



AMA
jer negujem život

FOOD SOVEREIGNTY IN SERBIAN CONTEXT

– FOOD PRODUCTION SYSTEM CRITICAL ANALYSIS FRAMEWORK

SAŠA PETROVIĆ

FOOD SOVEREIGNTY IN SERBIAN CONTEXT

– Food Production System Critical Analysis Framework

Author: **Saša Petrović**

Publisher: **Ama - Center for the Care of People and Nature**

For the publisher: **Katarina Milenković**

Translation: **Dragan Jonić**

Graphic design: **Božidar Dimić**

Web: **amacentar.org**

Contact: **office@amacentar.org**

Belgrade, 2019



This publication was made within the project “Food sovereignty in Serbian context”, financed by **CCFD-Terre Solidaire**. All the attitudes and statements declared within this publication represent the views of the author, not necessarily the donor.



FOOD SOVEREIGNTY IN SERBIAN CONTEXT

– FOOD PRODUCTION SYSTEM CRITICAL ANALYSIS FRAMEWORK

SAŠA PETROVIĆ

CONTENTS

Two paradigms: food safety vs. food sovereignty	5
Consolidation of agrobusiness and the idea of neoliberal economy – implications on the food production system	7
Five columns of food sovereignty	10
Political and economic context of Serbian agriculture	11
Institutions – land policy and legislation context	11
Market of agricultural land in Serbia	13
Land grabbing	14
Privatisation and land grabbing in Serbia	16
Land grabbing in Serbia – Tönnies company	17
Agricultural Group Belgrade (PKB) – demise of the last agricultural giant	18
Role of the state in the agricultural sector	19
Foreign direct investments and their effects in agriculture	20
Tightening of the belt - the state's (non-)investments in agricultural production	21
The case of raspberry growers or a model of functioning of free market in agriculture of Serbia	22
Cooperative societies in Serbia	24
Food production models in the world	27
Views of food production based on industrial agriculture and technology	27
Food production models based on small and sustainable farms	28
Agroecology as the road to sustainable agriculture and sustainable local communities	32
Stories from the field – small farmers in Serbia	35
Mirko Vlček – Vlček Farm (young people in agriculture)	35
Svetlana Stojanović – Stojanović Farm (women in agriculture)	36
Dragana and Dalibor Đorđević – Đorđević Estate, Kosjerić, Serbia	37
Ivanov Family Agricultural Estate (preservation of indigenous livestock breeds)	38
Orlović Agriculture (both city and country)	39
Sustainable production of food for all - or “business as usual” scenario?	40
Literature	43

Two paradigms: food safety vs. food sovereignty

What we call land is an element of nature inextricably interwoven with man's institutions. To isolate it and form a market for it was perhaps the weirdest of all the undertakings of our ancestors. – Karl Polanyi

The issue of the present system of food production at global level is a complex and multilayered area intertwined with a variety of theories, interests and relations of power. The actors who take part in the food production system: national governments, agrobusinesses, smallholder farmers, civil society organisations and international institutions offer different solutions to problems and challenges in the present food system and different visions for development of food production in the future.

One of the greatest and most complex challenges that the future will bring to us is how to feed the increasing global population. Once we count in the fact that we have only limited resources in the world, and that climate changes cause ever more frequent large-scale agricultural damage, the challenge of planning sustainable food system becomes even greater.

The Food and Agriculture Organisation of the United Nations (FAO) forecasts the growth of global population by 2050 to 9.1 billion, 70 percent of whom will live in urban environment. According to the FAO's forecast, the global food production will have to increase by 70 percent in order to feed the growing global population.¹

The structure of the food system lies upon four central columns: economic, social, environmental and cultural. **Food security** and **food sovereignty** are two dominant paradigms that treat the thematic of the food system.

The food security concept is promoted by **FAO**, headed by developed Western countries and international institutions such as World Bank, International Monetary Fund and so on. On the other hand, the concept of food sovereignty is, for example, promoted by **La Via Campesina**, a global platform of farmers which is, at the same time, both the creator and the main participant in the struggle for food sovereignty in the world.

The concept of the food security relies upon technology and large-scale production, which is seen by the advo-

cates of this model as the solution to feed the world and its growing population.

On the other hand, the concept of the food sovereignty is based on smallholdings and sustainable food production models which are in harmony with local ecosystems and territories, as well as with the cultural identity of the local population.

Naturally, these two developmental paradigms are completely and fundamentally different, the main difference being that the food security concept does not say anything about who makes what nor does it describe the ways and conditions used for production; however, these issues are crucial aspects of the food sovereignty concept - analysed through the balance of power, control and democracy within the global food production system (Rosset 2003, Martínez-Torres and Rosset 2010).

The food security notion emerged at the World Food Conference 1974, while trying to find the solution to famine in the Third World countries. The food security as a concept is created within the context of providing ample food, and, at the same time, within the context of regulating the global markets prone to frequent oscillations of food prices and quantities.

However, the World Food Summit 1996 brought about the change in meaning of the food security. The concept of food security become defined as follows: *Food security means physical and economic access of all people at all times to enough, safe, and healthy food for an active, healthy life.*² This change resulted in switching the role in the food provision context from the state to the individual, meaning that the market becomes an asset by which the issue of feeding the world's population is resolved by trade (Patel 2009).

The food security logics is rooted in development of the industrial agriculture, i.e. the development of technology and related agrochemical industry which provides "inputs" such as seeds, fertilisers, pesticides and so on.

¹ http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf

² Edward Clay, Conceptualizing the linkages: Trade reforms and food security, FAO, 2003

The maxim of such production is the increase in productivity and efficiency aimed at securing enough food for global population. However, this model of food production is problematic for environmental, economic and social reasons.

Consolidation of agrobusiness and the idea of neoliberal economy – implications on the food production system

It is an environmental issue that industrial agriculture pollutes environment, i.e. the soil and the waterways by overusing chemical products that destroy organic matter in the soil and then migrate to the waterways. In addition, the industrial agriculture is one of the largest air polluters, which, together with the food industry, globally produces as much as one third of greenhouse gases.³

There are more than a few problematic phenomena within the economic structure of the industrial agriculture. One of them is the phenomenon of dependence on chemical inputs and seeds, which is also problematic from the environmental point of view. As the chemical inputs destroy the organic matter in the soil, that leads to a vicious circle of creation of ever greater need in them, and, thus, to successively higher cost of production year in and year out.

Six multinational companies: Monsanto, DuPont, Syngenta, Bayer, Dow and BASF hold 75 percent of plant variety patents, 60 percent of commercial seed market and 76 percent of the agrochemical input markets.⁴ The concentration of agrochemical companies leads to oligopoly in the market, whereas the market oligopoly makes possible to control the prices of agrochemical inputs.

An example presented in a global study⁵ shows the relation between the prices of fertilisers and those of food. The results of the study reveal that the price of fertilisers grew by 250 percent within the last twenty years, which ultimately led to increased prices of food. The increase in the price of fertilisers is triggered by a constant growth of the price of oil within the last ten years, which, combined, makes significant impact on the increase of cost of agricultural production.

Increased costs pose the biggest problem for farmers and small producers, who are often forced to give up on agriculture as they cannot sustain the financial pressure due to all the necessary investment in production. The increase of indebtedness of farmers in some countries led to high suicide rate among the smallholders.

3 Vermeulen, S. J., Campbell, B. M. & Ingram, J. S. I. *Annu. Rev. Environ. Resources*. 37, 195–222 (2012).

4 ETC Group, *Putting the Cartel before the Horse and Farm*, 4, 2013

5 Johannes Kotschi, *A Soiled Reputation*, 27, 2013

Particularly tragic is the Indian example, where as much as 16,000 farmers commit suicide per year due to over-indebtedness caused by increased prices of agricultural inputs. Because of depleted organic matter in the soil, the production needs more and more agrochemical inputs to sustain the required yields, which, in the end, leads to economic and environmental unsustainability and to suicides of farmers affected by this situation.⁶

Despite the odes to the success of industrial agriculture in feeding the world, the number of the hungry in the world has increased greatly in the last 30 years. At the end of the nineties, this number was approximately 800 million people in the world (Lappe et al. 1998). After the economic crisis in 2008, this number grew to a record 1,02 billion people (FAO 2009), even though the global food production is more than sufficient for all. The paradox becomes even more obvious if we know that almost one third of food produced globally in a year is put to waste.⁷

While the governments of the countries in the world nominally fight to decrease poverty and establish food security, the concentration of wealth and resources is consolidated among a handful of corporations ruling over the entire food production chain, from production to distribution.

The trends of consolidation within the global food production system, already present for many years, have accelerated during the last few decades due to the implementation of the neoliberal measures. The main characteristics of neoliberal economy are deregulation, privatisation, erosion of social rights and free market doctrine. These tendencies lead to centralised agricultural pattern where the rules of the game are dictated by the agrobusiness, i.e. the input producers, food processing companies and multinational commercial companies, with their modes of production in complete disharmony with local ecosystems and separated from social relations (van der Ploeg 2008).

During the eighties and the nineties, a number of

6 Dominic Merriott: *Factors associated with farmers suicide-Crisis in India*

7 <http://www.fao.org/save-food/resources/keyfindings/en/>

so-called Structural Adjustment Programmes were launched, used by the World Bank and the IMF to provide loans for foreign debts of undeveloped countries. This created space for permeation of international financial capital into all the public spheres and started a wave of privatisation of publicly owned companies, as well as the deregulation of the labour market. At the same time, the countries belonging to the so-called global South were forced to abolish custom duties and guarantee prices for local produce, under the disguise of the market liberalisation.⁸

However, what happened in reality was that the World Trade Organisation protected the markets in the USA and the developed Western countries, imposing at the same time the abolishment of custom duties in the global South countries.

In 2003, Serbia has joined the structural adjustment programme by concluding the agreement with the World Bank, joining the club of countries undergoing the system reform processes. These measures were implemented through international and bilateral free trade agreements. The establishment of the World Trade Organisation and the acceptance of the Agricultural Agreement has institutionalised the market liberalisation process at the global level, limiting the autonomy of sovereign countries and their rights to regulate economy sectors – among others, the sector of agriculture and food production in general.

Some authors have termed this structure of the global food production system a “food dictatorship” imposed by agrobusiness corporations, which, at the same time, dictate the conditions of the complete food production in the world (Holt-Gimenez et al., 2009). The effects of the corporative food regime are market domination, huge profit rates, global meat chains, “supermarket revolution”, concentration of land ownership among corporations and unsustainable use of natural resources.⁹

The global economic crisis of 2008 has fully disclosed how frail is the global economic system. The economic crisis caused the food market crisis as well, triggering the increase in price of so-called basic foods. According to the FAO data, the price of rice jumped from 2006 to 2008 by 203 percent, that of wheat by 125 and that of maize by 113 percent.¹⁰ Those who suffered most from

the price rise were the poorest populations in undeveloped countries. It is estimated that the global crisis of 2008 led to the verge of famine more than one billion people in the world, which is an increase of 178 million compared to 2005 when the global hunger index was 848 million.¹¹

Apart from collapse of the global financial system, the reasons of the food crisis lie in the monopoly in food production and distribution control chain, and in the inequality of income and distribution of profit generated in food production. Never before in the human history the food has been as much concentrated in a single production matrix as today. Less than fifty companies control the bulk of the global production of seeds, agrochemical inputs and food distribution.¹²

Market liberalisation and a variety of financial measures enforced by the World Bank, International Monetary Fund and the World Trade Organisation have prevented poor countries to regulate their national food production systems.¹³ Instead of radical turn in the system after the crisis of 2008, the solution imposed by the neoliberal economic doctrine is the so-called “Second Green Revolution” which offers, as a model of development, new industrialisation in agriculture combined with new technologies and accompanied by further market liberalisation and credit borrowing.

Hand in hand with global financial institutions and investment funds, the corporations have the global food production system under their control. From the control of the agricultural land to the control of production assets to the distribution and the market, every link in the chain is controlled by capital. Slowly but surely, the agrobusiness and the industrial agriculture squeeze the smallholders and family farms out of the market competition.

The trend of shutdown of small farms is global and grows intensively. European countries, such as Germany, France, Belgium and Finland, since 1970 have lost as much as 70 percent of their farms. Some newcomers to the EU - Bulgaria, Estonia, Czechia and Slovakia, from 2003 to 2010, have lost approximately 40 percent of their farms. Poland alone has lost nearly a million of

11 <http://www.globalhungerindex.org/pdf/en/2009.pdf>

12 Agrifood Atlas, Rosa Luxemburg Stiftung, 2017

13 See more on Eric Holt-Giménez and Loren Peabody, *From Food Rebellions to Food Sovereignty: Urgent call to fix a broken food system*

8 Eric Holt Gimenez: *A Foodie's Guide to Capitalism*, 36, 2017

9 Agrifood Atlas, Rosa Luxemburg Stiftung, 2017

10 See more on <http://www.fao.org/3/a-ak421e.pdf>

smallholders between 2005 and 2010.¹⁴

The processes of pauperisation and failure of small producers have seriously endangered the sustainability of the global food production system. It is not the aim of the agrobusiness to feed the world's population, but to extract wealth from every link of the food production at the global level, ignoring the consequences. In such setting, human lives are not a factor to be counted in, particularly the lives of people in rural areas, already proverbially at the margins of the society.

The same problems permeate the context of natural resources and ecosystems. Even though the word "sustainability" is a common leitmotif in every mainstream political and economic discourse, the practice has yet to see these principles applied in strategic actions, whether it be agriculture, economics, energy or else. Both in Serbia and globally, with differences in the political and economic processes and the degree of development counted in.

It is the sustainability that is the keyword for food sovereignty. The food sovereignty makes necessary a systematic change that would make possible for people to have direct and democratic control over the crucial elements in our societies: how we eat, how we use and maintain our soil, water and other resources to the benefit of the generations of present and of future, and what relations we forge among us.¹⁵ Because the food is not a commodity but a human right and the food production and distribution are a sine-qua-non for human survival and, at the same time, the issues of social and national sovereignty.

¹⁴ <https://www.theguardian.com/environment/2014/may/28/farmland-food-security-small-farmers>

¹⁵ See more on <https://viacampesina.org/en/wp-content/uploads/sites/2/2018/02/Food-Sovereignty-A-guide-Low-Res-Version.pdf>

Five columns of food sovereignty

La Via Campesina defines food sovereignty as the right of people to healthy and culturally adapted food produced in ecologically sustainable way and the right of people to define agricultural and food systems. The food sovereignty gives preference to aspirations and needs of those who produce, distribute and consume food, over demands of markets and corporations.

The food sovereignty rests on the following five columns:

- Production and consumption – change of types of food production and consumption
- Distribution – change of type of food distribution
- Labour and social rights – appropriate valuation of work and improvement of social conditions in food and agricultural production
- Natural resources and commons – right to natural resources and public assets
- Public policies and regulations – change of regulations that define food production systems

La Via Campesina's fight is about the preservation of traditional, peasant's model of production as opposed to the hegemonic concept of the corporate food system. The peasant's production model is the foundation of the food sovereignty, based on four principles: social, economic, ecologic and cultural.

Only a synergy of these four principles may lead to sustainable agriculture and to good and dignified life of people in rural areas. The peasant's model of sustainable production promoted by *La Via Campesina* is fair in social and economic sense, it respects identity and skills of local communities, prioritises local markets and strengthens the autonomy of people and communities (La Via Campesina 2013).

In its essence, the food sovereignty is an alternative social and economic food production model based on the principles of fairness, democracy, equality and sustainability in the food production system. To change the existing corporative production model based on the industrial production, it is necessary to engage many par-

ticipants within the society, from the producers to the consumers.

As a political demand, the food sovereignty emphasises the autonomy of states to carry on the redistributive land reform and social welfare programmes and create safety nets for smallholding farmers. *La Via Campesina* puts the food sovereignty above the state and opens global political struggle to exert pressure on national governments and rise the global awareness (Martinez-Torres and Rosset 2010).

