

## ABOUT THE CAUSES OF AGRICULTURE CRISIS IN THE REPUBLIC OF SERBIA

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### Summary

*Agriculture of the Republic of Serbia is in the long-term and the multiple crisis: crisis of management, organization crisis, financial crisis, crisis of competitiveness, investment crisis, market crisis, crisis of agricultural policy, crisis of confidence and other forms of crisis. The aim of this paper is to investigate many causes of the limitations of agricultural development of the Republic of Serbia, where the authors specifically point out the following: unfavourable agrarian structure and the lack of organization of farmers; unregulated market of agricultural products; lack of competitiveness; inadequate role of the state; deagrarianisation and depopulation of villages. A qualitative method of analysis, synthesis and comparison, as well as supporting quantitative statistical methods were used. Authors concluded that systematic and radical measures and actions are needed at the macro and micro level, in order to overcome a difficult situation in which our agriculture is, as a strategic activity of the Republic of Serbia.*

**Key words:** *Crisis of Agriculture, the Republic of Serbia, Causes, Consequences, Measures and Actions.*

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## Introduction

The crisis of agriculture in the Republic of Serbia takes a very long time. Historical roots of our agrarian crisis date back to the period between the two world wars, where we had the problem of agrarian overpopulation, then after World War II the problem of deagrarianisation (due to industrialization strategy). Inflation, hyperinflation, sanctions, wars, bombings, which have happened in nineties, have left disastrous **consequences** on agriculture and agricultural sector. The first decade of this century was marked by drought and floods (climate change), the unfavourable economic position of agriculture and at the end the global economic and financial crisis (Pejanović et al., 2005).

The global economic and financial crisis had negative impact and still has negative impact on the (agricultural) economy of the Republic of Serbia. Agriculture, unfortunately, suffers the most, because it has not recovered even after a long cycle of crisis in the 90's of the last century. A striking indication of the crisis is **the crisis of animal husbandry**, which gets worrying (For instance: after the collapse of the former Yugoslavia, Serbia had about a million sows and now has, according to experts estimation, around 350,000 breeding animals).

The aim of this paper is to investigate many causes of the crisis of agriculture of the Republic of Serbia. Numerous causes of the crisis are reduced to **the permanent unfavourable economic situation of agriculture. Wrong strategic macroeconomic concept** causes that this branch of agriculture, with exceptional comparative advantages, is inadequately treated and is inappropriately positioned. **Climate change** is also an important cause of the crisis.<sup>4</sup>

Complex and numerous factors of the crisis of Serbian agriculture can be classified into several, in our opinion, **the key groups of problems**: unfavourable agrarian structure and disorganization of commodity producers, unregulated market of agricultural products, un-competitiveness, inadequate role of the state, deagrarianisation and rural depopulation.

A qualitative method of analysis, synthesis and comparison, as well as supporting quantitative statistical methods were used.

### Unfavourable agrarian structure and disorganization of farmers

The economic structure of agriculture of the Republic of Serbia has long been dominated by **small commodity production** (an average of about three hectares compared to more than 20 hectares in the EU) on our small farms. The transition has not managed to solve this big problem.<sup>5</sup>

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4 According to the estimations of the Serbian Chamber of Commerce climate change (drought) led to the yield losses in 2012 from 10 to 50 per cent of economically important crops such as corn, soybeans, sunflowers, sugar beets, vegetables and fruits.

5 According to the Census of agriculture in 2012 the average farm in Serbia uses 4.5 hectares of agricultural land, has one tractor, one cow, four pigs, three sheep, 26 poultry and one bees colony.

Medium-sized farms (from 1-5 ha), which are in Serbia 76.8% (Census 2002), has character of **semi-subsistence farms**: non-specialized, “mixed” farms; renting a small land, with few employees; having outdated machinery, with small economic power; lack of investments; credit debt; low level of irrigation use; unfavourable age structure; unfavourable educational structure; lack of entrepreneurial ideas and initiatives; low yield; low market surplus (Pejanović et al., 2007).

