

COMMUNITY SUPPORTED AGRICULTURE GROUPS AS A FORM OF SUSTAINABLE ENTREPRENEURSHIP

Zvonimira Šverko Grdić
Helena Traub

Abstract

Community Supported Agriculture (CSA) contracts allow consumers to buy a variety of different products. In turn, the consumers provide working capital to the producers during the process of production. This paper describes the activities and specificities of community supported agriculture groups as groups representing the trend of different types of informal, common social initiatives. Such initiatives can be characterized as a form of sustainable production and consumption.

Purpose – The purpose of this work is to contribute to and develop the scientific knowledge about the role of sustainable entrepreneurship and community supported agriculture in sustainable production and consumption, as well as about their importance for the economy of the future.

Methodology – The following scientific methods were used in the formulation and presentation of the findings: methods of analysis and synthesis and method of description. Also, desk research of available literature, relevant websites and examples was performed and in order to analyse current situation regarding CSA groups and sustainable entrepreneurship.

Findings – The findings in this paper outline the emerging researches and potential future research directions concerned with sustainable entrepreneurship and community supported agriculture.

Contribution – The main contribution of this work is its emphasis on the fact that the economic, social, and ecological principles of sustainable entrepreneurship are deeply rooted in community supported agriculture.

Keywords: community supported agriculture, sustainable entrepreneurship, sustainable consumption, solidarity economy

INTRODUCTION

Community supported agriculture represents one form of sustainable entrepreneurship, i.e. a form of partnership between producers and consumers which refers to sustainable, local production and consumption of products. The aim of sustainable consumption and production is reducing the use of natural resources, the production of hazardous and toxic substances, air, water and soil pollution, as well as reducing or preventing the generation of waste at the source. Community supported agriculture can, in part, facilitate the economic development of Croatia (Cifrić, 2003, 346). Furthermore, it supports sustainable and inclusive development, poverty reduction and enhancing the quality of life. Sustainable entrepreneurship is a concept that combines elements of sustainability and entrepreneurship. This form of entrepreneurship entails the ability to demonstrate responsible creativity while achieving viable, liveable and equitable

development through the integration and management of natural and human resources in business.

The main purpose of this study was to answer the following research questions:

1. Can CSA become one of the main drivers of sustainable entrepreneurship?
2. Is the level of CSA development in Croatia adequate?
3. Will increasing the awareness of sustainable development lead to a slow abandonment of the existing economic model?

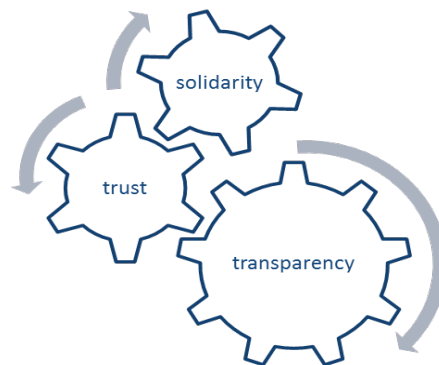
This paper was written with two goals in mind. The first is the presentation of the general characteristics of community supported agriculture as a form of sustainable entrepreneurship, while the second goal is exploring these groups in the Republic of Croatia. Although CSA in Croatia is in the pioneering stage of development, it is a good indicator of new socioeconomic tendencies that can prove useful for the Croatian economy.

