigation and change the steps local governments and farmers must take to obtain irrigation. The plan will be available by May 2005 on the MAFWM web site at www.mps.hr. Dr. Romic may be contacted at DROMIC@agr.hr for additional information.

USAID Agribusiness Competitiveness Enhancement (ACE) Project: ACE’s goal is to significantly increase the buy-off of Croatian agricultural products in the targeted clusters of dairy, swine, and horticulture in order to increase producer incomes and assure a balanced and sustainable employment base in the agribusiness sector. ACE offers technical assistance and matching grants for irrigation systems that are identified as a barrier to large producers in the targeted clusters.

Croatian Water Commission: Local governments may be able to access EU funds under CAP Section 1 which supports investments that improve irrigation infrastructure and enable farmers to apply irrigation techniques that require lower volumes of water than traditional systems. The National Irrigation Plan will define the roles of Croatian Waters, the MAFWM, and county and local governments in an effort to establish a “one-stop shop” for irrigation. This plan should be in effect in time to access the EU’s Special Accession Program for Agriculture and Rural Development funding for irrigation projects in 2006.

The Ministry of Environmental Protection, Physical Planning and Construction is responsible for environmental protection. Local governments are advised to contact this ministry before conducting a feasibility and environmental impact study. Website: www.mzopu.hr.

The World Irrigation Information Network: Utah State University hosts this network which assembles research and disseminates information needed by agricultural water institutions and those involved in irrigation research, training and assistance. In May 2002, Dr. Devor Romic, University of Zagreb, attended the Network’s formative conference on world irrigation information which included information on forming water user organizations. The Network’s web site at www.irri-net.org also provides a link to a booklet on forming water user groups.

Croatian Waters is the current official authority for all irrigation waters and is responsible for the national coordination of irrigation. Authority over water allocation and source development is currently under evaluation. The National Master Plan for Irrigation, expected in May 2005, may change the role of Croatian Waters in the future and provide much needed clarification of roles and responsibilities between Croatian Waters and local governments. Currently, Croatian Waters provides studies, surveys, information, and financial data on general water management, coordination of water use plans, establishment and maintenance of integrated data systems for water management, water conditions, maintenance and

regulation of watercourses, ice and flood control, construction and maintenance of water management systems, water resource protection, development and monitoring of water supply, usage control, and enforcement of legal sanctions for water conservation. Website: www.voda.hr.

DRAFT

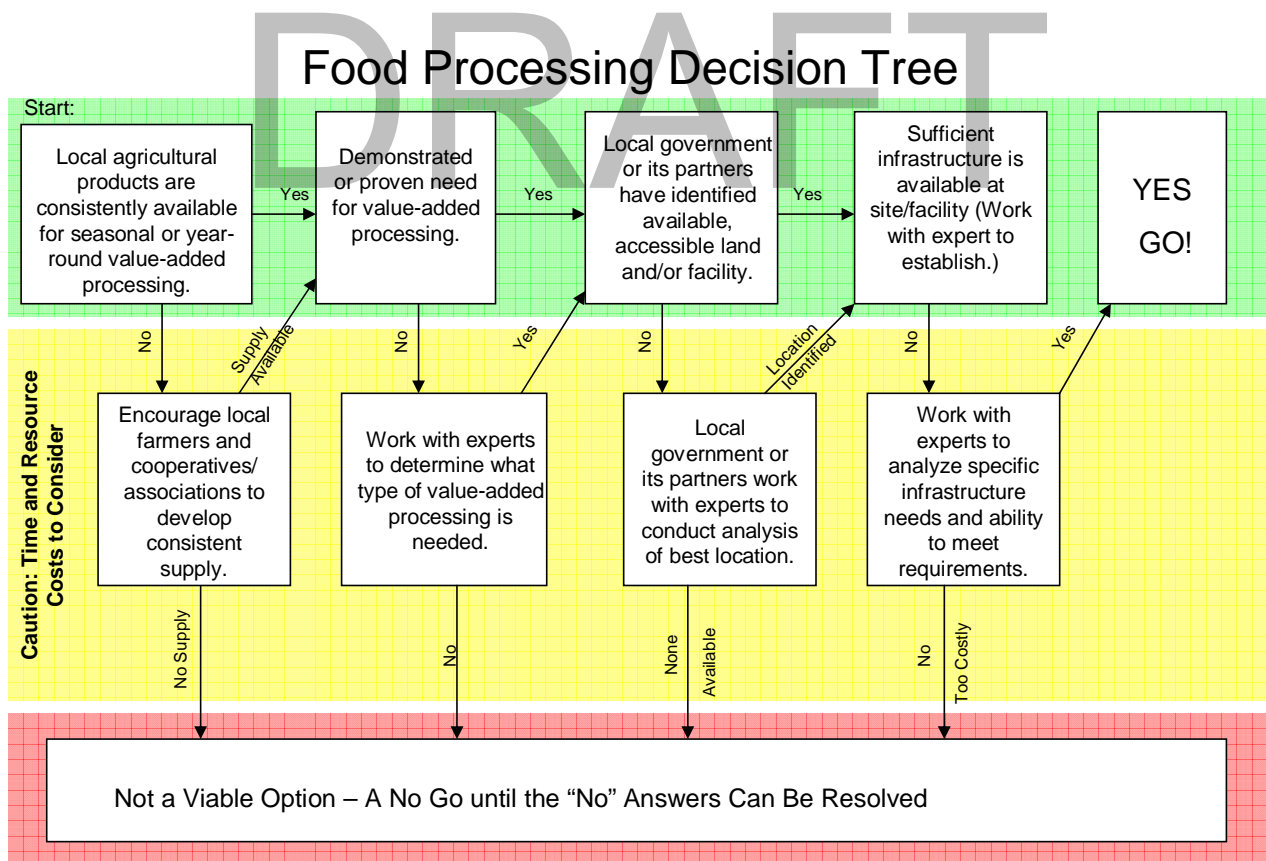
INTERVENTION IV: STIMULATING FOOD PROCESSING (VALUE-ADDED)

Definition:

Food Processing: To treat or prepare raw products through additional methods or steps to meet safety standards, to extend safe consumption time, to convert to a marketable form, or to make food available when and where needed, thus enhancing the value of the product.