As for the **large farms**, they have gone through and still go through the process of privatization. In many cases, privatization has been a failure, with enormous negative consequences, and in terms of production and in terms of employment (e.g. “PIK Bečej”).

There are, however, very successful examples of privatization (e.g. “Delta Agrar”). These companies should be accepted as a positive example of our agricultural companies, not see them with prejudice, stereotypes or even with ideological signs.

**Disorganization** in our agriculture is reflected in the lack of organization of farmers (associations, cooperatives, clusters): cooperation and contract production are underdeveloped; unregulated conditions of purchase and purchase prices (mainly at the expense of primary producers); buyers (usually) do not have HACCP certification; demand is unstable (oscillatory) and adapted to their own needs at the expense of primary producers; payment system is unregulated (long, uncertain and at the expense of primary producers); high participation of dealers (especially in the purchase of cattle); abandonment of commodity producers to the cruel market rules and the uncertain fate of the business.

**Business networking** of commodity producers could have a significant positive effect: cheaper purchasing of inputs, easier and more secure placement, exchange of knowledge and experience, access to better credits, cheaper and faster certification, branding, better education and training, legal protection and so on. In one word, greater competitiveness of commodity producers could be achieved in this way.

### Unregulated markets of agricultural products

**The transition** of the Serbian economy has left a **negative impact** on agriculture (Pejanović et al., 2005). Administrative management model has been replaced by a liberal market economy. Also, **market**, as a key institution of modern democratic society, **is not regulated**, which had and still has negative effect on business entities in agriculture. The market **is not developed or efficient**, even when it comes to the commodities market, futures market, money market, capital market, labour market, rental and trade land market (outdated land register and cadastre system, the unresolved issue of public property in cooperatives, unfinished registration, etc.), (Pejanović et al., 2007).

**Unregulated market** of agricultural products is reflected in:

- **Monopolization of demand** (Market is dominated by a few processors (oligopoly) that have deal through the cartel, especially regarding to the purchase prices of agricultural products);
- **Atomization of offer** (Large number of relatively low associated small agricultural producers on the supply side - a convenience for monopoly);
- A large percentage of the market is in **unregulated flows** of purchase and payment (e.g. high participation of “dealers” in the purchase of cattle, etc.);
- **Volatility in prices** of agricultural products, followed by price disparity, especially in animal husbandry;
- **Administration of market** (“Regulation on restrictions of margins...”);
- Inefficient market **inspection authorities** (veterinary, sanitary, phytosanitary and other agricultural inspections);
- Lack in **purchasing and distribution** centres and cooperatives in the function of purchase and distribution;
- Underdeveloped **commodity-stock market** (undeveloped conditions for commodity-stock business and futures trading of agricultural products);
- Inefficient system of **commodity reserves**;
- The domestic market is **small-scaled and with low purchasing power**,
- **The foreign market** is demanding, slowly and insufficiently occupied.

### Uncompetitiveness

**Competitiveness** is the imperative of the modern market economy. In developed economies everything is subordinated to the competitiveness at the micro and macro level. Unfortunately, the transition in Serbia hasn't made of agriculture modern, efficient and profitable economic activity (Pejanović et al., 2009). Economic entities in agriculture are not transformed into economically strong and capable commodities, which equally are able to respond to the growing needs on the world market. Surplus in foreign trade exchange of agricultural products, which Serbia has since 2004, is more an indicator of our potential options, then our real competitiveness (Pejanović, 2013).

**Uncompetitiveness** of agriculture, farmers and agricultural products in Serbia is reflected in the following:

- Our agricultural production is **expensive and inefficient** (costs and prices);
- **Extensiveness** of total agricultural production (0.25 conditional units of cattle per hectare, compared to 0.98 in the EU). Extensiveness is the consequence of relatively **low productivity**, inefficient land policy, old technical-technological equipment, low level of business connections (Jefferson Insitute, 2003);
- Underdeveloped and insufficient use of **irrigation system** (small percentage of

irrigated land);