The right of people to freedom of choice and determination of the food system within a specific territory is the very essence of the food sovereignty. These five columns are supposed to work on the principles of democracy, equality and inclusion of all the participants in the food production system, from producers to distributors to consumers. To make the food production system sustainable for everyone, most of all for smallholder farmers, these columns should be integrated into a common system that works equally for all the participants in the food production system.

The right to food is fundamental right and the basis for existence of each and every one of us. Understanding the structure and ways how the existing food production system works makes it possible for us to change the present system by our decisions. The English term "voting with your fork" does make sense, even though it is structurally limited. Eating is inherently a political act. Selecting the foods we eat, we in some way support or do not support certain structures of power, which define and control the food system.

Of course, understanding the political and economic framework and changing the consumers' habits per se are not sufficient to achieve systematic change, but they do make room for establishment of some new models and ways of food production in the future. The food sovereignty is of everybody's concern: from producers to consumers, from rural to urban communities, from rich to poor countries. All the people in the world are intrinsically linked to the food and depend on it. Everyone wants to eat better foods that are produced on the principles of fairness and sustainability. It is exactly these principles that are established by the food sovereignty movement in its struggle for a better and fairer food production system.

Political and economic context of Serbian agriculture

In the context of these trends - from market liberalisation to concentration of power of agrobusiness - we must ask where Serbian agriculture is positioned in the global food production system and what are the repercussions of neoliberal economic trends on the structure of agricultural production in Serbia.

The Serbia's political elites are constantly talking about the necessity of investing in the development of rural areas that are existentially and inextricably linked with agriculture. However, the real situation is much more different.

In Serbia, as in most countries in the Balkans, the most numerous are smallholder producers whose arable land varies from one to five hectares. According to the census of population and households of 1991, there were 1,115,663 farms in Serbia. The next census of 2002 reveals the number of 778,891 farms, and the most recent agricultural census of the Republic of Serbia lists 631,555 farms.¹⁶ Thus, according to official data, as much as 484,108 farms have been shut down in the last twenty years, without taking into account the period of six years since the last census.

The dynamics and method of agricultural development in Serbia during the last 30 years is correlated with the decline of small family farms. The growing withdrawal of the state from agricultural investments, accompanied by transitional privatisation and market liberalisation, has led to the collapse of a large number of family farms and smallholder producers, due to newly-created structural conditions. The current economic development model of Serbia is based solely on attracting foreign investors, and consequently on further privatisation of the national economic structure.

Institutions – land policy and legislation context

The agricultural policy of Serbia is determined by a set of laws, directives and regulations, but also by some strategic documents, namely the Strategy of Agriculture and Rural Development of the Republic of Serbia 2014-2024. These documents should regulate the functioning of the agricultural sector, but they are also indicators of

the current policy applied by the Republic of Serbia in this area as well as plans for future development.

There are several acts governing the functioning of agriculture as a whole: Act Amending the Agriculture and Rural Development Act, Act Amending the Agricultural Land Act, Agriculture and Rural Development Incentives Act, Financing and Securing Funds for Agricultural Production Act.

Other laws are used for governing individual agricultural sectors, ratifying international conventions and agreements between the Government of Serbia and other countries regarding cooperation in the field of agriculture and related sectors, or regulating other spheres of the society which are in some way related to agriculture. These acts are: Forests Act, Hunting Act, Organic Production Act, Food Safety Act and so on.¹⁷

The issues of agricultural legislation can be divided, in a wider sense, into two types of problems: problems of formulation and approval of laws, and problems of implementation of approved laws. The problems in law implementation are a general problem of Serbia and are not unique to the laws in the field of agriculture. In the process of approval of new laws, there is no practice of dialogue between the state and the farmers, and they are often unhappy with the approved laws. Because of this, the farmers often complain about the small incentives set forth by the Incentives and Rural Development Act and their protests are frequent – for example, the protest during the approval of the Act Amending the Agricultural Land Act.¹⁸ The protesting farmers pointed to serious legislative failures, such as the lack of fuel subsidies as opposed to farmers in the European Union, where it is a usual measure of assistance to agriculture. They pointed out that such policy further aggravates the position of domestic, smallholding farmers compared to that of their European counterparts. In addition, this places them in a more difficult position than that of the big money. In this way (ignoring farmers), the state shows a tendency to direct its agrarian policy towards stimulating the agrobusiness and not the small producers.

Considering the fact that Serbia is in the process of ne-

¹⁶ STRUCTURE OF FARMS IN THE REPUBLIC OF SERBIA IN ACCORDANCE WITH THE SIZE OF AGRICULTURAL LAND, Z. SIMONOVIĆ, 2017

¹⁷ See more on <http://www.minpolj.gov.rs/dokumenti/>

¹⁸ See more on <http://www.masina.rs/?p=2011>

gotiations with the European Union, and that the legislation and the organisation of the crucial social sectors are aligned with the EU models, one should expect the agricultural sector to undergo certain changes.

Each country within EU applies its own and specific agricultural strategy. However, one of the EU's most important operational areas in this field is the Common Agricultural Policy (CAP), a set of measures and programmes that provide support to farmers to increase the productivity of their work, which at the same time makes it possible for the EU population to get food at affordable prices. The EU farmers have a secure and stable income and the foundations of rational utilisation of natural resources have been established in order to combat climate change and support rural development.

The way how CAP regulates the field of agriculture in EU is through direct payments, which secure financial stability of farmers, so that, by market interventions in case of sudden price variations, so-called "interventional" prices are formed to provide a protective framework for producers. In addition, the CAP programme includes a variety of measures aimed at the development of rural areas.¹⁹

There are studies that highlight good and bad characteristics of CAP. The impact of CAP on Third World countries depends on whether they are importers or exporters of products included in CAP, whether they have access to the European market, and whether poverty is a feature only of their urban territories and of their internal agricultural and market structures. The performance of the common policy varies in different countries,²⁰ which leads us to the conclusion that Serbia should seriously analyse this system and prepare local farmers on time. The potential positive effect of this programme might not necessarily be achieved, due to the lack of understanding of preconditions required for its successful implementation.

One of the most important documents of the agricultural legislature and development is the Strategy of Agriculture and Rural Development of the Republic of Serbia 2014-2024.²¹ The emphasis of this Strategy is put on the reform of agricultural policy and on the harmonisa-

tion of the national legislation with that of the European Union – *Acquis communautaire*. At the very beginning of this document, the modern role of the state in managing the development of agriculture and rural areas is emphasised, although there is no precise indication of what is meant by this term.

One of the main strategic objectives of this strategy is the increase in production and the stability of the producers' income. According to this strategy, the essence of sustainable development is to generate a sufficient, competitive and stable income of agricultural holdings. Another objective of the strategy is to improve the quality of life in rural areas, reduce poverty, achieve more equal share in income distribution and create economic opportunities. The priority for strategic changes is the stabilisation of agricultural producers' income, at the same time emphasising the importance of efficient land stewardship and increased availability of land resources.

When looking at the objectives and current trends of agricultural policy, the contradictions and deviations from the activities foreseen by the strategy are easy to spot. As the central figure of the development of agriculture, within this strategy, is a small producer—a smallholding farm—the contradiction is obvious: it is absolutely not the direction of the current agrarian policy of the authorities of Serbia.

In 2017, Serbia had a negative growth rate of 11.2 percent²² in agriculture, while the strategy, for this period, predicted positive growth of as much as 9.1 percent. This is an indication that the strategy is based on absolutely unrealistic predictions, and as such cannot be considered a trustworthy strategic document.

Nearly all major decisions of the Government of Serbia and the relevant ministries in charge of agriculture were in conflict with the strategic objectives proclaimed in the Strategy. The first and most important of these decisions was related to already-mentioned changes in the legislative framework, which favoured foreign investors and agrobusiness in exercising the right of priority and the right of preferential leasing of the state-owned agricultural land.

Thanks to these measures, the owners of the big capital, who are also owners of industrial chains, are among the owners of the largest parcels of high-quality arable

¹⁹ See more on https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/cap-glance_en

²⁰ *The impact of the Common Agricultural Policy on developing countries*, 16, 2018

²¹ See <http://uap.gov.rs/wp-content/uploads/2016/05/STRATEGIJA-2014-2020-.pdf>

²² See <http://www.stat.gov.rs/sr-latn/vesti/20181001-bruto-doma-percentC4-percent87i-proizvod-2017/>

land (mostly in Vojvodina). In addition, large areas of arable land are increasingly ending in the hands of foreign companies.

The fact that the government decided to declare bankruptcy, privatise or completely liquidate several state-owned businesses of strategic importance for agriculture supports the thesis that the government gives preference to big capital and foreign investors. In the last few years, national manufacturers of agricultural machinery have been shut down (*IMT* and *Rakovica*), and all the state-owned producers of fertilisers have been strangled by declaring bankruptcy in *HIP Azotara* and closing down the *Agrohemija* company.

Another, very important point that negates the support to small farmers and households is the lack of measures of market and price subsidies. Although the strategy clearly sets out these incentive measures aimed at stabilising prices and income in times of market disturbance (price fall or excessive increase), the producers are, in practice, left to fend on their own in the market turbulences.

Regular protests of raspberry, tart cherry and plum growers and other producers, due to manipulations mostly by the owners of cold storage facilities and other buyers, confirm the lack or regulation of the market conditions. In such cases, the role of the state was almost unnoticeable, and the producers were left in the lurch and with losses.

Effective land stewardship, the establishment of a functional market and the protection of the highest quality land from conversion into land for other purposes are also measures foreseen by the Strategy. However, neither the Strategy nor more recent documents, such as the National Agricultural Programme 2018-2020, do not address the change of legislation with regard to the right of priority and right of preferential lease of public agricultural land. So, the Strategy talks about the land market, but there is no either framework or a more precise land management plan.

Market of agricultural land in Serbia

The area of the tilled soil is a very important factor in agriculture. Regardless of the amount of the money invested, condition of machinery, the use of appropriate fertilisers and plant protection, if the arable land is small, the final income of farmers will be small as well. Thus, it can

be said that the area of arable land tilled by an individual or an entity is directly or indirectly correlated to the amount of realised revenues. Some other agricultural production items, such as subsidies and other benefits derived from the state, may also be dependent on the area of arable land.

According to the data presented in the Agricultural Census 2012, the farms in Serbia cultivated 3,437,423 hectares of agricultural land. The largest portion of this land—as much as 73.1 percent—goes to tilled land and vegetable gardens, 20.7 percent are meadows and pastures, and the rest orchards and vineyards. From these data, it can be seen that a large percentage of agricultural land is used for tilling and production.

However, out of the total number of farms in Serbia, as much as 47 percent cultivates only up to two hectares²³. This number can be used as an important information for the creation of a future agricultural development policy. In order to strengthen smallholders, the state would have to let them have better access to land. This would enable a practical implementation of the fundamental principle of the Strategy of Agriculture and Rural Development, i.e. the strengthening and improvement of the income of small farmers.

The measures of agrarian policy are the most important instrument of responsible land stewardship. These measures must enable the creation of favourable conditions and betterment of the property structure, so as to improve agricultural production and achieve better economic results.²⁴

However, the transition process and the start of negotiations with the EU have led to a completely different development of the situation regarding the distribution of agricultural land. Serbia has initiated the process of European integration by signing the Stabilisation and Association Agreement in 2008.²⁵ This document stipulated that, by 1 September 2017, Serbia would have harmonised its legislation regarding the acquisition of real property in Serbia, in order to equalise the treatment of EU and Serbian citizens. In this way, Serbia has become last year the only country in Europe to liberalise its agri-

23 Agricultural Census, Agriculture in the Republic of Serbia, 2012
24 K. Đurić, S. Milović, H. Hyba, R. Prodanović, J. Bošković, *Komparativna analiza posedovne strukture u Republici Srbiji i EU*, 2016

25 *Stabilisation and Association Agreement Between the European Communities and Their Member States of the One Part, and the Republic of Serbia, of the Other Part*

cultural land market before joining the EU.

By approving amendments to the Agricultural Land Act,²⁶ which came to effect exactly on 1 September 2017, the authorities just limited the possibility of land leasing to EU citizens by applying stricter terms of leasing. The approved amendments stipulate that the EU citizens must have at least ten years of permanent residence in Serbia, and that the largest parcel of land offered for lease may not be larger than two hectares. However, damage to the market of arable land in Serbia has been done earlier.

Prior to the amendments of the Agricultural Land Act of 2017, the same Act was amended at the end of 2015. The main deficiency and the target of criticisms of the amended act of 2015 was the fact that the Act prescribed the possibility of leasing agricultural land for a period of as much as 30 years.²⁷ At the beginning of 2017, the Ministry of Agriculture and Environmental Protection announced the Public Call for Exercising the Right to Preferential Lease of State-Owned Agricultural Land.²⁸

The statutory minimum investment of EUR 500,000 in the first three years of operation, of which 30 percent must be in the first year, and a short deadline for the preparation of the plan of investments (the public competition lasted 30 days only), have made it clear that this was a public call intended for agrobusiness. The announcement of the public call took place a few months before the approval of the amendment of the Agricultural Land Act of 2017, which made it possible for a handful of foreign companies to take advantage of the old Act through the lease of large parcels of agricultural land for a period of 30 years (for example the Tönnies company; more about this in a separate chapter).

After the World War II, large areas of arable land remained abandoned. The reform of agriculture in the socialist Yugoslavia began with the establishment of the Land Reform Fund in 1944. As early as 1945, the process of colonisation of agricultural land began with the adoption of the Land Reform and Colonisation Act. By this Act, the land was granted to landless peasantry and to those with small holdings, in order to suppress class

differences.²⁹

By developing Yugoslav agriculture and establishing large state-owned food conglomerates and companies, a significant part of the nationalised land was allocated to them. These companies—the state-owned food industry—cultivated the land, processed raw materials and produced food, while employing thousands of male and female workers. The surplus value was further invested in the development of the food industry, education of workers and in scientific research.³⁰

With the fall of socialism and the beginning of the neo-liberal reforms in Serbia, state-owned food industry in Serbia becomes to deteriorate, companies are pulled apart and their property sold and privatised. This was the fate that hit the conglomerates of *Jedinstvo*, *Poljoprivreda*, *Agrobačka PKK*, *Rudnik*, *Jadran* and many others, whose assets, including agricultural land, were sold out at much lower prices during the period of intensive privatisation, with numerous malversations.³¹ In this way, a few businesspeople who had amassed most of their wealth exactly in this process of selling state-owned property, buying the agricultural land that was formerly the property of the state-owned food company groups, now possess large parcels of the highest-quality arable land.

It can be seen from the above that the present-day authorities in Serbia treat agricultural land only as a commodity and not as a resource of strategic importance. If the agricultural land is abandoned to the market, with changes of legislation giving a free hand to big capital and agrobusiness, it is clear that it is the smallholders and small farms with little arable land who lose. This development will lead to further weakening of small producers as they will be forced to wage battle in the market with incomparably more powerful farmers from the EU countries and with the agrobusiness, which are in a privileged position in any way possible.