Purpose:

- Add market value to raw products through:
 - Packaging
 - Brand identification
 - Creating a new finished product
- Support local agriculture by creating or expanding the market for local food products
- Create local employment
- Expand the local economic base



Things to Consider:

Food processing represents over 20% of Croatia's total industrial production and almost 18% of total industry employment. Between 1999 and 2002, the number of companies in this sector increased by 21%, however, net profit from 1999 – 2002 was negative for all food sectors except tobacco. Croatia is one of the highest-cost producers and source suppliers in Europe³⁵.

Because Croatian food products recently lost significant market share in domestic markets, there is an opportunity for import substitution if producers can meet market demands at competitive prices. The achievements of several Croatian food processors demonstrate that building the consistency of raw products, improving local branding, upgrading facilities, and developing products that meet market demands at a competitive price can equal success. Having raw products available locally can equal success for rural areas if processing costs can be held at competitive levels and if feasibility studies demonstrate a match with a growing market demand.

Local Government's Role in Food Processing:

Local governments – acting alone or in partnership - can play a key role in attracting local entrepreneurs and cooperatives to agro-processing, in nurturing local food processing plants to expand, and in keeping production costs low. Farmers that expand into greenhouse production can be supported with needed infrastructure. Some local governments have partnered with local producers and small cooperatives by donating empty government-owned buildings for food storage, drying facilities, or processing and by creating agricultural or enterprise zones that include food processors for more advanced processing possibilities.

Initial Steps and Investment Cost Factors to Consider:

- Explore marketing plan for value-added products to determine best market placement for regional products.
- Work with experts to conduct a cost/benefit analysis of value-added processing and packaging of agricultural products in the region.
- Establish mechanism to involve farmers to supply the processing facility.
- Conduct a business plan or feasibility study to include operating as a cooperative, under private ownership, etc.; involve potential owners.
- Identify a site; consider local government donation of building or land.
- Secure location permit.
- Secure land.
- Determine building costs.
- Assist potential owners in identifying operating costs.
- Identify potential investors.
- Apply for grants or loans to finance construction.
- Obtain environmental or other required permits.
- Tender construction including such costs as:
 - Land clearing
 - Pavement

³⁵ European Commission - Rural Development; Croatia Agenda.

- Road improvements to site
- Water (to site and on-site)
- Wastewater processing
- Solid waste
- Electricity
- Lighting
- Sanitation facilities for employees
- Building or renovation including administration offices
- Purchase equipment (*optional if privately-owned*; consider assistance if locally-owned cooperative)

Recurrent Steps and Operating Cost Factors:

- Facility maintenance
- Infrastructure maintenance (solid waste, electricity, road access, etc.)
- Marketing

Examples³⁶

- *Croatia Best Practice - Slatina Infrastructure Development:*³⁷ The city of Slatina committed to support the development the agro-processing industry through an Enterprise Zone (EZ) to expand its agriculture sector beyond an existing flour mill and bakery, silo storage facility and a KTC shopping chain that purchased local agriculture products. As part of its urban plan, a feasibility study was conducted to develop an enterprise zone near the edge of the city. Transferring land ownership back to the city presented the first challenge and involved taking an entrepreneur to court to reclaim undeveloped land. Infrastructure costs for uses ranging from agro-processing to SME development exceeded the city's resources. In addition, the feasibility study, architecture studies and plans amounted to 322,350 HRK and additional costs would be required to move electrical lines to accommodate roads and a water supply for the EZ. As a result, the city required a 70% match and began applying for a variety of grants. Ultimately, funds were secured piecemeal over four years from five sources including the Ministry of Crafts and SME, Development and Employment Fund, Regional Development Road Funds, county funds and the Ministry of Labor and Entrepreneurship. The city raised a total of 5,592,495 HRK and donated land valued at 750,000 HRK. Currently, the EZ has created 102 new jobs via two storage facilities, a shipping center, a metal industry, a technical center for vehicle registration. A new production company will open in early 2005 and the city will continue to use profits from new businesses for additional improvements.
- *Croatia Best Practice- Drnis Pršut*³⁸ *Brand Identification:* Epicures throughout Europe have long known that Drnis Pršut (smoked ham) is one of the best meat products in the

³⁶ Reference the Cooperatives Intervention for a description of the Zagora Cooperative and its link to the successful I-Pak Dairy processing facility.

³⁷ Based on an interview with Drazen Vujcic, EDSP Consultant City of Slatina and Municipality Crnac.

³⁸ For more information on Drnis Pršut, visit the US Embassy/Croatia Website at:

http://www.usembassy.hr/usaid/success_13.htm

world. Prior to the conflict, the state-owned company, Mesopromet, produced thousands of units per year. Over 25% of pršut production came from Drnis before the war. The Drnis facility directly provided several hundred jobs and enabled local pig breeders to earn a living by supplying raw materials. During the conflict, Mesopromet was completely destroyed.

Drnis local government officials turned to FLAG International to explore ways to restart the company. The Drnis Pršut Producers Association was formed from a group of 12 local businesses. Technical assistance funded by USAID helped the Association to create a brand label for genuine Drnis Pršut and to transform packaging to provide an appealing and sanitary appearance. Marketing materials such as a web page and brochures also enabled the Association to improve its approach to customers.

Rather than competing with high-volume, low-quality importers, members focused on a premium product to command a higher market price. The Association identified pig breeders in the Slavonia region who bred high-quality pigs under optimal conditions. This market link between producers and suppliers stabilized the quality of raw materials. In addition, an innovative, one-time livestock credit program (LCP) was developed to provide short-term financing for breeders to raise pigs to the Association's specifications. The credit program also supplied positive cash flows for processors during the lag time between pig purchases and pršut sales, empowering them to finance their own growth

Origin-geographical labeling has been well-established as a rural development tool in Italy and France. In addition, creating an entirely domestically-produced product enabled the Association to gain Protected Designation of Origin (PDO) certification. Such geographical indications can be registered with the World Trade Organization, similar to a trademark or copyright, to ensure that only authentic producers use the registered name and capitalize its branding. This certification also undercuts the competition's unfair advantage and helps protect Drnis producers from grey market production and illegal imports that account for about 70% of the Croatian market. It also makes Drnis an attractive site for investment by food processors that want to capitalize on Drnis' reputation, which could bring more jobs to the local economy. With USAID-funded assistance, the Association also obtained International Organization for Standardization (ISO) and Hazardous Analysis and Critical Control Point (HACCP) international quality control certifications which will enable its members to export pršut throughout Europe. For more information on the Drnis Pršut experience, please consult the USAID Croatia website at <http://www.usembassy.hr/usaidd/>. Information on European Union systems for food quality is available at the EU agriculture and food website at: http://europa.eu.int/comm/agriculture/foodqual/quali1_en.htm.