1. COMMUNITY SUPPORTED AGRICULTURE– SHORT OVERVIEW AND THEORETICAL CONCEPTS

In literature, community supported agriculture is described as cooperation between farmers and consumers based on their mutual interests, and which includes payment and delivery of products, as well as other forms of co-operation (Wells, Gradwell, Yoder, 1999, 38). The concept developed in the 1960s, in Japan and Switzerland (Ertmanska, 2015, 52), as a result of farmers' and consumers' concern for the sustainability and safety of the products (Kolodinsky, JM, Pelcho, LL, 1997, 130). In many cases, the consumers pay in advance, which covers the initial cost of the production. The farmer is supported by his clients at all times and, in turn, delivers fresh products on a weekly basis. In this respect, the risks and benefits of production are shared by all participants in community supported agriculture (Goland, 2002, Haekins, et al., 2003, Henderson, 2007). The risks are related to the risk of production, including poor crop yields due to bad weather or agricultural conditions. Community supported agriculture is oriented toward the production and consumption of local food with an emphasis on the environment and organic production practices (Ertmanska, 2015, 52). Furthermore, it represents a new form of social cohesion, mainly between urban and rural areas. Likewise, this form of association and cooperation provides a platform for all of those who want to finance and directly help the so-called small farmer that will, following his own beliefs and attitudes, grow food respecting environmental and moral principles (Orlić, 2014, 73). Despite different approaches, CSA draws inspiration from new modules that are based on cultural and humane relations in the exchange of goods. By creating long-term partnerships, CSA supports local production and thereby becomes a co-creator of local development. Likewise, by supporting a humane approach to work, the environment, animals and fairly priced products, it ultimately stimulates the production of quality food available to everyone, but not at the expense of the environment and nature.

The development of a strong model that supports personal relationships with local producers, at the micro level, affects the development and welfare of the local community. The short chain between producers and consumers and abandoning the intermediaries and organized distribution systems allow for price corrections and ultimately, a joint creation of development strategies for each particular producer. However, in order for it to function properly, community supported agriculture must be based on solidarity, transparency and trust (as shown in the following figure).

Figure 1: **Pillars of CSA**

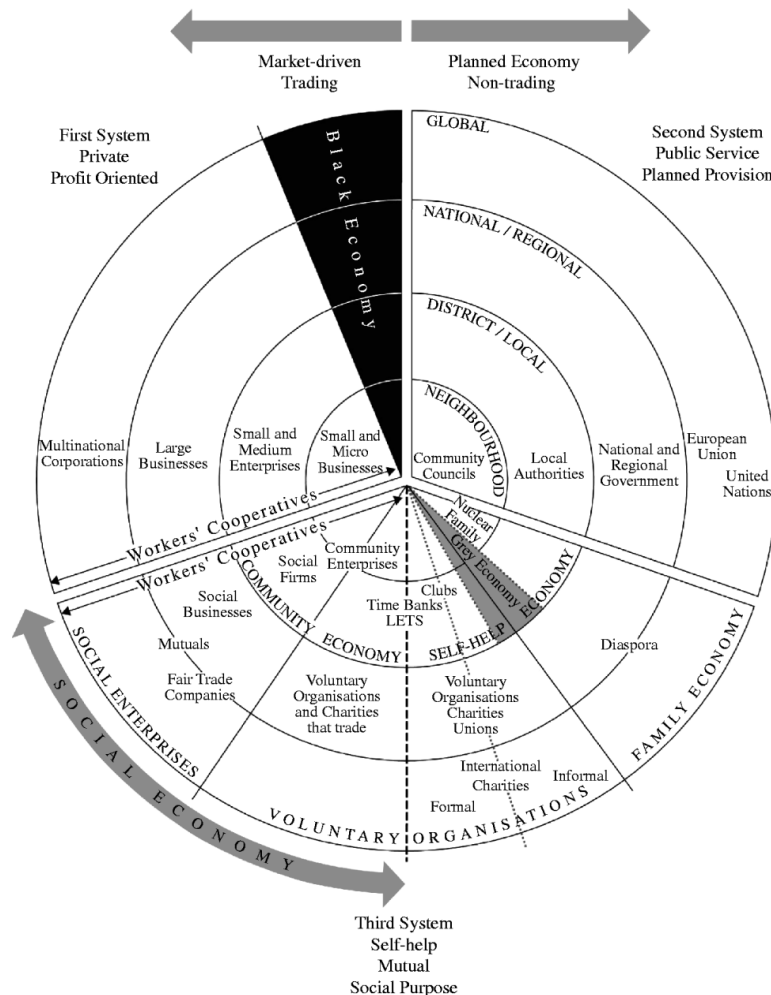


Source: Birhala, B., Mollers, J. (2014); Community Supported Agriculture in Romania: Solidarity Partnerships as Viable Innovations for Small Farms, prepared for presentation at the EAAE 2014 Congress "Agri-Food and Rural Innovations for Healthier Societies" 26-29 August, 2014, Ljubljana, Slovenia, p.6, authors' interpretation

These three pillars are the basis for building the bridges of cooperation which contribute to the welfare of both consumers and producers.