Land grabbing

Land grabbing can be defined as being the control (whether through ownership, lease, concession, con-

26 Act Amending the Agricultural Land Act 2017

27 See more on <http://www.agrosmart.net/agro-politika/sta-donose-izmene-zakona-poljoprivrednom.html>

28 See <http://www.minpolj.gov.rs/komisija-za-ostvarivanje-prava-prvenstva-zakupa-javni-poziv/>

29 M. Mitrović, *Villages in Serbia, Change of Structure and Problems of Sustainable Development* 83, 84 2015

30 I. Radenković, M. Solar, *From Field to Socialist Industrialisation to Table and Social Life*, publication *We Gave You the Cities*, 153, 2018

31 S. Jelić, *Vulnerable Points of Serbian Agriculture*, Sociološki pregled, vol. XLIV 2010

tracts, quotas, or general power) of larger than locally-typical amounts of land by any person or entity (public or private, foreign or domestic) via any means ('legal' or 'illegal') for purposes of speculation, extraction, resource control or commodification at the expense of peasant farmers, agroecology, land stewardship, food sovereignty and human rights.³²

Land grabbing is a land policy that is in conflict with human rights – which is not based on the land user content and realistic assessments of social, economic and environmental impacts. Such policy is, at the same time, characterised by a lack of democratic principles of transparency with clearly set commitments in employment and benefit sharing.³³

Although the land grabbing phenomenon has been known since the time of colonialism, the term has largely gained significance in the time of rising food prices in the global market after 2008.³⁴

The term *land grabbing* is purely political in nature, as the decisions are made on the use of land and other natural resources, both now and in the future. It represents the power of national and transnational capital, greed for profit that overcomes and prevails over the interests of local communities. This concept also represents the process of changing the meaning and use of land (and land-related) resources. Thus, from the production of food for personal needs, for supplying local greengrocers and supporting local economy, the focus is shifting to growing monocultures in industrial proportions, extensive exploitation of ores and minerals, that is towards production for the global market, pushing the needs of the local community into background.

Land grabbing is characteristic for developing countries. In recent years, the process has become more frequent in the countries of the EU periphery. It is based on the neoliberal political and economic framework, which, in turn, secures legislative framework for land grabbing. Due to the fact that governments make the entire process possible by changing the legislation regulating the arable land stewardship, the process is generally carried on in accordance with local laws, making it impossible to counteract it by legal action. The feature of the en-

tire process of land grabbing is lack of responsibility and transparency both at the local authorities and the owners of capital who acquire land. For this reason, land grabbing can be perfectly legal in terms of the application of laws but is never legal from the point of view of social justice.³⁵

There are a handful of arguments used by the big money in advocating land grabbing. The first and most ubiquitous is the thesis that there is free land aplenty in the world, which can, by investing, be transferred into jobs and development opportunities for developing countries. Another argument is that agriculture needs new investments, especially foreign ones. In this case, it is assumed that it is the lack of investments that lies in the basis of the global rural crisis, poverty and hunger. The third argument is that large-scale land cultivation is necessary in order to fight global food and fuel scarcity. In this case, the emphasis is put on the development of so-called biofuels, using at the same time the fight against climate change as a pretext.³⁶

However, this context represents only the attitude of agrobusiness, whose mission is to create and advocate policies that will enable large-scale land usurpation. Such attitudes are merely superficial analyses of much more complex issues, where the interests of big money are presented as the interests of the majority.

According to the data of Land Matrix, a global land use monitoring initiative, over the past decade more than 500 land-grabbing cases have occurred, and more than 40 million hectares of arable land have been seized in the process, at the expense of local communities.³⁷ What is even more significant is that the investors do not capture unused land, but mostly land that is actively used by smallholding farmers. Also, the foreign investments are not the only form of investment in agricultural production. There are good examples of small producers, farmers who successfully produce food on small holdings and encourage local sales and local economy, with only minimal environmental damage. There are such cases in South America and some African countries, and similar models of organisation of food production for local markets are increasingly common in some regions of

32 K. Baker-Smith, S. Attila, *What is Land Grabbing? A Critical Review of Existing Definitions*, 2, 2016

33 Definition from the Tirana Declaration of May 2011. See more in *Our Land, Our Choice, The Great Land Heist 2014*

34 <https://www.globalagriculture.org/report-topics/land-grabbing.html>

35 *Land grabbing and land concentration in Europe*, Transnational Institute, Amsterdam 2016

36 A. Graham, S. Aubru, R. Kuneman, S.M. Suarez, *Land Grab study*, CSO Monitoring 2009-2010. "Advancing African Agriculture" 24-28

37 See more on <https://landmatrix.org/en/get-the-idea/compare-size/>

Europe and North America.

It is characteristic that land grabbing is mostly taking place in developing countries with weak public regulatory mechanisms and in countries that base their economy on attracting foreign investment. This is primarily the case of the countries of Latin America, Africa and some parts of Asia. However, over the past ten years, the phenomenon of land grabbing can be increasingly observed in the territory of EU, mainly in the peripheral countries of the block. The most recent analyses of the condition of land in EU show that as little as 3 percent of the largest companies control about 50 percent of the total arable land. In countries like Slovakia, Czech Republic and Bulgaria, agrobusiness controls between 80 and 90 percent of the total arable land.³⁸

The low price of agricultural land in Eastern Europe versus Western Europe is the primary factor that drives land grabbing in the European periphery. Also, the EU's Common Agricultural Policy (CAP) and the way in which the budget funds are allocated have significantly increased the land grabbing. Namely, for many years now in the EU, agrobusiness has been pumping out enormous funds from the agricultural budget, thanks to regulations that favour large-scale production.

The land grabbing onslaught in the form of increasingly aggressive land hijacking, expropriation and privatisation of ever-larger land areas lies in the heart of the capitalist food system. The objectives of agrobusiness in such a system are the commodification of natural resources and their translation into private property with the aim of buying, usage or selling at will. The fundamentals of private ownership lie in the accumulation of surplus value, goods and wealth. Due to the tendency of the capitalist market to constantly grow and accumulate surplus value, the gap between the rich and the poor is growing, and the environment is being destroyed.³⁹

Privatisation and land grabbing in Serbia

The land grabbing process in Serbia started during the period of the break-up of Yugoslavia and continues later, in the EU integration process. After the fall of Slobodan Milošević's regime in 2000, the process of privatisation of state-owned property inflated to enormous propor-

tions. Serbian capitalists and tycoons used privatisation to camouflage their illegal actions and acquire property through the purchase of state-owned companies. From 2001 to 2012, two hundred and fifty-six companies in agricultural business were privatised. More than 65,000 workers in these companies became unemployed, and as much as 50 percent of sales contracts were terminated.⁴⁰

Prior to the start of the privatisation process from 2000 to 2015, 91 agricultural conglomerates and 108 agricultural holdings successfully operated in Serbia, of which as much as 106 holdings and 36 conglomerates in Vojvodina. Because of the privatisation, about 120,000 hectares ended up in the hands of a few individuals. The country lost tens of millions of euros and the Serbian agriculture suffered incalculable and permanent damage (Gulan 2016).

The state-owned arable land was under the stewardship of food companies and cooperatives, which cultivated crops as part of their food production process. With the start of the privatisation process, the principle of the state ownership was completely abandoned, with assets in this form of ownership privatised.

In addition to illegal seizure of the state-owned land, the entire process was followed by the extraction of assets and financial capital from the company, and by burdening the company before all the purchase instalments for its privatisation were paid, that is before the termination of the privatisation contract. Loans received from the banks were transferred through interest-free loan agreements, without security assets, to the accounts of related companies whose business is controlled by the same individuals.⁴¹

Parallel to the privatisation process, issues related to the restitution of the cooperative property were also manipulated. According to the study titled *Agricultural Land in the Republic of Serbia*, some 400,000 hectares of agricultural land—cooperative property—are missing from the census.⁴² During the transition, the cooperative-owned land was regarded as state-owned assets, although cooperative property was essentially the property of individuals. Due to the lack of demarcation of

40 M. Srećković, *Land Concentration, land grabbing and peoples struggles in Europe*, The case of Serbia, Transnational Institute, 194, 2013.

41 See more in: *Privatisation Case Studies in Serbia*. Belgrade, Naled 2014

42 Miladin Ševarić: *Agricultural Land in the Republic of Serbia*, 2015

38 Transnational Institute, 2011. Extent of the farmland grab in the EU

39 E. Holt-Gimenez, *A Foodie's Guide to Capitalism*, New York 2017

ownership between the state-owned and the cooperative-owned property, cooperative assets were classified as state-owned assets, and at the same time entered the murky privatisation processes that took place with state-owned agricultural holdings. When stores, dairies, silos, slaughterhouses, warehouses, farms and other facilities that were part of the cooperative property—owned by cooperative members—are added, the value of the property loss suffered by the cooperatives during the transition skyrockets to several billion euros.

In order not to bear the brunt of the return of sold cooperative assets, the state has deleted the articles of the preceding Act, and in the Act on Cooperatives (2015) practically legalised the hijacking of all cooperative property that was taken without payment.

Poor regulation of agricultural land (i.e. almost no regulation at all) made it possible to sell the state-owned arable land. Many companies and cooperatives that operated in agriculture and food production business were privatised together with the land they used to carry out their business, without prior resolution of the issues of land ownership. After they bought these companies, most of the owners registered the assets of these companies as their own private property in the real estate register. This change of ownership was certainly not done legally, since the aforementioned companies and cooperatives were entitled only to use the state-owned land.⁴³

By this mechanism, the ownership of large-scale agricultural land was acquired by individuals who, besides arable land, also hold industrial food production chains. Today, among the owners of the largest areas of arable land are Petar Matijević, the owner of *Matijević Company* with more than 30,000 hectares, Miodrag Kostić, the owner of *MK Group* with more than 30,000 hectares and Miroslav Mišković, the owner of *Delta Agrar* with more than 20,000 hectares.⁴⁴

By a similar strategy, a handful of foreign companies now also possess significant parcels of arable land. By purchasing several state-owned companies, including the holdings *Vojvodina*, *Miletić* and *Ratkovo*, Irish company *Baltic Property Investment Limited* now owns some

13,000 hectares of arable land. The Hungarian company *CBA* acquired approximately 2,600 hectares in the same way, and the company *Žito Grupa* of the Croatian businessman Marko Pipunić owns about 2,000 hectares.⁴⁵

The manner in which the privatisation was carried out was made possible by the state that created the relevant framework, without observing the constitutional and legal provisions. By coupling the capital and the state, that is the tycoons and the state elite, driven by private interests, a system was made in which it was possible to carry on privatisation outside the legal framework.

While the process of privatisation of state-owned agricultural companies by grabbing state-owned land and extracting funds through numerous financial malversations enabled the enrichment of a few tycoons and the creation of a market monopoly, on the other hand, the never-completed process of restitution of the cooperative property deprived the peasants of their land, production assets and distribution networks. All this has drastically increased the pauperisation of peasants and the marginalisation of their position in the current agrarian structure.

In addition to the mechanism of purchasing state-owned companies, there is another mechanism of land grabbing in Serbia (a frequent form of land grabbing at the global level). This form implies state-supported long-term lease of arable land and includes amending the legislation aimed at bringing foreign investors (big money). In this way, a German meat producer was brought to Serbia (the *Tönnies* company) but has not yet formally started operations.

Land grabbing in Serbia – Tönnies company

The arrival of *Tönnies* is one of the most recent examples of land grabbing in Serbia. However, this is not a typical example of land grabbing, as this time the bar was raised by another notch – the state took active participation by luring this investor in and changing the legal framework that regulates the arable land. The arrival of this company is a classic example of the neoliberal concept of “recovery” of national agriculture by bringing foreign investors, to the detriment of the local economy and small producers.

Tönnies is an offspring of a small family butchery estab-

43 M. Srećković, History of Agrarian Reforms and Consequences of Privatisation in Agriculture, Field 4.3. Privatisation of State-Owned Agricultural Companies, *Balance Sheet* publication, Centre of Emancipation Policies, Belgrade 2015

44 See more on <https://www.makroekonomija.org/0-branislav-gulan/cija-je-zemlja-zemlje-srbije/>

45 See more on <https://www.danas.rs/ekonomija/stranci-medju-najvecim-vlasnicima-zemlje-u-srbiji/> and on

lished in 1971. Today, this company is one of the largest Europe's meat producers. It is estimated that during 2015 as much as 16 million pigs were butchered in the slaughterhouses of this company, whereas its annual turnover is more than six million euro. However, this is a company notorious in the German public and is considered an employer of ill-repute. It is known that many of its employees come from Eastern European countries and that they are hired through agencies, often without contract. The *Tönnies* CEO and management were fined in 2011 for poorly declaring their products, but they managed to avoid prosecution for violation of antitrust regulation by closing subsidiary companies.⁴⁶

Before changing the regulatory framework, the Serbian officials have spectacularly announced the arrival of this company. It was announced that the arrival of *Tönnies* will bring 8,000 new jobs in Serbia during the first year of operation. In a non-binding Memorandum of Understanding signed between the Government of Serbia and the representatives of *Tönnies*, it was announced that 20 pig farms would be opened, with the total investment supposedly amounting to 420 million euro. In order to carry investments into effect, *Tönnies* leaders demanded that they be granted a long-term lease of land at five locations in Serbia, which was not allowed by the legal framework in effect before 2015. By changing the legal framework and announcing a public call for lease of state-owned land for a period of 30 years,⁴⁷ the state let this company into the Serbian market. In this way, although they have not yet started operations in Serbia, *Tönnies* now have available about 5,000 hectares of arable land of the highest quality in Vojvodina, with a thirty-year lease.

However, even though almost all conditions they set for their arrival were met, the German company still does not start production in Serbia, which is in contradiction with the announcements of Serbian politicians. After *Tönnies* was granted lease over the agricultural land, it was made public that the company's investment would be four times lower than announced and that, instead of the announced 8,000 jobs, only 250 workers would be employed. Also, according to the most recent estimates made by the Ministry of Agriculture, the budgetary benefit from the *Tönnies* investment would be EUR 700 per hectare, which is by 30 percent less than the announced

EUR 1,000.⁴⁸

The arrival of *Tönnies* will trigger significant losses with domestic pig growers, who for years have problems with low purchase prices. Frequent monthly or even weekly price fluctuations, rare in the EU countries, make it difficult to sell pigs.⁴⁹ The state did not display any intention to regulate the pork market and protect domestic growers and it is even harder to expect it to do so in the future, when a producer who has remarkable power to negotiate with the state arrives to the market.

It is obvious that the domestic farmers will bear the consequences as well. The land granted to *Tönnies* was previously leased by Vojvodina farmers, who now are denied it. This weakens their production capacities and leads to a decline in revenues. Not less important is the fact that the *Tönnies* operations will cause tremendous damage in crumbling the potential of the land used for pig breeding, due to the elevated use of pesticides. Pig breeding is accompanied by numerous ecological problems: environmental impact, climate change, eutrophication, increased soil acidity, use of abiotic resources, soil and water pollution. Also, the land used for pig breeding could be used for the purpose of cultivating forests or fruit and vegetable growing.⁵⁰ Although it has been proven that pig breeding causes less pollution than ruminant breeding,⁵¹ pig farming on an industrial scale would leave significant footprint on the environment.

Agricultural Group Belgrade (PKB) – demise of the last agricultural giant

Privatisation of the *PKB* Group is the last step in the privatisation of large state-owned agrarian companies. The transformation of the agrarian sector from the public stewardship into the private sector was, symbolically, finalised by the sale of *PKB*. The case of *PKB* and the reason for its sale have no connection whatsoever with the improvement of its business as a standard excuse for privatisation of a company. Almost all agrarian experts in Serbia were against privatisation, knowing the Group's operational capacity and the value that can be produced within the *PKB* with competent leadership

⁴⁸ <https://insajder.net/sr/sajt/tema/11671/>

⁴⁹ <https://www.agrarije.com/blog/proizvodnja-i-prerada/da-li-je-moguće-predvideti-cenu-svinja-u-srbiji/>

⁵⁰ A. Kleanthous, *Pigs and the Environment*, BPEX report, 19, 2009

⁵¹ *Greenhouse gas emissions from pig and chicken supply chains*, A global life cycle assessment, FAO, 2013

⁴⁶ <https://insajder.net/sr/sajt/tema/3107/>

⁴⁷ See Subsection 1.2: Market of agricultural land in Serbia

and support. However, the focus of the privatisation is not on the potential economic value of production. The main bait for investors is the *PKB*'s land attractiveness. There are 16,700 hectares of state-owned land near the urban zone of Belgrade. The new owner of the *PKB Group* is the Arabian company *Al Dahra*, which bought the ownership of all the *PKB* assets at a price of 104.5 million euro. According to the latest consolidated financial statements, the total value of *PKB* assets is approximately 490 million euro.