Where to go for help and more information:

USAID Agribusiness Competitiveness Enhancement (ACE) project assists the development of Croatia's agribusiness sector, consisting mostly of SMEs, by focusing on improving domestic market linkages and building commercial relationships between primary producers and major processors. The project is organized around three components

of the largest primary clusters - dairy, swine and horticulture. Technical assistance is provided from three project offices located in Zagreb, Osijek and Split. The project works at all levels of production but its primary focus is on development of "competitive production models" that can be replicated through major processors and retailers to Croatian agricultural producers. ACE's goal is to significantly increase the buy-off of Croatian agricultural products in targeted clusters to increase producer incomes and assure a balanced and sustainable employment base in the agribusiness sector. ACE offers technical assistance and matching grants for irrigation, processing and storage facilities, and other production enhancements.

Ministry of Agriculture, Forestry and Water Management (MAFWM)

In coordination with other Ministries, MAFWM intends to prepare a National Development Plan between 2005 and 2007 to bring obligations contained in EU structural funds regulations in line and provide the first steps for obtaining Regional Development Funds for infrastructure needs. Local governments are advised to participate in developing Regional Operating Plans to include urgent infrastructure needs and to watch for funding announcements for plans involving agro-processing plans.

- Market Information System In Agriculture (MISIA), under the MAFWM, was established in 1997 to acquire, process and distribute market data on agricultural products. Website: www.mps.hr

Ministry of Public Works, Reconstruction and Construction provides assistance for local government public works and infrastructure needs, especially roads and wastewater.

Ministry of Maritime Affairs, Tourism, Transport and Development provides assistance for local government transportation infrastructure and any other transportation needs.

Croatian Chamber of Economy (Commerce) offers general food export information and provides commerce assistance and planning. The central office is in Zagreb.

Agriculture, Food Industry and Forestry Department provides information on the agriculture food processing industry.

Email: poljoprivreda@hgk.hr

Website: www.hgk.hr

INTERVENTION V: ORGANIC AND ECOLOGICAL FARMING

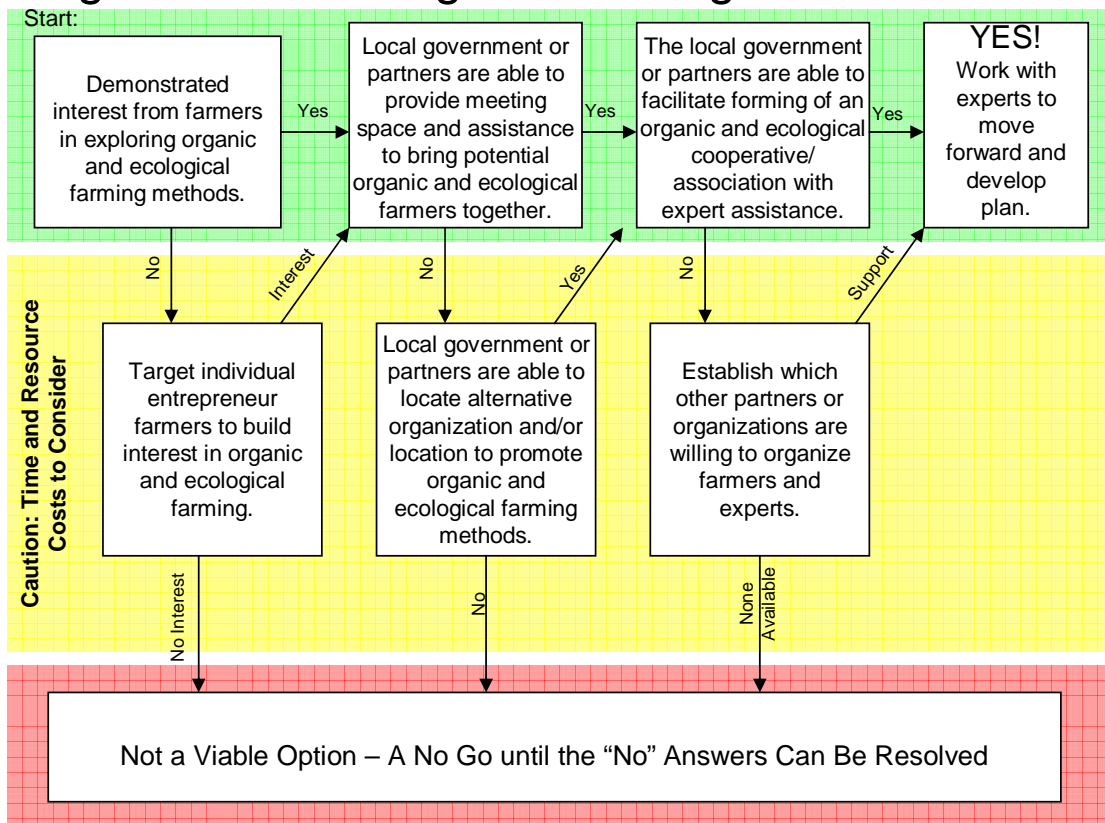
Definition:

Organic and Ecological Farming: (also referred to as agro-ecological, agro-ecology, or agro-ecosystems) A farming system that avoids or excludes the use of synthetic inputs such as fertilizers, pesticides, hormones, feed additives, and which relies, to the maximum extent feasible, upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological systems for nutrient mobilization and plant protection.

Purpose:

- Provides a value-added product in market demand.
- Reduces the cost of non-labor agricultural production inputs by utilizing natural ecological means to supply plant nutrients and control weeds, insects and pathogens.
- Helps maintain a higher level of production, creating local employment.
- Reduces potential human and animal health hazards.
- Develops soil health and productivity.
- Develops an environmentally-friendly local food system to serve surrounding urban areas.
- Exploits family traditions of chemical-free farming and fosters the use of small plots with higher return value for fresh food that are more likely to be certified as organic..

Organic and Ecological Farming Decision Tree



Things to consider:

Organic agriculture products are a growing market throughout Croatia and Europe. Currently, Croatia cannot meet its domestic demand and is 87th out of 93 countries in certified organic products, with slightly more than 3,500 ha or 0.004% of agriculture land in organic production on 160 certified organic farms. Still, organic production is growing. In 2000, Croatia had only 12.5 ha spread over 17 farms. Land that has not had applications of chemical fertilizers, pesticides or herbicides within the last 3-5 years can be certified for organic production. It is an agricultural resource that merits protection.