Community supported agriculture is an example of solidarity economy where the goal of economic activity is the achievement of reciprocity and practical solidarity. Solidarity economy is embedded in the concept of social economy which spans all levels of economic organization, from the neighbourhood to the global, and manifests itself in various forms of "community economy" or self-help economy (Birhala, Mollers, 2014, 4). Solidarity economy provides something contrary to the classic, neoliberal approach to economy and results in the so-called homo economicus (Kawano, Masterson, Ellsberg, 2009, 5). This type of economy emerges as an alternative to the current economy; the current economic crisis and its devastating consequences are seen as an opportunity to be seized. Reaching the bottom provides an opportunity for new solutions, either by recycling the old ideas or developing completely new ones. Ecologically grown food, produced and distributed in a way proposed by community supported agriculture, occupies an important place in such economy (Orlić, 2014, 75). Social economy is defined as the "third system", which is linked to the "first system" (private, profit-oriented system that ensures efficiency) and the "second system" (public sector that ensures quality). The relationship between these systems is shown in the following figure.

Figure 2: Three Economic Systems



Source: Birhala, B., Mollers, J. (2014); Community Supported Agriculture in Romania: Solidarity Partnerships as Viable Innovations for Small Farms, prepared for presentation at the EAAE 2014 Congress "Agri-Food and Rural Innovations for Healthier Societies" 26-29 August, 2014, Ljubljana, Slovenia, p.5

In Croatia, the first initiatives for the establishment of community supported agriculture were launched in late 2010, establishing the administrative teams and harmonizing the activity principles, with solidarity being the most important one. The first such group was established in Zagreb. However, such groups exist in other parts of Croatia as well. The following table shows a list of community supported agriculture groups in various parts of the state.

Table 1: **Community Supported Agriculture in the Republic of Croatia**

Area	Community supported agriculture group
Zagreb	CSA Srijeda, Jato, Zapad, Maksimir, Dubrava, CSA Trešnja, CSA Waldorf, Remete
Zagreb conurbation	Sveta Nedjelja – CSA Krijesnice, CSA Pušlek Velika Gorica
Istria	CSA Poreč, Solidarity eco group Pula, Solidarity eco group Pula Šijana, Solidarity eco group Pula Višnjan
Slavonski Brod	
Čakovec	
Split	Solidarity network Brioni, Split
Osijek	Solidarity eco group Osijek
Brač	CSA Brač
Kvarner	CSA Pod Učkun istok – covering the east part of Rijeka, CSA Pod Učkun zapad – covering the west part of Rijeka, CSA Pod Učkun Drenova – covering the area of Drenova, part of Rijeka, CSA Pod Učkun Opatija – covering the area of Liburnia (Opatija, Lovran, Matulji)

Source: Sarjanović, I., (2014), Uloga grupa solidarne razmjene u razvoju ekološke poljoprivrede u Hrvatskoj, *Geoadria* 19/1, p.15, and the authors' interpretation

Considering the production and the needs of society, it could be said that the idea of CSA encourages the development of small businesses in local communities. The intended, targeted purchase facilitates the producers' choice of the product and production type, and planned production reduces the possibility of creating surpluses.

The policy of sustainable consumption and production (occurring as one of the results of community supported agriculture) seeks to encourage sustainable patterns of behaviour and business in all economic sectors, in a way that introduces the concept of "life cycle of products and services" (Life Cycle Approach LCA), monitoring the input and output of materials and energy and its environmental footprint during different production cycles (Barber, 2007, 502). The aim of sustainable consumption and production is reducing the use of natural resources, the production of hazardous and toxic substances, air, water and soil pollution, as well as reducing or preventing the generation of waste at the source (Hauschild, M., Jeseit, J., Alting, L., 2005, 2). Sustainable production relates solely to the production process and takes into account the economic, social and environmental impacts of the production process. Sustainable consumption is equally related to the production and the consumption part of the process, and the responsibility for sustainable consumption lies equally with both producers and consumers. In other words, the producers should concentrate on the production process which would not only create quality and lasting products, but also use the optimal amount of resources. On the other hand, the consumers, with a proper selection and moderate use of the products (and reduction and appropriate disposal of waste), as well as the rational and moderate consumption of basic resources (water, gas, energy), should contribute to the changes in the current, unsustainable consumption patterns.