No one knows exactly how much land *PKB* has, because some sections of the land are still state-owned and some are part of cooperative property. However, one thing is certain: it is a huge piece of land near Belgrade, and Belgrade is permanently expanding. A solid part of this agricultural land lies in vicinity of urban construction land, and the city's spatial plans are custom-tailored to investors. It is very likely that the value of the land is what triggered the interest of the new owner of *PKB*. By simply changing the urban development plan, agricultural land within *PKB* can easily be converted into construction land with its value multiplied.

Manipulations and speculations with the land are an integral part of the land grabbing process. According to the Financial Statements of 2015, *PKB* was in that year allowed to register as its own 16,365 hectares of state-owned land, of which about 15,000 hectares of agricultural land. If the conversion of the *PKB*'s right of use to the right of ownership was not made, these parcels could not have been sold because the Agricultural Land Act does not allow the sale of state-owned agricultural land.⁵² The *PKB* case once again clearly shows that the state creates land policy mostly in the interest of the big money, completely disregarding the needs of the local community.

Role of the state in the agricultural sector

Agriculture in Serbia, with miserable state subsidies and lacking strategic production planning, does not have the basic measure of cost-effectiveness and sustainability. Regardless of free market mantras, the state is and should be the regulator of the economy and of the market, because it has the power and resources to regulate these processes. All economically developed countries

regulate their markets and apply some form of protectionism in strategic sectors of their economy.

Among a variety of causes that have influenced this trend in the volume of agricultural production in Serbia, one can single out unfavourable climate conditions (droughts and floods) and, above all, insufficient investments, that is insufficient volume of investments that would give a spur to the production and mitigate the impact of these climate factors. For example, the European Union annually invests USD 130 per capita, and Serbia only USD 29 (Pejanović & Tica, 2005).

There are many factors that jeopardise the development of agriculture in the Republic of Serbia. They have been present for a very long time, but they are particularly pronounced today in the conditions of the global financial and economic crisis, which severely endangers the entire economy of the Republic of Serbia, especially the agriculture. These factors are:

- Lack of organisation in the national agriculture, which reflects in insufficient organisation of farmers (associations, cooperatives, clusters). Cooperation and contractual production have not been sufficiently developed. Unregulated terms of purchase and sales prices are mainly to the detriment of the primary producers.
- The purchasers (mostly) do not have HACCP certificates, their demand is unstable and tailored to their own needs, and the payment system is unfair (it takes too long, the payment is uncertain, and the system handicaps the primary producers). There are too many go-betweens (especially in livestock trade), while the exposition of the producers to the whims of the market makes their business uncertain, which in turn leads to uncertain development of agriculture.
- The state as the main creator of the agricultural policy is supposed to create a sound, functional and transparent institutional framework in which the agricultural production can be developed in the interest of all agricultural producers. In the context of managing the institutions and the agricultural policy in general, there are many factors within the system that are not properly solved to enable successful development of production in Serbia. These factors are:

⁵² <https://insajder.net/sr/sajt/tema/12339/Vrednost-PKB-a-pala-pred-privatizaciju-Ministarstvo-odbija-da-dostavi-procene-vrednosti.htm>

1. **Structural aspects:**

- 1.1. Lack of adequate national development strategy and of an action programme for agriculture and rural development;
- 1.2. Very low agrarian budget (on average, 3 percent of the total budget);
- 1.3. Unresolved system of financing agriculture;
- 1.4. Lack of adequate and long-term policy of state intervention in the market of agricultural products;
- 1.5. Inefficient agrarian and rural policy measure (insufficient protection of domestic agrarian production), among other things, with the action “Buy Domestic Products”;
- 1.6. Unresolved issue of pensions and debts of farmers, etc;
- 1.7. Inadequate land policy;
- 1.8. Problem of agrarian legislation, which is incomplete and insufficiently applied;
- 1.9. Unregulated property relations (privatisation, restitution).

2. **Financial aspects:**

- 2.1. Insufficient and uncertain incentives for agricultural production and rural development through:
 - 1) Direct incentives – premiums, production incentives, subsidies, assistance to non-commercial agricultural estates;
 - 2) Market incentives – export incentives, coverage of storage costs, loans;
 - 3) Structural incentives – rural development measures, improvement of agricultural land protection and quality, measures of institutional support.

3. **Operational and institutional aspects:**

- 3.1. Undeveloped advisory network;
- 3.2. Rudimentary system of recording and reporting in agriculture;
- 3.3. Inexistent system of agricultural bookkeep-

ing data (to monitor farm revenue and expense);

- 3.4. Inexistence of integrated information system for agriculture;
- 3.5. Lack of development organisations (e.g. agrarian development bank, agrarian chamber, food agency);
- 3.6. Lack of preparedness for climate changes that take their toll.⁵³

The change of the concept of agricultural management is necessary. The neoliberal *laissezfaire* principle and free-market fundamentalism have crashed even in developed countries. The state must take over the role of the market regulator and protect the market from the monopoly of big players if it wants small producers to have a chance of survival in the future.

It needs political will to establish firm rules of the game that will regulate the market, as well as the structure and development of agricultural production in Serbia.

Foreign direct investments and their effects in agriculture

The main Serbia’s economic strategy is based on attracting so-called foreign direct investments (FDI). The FDIs are supposed to revitalise the ailing domestic economy. The main instrument for attracting foreign investments are subsidies for job creation, which are paid to foreign capital owners from the state budget.

Although the precise amount of funds invested in subsidies is unknown due to often unavailable and, sometimes, contradictory data, those data available indicate that, from 2000 to 2016, foreign investors were paid out some 439 million euro within 304 signed contracts. For standard projects implemented through SIEPA (Serbian Investment and Export Promotion Agency), which has been renamed to Development Agency, non-refundable state funds were offered ranging from EUR 4,000 to 10,000 per newly created job. Special packages were available for large-scale projects, on the condition that the investment value was at least 50 million euro and that at least 300 people were employed on the project. These projects were eligible for a subsidy of up to 20

⁵³ Developmental Issues and Priorities of Agriculture in Serbia, Pejanović, 54, 2013

percent. For projects that exceed 100 million euro, the subsidy of 17 percent is available.⁵⁴

With regard to tax incentives, in particular for export-oriented investments, Serbia grants exemption from profit tax for a period of ten years for companies which invest more than 8,5 million euro in fixed assets, and which, during the investment period, employ at least 100 additional employees full-time. The ten-year exemption from profit tax begins at the moment when the company starts to generate profit.

Also, the investors are exempted from income tax and social security contributions for a period of two to three years, provided that they open new jobs for first-time workers or for those who are currently registered as unemployed. In addition, no VAT is charged on imports of raw and semi-processed materials used in export-oriented manufacture. The functioning of this system is allowed by double tax treaties.⁵⁵

Serbia's deficit in balance of payments is chronic. Generally, the deficit can arise due to: 1) increase in import of consumer goods, especially agricultural products; 2) increase in import of investment assets, usually for industrialisation purposes; 3) interest and debt payment; and 4) due to capital leaking from the country. The Serbian deficit was created on the basis of points 1), 3) and 4). However, regardless of the reasons for the deficit, it must be compensated in one way or another. The compensation is usually made through FDIs combined with extensive borrowing abroad. New foreign borrowings create new liabilities and more and more future liabilities are piled-on, until the point is reached where the whole economy exists only to pay interests.⁵⁶

The analogy between foreign direct investments and state subsidies shows how one type of economic development is favoured by the state – the type based on subsidies lavish for Serbian economic condition, while, at the same time, other types of development are neglected, such as agriculture.

Not only does the state neglect agricultural development, but it gains more from farmers than it pays them through subsidies. The amount of the agricultural subsi-

dy is approximately 4,000 dinars per hectare of production. If a farmer spends 400 litres of fuel per hectare, (s) he gives the state 200 euro per hectare in excise duties and VAT per annum. Through taxation of agrochemical inputs (seeds, fertilisers, pesticides, etc.), the state also gets money from the farmers. So, when it comes to how much the state invests in agriculture and how much it gets back through taxes and excise duties, it turns out that the farmers give much more to the state budget than the state invests in the sector of agriculture.

This ratio of revenue vs. expenditure is, in the projection of the future, absolutely unsustainable for most farmers. It is not only that the farmers will not have funds to invest in production, but such trends will progressively lead to increased import of food to domestic markets, which will heavily impair the farmers' competitiveness in the market.

Insufficient state investments in agriculture, combined with unregulated market, are very likely to lead to further deterioration of smallholders and family farms. This spiral will have a disastrous effect on rural communities—already much more pauperised than the urban communities—and incite further migration of people from rural to urban areas.

Tightening of the belt - the state's (non-)investments in agricultural production

After the privatisation of state-owned companies and the consolidation of private agrobusiness, all under the supervision of the state, the state slowly shifts to the stage of exiting from investments in the agrarian sector as a strategic branch of the economy. In recent years, the state has greatly reduced investment in agriculture, primarily in the form of subsidies and fuel excise duty exemptions, which have been denied to farmers since 2015. From 2012 to date, the subsidies per hectare dropped from 14,000 dinars to 4,000 dinars, while the price of diesel oil jumped from 95 dinars to 165 dinars per litre on the average.

For comparison, the average subsidy per hectare of production in the EU is about 259 euro⁵⁷ - almost eight times higher than in Serbia. Combined with the price of fuel, among the most expensive in Europe, this clearly shows how perilous is the situation of Serbian farmers

54 Ivan Radenković: Foreign Direct Investments in Serbia, 68-70, Rosa Luxemburg Stiftung Belgrade

55 Ivan Radenković: Foreign Direct Investments in Serbia, 71, Rosa Luxemburg Stiftung Belgrade

56 Ivan Radenković: Foreign Direct Investments in Serbia, 43, Rosa Luxemburg Stiftung, Belgrade

57 <https://ec.europa.eu/agriculture/sites/agriculture/files/statistics/facts-figures/direct-payments.pdf>

in the current economic context in Serbia.

The agricultural subsidies are primarily to maintain the competitiveness of agriculture in the market. Agriculture is a strategic sector subsidised by every state. Namely, the agricultural budget in the European Union for the period 2014 to 2020 is, on average, 35 percent annually,⁵⁸ while in Serbia as little as 5 percent of the state budget goes to agriculture in accordance with the Agriculture and Rural Development Act.

In accordance with the Agriculture and Rural Development Act, 5 percent of the state budget should be allocated to agriculture. However, this amount is lower in practice. For example, the agricultural budget in 2016 should have amounted to 56 billion dinars in line with budgetary expenditures for 2016, while, in reality, it amounted to 40.494 billion dinars. It is estimated that Serbian farmers, in the period from 1996 to 2016, had been denied approximately 100 billion dinars of budgetary funds (Ševarlić 2016).

Comparing the competitiveness of the Serbian agriculture and that of the EU in terms of agricultural budget and subsidies, it is clear that the Serbian agriculture is less competitive than European by far. In other words, this generally means that an EU farmer, thanks to higher subsidies, is in a position to produce food at a lower price than a Serbian farmer, which makes the European counterpart more competitive in the market.

The market of agricultural products in Serbia has been liberalised since 2014, and custom duties have been abolished for most agricultural products and foodstuffs imported from the EU. This is an absolute precedent in the context of opening the markets towards the EU. Serbia is the only country to do so before actually joining the European Union. Before joining the block, all other countries applied a variety of measures and programmes for adjusting their agricultural production to EU requirements.

Market liberalisation has opened space for importing foreign products that are cheaper than domestic products, which also applies to the food and agricultural products market. Last year, imports of agricultural products and foodstuffs in Serbia increased by 15,4 percent.⁵⁹

58 <http://www.europarl.europa.eu/factsheets/en/sheet/104/the-common-agricultural-policy-in-figures>

59 <https://www.ekapija.com/news/2027980/srbija-u-2017-zabelezila-pad-izvoza-svih-najznacajnijih-agrarnih-proizvoda-uvoz-porastao>

This year's tendency displays an even higher growth in the period from January to May. The value of the food imports is USD 845.4 million, which is 26.3 percent more than in the period from January to May 2017.⁶⁰

The opening of the market and increased imports resulted in dumping the prices of domestic producers who, with existing state subsidies, are not competitive with foreign producers. This will mostly affect small producers who will not be able to cope with market pressure and price dumping. In this context it is very likely that the trend of shutting down small family farms will continue.

The case of raspberry growers or a model of functioning of free market in agriculture of Serbia

Apart from the EU competition, domestic farmers have major problems with domestic purchasers. A handful of companies have organised into a cartel to fix the prices of some agricultural products in Serbia. On the other hand, the state denies that the cartel exists, justifying the situation by the free market logic – that the market alone determines purchase prices depending on the supply and demand.

The case of raspberry growers clearly illustrates that the market in Serbia is not based solely on the logic of supply and demand in the global markets. For the past three years, the drop of raspberry purchase price has proven an obvious market manipulation and price dumping imposed by the buyers.

Last year, because of the pressure of raspberry growers and their accusations that the purchasers – the owners of cold storage facilities are responsible for the last year's extremely low purchase price, the Ministry of Agriculture has demanded from the Competition Protection Committee to carry on market analysis and determine whether there have been "market disturbances", i.e. whether the low raspberry purchase price last year was caused by the buyers' cartel influence on the market. Some data from the analysis clearly show that the last year's purchase campaign was marred by market deviations.

A comparison of raspberry purchase and export prices in 2016 and 2017 is illustrative: according to the data published by the Ministry of Agriculture of Ser-

60 <http://www.agrosmart.net/agro-politika/uvoz-hrane-enormno-raste-suficit-manji.html>

bia, the average export price of raspberry in 2016 was EUR 2.57 per kilo, while it dropped to EUR 2.18 in 2017. If one knows that the average purchase price in 2016 fluctuated around RSD 240 per kilo and in 2017 around RSD 135 per kilo, the disproportion is more than obvious: in 2016, the difference between the export and the purchase price was about RSD 60, while in 2017 it ballooned to RSD 122. This comparison clearly shows that the purchasers, by price dumping in 2017, grabbed a profit twice as large. However, the Competition Protection Committee brazenly declared that there were no disturbances in the raspberry purchase market, although the data from the analysis they made themselves, at least, raise doubts about this. As the data from the Commission analysis show, the problem does not lie in the reduced demand for raspberries in the global market, which could have led to a decrease in raspberry price. However, the raspberry exports in the first ten months of 2017 reached the total exports in 2016. In other words, the problem can be summarised like this: the rules of the game, i.e. how the cake is shared are determined by the stakeholder with better negotiating position in the market.

Another information from the analysis made by the Competition Protection Committee indicates that its credibility is disputable. According to the data supplied by *Altiva LLC* company from Belgrade, which is one of the largest raspberry purchasers in Serbia, the difference in the purchase and export price in 2017 results from the fact that raspberries are still supplied under the contracts from 2015 and 2016. Compared to the then agreed export prices, the difference in the export price determined by contracts for 2017 harvest rises to EUR 0.87 per kilo. However, according to the Ministry of Agriculture, the difference in the 2016 and 2017 export prices was EUR 0.40. It is, thus, clear that the difference between the export prices in 2016 and 2017 was not the reason that could have justified a difference of RSD 100 in the raspberry purchase price in 2016 and 2017. The data supplied by the Ministry of Agriculture, Customs Administration and the purchasers are dissonant and clearly indicate that the market is exposed to manipulation and speculation, mostly to the disadvantage of the raspberry growers.