The Croatian government began in 2003 to offer subsidies for organic production that are approximately 30 – 140% higher than those for conventional agricultural products. Two organic certification organizations exist, BIOPA and Agribiocert, a branch of the Italian certification agency ICEA (Istituto Certificazione Etica e Ambientale). Croatia is also aligning to meet the EU Common Agricultural Policy (CAP) by developing policies aimed at minimizing environmental degradation and encouraging farmers to maintain the countryside and environment while securing farming profitability. Encouraging organic farming supports this effort. Organic farming research around the world has shown compatibility in even the most sensitive areas, such as protected river basins and wetlands, which are present in Croatia.

Local Governments' Role in Organic and Ecological Farming:

Local governments in Croatia have encouraged farmers to consider organic production and certification by providing links to certification agencies, to the Croatian Agriculture Advisory Service agent, and to donor organizations that assist farmers in gaining greater sustainability and profitability. Local governments also provide space to hold workshops and informational meetings about growing trends in organic farming, product demands, and forming associations or cooperatives.

Local governments can foster local organic systems by conducting a community food assessment of local demand for organic products. With community input and stakeholder and governmental support, a local food policy council or food advisory board can be established to determine planning steps to develop local agricultural infrastructure such as production, distribution, and markets. A planning board or city, county commission can be a good place to start.

Initial Steps and Cost Factors to Consider:

- Work with experts to conduct a market analysis to determine demand for domestic and internationally produced organic agricultural products.
- Identify stakeholders, farmers and farmer associations who will support and guide the process.
- Identify land that may be eligible for organic certification.

Additional Steps and Cost Factors:

- Conduct a community food assessment

- Establish, if needed, a local food policy council or food advisory board to determine planning steps to develop needed infrastructure for organic production.
- Partner with city and county government to identify procedural and logistical methods to foster local agricultural sustainability through partnerships, legislation, zoning, and referendums related to land use for ecological food production.

Examples:

- *Croatia Best Practice – Organic Food Production - Eko Zadar:* Eko Zadar is a non-profit NGO established in 1999 that promotes production of bio-organic food, seeds and herbs. Members include family farms, consumers, supporters, and students, with 92 families currently registered. Its main goal is education. Eko Zadar provides consulting advice and training on production, processing, marketing and certification of organic products to its members who are mostly small producers of Mediterranean plant cultures such as herbs, cherries, wine grapes, honey and propolis, vegetables, and olives. On-going processing includes wine grapes and olives. Contact Information: Eko-Zadar, Trg Petra Zoraniaea 1, 23000 Zadar. More information on this and other initiatives in Croatia is available at the European Union Quick Impact Facility website at www.gif.hr.
- *Czech Republic Best Practice – Organic Agriculture in the Jeseniky Micro-Region:*³⁹ The Jeseniky Micro-Region is a protected area established in 1969 in the Moravia Region comprising 74,000 ha of mountain area, mostly covered by spruce forest and agricultural land. The largest number of organic farms in the Czech Republic are found in this region, with 4865 ha, equivalent to 20% of the agricultural land. Farms are committed to biodiversity conservation and are certified according to EC Regulation Nr.2092/91. Low-intensity cattle farming for slaughter and breeding is the principle activity, with only 0.3 cattle units per hectare. Other production includes spelt, wheat, barley, rye, triticale, and milk. These organic products bring higher returns for the farmers who also protect the semi-natural pastures and meadows to obtain ancient varieties of seed material for sowing on newly cultivated plots. During the last decade, most arable land was converted to meadows and pastures to increase the local agro biodiversity, minimize soil erosion and avoid external input needs. More information on this best practice is available at the FOA website : http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/005/AD090E/ad090e.htm.
- *Russia – Organic Agriculture and Bird Conservation in Muraviovka Park*⁴⁰: Muraviovka Park is a private protected area located along the Amur River in far eastern Russia, the largest free flowing river in the world. The park was instituted in 1994 by a Russian NGO (Amur Program of Socio-Ecological Union) with financial support from U.S. International Crane Foundation and Japanese Pop Group Corporation. It consists of

³⁹ UN FAO. Nadia El-Hage Scialabba, Secretary. Priority Area for Inter-Disciplinary Action on Organic Agriculture. Organic Agriculture: The Challenge of Sustaining Food Production While Enhancing Biodiversity. Report from Sub-Group Meeting on Wildlife, Biodiversity and Organic Agriculture. Ankara, Turkey, 15-16 April 2003. Food and Agriculture Organization of the United Nations, Rome. P. 22.

⁴⁰ Ibid, 17.

5,200 ha of wetlands and plateau lands surrounded by croplands which provide critical habitat for more than 520 plant and 200 bird species including certain endangered cranes and storks. The park was created to further research into new strategies for environmental conservation and sustainable development through sustainable agriculture techniques, wildlife habitat protection and improvement, and ecotourism. While the area offers excellent soil and climatic conditions for crop growing, farm practices including burning straw and using large quantities of pesticides and herbicides have caused considerable damage to wildlife, human health and the economy.

A demonstration area of 460 ha was developed to exhibit how sustainable agriculture fields near wetlands can offer breeding, roosting and feeding habitats for birds. The principal crops are wheat, barley, soybeans, and corn varieties. Corn is planted as a lure crop to offer foraging for wildlife to keep cranes out of the agricultural fields and avoid conflict between birds and farmers. As agricultural activities changed and preservation of wetlands increased, the number of cranes and storks increased two to three times. Even more impressive, through use of traditional varieties, strict crop rotations, a fallow strategy and multiple cultivations, pesticides and agrochemicals have been eliminated and crop yields exceed those of conventional farmers at half the production cost, convincing many farmers to change their practices. More information on this best practice is available at the FOA website :

http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/005/AD090E/ad090e.htm.