2. COSTS AND BENEFITS OF COMMUNITY SUPPORTED AGRICULTURE

The mere establishment of community supported agriculture or similar organizations around the world brings benefits that are both the basis for successful cooperation, and the reason for joining the group. The economic and social benefits for the members are the following (Sproul, Kropp, 2015, p.1346-1349):

Economic benefits:

Reasonable prices for group members. Since this is a type of direct sale (arguably, even exchange of goods), there are no costs related to marketing, agents, sales (trade) and the like. CSA represents an active participation in the creation of a sound economy, since simple purchase / exchange can contribute to the economic stability of a small producer in the local community. Various studies of the economic effects (calculating the price that a product would have on the local market) show significant savings. These savings refer to 1.2-2.5 times cheaper products purchased through community supported agriculture groups than the products purchased at the local markets (Brown, Miller, 2008, 1298).

Social benefits:

Socializing and belonging to a community encourages the belief in a better future, especially for the lonely people or those who wish to meet people with similar beliefs, most of all in urban areas. Cooperation and the exchange of ideas can stimulate a number of social innovations which contribute to the satisfaction, as well as the economic prosperity of individuals (Wharton, Hughner, MacMillan, Dumitrescu, 2015, 282).

On the other hand, CSA brings benefits to the producers as well. These are as follows (Sproul, Kropp, 2015, 1346-1349):

Economic benefits:

Guaranteed sale: A strong market allows the producers to put all of their products on the market throughout the year, given that the CSA groups are interested in those products. Another benefit refers to the reduced costs, especially for the small producers whose survival in today's global economy is extremely difficult. Direct sale to the CSA groups allows for a simplified production process and provides more time for the producers. The time needed for marketing disappears altogether, as well as the costs of ensuring the sale. All this reduces the costs and, consequently, increases the profit.

Social benefits:

Support: The relationship between members of the CSA and the producers is personal, which allows for various forms of support, such as volunteering in the field, especially young people for the older people. In some cases, support is provided in the form of a loan, i.e. advanced payment for a longer period, helping the individual to recover or invest in the necessary infrastructure.

Community supported agriculture represents the need for a fundamental reconception of the relationship between food, economy and community; a step towards a higher level of environmental sustainability, and an attempt to become detached from the global super-market and to re-establish the vital local economies (Schnell, 2007, 550). In addition to the economic and social components, it is important to mention the environmental benefits of this form of cooperation between the CSA and the producers. It can be said that encouraging organic farming, packaging reduction (which means less use of natural resources, water, fossil fuel, etc) and the reduction of additional waste (bags, cards, posters, promotional material, etc.) make a significant contribution to sustainability and conservation of natural resources.

The possible drawbacks of this type of partnership are reflected in the fact that the success of CSA is highly uncertain. It depends on a certain type of consumer; selected from the high-income, well-educated urban population, for whom the price is not the main criterion for product purchase. Furthermore, it requires the consumer's interest and commitment to this type of purchase and consumption. CSA is a valid option for a few farms - the owners must have an entrepreneurial personality, a background which offers insights into the urban environment, and a high degree of commitment and social interaction. The fact that the economic and the investment climate favours the "big players" is the main limiting factor of this group type as a form of sustainable development.

3. SUSTAINABLE ENTREPRENEURSHIP AS THE RESULT OF COMMUNITY SUPPORTED AGRICULTURE

Sustainable entrepreneurship is becoming the prevailing, continuously growing trend. The relationship between entrepreneurship and sustainable development has been addressed by various streams of thought and literature such as ecopreneurship, social entrepreneurship, sustainable entrepreneurship and, in an indirect way, also institutional entrepreneurship (Schaltegger, S., Wagner, M, 2011, 223). Sustainable entrepreneurship is defined as examination of „how opportunities to bring into existence „future“ goods and services are discovered, created, and exploited, by whom, and with what economic, psychological, social and environmental consequences“ (Cohen, B., Winn, M.I., 2007, 35). Translated into firms' practices, sustainable entrepreneurship is closer to the strategic dimension of corporate social or altruistic vision of responsibility (Spence, M., Gherib, J.B.B., Biwole, V.O, 2011, 335). Sustainable entrepreneurship takes care of the natural environment. There are ten basic rules for becoming a sustainable entrepreneur (Crals, E., Vereeck L, 2005, 177):