Tens of thousands of families live from raspberry growing, which is their primary source of existence. After the events of this year and the lowest raspberry price in history, the justifiability of raspberry growing is ques-

tioned due to market conditions in Serbia. Whatever the reasons for the problem of the purchase price, it is hard to logically explain why the raspberry purchase price dropped two to three times within two years. Regardless of how many different factors affect the price and how high is the market unpredictability, such oscillations do not happen by themselves, but are, in large part, the result of the power of purchasers as market players.

The purchasers have numerous possibilities to manipulate the raspberry growers. Many growers sign disadvantageous contracts with purchasers at the beginning of the year, on the basis of which they are provided with raw materials (agrochemical inputs) and return the price of inputs in kind, i.e. through a part of the raspberry crop. The catch is that in these contracts no purchase price is defined, so that the growers do not know in advance how much the production cost will be. This creates a large space for manipulation in the context of invested funds and gained profits.

According to raspberry growers, the last year's price, and particularly the price of this year, do not cover the cost of production. Tremendous damage has been made and existence of many people has been imperilled due to the recent events in 2018. This year, some growers revolted by the purchase prices destroyed their orchards in despair. In most cases, the raspberry growers are smallholders with estates of about one to two hectares on the average. Tens of thousands of families in the Western and the Southern Serbia, directly or indirectly, existentially depend on the income from raspberry growing. The current situation and circumstances in the sector of raspberry growing threaten the existence of thousands of people, and solving their problems means also enabling secure future for not a small number of people living in these areas.

The question is what the role of the state in raspberry production is. Last year and this year, the growers appealed to the state to assist in forming the purchase prices. The state did not want to "interfere" with their problems, notoriously responding that the price is determined on the free market. However, the market is never as free as the term claims. In the context of agriculture, all countries determine the price of their produce using two instruments: subsidies intended to elevate the market competitiveness and trade agreements by which domestic production and strategic economic sectors are protected.

Cooperative societies in Serbia

A cooperative society is a legal entity and a special form of incorporation of natural persons who, by doing businesses on cooperative principles, realise their economic, social, cultural and other interests and who manage and control the cooperative activities. Cooperative principles are self-help, self-responsibility, democracy, fairness and solidarity.⁶¹ Most often, it is smallholders who join the cooperative in order to achieve better performance in the competitive market.

The difference between a cooperative and a stock company is that a share in a stock company is a predetermined fixed deposit, a part of the total equity paid in cash, while the stake in a cooperative does not have to be in cash, but can be in land, agricultural machinery, buildings and work without formal employment. Cooperatives do not generate unlimited profits for private entrepreneurs, but fair shares for all members, on the basis of the above cooperative principles.

The process of development and prolonged sustainability of a cooperative is based on a cooperative spirit. Cooperative is the most suitable form of self-employment and solution of existential problems of the poorer strata of the society. By their cooperative work, small producers are better equipped to place themselves in a more favourable and equal position of a market negotiator. That is why cooperatives are considered an important tool for improving the living condition of men and women.⁶²

The cooperative work is very common in developed countries, where the cooperatives are formed even by entities that own more capital. Today, there are some three million cooperatives in the world with 1.2 billion members – every sixth person on the planet is a member of a cooperative. Cooperatives employ 10 percent of the total workforce globally, which means that 280 million people work in them.⁶³

Agricultural cooperative societies have long tradition in Serbia. Low competitiveness and disadvantages in access to the market created the need for association and organisation of farmers. Although cooperatives have

been facing problems ever since their forming in the 19th century, they played a significant role in the development of Serbia's agrarian sector.⁶⁴ Serbian agricultural cooperatives had a common fate with villages and agriculture in many Serbia's economic systems and forms of government, but the period after 2000 was particularly destructive.

The specificity of the Serbian agricultural cooperatives was that, in a significant number of cooperatives, the members did not own the cooperative assets, but they were owned by the state instead. The convolutedness of the legal framework and the lack of regulations that would govern the issue of ownership of cooperative property have enabled a few tycoons and capitalists to gain wealth by buying cooperative assets and enrich themselves further, while cooperatives and their members were left empty-handed. The absolute demise of the cooperatives occurred in 2009, by passing the Bankruptcy Act. The bankruptcy proceedings were imposed in a shortened procedure over 736 agricultural societies, representing 38.1 percent of all agricultural societies in Serbia at the moment. Half of the cooperatives in the areas of Zaječar, Valjevo and Jagodina were liquidated, and as much as two thirds in the areas of Bor, Niš and Leskovac. The Article 3 of the Bankruptcy Act was declared unconstitutional by the Award of the Constitutional Court of the Republic of Serbia, but, according to some estimates, 48,106 hectares of agricultural land have "disappeared" in this period (2009 to 2012). Also, the purchase of cooperative land by the UAE company *Al Dahra* at extremely low price has caused tremendous damage to cooperatives in an estimated amount of more than half a billion euro.⁶⁵

The problems the cooperatives face in Serbia have not yet been solved. The assets of many cooperatives have not been returned, and this is also one of the deficiencies of the new Cooperatives Act of 2015.⁶⁶ It is beyond doubt that the role of the state in stimulating the cooperative movement is very important, but there is also a problem of low awareness among farmers about the potentials of the cooperative work. Low level of education, unfamiliarity with the market and wrong decisions,

61 Cooperatives Act (Article 2, Article 4)

62 D. A. Bello, *The Role of Cooperative Societies in Economic Development*, pp. 7, 8, MPRA, 2005

63 See more on <https://www.ica.coop/en/facts-and-figures>

64 K. Marković, *Agricultural Cooperatives in the Republic of Serbia - Conditions and Perspectives*, 2007

65 See more on <https://www.makroekonomija.org/poljoprivreda/pravci-razvoja-zemljoradnickog-zadrugarstva-u-srbiji/>

66 Cooperatives Act, 2015

are the common mistakes that can be avoided by more thorough information and learning about the process of production and product processing and placement. The general traditionalism among farmers and cooperatives is also one of the problems, being a barrier to a more rational understanding of today's tendencies in agriculture and in the market of agricultural products.

The most significant problems of today's cooperative members in Serbia are the small volume of production, lack of processing capacities, cold storage facilities and warehouses, proper machinery, anti-hail defence, irrigation systems, and still low level of state assistance. These problems are understandable in older cooperatives which remained in the business and weathered all the changes in the political systems that Serbia has experienced in the last 50 years, but they cannot be tolerated in newly-formed cooperatives. When associating into new cooperatives, the farmers should take a more rational approach in assessing their capacities in land, machinery, processing facilities, labour force and market demand in their produce. State subsidies and incentives in Serbia are several times lower than in developed European countries, but association into cooperatives in which the work and production depend on state benefits cannot be regarded as rational. Of course, it is necessary to work on elevating the level of state assistance in financial, legislative and educational sense, but the work of the cooperative cannot be based on variable and uncertain capacities.

During 2017, the Serbian government has made the first substantial step towards encouraging and recovering of cooperatives by launching the project titled *500 Cooperatives in 500 Villages*. The project is managed by Milan Krkobabić, a minister without portfolio, and its objective is a more balanced regional development. Within the project, non-refundable assistance in cash is distributed to newly-formed (up to 50,000 euro) and existing (up to 100,000 euro) cooperative societies that operate in line with the project requirement. In 2017, 196 million dinars were allocated to assist 22 cooperatives; 825 million dinars are earmarked for the year 2018.⁶⁷

Since the project launch, more than 300 new cooperatives have been established, indicating that this project is able to give a significant spur to the cooperative movement. However, the project has some shortcomings as well: it is implemented by a minister without portfolio,

meaning that there is no fundamental infrastructure for expert assistance to people planning to establish a new or revitalise an existing cooperative society. Although many municipalities do have centres for entrepreneurship advisory and incentives, they are usually occupied by unskilled individuals mostly delegated in accordance with their political affiliations, and they lack educational support that would assist the members in considering all the facts when they start to establish or revitalise a cooperative. One, thus, can conclude that the project assistance is given to cooperatives that already have some capacities, and not to weaker cooperatives, which, in this manner, are left out in the cold – it is a selection of a kind and not a form of assistance to weaker cooperatives.

The most worrying is that, among farmers, there is a general criticism of the project, based on the claims that the funds have been granted to cooperatives whose management is politically close to the authorities. Although this information should be taken with a grain of salt, the concern is justified nevertheless, judging by the numerous corruption affairs and the nontransparent allocation of funds in many public infrastructural projects.

Since the most important cooperative principles are the democracy in decision-making, transparency and fair distribution, such rumours cast a shadow on the idea of cooperative movement and principles. In addition to public funding of re-development of the cooperative movement, it is crucial to establish the trust of farmers in the cooperative business model. In this context, the crucial elements are the systemic regulation of functioning of the cooperative and transparency in operations and allocation of funds.

In recent years, the concept of cooperative movement has been rather vague in our region. A stereotypical idea of cooperatives is one of the main obstacles to the development of this form of business. Partly because of its publicity and partly due to economic ignorance, small and medium-sized enterprises are more popular in Serbia, but they are a form of individual economic activity in the market. The only effective way for rationalising business, cutting costs and increasing the competitiveness of products and services leads through association. Promising business environment is created by combining labour, finance, intellectual skills, business knowledge and experience and other resources based on cooperative principles. Modern cooperatives

⁶⁷ See <http://www.mbpr.gov.rs/aktivnosti-saopstenja.php>

that operate in most developed countries in the world have recognised since long that association is the most efficient barrier to oppose the interests of big business. At present, this is the only way for small producers to protect their profits and their interests. In the cooperative model of business, small-scale producers make it possible to bring themselves into a more favourable position in market negotiation when competing with the agrobusiness.

Generally speaking, if we take into account that smallholders make up the majority in the agricultural structure of Serbia, the perspectives for the development of cooperative movement are enormous. However, the neoliberal economic ideology that has brought with it the change of the business model from the collective association of labour to individual entrepreneurship is currently one of the biggest impediments to the development of the movement. In other words, at present, the biggest challenge is how to change the mental structure of small producers in terms of business organisation.

Another major problem in the development of cooperative movement is the issue of distribution, that is the placement of produce made in the cooperative. Unlike the previous period, today none of the cooperatives has its own distribution channel and a sales network used by the end consumers to buy produce directly.

However, it is important to point out that the project is well designed, that this is the first project of its kind in our region and that it is only the beginning, so a more detailed judgment on its performance will be possible only in a few years. The project certainly improved the general climate and gave the cooperative movement some spur.

The state should invest much more in the development of cooperative movement as a form of direct support to small producers. The current project—*500 Cooperatives in 500 Villages*—with the budget of some 825 million dinars is only a minor contribution in the context of serious revitalisation of operational capacities of the cooperatives.

Food production models in the world

Existing structural conditions reflected in the political and economic processes and their pace of development do not promise a bright future for Serbian agriculture. It needs profound and structural system transformations to change this. However, the preliminary step for implementing such change is to elevate awareness and emancipate the society. Individual understanding of societal processes surrounding people in a local and global context is a key factor for engaging individuals in movements that try to make changes. In this regard, the focus is on movements that create organised resistance and exert political pressure on their governments. On a global scale, the number of movements that demand a more just, more equitable and more democratic system of food production management is increasing.

The development of industrial-scale agriculture oriented to the global market has weakened traditional peasant agriculture and increased the power of owners of landed property (de Alcantara 1976, Griffin 1974). Many authors have thoroughly researched and documented the deepening of the class, gender and regional inequalities caused by the Green Revolution (Agarwal 1994, Byres 1981, Feder 1976, Griffin 1974, Pearse 1980, Shiva 1991, 1992). Consolidation and concentration of peasant holdings in the hands of the landowners, accompanied by increased mechanisation of works that were previously labour-intensive, pushed the peasants into marginal territories or into urban peripheries, forcing them to survive through increased self-exploitation and compete with one another in narrow market niches (Davis 2004, 27).

The Green Revolution as a product of the capitalist mode of production has increased the efficiency of work and the overall food production, thus contributing to the global population growth. Global population has more than doubled over half a century of the highest growth of productivity in capitalist agriculture. This has led the capitalists to conclude that only large-scale industrial agriculture can feed the world. However, the increase in production was achieved primarily thanks to the high quality of soil at the time, which is no longer the case (Altieri 2013).

On the other hand, the inability of industrial agriculture to provide means for survival of approximately 1.5

billion peasants, who manage to produce half of the world's food in marginal territories, means that the poverty and hunger among the rural population will raise even more, accompanied by extended battle for land and resources. This also means that organic and sustainable agriculture will gain increasingly more importance as an alternative to industrial agriculture. Contrary to common belief, there is extensive scientific literature in the field of agroecology that proves that organic agriculture and small farms can meet all the current and future needs in global food production very easily, and that such systems of production are better at satisfying the material needs of the rural population (Rosset 1999, Pretty and Hine 2000, Badgely 2007).

Advocates of industrial agriculture as a development model of the global food system include multinational behemoths and international financial and development institutions, such as the World Bank, the World Trade Organisation, the International Monetary Fund and so on. There are two schools within the structure representing industrial agriculture: one is the neoliberal movement while the other is the so-called reformist movement.

Views of food production based on industrial agriculture and technology

Neoliberal view. The period between 1978 and 1980 was characterised by some crucial events in the global political and economic context. China, under the rule of Deng Xiaoping, opens the space for liberalisation of the Chinese economy. Margaret Thatcher comes to power in the United Kingdom with the aim of curbing the power of the trade unions and of launching a tsunami of privatisations in state-owned sectors of economy. Ronald Reagan becomes the president of the United States of America, with the goal of "liberating" the financial sector both in the US and globally. From the 1970s onwards, a radical turn towards neoliberalism takes place at the global level, permeating all spheres of the society as the dominant mode of discourse and slowly becoming the fundamental doctrine of economic growth and social development.

Neoliberalism is embodied in the neoliberal state, and its structural foundations rest on economic liberalism and the free market. Neoliberalism is in the first instance

a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterised by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices. State interventions in markets (once created) must be kept to a bare minimum because, according to the theory, the state cannot possibly possess enough information to second-guess market signals (prices) and because powerful interest groups will inevitably distort and bias state interventions (particularly in democracies) for their own benefit.⁶⁸

The process of neoliberalisation has, however, entailed much 'creative destruction', not only of prior institutional frameworks and powers (even challenging traditional forms of state sovereignty) but also of divisions of labour, social relations, welfare provisions, technological mixes, ways of life and thought, reproductive activities, attachments to the land and habits of the heart. In short, it is safe to say that neoliberalism seeks to bring all human action into the domain of the market.⁶⁹

The main proponents of the neoliberal way are global financial and development institutions, such as the World Bank, the International Monetary Fund, the World Trade Organisation and so on. On the other hand, large multinational corporations take over markets and create oligopolies through institutional frameworks made by states in cooperation with global financial institutions.

In the context of food production, the neoliberal development model imposes industrial agriculture as the only option able to meet the needs of the world's population in food. However, as we have already explained, industrial agriculture carries with it a number of wideranging problems and contradictions. The main reason why the neoliberal view favours industrial agriculture as a development model is that it secures complete hegemony over the food system – from input production control to seed patents to product placement. A free market is the crucial structural premise that allows the entire control mechanism to function at all. Eventually, the free market itself remains under control of developed countries and corporations. As a consequence, the fundamental ideas of neoliberal ideology, that is the assumptions of

democracy and individual freedom of action, however, remain dead letter on paper. In the end, the neoliberal approach to the issues of the global food system is designed to serve its own purpose rather than people and to multiply neoliberal institutions and corporations that control the food system itself.

The reformist view also advocates industrial agriculture as a development model for the global production system. The most famous institution promoting the reformist approach is the UN Food and Agriculture Organisation (FAO). FAO, as a supra-national organisation, applies the concept of "food security", by which it is trying globally to implement alternatives within the existing food production system that are less detrimental to people and the environment.