Where to go for help and more information:

The Croatian Agriculture Advisory Service offers workshops on organic farming and their web site provides links to related articles and bulletins as well as a list of all agriculture agents in Croatia. www.hzpss.hr

Organic Food Certification

Currently there are two organic certifiers approved by the Ministry of Agriculture, **Agribiocert and BIOPA.**

Contact Information:

ICEA CROAZIA c/o Cooperativa Agribiocert

Veli dvor 11 - 51513 Omisalj

Tel: +385 51 842 607; +385 98 168 3031

Fax: +385 51 212 074

Contact: Ranko Tadic

E-mail: zadruga.agribiocert@ri.htnet.hr; kroatia@icea.info;

BIOPA

Djakovstina 2

31 000 Osijek

Tel: +385 31 204 949; +385 31 204 620

Fax: +385 31 213 659

USAID Agribusiness Competitiveness Enhancement Project (ACE) will help large production farmers who seek expertise in organic farming or to form organic cooperatives or associations in targeted cluster areas including dairy, swine and horticulture. ACE will also assist in completing paperwork and contracts as well as providing help to develop an organization. ACE assists in building commercial relationships between large producers and cooperatives with market access to dairy, swine and horticulture. Its goal is to increase the buy-off of Croatian agriculture products in the targeted clusters in order to increase producer incomes and assure a balanced and sustainable employment base in the agribusiness sector. Information on ACE is available at: www.usembassy.hr/usaidd/pdff/economic/ACE.pdf.

USAID Raising Incomes in Economically Distressed Areas (RIEDA) Project started in 2004 and is funded through 2008. The project's single objective is to increase sustainable agricultural employment and incomes in areas of special state concern. RIEDA will work hand in hand with the ACE project to help small "subsistence level" producers expand production to that of a commercial or emerging commercial farmer. RIEDA offers technical assistance to individual and small agricultural producers and firms and offers grants to assist viable enterprises form cooperatives and existing co-ops to expand. RIEDA focuses on dairy, swine and horticulture and on increasing local consumption and production, including organic production. More information on RIEDA is available at [www.usembassy.hr/usaidd/pdff/economic/RIEDA%20 2004 .pdf](http://www.usembassy.hr/usaidd/pdff/economic/RIEDA%202004.pdf).

South Eastern Europe Environment Information is a sharing pool for support, information, announcements and exchange of environmental information including organic farming in South Eastern Europe. Website: www.see-environment.info.

INTERVENTION VI: FORMING FARMING COOPERATIVES AND ASSOCIATIONS

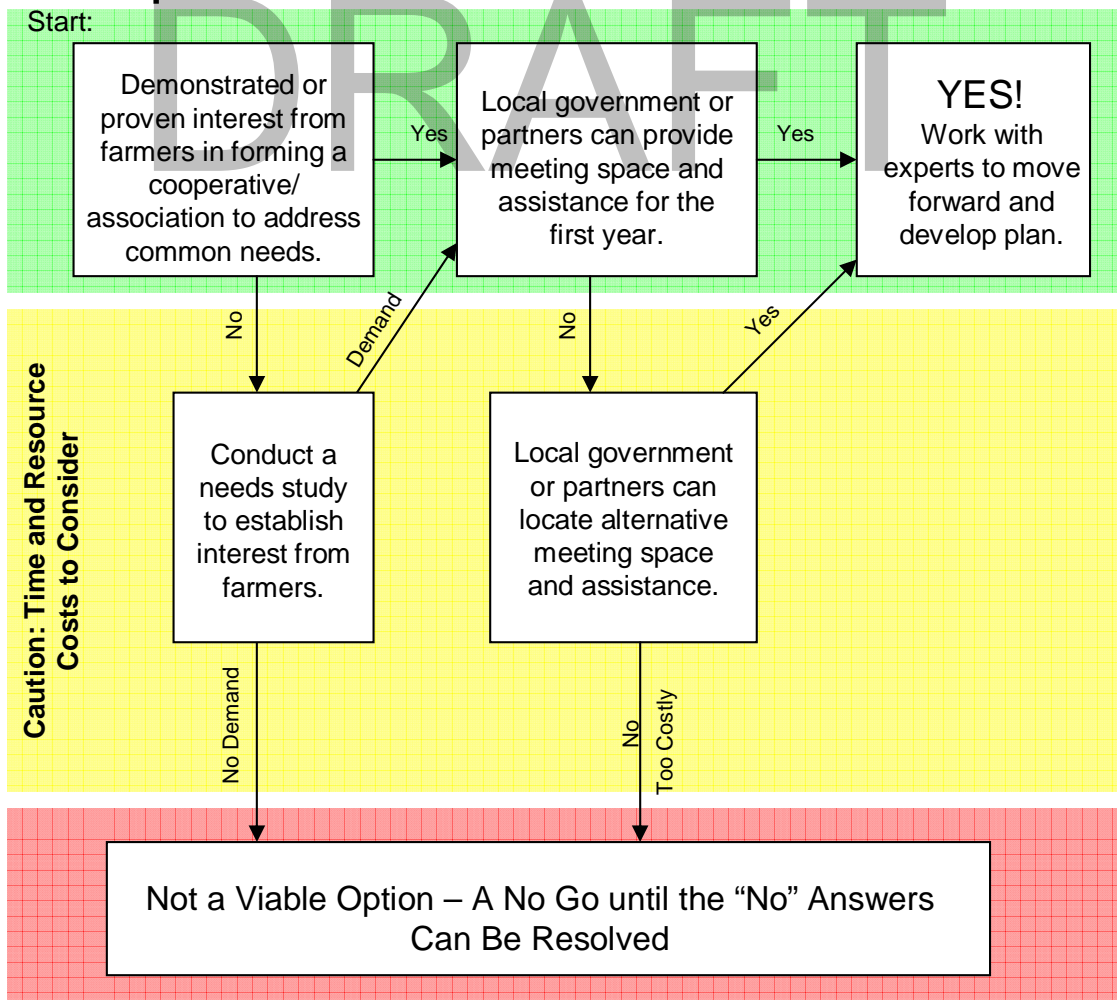
Definition:

Farming Cooperatives: A group of farmers working together willingly for a common purpose and mutual benefit, to enhance their buying and selling capacity, market their products and gain greater competitive advantage than by working alone. A registered cooperative has legal business rights equal to any other trade company.

Purpose

- Enhance agriculture incomes and employment
- Link agriculture producers to build capacity to:
 - Raise profitability and sustainability
 - Leverage group buying thereby reducing input costs
 - Obtain better terms from processors and wholesalers
 - Access available financing and support programs

Cooperative/Association Decision Tree



Things to Consider:

A single family farm's market outlet is typically in its local region, which limits income opportunities to subsistence levels. Small farmers face steep barriers in trying to function alone in the global market. To be competitive, small producers must form associations and cooperatives for marketing and purchasing inputs and for making greater investments in infrastructure such as irrigation, greenhouse construction and storage facilities.