1. The corporation should start reducing environmental damage, respecting human rights and treating its employees with great care;
2. Sustainable entrepreneurship has to be a self- initiated process and should not simply be a response to external pressure;
3. If a corporation wants to practice sustainable entrepreneurship, it should identify clear aims and targets;
4. The aims should be closely related to the corporation's practice and should match the corporate values and its primary activities;

5. The aims have to be closely related to the consumers' needs;
6. The corporation has to be capable of explaining the relationship between sustainability and its activities and production processes;
7. The corporation should adhere to these aims on a long-term basis;
8. Consumers and pressure groups should have a transparent overview of investments made by the corporation related to sustainable entrepreneurship;
9. Sustainable entrepreneurship practiced by the corporation should not be shifted to the consumers via a price increase; and
10. A corporation should not attempt to overemphasize its efforts.

Examples of sustainable entrepreneurship can be found in companies such as Hipp (in Europe, one of the largest manufacturers of baby food), Duttweiler (founder of Migros, the biggest food supplier in Switzerland), Pfenninger, (Europe's largest manufacturer of brushes and brooms). Sustainable entrepreneurship presupposes that the companies are aware of the impact their direct and indirect behaviour has on the environment. Another presupposition, in analysing the opportunities and threats, is taking into account not only the market but also the environment.

CONCLUSION

The activities undertaken by community supported agriculture in the world, as well as in Croatia, are based on transparency, trust and solidarity. This encourages cooperation based on values that contribute to community development. The values and ways of encouraging the exchange of goods are based on the ideas that promote acceptance, respect, appreciation of other persons' work, and providing assistance for the needy. The economic, social, and ecological principles of sustainable development are deeply rooted in CSA because it all comes down to the individual; the person who is a part of the group, the community, and the world. Sustainable entrepreneurship is a spin-off concept of sustainable development, which in itself covers many evolutions in business, such as corporate social responsibility, ethical entrepreneurship, ecological care, and stakeholder participation. The findings in this paper outline the emerging research and potential future research directions concerned with sustainable entrepreneurship and community supported agriculture. Limiting factor of this paper is the lack of analysis of concrete data about CSA in Croatia in terms of financial indicators, the number of connected consumers and the quantity of products, which would allow an insight into the importance of this mode of production for the development of sustainable entrepreneurship. This, of course, is recommended for future research. Sustainable entrepreneurship appears as a new business concept. The increase in the level of awareness about sustainable development also increases awareness about the need to decrease the harmful effects on the environment and society, as well as about the unsustainability of the existing business model. It can be concluded that the goals of sustainable entrepreneurship are ethical behaviour and economic benefits that improve the quality of life for the workers, their families, communities, the society and future generations. It is clear that community supported agriculture, though only in the initial stage of development in Croatia, can be the bearer of positive changes.