Reforms promoted by FAO may be presented as programmes and initiatives that aim to eradicate hunger in the world and to improve social and material position of peasants. However, these reforms are carried out within the existing capitalist system, which perpetually reproduces systemic contradictions, which, in turn, lead to material and social inequalities.

The reformist view shares the same ideological line with the neoliberal view, with the difference being greater "social sensitivity" of the reformist versus neoliberal view. Thence, the reformist view with FAO as the main stakeholder promotes a model of capitalism so-called "the capitalism with a human face". In other words, FAO and other reform institutions try to mitigate, through certain programmes, the consequences of global structural inequalities exerting the greatest impact on the rural population in the world. Although FAO programmes do have some positive aspects, they, however, do not aim intrinsically to address the structural problems of rural populations.

Food production models based on small and sustainable farms

The second paradigm that analyses the issues of the global food production system is antipodean to the industrial agriculture. In the models of sustainable food production, emphasis is put on traditional agriculture with smallholders as the pillars of the system. There are two dominant views within this paradigm: one is progressive while the other is radical.

The progressive view is based on the concept of "food

68 David Harvey - A Brief History of Neoliberalism 8, 2005

69 David Harvey - A Brief History of Neoliberalism 9, 2005

justice". The term refers to the right to food as one of the fundamental human rights within the UN human rights system. The development model of the progressive view is based on the development of local food systems, smallholders and family farms, and on the concept of organic production and fair trade.

One of the objectives of the progressive view is to build relationships between rural and urban populations by a trade exchange between consumers and producers. In the last ten years, CSA (Community Supported Agriculture) models have become increasingly popular. CSA principles understand direct cooperation and exchange between producers and consumers based on solidarity and sustainability. The benefits of these models are that the small producers gain a reliable market for placing their goods through a group of people, and, consequently, can better plan their investment in production. On their part, consumers are privileged by the fact that they get healthy food from a producer they know, with generally lower than market prices.

The progressive model also endeavours to ensure access to fresh and healthy food in poor communities, and researches models of cooperative movement and alternative business models.

The stakeholders of the "food justice" movement are a variety of organisations engaged in food security in local communities and environmental organisations fighting for rights of people in urban and rural areas who are oppressed by racial or class differences within the capitalist food production system (Ahmadi 2009). Primarily focused on practical issues, the groups within the progressive movement are engaged in local food production and the creation of business models in disadvantaged communities.

In Europe, local civil reaction to the unfair budgetary allocation within the Common Agricultural Policy has led to the establishment of 750 small-scale producer associations (AMAPs) only in France. These associations work on the principle of solidary contracts and local agroecological farmers.

In Spain, a movement titled *There's a Garden Beneath the Asphalt* (*Bajo el Asfalto está la Huerta*) works in many parts of this country to produce food on the principle of solidarity. In the United Kingdom, there are some six hundred *vegetable box* concepts, and in Belgium about two hundred groups for solidary buying of home-made

products from the countryside.

In Latin America, the *Campesino a Campesino* (*Farmer to Farmer*) movement was founded. Unlike European movements engaged in alternative models of organisation and supply of food in the market, *Campesino a Campesino* is based on the transfer of knowledge, methods and experience among farmers about the issues of agricultural production. Members of the movement also discuss all the relevant political, social and economic processes that affect them.

In Asia, there is a movement similar to Latin American, called *Farmer Field Schools*, also engaged in education and transfer of knowledge among farmers. Agroecological models of agricultural production are the central axis of their work.

All these groups greatly assist the progressive civil society organisations, but they do not have pronounced historical connections with agrarian movements and political organisation (Bunch 2010, Gomez 2010, Vasquez 2010). However, it is a position undergoing change, as all the organisations and producers realise that the production in environmentally sound way is not able itself to provide existence under the pressure of the corporate food regime. With this in mind, most groups begin to politicise and establish new forms of agricultural organisations – those that problematise the political and economic context at the state level as well.

At the international level, progressive movements have opened a significant political space within the UN system. After several decades, FAO as a part of the UN structure has to some extent become a polygon to exert political pressure on major global trade and financial institutions.

Working on the reforms within the FAO system, the Committee for World Food Security as an intergovernmental body has created space and mechanisms for greater participation of the civil society in political processes that determine structural conditions of the global food system. By the coincidence of circumstances, the reforms within the FAO have made this Committee the axis for advocating progressive ideas in the context of the global food policy. During the global financial crisis of 2008, when the food prices skyrocketed, the governments of chief FAO funders limited the role of this organisation as a forum for development of progressive policies. On the other hand, the civil society has appealed to the FAO to

play an autonomous role in the combat against hunger by calling international governments to admit responsibility for mistakes (McKeon 2010).

The CFS Committee is an umbrella for a spectrum of participating organisations, such as the International Policy Committee on Food Sovereignty, Oxfam International, Action Aid and so on. This Committee prepared a number of proposals offering progressive and radical views on sustainable food production methods, land reform, combating monopolies in the food system by assisting small producers, limiting the production and distribution of GMO crops and ways of storing food.

The academic community engaged in a variety of researches and there are many papers that analyse different angles of approach within the heterogeneous progressive movement, such as *Food Justice and Community Food Security* (Winne 2008), *Food Democracy* (Lang 2005), *Food Safety* (Nestle 2002), *New Agrarianism* (Jackson 1984), *Good and Healthy Eating* (Petrini 2005, Pollan 2009, Schlosser 2001).

In addition, there is also a tide of documentaries that attack agrobusiness and promote local, organic and sustainable food production systems, such as *The World According to Monsanto* (Robin 2008), *Food, Inc.* (Kenner 2009) and *King Corn* (Woolf 2007).

The radical view within the food movements seeks profound and structural changes in the global food system. The flagship of the radical movement is *La Via Campesina*, a global platform of farmers.

The struggle for human rights and the redistribution of power within the global food system are the cornerstones of radical action. From the radical point of view, hunger and poverty are not the result of poor productivity, unemployment and low wages, but are caused by systemic inequalities in the sphere of production and social reproduction.

The vision of the food system as seen by the radical movement is not all too different from that of the progressive movement, in that the radical movement also focuses on the development of local food systems relying on agroecology and traditional knowledge. However, unlike the progressive movement, the radical view concentrates—to a much higher degree—on the balance of power and inherent contradictions within the capitalist system of production. In this regard, it can be said that the radical movement is incomparably more

politicised and critical towards the current neoliberal capitalist food system model.

The radical movement makes as a political demand the struggle for the concept of food sovereignty that requires redistributive land reform, social welfare, right of local communities to resources (soil and water), market regulation (parachutes against price dumping and food over-production, inter alia).

The central pillar of the food sovereignty is the right of all the people to freely and autonomously create the policy and structure of their own food system, tuning it to their needs. In the context of today, given the current global political and economic order, the concept of food sovereignty is indeed a radical idea in the fullest sense of that word. The hegemony of multinational corporations and dominance of developed countries over the global food systems dictate the direction of development that is in full opposition to the idea of food sovereignty.

The food sovereignty is a complex and multidimensional phenomenon, reaching far beyond the agriculture itself and the food production. Although the global systemic setting does not leave much space for development of the idea of food sovereignty, the food sovereignty movement slowly spreads across the society. The idea of democracy, meaning the right of choice and determination of local food systems, increasingly attracts more adherents and players who take over the ideas and demands of food sovereignty.

At present, most of those who advocate the ideas of food sovereignty in this or that way come from the progressive movement. Although the progressives are not radical in their demands and modes of action, the values they represent and cherish are those represented by the food sovereignty movement. Across the length and breadth of Latin America, Africa and Asia new peasant organisations mushroom that fight for food sovereignty. In Northern America and Europe, there is a growing number of agricultural, labour and consumer organisation struggling for a more egalitarian and sustainable food system. Whether due to growing pauperisation, growing social inequalities or growing unemployment, more movements are emerging that advocate more equal and sustainable food system. While there are indeed many organisations struggling for a different food system, their fragmentation is a serious issue on a general level. So as to change the balance of forces within the global food system, that is to open a breach for

systemic changes, it is necessary for all the movements to forge a form of unity in their demands and modes of action.

A renowned theoretician Samir Amin calls this form of unity *a convergence in diversity*.⁷⁰

In its essence, this term refers to the unification of all food movements into a single platform based on common values, while honouring the differences in ideology among stakeholders and different modes of action. Only in this way can a social movement be created that will be capable of changing the dominant balance of forces and making structural changes in the existing order.

Without food sovereignty, no political sovereignty is possible. Without food sovereignty, no sustainable food security or food justice—national or local—is possible.⁷¹

70 Food Movements Unite: Strategies to Transform our Food System (2011, p. 17)

71 Food Movements Unite: Strategies to Transform Our Food System (2011, p. 15)

Agroecology as the road to sustainable agriculture and sustainable local communities

Agroecology provides scientific, methodological and technological grounds for new agrarian revolution on the global level (Altieri 2009).

There is increasing evidence that warns that the increased push toward industrialisation and globalisation of the world's agriculture and food supply imperils the future of humanity and of the natural world. Industrial agriculture, which is corporate controlled and promotes agrochemically based, monocultural, export-oriented systems, is negatively impacting public health, ecosystem integrity, food quality and nourishment, traditional rural livelihoods, and indigenous and local cultures, while accelerating indebtedness among millions of farmers, and their separation from lands that have historically fed communities and families. This transition is increasing hunger, landlessness, homelessness, despair and suicides among farmers. Meanwhile, it is also degrading the planet's life support systems, and increasing alienation of peoples from nature and the historic, cultural and natural connection of farmers and all other people to the sources of food and sustenance. Finally, it is also destroying the economic and cultural foundations of societies, undermines security and peace, and creates a context for social disintegration and violence.⁷²

Industrial farming has brought with itself a number of "ecological diseases" that may be grouped into two categories: diseases of the ecotope, which include erosion, loss of soil fertility, depletion of nutrient reserves, salinisation and alkalinisation, pollution of water systems, loss of fertile croplands to urban development, and diseases of the biocoenosis, which include loss of crop, wild plant, and animal genetic resources, elimination of natural enemies, pest resurgence and genetic resistance to pesticides, chemical contamination, and destruction of natural control mechanisms. Under conditions of intensive management, treatment of such "diseases" requires an increase in the external costs to the extent that, in some agricultural systems, the amount of energy invested to produce a desired yield surpasses the energy harvested.⁷³

The loss of yields due to pests in many crops (reaching

⁷² Miguel A. Altieri, Clara I. Nicholls, *Agroecology and the Search for a Truly Sustainable Agriculture*

⁷³ Gliessman, S.R. 1997. *Agroecology: Ecological Processes in Agriculture*

about 20-30 percent in most crops), despite the substantial increase in the use of pesticides. On a global level, 2.6 million tonnes of pesticides are used annually, worth about 25 billion dollars at the market.⁷⁴

Plants grown in genetically homogenous monocultures are lacking natural defence mechanisms against pests. By crossbreeding different varieties, the scientists wanted to create high-yield crops, but they are more vulnerable to pests than indigenous varieties. On the other hand, industrial farming adversely affects the pest enemies that cannot survive in monocultural systems and thus suppress parasites in a natural way.

Most foods we eat today were created by crossbreeding cultures and varieties grown by farmers without modern technology and industrial inputs. Farmers have cultivated 5,000 varieties—widespread now—and "donated" more than 1,9 million plant species to the world's gene bank (ETC Group, 2009).

In the US alone, 324 million kg of 600 different types of pesticides are used annually with indirect environmental (impacts on wildlife, pollinators, natural enemies, fisheries, water quality, etc.) and social costs (human poisoning and illnesses) reaching about USD 8 billion each year. On top of this, 540 species of arthropods have developed resistance against more than 1000 different types of pesticides.⁷⁵

It is obvious that a plethora of ecological problems is deep-rooted in the capitalist system that supports monocultural systems and the use of extensive inputs in agricultural production and leads to deterioration of natural resources. This deterioration is not only ecological, but socioeconomic as well due to its adverse effect on both rural and urban populations. That is why the issues of agricultural production on industrial scale cannot be considered as a technical and technological problem only, but social, cultural and economic aspects of these issues should be also taken into account. It is particularly important to do it now, as the programmes of rural development imposed by agrobusiness go to the detri-

⁷⁴ Miguel A. Altieri, Clara I. Nicholls, Fernando Funes: *The Scaling Up of Agroecology: Spreading the Hope for Food Sovereignty and Resiliency*

⁷⁵ Miguel A. Altieri, Clara I. Nicholls, Fernando Funes: *The Scaling Up of Agroecology: Spreading the Hope for Food Sovereignty and Resiliency*

ment of consumers, farmers, family farms, the environment and the rural population in general.

Two relatively recent reports (IAASTD 2009; deSchutter 2010) argue that, to provide sustenance for another billion of people—as the world’s population is predicted to grow by 2050—it is necessary to adopt as efficient farming systems as possible. The reports recommend a radical shift to agroecology as a way to ameliorate the food production system and improve material conditions of the poorest strata of population. Both reports were prepared in extensive discussion with scientists, and they emphasise that small food producers can double their output over the next decade using existing agroecological methods.

The solution to the upcoming challenge of feeding the global population lies in the use of socially responsible methods and technologies that respect the principles of environmental conservation. In a world where the arable land is on decline, where fossil fuels become more scarce and more expensive, where the amounts of water are ever decreasing, with drastic climate change accompanied by social unrest and economic insecurity, the only food system that will be able to tackle the challenges of the future is the one with a high level of diversity, productivity and efficiency (IAASTD 2009).

Production systems anchored in agroecology are resilient and energy efficient; they foster biodiversity and are characterised by the principle of social responsibility, and they rely on the postulates of food sovereignty (Altieri 1995; Gliessman 1998). Agroecological initiatives aim to transform industrial agriculture through the transition from fossil-based production that serves the interests of agrobusiness, to production based on alternative agricultural paradigms that develop local and national production systems rooted in local innovations, resources and solar energy. This means to make arable land, seeds, irrigation systems, loans and local markets available to farmers and create incentive economic policies, financial subsidies and market opportunities.

Agroecological system is embedded in the principles of ecology and sustainability on which traditional farmers’ agricultural systems are based. Agroecology is a long string of successful examples of agricultural systems built around the diversity of crops and animal species, which maintain their own systems for managing water, land and biodiversity using complex traditional knowledge. Such systems have successfully fed most of the

world’s population for centuries and continue to feed people in many parts of the world even today (Koothakan and Altieri, 2010).

The agroecological approach assumes the diversification and revitalisation of small and medium-sized farms and the transfiguration of the entire agricultural policy and food systems with the aim of economic and ecological sustainability both for farmers and consumers.

The basics of sustainable management of agricultural systems are:

- **Sustained growth of productivity of agricultural farms;**
- **Continued risk mitigation and improved system resilience;**
- **Promotion of ecologic sustainability, social equality and cultural diversity;**
- **Preservation of natural resources, increased biodiversity and optimisation of ecosystem functions;**
- **Termination of degradation of soil and of the environment in general.**

An increase in yields in food production on 29 million hectares is clearly documented in a study⁷⁶ that included 208 agroecological projects in developing countries. Nearly nine million households have gained a significant benefit in terms of food security and dietary diversity. The land where agroecological principles were applied produced 50 to 100 percent higher yields per hectare of production. Such an increase is a major step forward in ensuring food security for farmers living in remote areas.

As a science, agroecology is in harmony with the vision of rural movements as it does not call into question the reason of the farmers, but builds upon it. Agroecology does not intend to change local agricultural systems in a radical way, but to optimise their design using local knowledge and resources. Also, agroecology mobilises the local community because it assumes participation and horizontal methods of exchange of knowledge and know-how (Altieri and Toledo, 2011).