Traditional farmers may be distrustful of the term "cooperative" and initially reluctant to join an organization due to negative experience with socialist era cooperatives. The term "association" may be more acceptable. Based on four years of experience, USAID's FLAG (Firm Level Assistance Group) program advises that forming an association is the best first step in marketing the concept of an independent farmer's organization. Fellow farmers, mayors, and trusted local agricultural agents can then provide information about these "bottom-up" organizations that help overcome barriers to competitiveness.

Local Government's Role in Farming Cooperatives: Local governments – acting alone or in partnership - can play a key role in forming farming cooperatives through the following activities:

- Contacting farm leaders to begin discussions on forming cooperatives.
- Personally inviting farmers to organizational meetings.
- Obtaining support from entities that offer organizational assistance.
- Making available office and meeting space.
- Providing access to computers, office equipment and bookkeeping assistance during the start-up year.
- Donating or locating product storage space.
- Acting as an intermediary to facilitate access to government programs.

As detailed in the following resource section, local governments have access to a rich source of assistance in forming cooperatives.

Initial Steps and Investment Cost Factors to Consider:

- Conduct an interest/needs analysis to determine interest or resistance.
- Establish mechanism to involve farmers and experts in forums to explain benefits.
- Work with experts to conduct a cost/benefit analysis.
- Assess ability to support administrative needs (office space, equipment, etc.)
- Assess ability to contribute to storage, packaging facilities from available buildings, infrastructure, local funding, etc.
- Obtain expertise from the resource groups.

Recurrent Steps and Operating Cost Factors:

- Assistance with administrative duties and funding for staff
- Office space
- Buildings to meet growing needs for value-added products
- Infrastructure development to accommodate future expansion

Examples:

- *Croatia Best Practice – Cooperative Ring of Agriculture Equipment:*⁴¹ Djulovac is an example of effective collaboration between local government and producers that boosted local production and increased competitiveness in the region. Its mayor, Milan Grahovac, recognized that outdated hay baling equipment slowed production for local farmers. A small cooperative was formed to share farm equipment, starting with eight local farmers pooling funds to purchase the equipment and the city providing nylon rope and some co-financing. The co-op now has four pieces of equipment and over forty farmers, with the city allocating over 30,000 HRK a year for rope for the circular baling process. Today, Djulovac allocates 140,000 HRK each year for agriculture development. The last seven years, it has committed 100,000 HRK to provide a 50% match to producers for the insemination of cows performed through contracts with veterinarian stations in the area.
- *Croatia Best Practice– EKO-Dalmacija Organic Farming Cooperative:* New production standards raised the agriculture production value of 45 farmers willing to venture into organic food production and to form the Eko-Dalmacija Cooperative. Local government donated facilities that were retrofitted with United Nations Development Programme (UNDP) funds to create a cold storage facility. The co-op produces 12 different agricultural products certified by Switzerland’s Institut fur Marketologie and BIOPA, who carried out the farm inspections. In 2002, Eko-Dalmacija won the “First Quality” prize at the eco-food fair in Cakovec. In September 2003, the co-op signed an agreement with the SMS to purchase and process organic production at its Split premises. The co-op received credit assistance from the EU Quick Impact Facility (QIF), a UNDP Office for Project Services (UNOPS) program, which required three conditions⁴²: a marketing contract signed before funding, crops insured with the Croatia Osiguranje, and collateral of at least 50% of the total cost. More information on this and other initiatives in Croatia is available at the European Union Quick Impact Facility website at www.gif.hr.
- *Croatia Best Practice– Dvor Pig Producer*⁴³ - *Assisted by FLAG International:* This case study illustrates how subsistence-level pig production can be transformed into a lucrative value-added business through a co-op and a few targeted business loans. In 1997 after the war, Rade Gagic returned to Dvor, a small town south of Zagreb on the Bosnian border. With stables destroyed, fields overgrown, and equipment and livestock looted, the Gagic farm was in no shape for production and the family struggled on a survival income.

In 2000, a USAID-funded program implemented by FLAG International⁴⁴ (FI) helped the Gagic farm get started with a small herd of a few pigs. By 2001, the herd had grown to 50 pigs but the family’s financial reward was meager. Stables were still in shambles, which caused higher animal mortality rates and reduced birth rates. FI then assisted Gagic in

⁴¹ Interview with Milan Grahovac, Mayor of Djulovac.

⁴² QIF website at www.qif.hr/index_2.htm

⁴³ Information provided by Flag International. Visit the US Embassy website at http://www.usembassy.hr/usaaid/pdf/job/rade_gagic.pdf for more details.

⁴⁴ The FLAG project has transitioned into the ACE and RIEDA projects.

forming the AgroNatur Cooperative with other local pig breeders by providing training and management support. Farmers began to benefit from lower transport and veterinary costs negotiated by AgroNatur using increased economies of scale. FI worked with Gagic to prepare a business plan that enabled him and five other coop members to raise \$14,000 to reconstruct stables.

Under the ECRA program, an innovative Livestock Credit Program (LCP) loaned 40 pigs to each of the AgroNatur members at an 8% market interest rate. FI required the breeders to hold the pigs longer than usual to add the 40% weight gain required by premium dry meat processors, such as Drnis Pršut Producers Association. The extra growth time meant higher feed costs but the breeders realized over four times the profit from traditional methods. In addition, because Gagic is one of the few breeders in Croatia who has invested in the Duroc breed essential to produce premium Dalmatian Prosciutto, he is now competitive in the Duroc pig market.

By strategically repositioning Gagic's farming into high value-added sectors, establishing vital market linkages, and assisting with herd increases, a subsistence-level operation was transformed into a sustainable income source. This case study also demonstrates how smaller producers can form a co-op and produce a high quality, high-end product that used regional labeling to compete on the world market. AgroNatur succeeded by making market links between pig farmers and pršut processors, capitalizing on Drnis Pršut's reputation and Protected Designation of Origin certification.

- *Croatia Best Practrice – Zagora Cooperative - Importance of Linking to Expertise*⁴⁵. A 2003 agricultural law took effect eliminating subsidies that provided incentives for many small dairy farmers in Dalmatian villages. FLAG International (FI) assisted Ivan Petrović, owner of the I-Pak Dairy, one of the most promising SMEs in the area, and four other successful local entrepreneurs in forming an agricultural cooperative to serve as the nucleus of agricultural development in the area. Although dairy production formed the basis for nearly 80% of the Zagora Cooperative's activities, the co-op founders pledged to promote village tourism and traditional pršut production over the long term. Co-op membership was offered to any agricultural producer in the area, regardless of ethnicity, who worked in four core business sectors. FI helped the cooperative design a unique membership contract that allowed greater access to technical assistance and state subsidies which dispelled fears about joining a cooperative.