REFERENCES

- Barber, J. (2007), "Mapping the Movement to Achieve Sustainable Production and Consumption in North America", *Journal of Cleaner Production*, Vol. 15, pp. 499-512.
- Birhala, B., Mollers, J. (2014), "Community Supported Agriculture in Romania: Solidarity Partnerships as Viable Innovations for Small Farms", prepared for presentation at the *EAAE 2014 Congress "Agri-Food and Rural Innovations for Healthier Societies"*, 26-29. August, 2014, Ljubljana, Slovenia, pp.1-16.
- Brown, C., Miller, S. (2008), "The Impacts of Local Markets: A Review of Research on Farmers Markets and Community Supported Agriculture (CSA)", *Agricultural and Applied Economics Association*, No. 5. pp. 1296-1302.
- Crals, E., Vereeck, L. (2005), "The Affordability of Sustainable Entrepreneurship Certification for SMEs", *International Journal of Sustainable Development & World Ecology*, pp. 173-183.
- Cohen, B., Winn, M.I. (2007), "Market Imperfections, Opportunity and Sustainable Entrepreneurship", *Journal of Business Venturing*, Vol. 22, pp. 29-49.
- Cifrić, I. (2003), *Ruralni razvoj i modernizacija*, Prilozi istraživanju ruralnog identiteta, Zagreb, Institut za društvena istraživanja u Zagrebu.
- Ertmanska, K. (2015), "Community Supported Agriculture (CSA) as a Form of Sustainable Consumption", *Acta Oeconomica*, Vol. 14, No. 2, pp. 51-59.
- Goland, C. (2007), "Community Supported Agriculture, Food Consumption Patterns, and Member Commitment", *Culture & Agriculture*, Vol. 24, No. 1, pp.14-25.
- Hawins, T., Daveis, D., Hawkins, P., Lyons, K., Walton, S., Hapburn, J. (2003), *Towards a Community Supported Agriculture*, Brisbane, Australia.
- Hauschild, M., Jeswiet, J., Alting, L. (2005), "From Life Cycle Assessment to Sustainable Production: Status and Perspectives", *CIRP Annals – Manufacturing Technology*, Vol. 54, Issue 2, Elsevier, pp. 1-21.
- Henderson, E. (2007), *Sharing the Harvest, A Citizen's Guide to Community Supported Agriculture*, Chelsea Green Publishing Company, Vermont.
- Kawano, E., Masterson, T.N., Elsberg, J.T. (2009), "Introduction U/In solidarity Economy I. Building Alternatives for People and Planets", *Centers for Popular Economics*, pp. 1-7.
- Kolodinsky, J.M., Pelch, L.L. (1997), "Factors influencing the Decision to Join a Community Supported Agriculture (CSA) Farm", *Journal of Sustainable Agriculture*, pp. 129-141.
- Orlić, O. (2014), "Grupe solidarne razmjene, Počeci ekonomije solidarnosti u Hrvatskoj", *Ekološka tribina*, Vol. 44, pp. 72-88.
- Sarjanović, I., (2014), "Uloga grupa solidarne razmjene u razvoju ekološke poljoprivrede u Hrvatskoj", *Geoadria* 19/1, pp.1-25.
- Schaltegger, S., Wagner, M. (2011), "Sustainable Entrepreneurship and Sustainability Innovation: Categories and Interactions", *Business Strategy and the Environment*, Vol. 20, pp.223-237.
- Schnell, S.M. (2007), "Food with a farmer's face: In the United States", *The Geographical Review*, Vol. 97, pp. 550-564.
- Spence, M., Gherib, J.B.B., Biwole, V.O. (2011), "Sustainable Entrepreneurship: Is Entrepreneurial will Enough? A North-South Comparison", *Journal of Business Ethics*, pp. 335-367.
- Sproul, T., W., Kropp, J. (2015), "A general Equilibrium Theory of Contracts in Community Supported Agriculture", *Amer.J.Agr.Econ*, Vol. 97, No. 5, pp. 1345-1359.
- Wells, B., Gradwell, Sh., Yoder, R. (1999), "Gorwing food, gorwing community: Community Supported Agriculture in rural Iowa", *Community Development Journal*, Vol. 34, No.1, pp. 38-46.
- Wharton, C., Hughner, R.S., MacMillan, L., Dumitrescu C. (2015), "Community Supported Agriculture programs: A Novel Venue for Theory-Based Health Behavior Change Interventions", *Ecology of Food and Nutrition*, Vol. 54, pp. 280-301.

Zvonimira Šverko Grdić, PhD, Assistant Professor
University of Rijeka
Faculty of Tourism and Hospitality Management, Opatija
Primorska 42, P.O.Box 97, 51410 Opatija, Croatia
Phone: +385 51 294 683
E-mail: zgrdic@fthm.hr

Helena Traub, Graduate Student
University of Rijeka
Faculty of Tourism and Hospitality Management, Opatija
Primorska 42, P.O.Box 97, 51410 Opatija, Croatia
Phone: +385 51 619 306
E-mail: ds2342@fthm.hr