The agriculture needs radical transformation, which

⁷⁶ Jules Pretty, Rachel Hine: Feeding the World with Sustainable Agriculture, 2001

must be guided by the idea that the changes in agricultural thematic cannot occur without corresponding changes in the social, political, cultural and economic context. In other words, a change is needed that leads to a more just social and economic environment, which would make possible the development of sustainable agriculture for humans and the environment.

The agriculture based on best ecological practices relies on the management of autonomous ecosystems. The management of autonomous ecosystems excludes the use of inputs with high externalities such as fertilisers, pesticides, feedstuffs, GMO seeds and so on, and resorts to external inputs only if the agroecosystem is unable to subsist on its own internal processes. The objective of management is to optimise the primary production efficiency of agroecosystems (nutrients, organic matter and energy recycling) in harmony with the local conditions of soil and climate, and with the social needs of the relevant region. The crucial objective of an agriculture that relies on the management of autonomous agroecosystems is to achieve the desired production output, at the same time avoiding or reducing the degradation of environment and living organisms in the agroecosystem and producing sufficient quantity of high-quality food products.⁷⁷

⁷⁷ Darko Znaor, *Unlocking the Future, The Embryos of Change: Sustainable Agriculture as a Road to Prosperity for the Western Balkans*, Heinrich Böll Stiftung 2014

Stories from the field – small farmers in Serbia

Mirko Vlček – Vlček Farm (young people in agriculture)

Mirko Vlček is a young farmer from the Pivnice village in Vojvodina. After graduation from the Faculty of Agriculture in Novi Sad, he decided to return to his home village and start organic vegetable growing. In his own words, he opted for organic growing because of his deep connection with the nature since childhood, so the idea to pollute the soil engaging in the conventional agriculture, accompanied by copious use of chemical preparations, was absolutely unthinkable for him.

What is especially interesting and inspiring with Mirko is his beginning of engagement in agriculture. He started saving from his frugal student grant. Having gathered some money after a while, he initiated the organic production on the family property. His start was modest - he planted just a few vegetable species on less than a hectare. The first year was a failure as few planted crops produced any fruits, apart from carrots that gave some yield. Determined and confident in his goal, he did not waver because of the initial failure but continued to work persistently. In the beginning, Mirko was working alone, 15 hours a day on the average, guided by the principle of learning by practice. In time, the Mirko's project of organic production started to develop, both in the sense of success in growing and in the size of the cropped land.

Although an alumnus of the Faculty of Agriculture, he says that the education for organic agriculture in Serbia is underdeveloped, but what is lacking most is the link between the faculties of agriculture and the organic growers. He is convinced that better cooperation between the educational institutions and the growers would lead to more interest among young people in Serbia in organic growing, which is a mutually beneficial outcome. Although Mirko managed to overcome all the challenges and hardships of organic production on a "do it yourself" principle, it would have been much easier for him to have had access to better education and mentoring that would facilitate the entire process, especially at the very start.

What makes Mirko stand out from most small farmers is his recognition and awareness of the importance of as-

sociation in order to address the needs and demands of the market in an efficient way. That is why he and a few friends joined forces and founded a cooperative of their own. Although the cooperative is of an informal nature, their mutual relation is that of cooperation, sharing and solidarity. By organising their work according to cooperative principles, they managed to offer a wide range of produce, from fruits and vegetables to flour, cereal crops, cheese and eggs. By joint marketing and product diversification, they are able to

provide market space for themselves and thus attract a wider range of customers. Although their cooperative is informal and micro-level, it represents a successful example of cooperation, and can serve as a good example to the new initiatives in the context of cooperative movement, especially among the young farmers who are not familiar with the advantages offered by the cooperative movement.

In the context of situation in the Serbian agriculture, as the two biggest problems he highlights the low subsidies granted by the state to the farmers and high cost of certification of organic produce. For a hectare of organic production, the state pays subsidies of 6,700 dinars. These funds are very low for necessary investment in further development of Mirko's production plans and capacities. In other words, when the total cost of investment in annual production is put together, these funds are insignificant.

The costs of certification of organic produce do not match the financial capacity of small producers, and they present a major burden on annual expenditures. For each agricultural crop a separate certificate must be procured that costs EUR 300 and is valid for one year. Given that one of the fundamental concepts in organic production is the diversity of crops and that every organic grower tries to cultivate at least a dozen different species, it becomes clear why the costs of certification are a ballast for organic farmers and for those who would like to convert into organic growing. Also, high costs of certification, among other things, lead to the elevated price of organic produce, so the organic products remain inaccessible to a large number of consumers.

An organic grower who manages a stall at the organic market in Belgrade is typical example of unnecessary burdening with absurd certification costs. The said

grower makes his flour from organic barley, buckwheat and spelt. However, he sells the flour by informal means because the organic certificate for the flour would cost 40,000 dinars, regardless of the fact that it is made from grains for which he already possesses a certificate. Such an example best demonstrates how little the institutions, namely the Ministry of Agriculture, care for creating regulations that would facilitate the business of organic growers and, instead, put needless burdens on the organic agriculture sector by imposing unnecessary costs that lead to situation like this.

Regardless of the difficult business circumstances, Mirko is positive and optimistic about the future. Although the organic agriculture is challenging and labour intensive, Mirko says that it is possible to make a decent living from organic growing, which can certainly be encouraging for young people who decide to engage in agriculture.

Svetlana Stojanović – Stojanović Farm (women in agriculture)

Svetlana is a veteran of organic agriculture, as she has been engaged in organic agriculture for 15 years now. Svetlana runs her own farm and she is also the mother of three children she raises by herself. She studied architecture and applied art. Her desire to be connected with the land led her to agriculture. She says that she is a “woman of the soil” and that is why the agriculture is a logical sequence on her life road. She learned about agriculture and natural processes from her grandparents in the village, whom she often visited from Belgrade.

Svetlana maintains organic production on six hectares in the vicinity of Kikinda, in the Serbian province of Vojvodina. What draws attention to her stall at the Belgrade organic market is variety of colours and types of fruits and vegetables. Svetlana grows several old tomato varieties, the seeds of which she keeps and produces by herself. However, for the seeds from her own production she cannot obtain organic certificate due to legal regulation. In the context of food sovereignty, the right to seeds, their preservation and reproduction is one of the fundamental principles for which the food sovereignty movement fights. However, in Serbia, just like in the rest of the world, the seed production is controlled by a small number of corporations, which have no interest in small producers keeping and producing their own seeds. Nevertheless, Svetlana grows old varieties and

sells them because she values that and, in that way, she has a certain strategic advantage over the other producers who do not grow such varieties.

As with all other organic growers, the high cost of organic certification is a large burden on an annual basis. Apart from this, Svetlana has the same problem as the aforementioned flour producer: every year she has organic fruits in excess that are left unsold at the stall, so she wants to use them for preparing organic jams for sale. However, she gave up when she saw that the certification bodies require about EUR 1,000 for each jam. The final outcome of such regulation is that Svetlana lost a vast quantity of fruits that she was unable to sell fresh but could use it to make jam, which would provide additional income.

Since Svetlana has been working in agriculture for a long time, she also offers the opportunity of supplying families with seasonal fruits and vegetables, on a “green box” principle and in a variety of forms: from weekly to monthly to annual supply. On the weekly basis, the minimum order is about 1,500 dinars, two to three thousand dinars for a fortnight, while the monthly order would cost about five to six thousand dinars. She created an interesting one-person annual package that costs EUR 365, which she calls symbolically “One Euro a Day”. However, because of the time needed for organisation and logistics of this kind of distribution, the concept did not fully come to life, primarily for the lack of time - as Svetlana has to share her time between working in the field and rearing her children. However, if Svetlana had a person who would manage the organisation and distribution, she would very much like to apply this model of business in practice.

Subsidies for organic growing and their role in production planning are trivial. Considering the amount of money and all the forms that must be filled for obtaining them, Svetlana says that the subsidies are not worth the effort.

As far as the situation with the organic growing that takes as little as 0.28 percent of the arable land in Serbia is concerned, Svetlana sees as the biggest problem the fact that very small number of farmers are competent enough to devise a good concept of production and development strategy. When the weak opportunities for education in organic growing are added to the equation, we get the situation as it is.

Svetlana is particularly concerned about the situation of women in rural areas. She points out that the biggest problem is the separation of families due to difficult economic situation in the villages, where most of fathers are forced to work abroad. As an example, she lists all her female neighbours whose husbands, all of them, work abroad. She says that the family is the pillar of existence in the countryside and that family separation is a big problem for the rural population and the very future of the village.

Svetlana also says that one of the problems of organic growing is its labour intensity. Organic farming requires much more work than conventional farming. This means that more people must be engaged, which in the end leads to higher costs of production.

On the other hand, Svetlana loves her job, although she works too much and sometimes does not have enough time for her family. She says that her greatest joy is when she sees the same people coming to her stall, by themselves at first, and then, as families are built and children born over the years, they come back to Svetlana with their children.

Dragana and Dalibor Đorđević – Đorđević Estate, Kosjerić, Serbia

Agricultural Estate “Đorđević” is located in Seča Reka village, a few kilometres away from Kosjerić in Western Serbia. Their farm is spread over six hectares. Although they do not have organic certificates for their produce, all fruits and vegetables are grown in strict compliance with organic farming principles. Moreover, Dragana and Dalibor plans include production on the principles of permaculture, being mindful of the complete ecosystem surrounding their farm. Apart from an old tractor, they do not have any other machinery, and everything is done by hand. However, thanks to the permaculture method of using cover crops (clover or lucerne as green manure), it is not necessary to till and aerate the soil, but only to remove the cover crop before the new planting. They also make their own seedlings as the certified seeds are expensive and hard to get - a small bag of organic seeds costs about 300 dinars, while conventional seeds cost only 30 dinars.

Dragana and Dalibor have moved to Seča Reka ten years ago, taking the property of Dragana’s grandparents. Dragana has moved in from Belgrade, and Dalibor

from Niš. They both came with an idea to escape from the city and work on fields in the countryside. They have two children, Vuk and Iva. However, the country life and farming are very labourintensive and demand a lot of investment while the results are uncertain; on the other hand, the advantages of such life—peace, natural environment and healthy food produced by their own hands—bring great satisfaction, says Dragana.

Their largest hurdle is the lack of funds for investment in proper production equipment, such as better quality polytunnel foil durable enough to withstand bad weather. The foil they use now is very cheap and of the lowest quality, and unsuited to harsh weather that sometimes hit their area.

Just like many other people in Western Serbia, Dalibor and Dragana grow raspberry and, like all the other growers, they have problems with purchase price, that is with raspberry purchasers. Dragana says that this year they were offered 80 dinars per kilo, although their raspberry comes from organic farming. Raspberry classification is made according to size, not quality.

Apart from the brazenly low price, Dragana emphasises the climate change as an even bigger problem. According to her, over the last few years the weather has greatly changed and become unpredictable. In earlier time, a hailstorm could be expected once in two or three years, and now it can happen twice or three times in a single year. This year heavy hails destroyed much of their raspberry and, instead of the expected seven tonnes, they had only 250 kilos of raspberry. In the past, the agriculture followed the folk calendar according to which it was possible to make the time schedule of the field works. It is no longer possible today, and the production planning is much more problematic and uncertain than before.

The climate change has also led to a decline in raspberry quality and more frequent infestations. All the problems in raspberry production considered, it can be said that raspberry is no more “red gold”, as it was flattered a few years ago. Dragana says that, because of the climate change, open field growing becomes nearly impossible. This is why they plan to migrate all of their production into polytunnels, which is a problem due to lack of funds for investment.

On their farm, Dragana and Dalibor also have an organic apple plantation. As they do not sell their produce on a

farmer's market, the apples are sold to a juice-making company. This year, apples were sold at 8 dinars per kilo, while, a few years ago, the company offered as little as 3 dinars per kilo.

Recently, the IPARD programme, EU's Instrument for Pre-Accession Assistance in Rural Development, was launched in Serbia. Dragana and Dalibor wanted to apply for a grant, but, due to extensive paperwork that must be submitted and their inexperience in project writing, they were unable to submit their application. They cannot afford the cost of a consulting firm that would help them prepare the project. That is why Dragana and Dalibor are not sure how to continue working in agriculture in the current circumstances, although they would love it more than anything. Dalibor is forced to drive lorries in addition to farming, as it is the only certain and constant income in their household.

Even though there are funds available from EU pre-accession assistance programmes, the scale of their use is still low in Serbia. Inexperience in project preparation is a notorious problem of every smallholder in Serbia, and a good part of the funds are left unused. The lack of state advisory services supposed to offer support to small farmers in the context of using the funds provided by the EU is particularly pronounced.

So far, Dragana and Dalibor have managed to live up to their dream of country living, thanks to their enthusiasm, modest way of life and their own food. The largest factor supporting their decision are their children who live in a natural environment, away from the city crowd and stress. In any case, a lot of love and attention is behind everything they do. Whether it be agriculture, their children or something else.

Ivanov Family Agricultural Estate (preservation of indigenous livestock breeds)

The agricultural estate of the Ivanov family is located near Dimitrovgrad, Southeast Serbia. Their primary activity is donkey breeding and milk production. Currently there are 47 donkeys of the indigenous Balkan Donkey breed on the farm, and the daily milk yield varies between two and eight litres, depending on the season. Donkey milk is sold at EUR 15 per litre. Approximately one thousand litres of milk are sold annually. Sergej's auxiliary business is herdbook bookkeeping.

The total annual cost of running the farm is about EUR 10,000 and includes hay purchase, procurement of materials for work and website⁷⁸ maintenance. Lacking cash, mechanisation and arable land, the farm is forced to buy as much as 90 percent of feed (mostly hay). The milk production peaks in autumn, winter and early spring.

The first location where the Ivanovs carried on their farming business was the village of Kamenica, in the area of Stara Planina. In addition to donkey breeding, the Ivanov family reared indigenous goat, cow and horse breeds. Remoteness of the village, poor infrastructure and demanding living conditions left a mark on the financial stability of the household, and the family decided to move the farm to an area not far from the town of Dimitrovgrad.

As the new location was not suitable for breeding all the animals they had, the family have entrusted all the animals, apart from donkeys, to the care of their farmer friends, hoping that in the years to come they will be able to create conditions for their return. Given that the location of the farm was changed, the estate still invests in improving the working conditions at the new location. They plan to build a special facility for donkey milking, and investments are also needed for building new premises for primary milk processing.

The farm's production is mainly for the domestic market. Although there have been offers and calls from abroad, the foreign sale would be unprofitable due to low production and high transport costs. The bulk of the milk is sold at the farm's doorstep or through local milk distributors. The limiting factor in the sale of donkey milk is the specificity of its ingredients. Donkey milk contains a small amount of casein and a lot of immunoglobulin, and, by composition, is closest to human milk. The process of pasteurisation, which is legally obligatory in Serbia, causes deterioration of the milk and there are less beneficial ingredients after pasteurisation. The household members emphasise that the now present direct sale is most desirable for them, as it is the best marketing for the farm.

Sergej Ivanov, a household member, points out that science has proven the beneficial effects of donkey milk on skin diseases and diseases of the respiratory system. Donkey milk is an immunostimulant and is also used as

⁷⁸ See more on <http://www.magarecemleko.rs>

an auxiliary product in chemotherapy.

Sergej Ivanov's farm has been granted the subsidies for preservation of indigenous breeds amounting to 10,000 dinars per multiplier. They used incentives for the development of rural tourism and for purchasing donkeys, but did not take any loans.

The household members emphasise as the main problems in their business the low level of incentives, illegal imports of agricultural products and low level of consumer awareness about the benefits of use of local produce. According to them, the fundamental problem of agriculture in Serbia is the lack of awareness among farmers on the importance of cooperative labour.