FI also conducted extensive education programs on bovine nutrition and other aspects of cattle care which raised daily average milk collection per cow from 10 to as high as 27 liters. Through the cooperative, many of the smallest farmers were connected to microfinance organizations and international charities that provided over 200 head of cattle the past year. By establishing market linkages with large feed producers, the co-op secured over 40% cost savings for farmers. In addition, FI assisted the co-op in preparing a business plan that resulted in a \$65,000 loan from the World Bank were used to purchase processing equipment for hard cheeses from sheep and goats. Members are positioned to

⁴⁵ From USAID Croatia achievements accessed online at http://www.usembassy.hr/usaidd/success_10.htm

receive dividends from sales of this high value-added cheese, increasing income opportunities from supplying additional raw milk.

Four years ago, Ivan Petrović opened the I-Pak dairy processing facility collecting 30 liters of milk daily and handling all the work himself. Today, Petrović processes about 5,000 liters a day and employs office staff, technicians to manage cheese processing, and drivers to collect milk and distribute cheese to customers. I-Pak's milk collection grew a remarkable 70% since the Zagora Cooperative was founded two years ago.

The Zagora Cooperative has over 400 active members throughout the villages who have become eligible for state subsidies, tax incentives, cheaper inputs, and who have substantially higher milk yields that vastly increased income level. Through the co-op, inhabitants now have a sustainable way to earn a living, which contributes to a strengthened community and a stabilized region.

More information on this and other USAID-sponsored projects in Croatia can be found at <http://www.usembassy.hr/usaidsuccess.htm> .

Where to go for help and more information:

Croatian Association of Cooperatives offers information and assistance on forming and registering a cooperative, related laws and regulations, and will work directly with local government to assist in the formation of farmer co-ops. Based in Zagreb, the organization serves cooperatives throughout Croatia. The association partners with the EU Quick Impact Facility (QIF) program to offer training for agricultural cooperative management and workshops on various assistance programs. QIF can fund cooperative infrastructure needs through a combined credit and grant package, loaning up to 80% of the total amount required. Website: www.zadruga.hr.

Croatian Agricultural Cooperative Alliance operates in the special State-concern areas including Dvor and West Slavonia and other areas of Croatia, providing education about founding co-ops and improving processing and production technologies. The organization also provides management assistance and business support.

USAID Agribusiness Competitiveness Enhancement Project (ACE) will help large production farmers who seek expertise in organic farming or to form organic cooperatives or associations in targeted cluster areas including dairy, swine and horticulture. ACE will also assist in completing paperwork and contracts as well as providing help to develop an organization. ACE assists in building commercial relationships between large producers and cooperatives with market access to dairy, swine and horticulture. Its goal is to increase the buy-off of Croatian agriculture products in the targeted clusters in order to increase producer incomes and assure a balanced and sustainable employment base in the agribusiness sector. For more information, contact the USAID Croatia website at <http://www.usembassy.hr/usaideconomic.htm>.

Raising Incomes in Economically Distressed Areas (RIEDA) project started in 2004 and is funded through 2008. The project's single objective is to increase sustainable agricultural employment and incomes in areas of special state concern. RIEDA works with the ACE project to help small "subsistence level" producers expand production to that of a commercial or emerging commercial farmer. RIEDA offers technical assistance to individual and small agricultural producers and firms and offers grants to assist viable enterprises form cooperatives and existing co-ops to expand. RIEDA focuses on dairy, swine and horticulture and on increasing local consumption and production, including organic production. For more information, contact the USAID Croatia website at <http://www.usembassy.hr/usaaid/economic.htm>.

Croatian Agriculture Advisory Service (HZPSS): Local Advisory Agents offer workshops and information to farmers interested in forming associations and on a wide variety of topics including product supply and demand, crop production, agro-economics, and farm financials. Its website provides a listing of all agents with contact information as well as links to other agriculture resources in Croatia: www.hzpss.hr

Croatian Agency for Small Business is an institution for developing and promoting small business. In coordination with the Croatian Association of Cooperatives, this agency can offer business organizational assistance and information. www.hamag.hr

Note: If a cooperative is planning to develop additional processing capabilities, the Food Processing Intervention in this section provides other information.

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INSTITUTIONAL RESOURCES

The Agricultural Institute Osijek

Juzno predgradje 17

Phone: 385 31 500685

FAX : 385 31 5034404

Web site: www.poljinos.hr

Central Agricultural Library

Svetosimunska 25, 10000 Zagreb

Phone: 385 1 2393766

Web site: www.lib.agr.hr

Croatian Association of Cooperatives

Gajeva 2a, 10000 Zagreb

Phone: 385 1 487 00 52

Web site: www.zadruga.hr

Croatian Agricultural Advisory Service/ Croatian Agricultural Extension Institute

Kaciceva 9-III, 10000 Zagreb

Phone: 385 1 4882700

FAX: 385 1 4882701

Web site: www.hzps.hr

Croatian Institute of Viticulture and Enology

Kneza Ljudevita Posavskog 48, 10000 Zagreb

Phone: 385 1 4648 261

FAX: 385 1 4647 224

Web site: www.hrzv.hr

Croatian Livestock (Selection) Center

Ilica 101, 10000 Zagreb

Phone: 385 1 3903111

Web site: www.hssc.hr (with links to all 27 centers in Croatia)

Croatian Mine Action Centers

Regional Office Sisak

Ante Kovacica 10

44 000 Sisak

Phone: 385 44554151

FAX 385 44 554 142

e-mail: hcr@hcr.hr

Regional Office Karlovac

Josipa Krasa 2

47 000 Karlovac

Phone: 385 47 616 236

FAX 385 47 612 083

e-mail: karlovac@hcr.hr

Regional Office Osijek
Vijenac Ivana Mestrovica 14 b
31 000 Osijek
Phone: 385 31 250 821
FAX 385 31 250 829
e-mail: osijek@hcr.hr

Regional Office Zadar
s. Radica 1
23 000 Zadar
Phone: 385 23 224 870

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Hrvatske Vode - Direkcija
Croatian Waters