Orlović Agriculture (both city and country)

Agriculture Orlović is a smallholding engaged in growing and sale of natural garden produce (tomatoes, onions, garlic, radishes, cabbages, cucumbers...). The Orlović family lives in the city of Kraljevo, and their arable land is located in the village of Bapsko Polje, in the valley of the Western Morava, not far from Kraljevo, Central Serbia. The household is among the few urban families whose members have decided to buy land in the country and live off farming and food production. They say that they wanted to take advantage of the high quality of arable land in Central Serbia and of the fact that the land is relatively inexpensive, so that the investment in agriculture seemed very rational. At present, they manage a little less than three hectares, using the principles of self-sustainability and organic growing.

A few years ago, the household has commenced the process of organic certification and, from March 2019, their products will be labelled as organic. For now, all the vegetables grown on their farm are labelled as "in-conversion" products, which is only a step away from certified organic products. The customers are offered fresh free-range eggs from hens that have access to outdoors and are fed grains from own production. They also have on offer free-range chicken meat.

In addition to vegetable growing, the household works in the tourism business as well. On their property, they have a building with two rooms and five beds in total, and a 25-person dining room which can also be used as a conference room. The household plans include new

investments in tourism, due to financial and marketing benefits.

The main selling strategy of the household is avoiding merchants and retail chains. They sell their produce by themselves by home delivery in the area of the City of Kraljevo, or by direct sale on their property or at the local farmers' market. They point out that the sales through merchants are not profitable and that for such sales they would have to engage in incomparably more extensive cultivation and reorient towards monoculture growing.

This household is planning to continue to improve their organic production and to maintain the principle of self-sustainability in the forthcoming period and to construct processing facilities so as to be able to make finished products from their own vegetables and further improve the tourist offer.

Marko Orlović, a member of the household, asserts that the biggest problem of domestic, small producers is the unregulated import of agricultural produce. In his opinion, the state would have to take the side of domestic growers, which is presently not the case, and to protect them by strictly controlling the import of products that are produced domestically. He also points out that the organic growers are in a more difficult position than other producers, due to the small number of places designed for sale of organic produce and to the low amount of funds from the agricultural budget allocated for the development of organic production. He gives an example of the City of Kraljevo, where in the current year as little as 3 percent of the agricultural development budget are earmarked for the promotion of organic growing. However, in the draft budget for the next year no funds are earmarked for this purpose.

Although they emphasise that the market struggle is very difficult and that production and sales have their own crisis moments, the household members have serious plans for the future and see their prospects in agricultural production as promising.

Sustainable production of food for all - or “business as usual” scenario?

Considering all the aspects and needs of the society, we can say that the food production is at the very core of nearly all environmental and socio-economic problems of this day – either as a source or as a solution to these problems.

Food and agriculture are in the focus of increased public attention and gain a more prominent place on the political agenda. Concepts and practices whose purpose is to promote more sustainable agriculture and food consumption are increasingly more recognised. This includes organic agriculture, food rights and food justice, local food, urban agriculture, and so on. There is also an increasing awareness among the people that they can be “food citizens”, i.e. that the consumers can vote on a daily basis for “an added value and sustainability bag”⁷⁹ by buying from small and organic producers. Also, there is a growing awareness that the price we pay for food does not include some of the environmental and social costs associated with industrial agriculture (for example, public health costs caused by poor nutrition).

However, possibly the biggest challenge ahead us in the context of global food production is the climate change. In addition to all the negative social and economic impact created by the capitalist model of production on a global level, the logic of perpetual economic growth driven by fossil fuels is most dangerous for the future of food production, but as well as for the future of civilisation as a whole. Notwithstanding the fact that the word “sustainability” has become a mantra repeated in virtually all political and economic contexts, from renewable energy sources to sustainable communities, the scenario of economic development is still dominantly relying on fossil fuels as the main energy source. The production of food for global population driven by fossil fuels and agrochemical inputs certainly does not meet the sustainability standard, whether for the humans or the environment.

In 1990, the Intergovernmental Panel on Climate Change (IPCC) submitted its first report on the likely fate of a warming world. The facts and projections served as the basis for the United Nations Framework Convention on Climate Change (UNFCCC), signed at the Earth Summit in Rio de Janeiro in 1992 and ratified by all UN

members, who pledged to ‘prevent dangerous anthropogenic interference with the climate system’ by cutting their emissions of greenhouse gases, chief among them carbon dioxide. Twenty year later, in 2012, global CO₂ emissions were 58 percent higher than in 1990 (Peters, Boden et al., 2013).

It takes time before a certain quantity of CO₂ emissions is realised as a corresponding amount of warming, and before that warming takes its full toll on the ecosystems. For every emission added to past output, the atmospheric concentration of the gas increases, its effect further augmented in accordance with ‘the fundamental tenet of climate science: emissions are cumulative’. The release of one tonne of CO₂ would not be so dangerous were it not for the billions of tonnes already out there; it is the total accumulation that pushes temperatures upwards, and the more that has been emitted, the smaller the prospect of limiting the ongoing rise.⁸⁰

The longer business-as-usual persists, the harder it becomes to break out of it. Every round of new pipelines and tankers and deep-water drilling rigs encumbers the next decades with an even more ponderous mass of infrastructure into which carbon has been locked.⁸¹

The problem with the global warming is that, in the context of climate change, it manifests itself almost imperceptibly. If a large company releases toxic chemicals in a poor country, the violence is gradual, ‘by the lapse of time separated from the original cause’, it never occurs simultaneously with the act itself. It is the same thing with burning the fossil fuels.

Food production is one of the main causes of climate change. The process of food production and its journey to our table cause nearly 50 percent of all greenhouse gases generated by humans.⁸²

Fertilisers, machines and other agricultural technologies based on fossil fuels contribute significantly to the greenhouse effect. On the other hand, the deforestation for the purpose of production of animal feed, excessive food packaging in containers and long distances that the food travels during transport close the cycle of pollution generated by the food industry.

⁸⁰ Andreas Malm, *Fossil Capital*, 17, 2018

⁸¹ Andreas Malm, *Fossil Capital*, 19, 2018

⁸² GRAIN, *Food and Climate Change: The Forgotten Link*, 2009

⁷⁹ In a sense that the economic, ethical and environmental values of the bag are higher than those of standard industrial products.

What will be the consequences of climate change on agriculture in Serbia and the region? According to estimates, the region's agriculture will be among the sectors suffering the greatest damage due to water scarcity (droughts) and temperature rise (UNDP, 2009). In the period from 1994 to 2003, the agricultural land in the Pannonian Plain, the most fertile agricultural region in the Western Balkans, received much less water than in the period from 1961 to 1994. From 1994 to 2003, the average annual deficit in water inflow was 57 litres per square metre, which is a deficit by 19 percent higher than in the period from 1961 to 1994 (Šimunić, Senta et al., 2006).

Also, the heatwaves are increasingly more frequent because of the increasing prevalence of temperatures higher than 25°C, which is the threshold above which the temperature starts to affect the crops. It is expected that, in the region, there will be one year with drought in every three years (Vučetić, 2006a, 2006b).

A recent study on climate change in the Western Balkans describes in detail the adverse phenomena of climate change due to temperature rise.⁸³ In addition to agriculture, the warming of the Balkans will decrease the quantity and quality of potable water and increase mortality due to more frequent heat waves.

The loss of organic matter in the soil (humus) and the soil acidification is an advanced process that will continue as long as the industrial agriculture is given primacy in the food production system. In the last 70 to 100 years, the agricultural soils in the region have lost about 50-70 percent of their organic matter (Martinović, 1997a). If there is no change in agricultural practices in a short time, this process is likely to advance, and the agricultural soils in the region in 2050 will be "thirsty", acid and less fertile. The loss of biodiversity—both in plants and animals—as a by-product of this developmental logic is a story that many scientists have already elaborated in greater detail.

New systems of food production could be the main solution to the problem of the climate change, combined with the transition from fossil to renewable energy sources. If measures are taken to restructure agriculture and food production in accordance with the principles of the food sovereignty, the engagement of small producers, agroecology and local markets, global

emissions could be halved.⁸⁴ The soil itself is the largest world's storage of carbon dioxide, methane and nitrogen oxides (Batjes, 1996, Kutsch et al., 2009, Nieder and Benbi, 2008, Schaufler et al., 2010, Schlesinger and Andrews, 2000).

Using Europe as an example, the scientists have demonstrated that the trend of industrialisation in agriculture and forest logging leads to the soil becoming the main source of greenhouse gases (Bahn et al., 2010). However, organic agriculture has the reverse effect, meaning that it helps in so-called "locking" of greenhouse gas emissions. The researches have shown that the practice of revitalisation of organic matter by agroecology can compensate, on an annual level, 24-30 percent of total global greenhouse gas emissions.⁸⁵

Therefore, the advantages of organic agriculture over industrial agriculture are multiple. In addition to much lower greenhouse gas emissions in organic agriculture, it also allows the locking of atmospheric gases.

However, in order to make the agriculture and food production sustainable for the environment and the humans populating it, radical systemic changes are needed in the global food production system. At the same time, this entails radical changes in the existing system, that is in the capitalist model of production and constant fossil-based economic growth that endangers the existence of the entire planet.

To achieve systemic change, it is necessary to reassess the balance of power and redistribute the power within the society. In other words, to demand democratic control over the global food production system. In this context, the movement that reappraise the existing balance and injustice within the global food production system is the food sovereignty movement.

On the other hand, the stakeholders coming from all the social spheres need to unite and create a movement powerful enough to exert pressure on hegemonic institutions and corporations, in order to move towards a more democratic, just and egalitarian system.

With this study, we tried to summarise and elaborate the fundamental aspects of food production thematic, as well as the heterogeneity and complexity in approaching these issues. Taking an interdisciplinary approach,

83 Regional Cooperation Council. Study on Climate Change in Western Balkans, 2018

84 GRAIN, Food and Climate Change: The Forgotten Link

85 GRAIN, Earth Matters: Tackling the Climate Crisis From the Ground Up

from political economy, food movements and their views to environmental science, we have endeavoured to integrate, in a holistic way, all the systemic societal aspects that affect the food production thematic. The study intertwines the Serbian and the global contexts of agriculture and food production, to let the reader acquire a wider picture and have the opportunity to compare the local and global contexts.

This study endeavours to bring the concept of food sovereignty closer to all those who are interested in the food production thematic, whether it be those who only want to eat healthy or the people interested in the political and economic milieu and all its implications in the context of the food system.

Every attempt to materialise a systemic change necessitates participation of as many people as possible in the process of change. The first step is familiarisation with the fundamental political, economic and ecologic processes in the food production system, and what follows is the practical implementation of the change.

We hope that this study—at least to some extent—will be able to highlight the necessity and importance of the food sovereignty in the framework of creation of a better and more just food production system, both for those who make our food and those who consume it.

Literature

- *Agrifood Atlas*, Rosa Luxemburg Stiftung, Heinrich Böll Stiftung, 2017
- A. Graham, S. Aubru, R. Kuneman, S.M. Suarez, *Land Grab Study*, CSO Monitoring 2009-2010. Advancing African Agriculture, 24-28
- Andreas Malm, *Fossil Capital*, 2018
- Baker-Smith Katelyn, Attila B.M. Szocs, *What is Land Grabbing? A Critical Review of Existing Definitions*, 2016
- Darko Znaor, *Unlocking the Future, Embryos of Change: Sustainable Agriculture as a Road to Prosperity for the Western Balkans*, Heinrich Böll Stiftung, 2014
- David Harvey, *A Brief History of Neoliberalism*, 2005
- Dogarava A. Bello, *The Role of Cooperative Societies in Economic Development*, pp. 7, 8, MPRA, 2005
- Đurić Katarina, Milović Slavica, Hamad H.H. Hyba, Prodanović Radivoj, Bošković Jelena, *Comparative Analysis of Property Structure in the Republic of Serbia and the EU*, 2016
- Eric Holt-Giménez, *A Foodie's Guide to Capitalism: Understanding the Political Economy of What We Eat*, 2017
- Eric Holt-Giménez, Loren Peabody, *From Food Rebellions to Food Sovereignty: Urgent Call to Fix a Broken Food System*, 2008
- Eric, Holt Gimenez, Annie Shattuck, *Food Crises, Food Regimes and Food Movements: Rumbblings of Reforms or Tides of Transformation*, Journal of Peasant Studies, 2011
- GRAIN, *Food and Climate Change: The Forgotten Link*, 2011
- GRAIN, *Earth Matters: Tackling the Climate Crisis From the Ground Up*, 2009
- Ivan Radenković, *Foreign Direct Investments in Serbia*, Rosa Luxemburg Stiftung, Belgrade
- Jelić S., *Vulnerable Pounts of Serbian Agriculture*, Sociološki pregled, vol. XLIV 2010
- Jules Pretty, Rachel Hine, *Feeding the World with Sustainable Agriculture*, 2001
- Kleanthous Anthony, *Pigs and the Environment*, BPEX report, 19, 2009
- *Land Grabbing and Land Concentration in Europe*, Transnational Institute, Amsterdam 2016
- Maria Elena Martinez-Torres, Peter M. Rosset, *Dialogo de saberes in La Via Campesina: Food Sovereignty and Agroecology*, The Journal of Peasant Studies, 2014
- Miguel A. Altieri, Fernando R. Funes-Monzote, Paulo Petersen, *Agroecologically Efficient Agricultural Systems for Smallholder Farmers: Contributions to Food Sovereignty*, 2011
- Marković Katarina, *Agricultural Cooperative Movement in the Republic of Serbia – Conditions and Perspectives*, 2007
- Miguel A. Altieri, Clara I. Nicholls, *Agroecology and the Search for a Truly Sustainable Agriculture*, 2005
- Miguel A. Altieri, Clara I. Nicholls, Fernando Funes, *The Scaling Up of Agroecology: Spreading the Hope for Food Sovereignty and Resiliency*, 2012
- Miladin Ševarlić, *Agricultural Land in the Republic of Serbia*, 2015
- Mitrović M. Milovan, *Villages in Serbia, Change of Structure and Problems of Sustainable Development*, pp. 83, 84, 2015
- *Our Land, Our Choice, The Great Land Heist*, 2014
- Philip McMichael, *A food Regime Genealogy*, The Journal of Peasant Studies, 2009
- *Agricultural census, Agriculture in the Republic of Serbia 2012*
- Radenković Ivan, Solar Maja, *From Field to Socialist Industrialisation to Table and Social Life*, publication *We Gave You the Cities*, p. 153, 2018

- Radovan Pejanović, *Development Problems and Priorities of Agriculture in Serbia*, 2013
- Radovan Pejanović, Nedeljko Tica, *On the Reasons for Crisis of Agriculture in the Republic of Serbia*, 2005
- Raj, Patel, *Journal of Peasant Studies*, 2009
- Samir, Amin, *Food Movements Unite: Strategies to Transform Our Food Systems*, 2011
- Srećković Milenko, *History of Agrarian Reforms and Consequences of Privatisation in Agricultural Sector, Section 4.3. Privatisation of State-Owned Agricultural Holdings, Profit and Loss Account* Publication, Centar za politike emancipacije, Belgrade 2015
- Srećković Milenko, *Land Concentration, Land Grabbing and People's Struggles in Europe, The Case of Serbia*, Transnational Institute, p. 194, 2013
- Stephen R. Gliessman, *Agroecology: Ecological Processes in Agriculture*, 1997
- Steve Suppan, *Challenges for Food Sovereignty*, Institute for Agriculture and Trade Policy, 2008
- *Privatisation in Serbia: Case Study*, Belgrade, NALED 2014
- *The Impact of the Common Agricultural Policy on Developing Countries*, p. 16, 2018
- *Extent of the Farmland Grabbing in the EU*, Transnational Institute, 2015
- Z. Simonović, *Structure of Farms in the Republic of Serbia in Accordance with the Size of Agricultural Land*, 2017
- *Act Amending the Agricultural Land Act*, 2017
- *Cooperatives Act*