Head Office

p.p. 151, 10001 Zagreb

Phone: 385 1 6307-333

FAX: 385 1 6151-793

e-mail: voda@voda.hr

Institute for Agriculture and Tourism

C. Huguesa 8, 52440 Porec

Phone: 385 52 408300

FAX: 385 52 431659

Web site: www.iptpo.hr

Institute for Plant Protection

Svetosimunska 25, 10000 Zagreb

Phone: 385 1 2301187

e-mail: zavod-zas.bilja@zg.tel.hr

Market Information System in Agriculture

Ulica Grada Vukovara 78, 10000 Zagreb

Phone: 385 1 6106685

FAX: 385 1 6109202

Web site: www.tisup.mps.hr

Meteorological and Hydrological Service of Croatia

Gric 3, 10000 Zagreb

Phone: 385 1 4565666

FAX: 385 1 4851901

Web site: <http://meteo.hr>

Ministry of Agriculture, Forestry and Water Management

Ulica grada Vukovara 78, 10000 Zagreb

Phone: 385 1 6106600

6106111

Web site: www.mps.hr

Ministry for European Integration

Ulica grada Vukovara 62, 10000 Zagreb

Phone: 385 1 4569 335, 4569 336

FAX: 385 1 4569 328, 6303 183

Web site: www.mei.hr

USAID – ACE (Agribusiness Competitiveness Enhancement)

Zagreb office:

Nasicka 53, 10000 Zagreb

Phone: 385 1 3689 212, 222

Osijek office:

Setaliste k. Franje Sepera 13

31000 Osijek

Phone: 385 31 250 160

Split office:

Dubrovačka 53, 21000 Split

Phone: 385 21 340 600

USAID – RIEDA (Raising Incomes in Economically Distressed Areas of Croatia)

Rudera Boskovicica 5, 21000 Split

Phone: 385 21 453 684

DRAFT

WEBSITE RESOURCES

Animal Health Status in Croatia – www.veterinarstvo.hr

Croatian Agency for Small Business – www.hamag.hr

Croatian Agriculture Census 2003 – www.dzs.hr/Eng/Agriculture/Census2003.htm

Croatian Agricultural Advisory Service/Croatian Agricultural Extension Institute – www.hzpss.hr

Croatian Association of Cooperatives – www.zadruga.hr

Croatian Bank for Reconstruction and Development - <http://www.hbor.hr/>

Croatian Chamber of Economy – Agriculture, Food Industry and Forestry Department - www.hgk.hr

Croatian De-mining Center – www.hcr.hr

Croatian Institute for Agriculture and Tourism – www.iptpo.hr

Croatian Institute for Plant Protection – www.zzb.hr

Croatian Livestock Selection Center – www.hssc.hr

Croatian Institute for Seeds and Seedlings – www.zsr.hr

Croatian Institute for Viticulture and Enology (wine) – www.hrzv.hr

Croatian Plant Protection Society - <http://www.agr.hr/hdbz/>

Croatian Waters – www.voda.hr

European Union – <http://europa.eu>

Faculty of Agriculture of the University of Zagreb - <http://www.agr.hr/>

FOA Statistics - <http://apps.foa.org/>

Institute for Adriatic Crops and Karst Reclamation - <http://www.krs.hr/>

Institute for Agriculture and Tourism – www.iptpo.hr

International Federation of Organic Agriculture Movements – IFOAM – www.ifoam.org

International Organization for Standardization – www.iso.org

Marketing Information System in Agriculture – www.tisup.mps.hr

Meteorological And Hydrological Service of Croatia – <http://meteo.hr>

Ministry of Agriculture, Forestry and Water Management – www.mps.hr

Ministry of Economy, Labour and Entrepreneurship – www.mingorp.hr

Ministry of Environmental Protection, Physical Planning and Construction – www.mzopu.hr

Ministry of European Integration - Website: <http://www.mei.hr>

Ministry of Sea, Tourism, Transport and Development – [www.mmtpr@hr](http://www.mmtpr.hr)

Republic of Croatia Central Bureau of Statistics - <http://www.dzs.hr/>

TISUP Trzisni informacijski sustav u poljoprivredi, an on-line Market Information System for Agriculture that helps farmers understand and access markets and facilitates trade. www.tisup.mps.hr/hr/default.asp

The Organic Standard, 2003 - www.organicstandard.com

United Nations Food and Agriculture Organization (FAO) - <http://www.fao.org>
Sub-regional Office for Central and Eastern Europe - www.foa.org/Regional/SEUR/fsd

United Nations Development Programme – www.undp.org

United Nations Office for Project Services – www.unops.org

World Climate - <http://www.worldclimate.com>

World Irrigation Information Network – www.irri-net.org

World Health Organization – www.who.int

LIST OF ACRONYMS

ACE	Agribusiness Competitiveness Enhancement Project
CAP	Common Agricultural Policy
CAEI	Croatian Agricultural Extension Institute (See HZPSS)
CEE	Central and Eastern Europe
ECRA	Economic and Community Revitalization Activity
ED	Economic Development
EDSP	Economic Development Strategic Plan
EU	European Union
EZ	Enterprise Zone
FAO	Food and Agriculture Organization of the United Nations
FFV	Fresh Fruit and Vegetables
FAS	Foreign Agricultural Service of USDA
GAIN	Global Agriculture Information Network
GAP	Good Agricultural Practice
GDP	Gross Domestic Product
GIS	Geographic Information System
HACCP	Hazardous Analysis Critical Control Point
HZPSS	Hrvatski Zavod za Poljoprivrednu Savjetodavnu Službu (Croatian Agriculture Advisory Service) (See CAEI)
ICEA	Istituto per la Certificazione Etica e Ambientale (Italian Institute for Certification for Organic Designation)
ISO	International Organization for Standardization
LCP	Livestock Credit Program
LED	Local Economic Development
LGRP	Local Government Reform Project
MAFWM	Ministry of Agriculture, Forestry and Water Management
MEPPPC	Ministry of Environmental Protection, Physical Planning and Construction
MSTTD	Ministry of Sea, Tourism, Transport and Development
NEAP	National Environmental Action Plan
PDO	Protected Designations of Origin
RIEDA	Raising Incomes in Economically Distressed Areas of Croatia
SAPARD	Special Accession Programme for Agriculture and Regional Development
SIDA	Swedish International Development Cooperation Agency
SME	Small and Medium Enterprise
SWOT	Strengths, Weaknesses, Opportunities and Threats
UI	Urban Institute
UNDP	United Nations Development Programme
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
WHO	World Health Organization
WSI	Worldwide Strategies, Inc.
WTO	World Trade Organization

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www.europa.eu.int/comm/external_relations/see/sap/rep3/cr_croat.pdf
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USAID RIEDA Project http://www.usembassy.hr/usaideconomic_7.htm

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