- **Unfavourable business environment** (a relatively high index of business and political instability, high levels of corruption, administration, etc.);
- **The quality** of the products does not meet the EU standards (slow implementation of quality standards, slow development of the quality through knowledge and innovations, slow implementation of the HACCP program - independent or integrated with ISO 9001, slow implementation of GLOBALGAP);
- Most of our exported agricultural products contain a large proportion of primary production factors (corn, raspberries, fruit, livestock) and **a small proportion of the added value** (knowledge applied through technology and marketing);
- **Agro-industrial chain** is disrupted and “torn” (production, processing, trade, logistics);
- We do not have **integrated offer** and we have lack of knowledge of export markets;
- Underdeveloped **distribution** phase, **promotion** phase and other marketing activities related to agricultural products;
- In unstable and uncertain economic conditions **entrepreneurship** and entrepreneurial spirit are underdeveloped (slow development of small and medium-sized enterprises in the agribusiness);
- Underdeveloped and weak lobbying system (**agrarian lobby**).

Entry into force of the Stabilization and Association Agreement (as of 1 January 2013) could be a serious problem to our uncompetitive agrarian commodity producers.

### **Inadequate role of the state**

Neither other important economic institutions, the state, in transition period in Serbia did experience adequate transformation. On the one hand, in the “head” of commodity producers is still desire for paternalistic role of the state, on the other hand the state has proved powerless and still shows its undefined role in creation and implementation of the “rules of the game”.

**Inadequate government’s role** in agriculture is reflected in the following:

- The lack of a **national strategy** for the whole economy, as well as the action program for agriculture and rural development;
- Inexplicable and unacceptable **low agricultural budget** (approximately three per cent of the total budget in these last few years; in 2012. amounted only 2.4 per cent of the total budget).
- Insufficient and uncertain **incentives** for agricultural production and rural development through:
- Direct incentives - premiums, incentives for production, regression, support of non-commercial farms,

- Market incentives - export incentives, the cost of storage, credit support,
- Structural incentives - rural development measures, improvement of protection and quality of agricultural land, a measure of institutional support;
- Agriculture is treated as a **”social shock absorber”** of society;
- Unresolved system of agricultural **financing** and **investments** in agribusiness sector;
- Undeveloped **register** of farms;
- Undeveloped network of **advisory services**;
- Unwillingness to **climate changes**, which take their “tribute”;
- Undeveloped system of **recording and reporting** in agriculture;
- Undeveloped system of agricultural **accounting data evidence** (for evidence of incomes and costs of farms),
- Undeveloped integrated agricultural **information system**;
- Inefficient **measures of agricultural and rural policies** (insufficient **protection** of domestic agricultural production, including campaign “Buy Domestic”; **unsolved** issue of agricultural pensions, farm debts, etc.);
- The problem of **agrarian legislation**, which is incomplete and under-used;
- Inadequate **land policy** (which is reflected in the existing law on agricultural land, which leads to serious problems in the application);
- Lack of **institutions** (e.g. Development Bank, Agricultural Commerce, Food Agency, etc.);
- Non-regulated **property relations** (privatization, restitution);
- Lack of **planning function** (neo-liberal concept of agriculture, which is mostly abandoned but here is still in use);
- Lack of adequate and long-term policy of **state intervention** on the market of agricultural products.

### **Deagrarisation and depopulation of villages**

Deagrarisation and depopulation of villages in the Republic of Serbia are serious **problems** of agricultural and social development (Bogdanov, 2003).

**Deagrarisation** is a process of migration from the countryside to the cities. In Serbia it is the process of mass abandonment of individual agriculture and transition into so-called “social economy”, including previous social agriculture and various civil services (Pejanović, 2009). It is a common phenomenon of modern society, but it is extremely strong in our case. In SFR Yugoslavia since the war till census in 1981 about six million people moved from agricultural to non-agricultural status. Since the mid-fifties of the last century scope of the migration was higher than the population growth (Pejanović, 2011). Qualitative changes in the development of agriculture and rural areas are happening in our country. In fact, since then there is a massive collapse of natural production in the countryside, a mass involvement of the farmers in the social

division of labour through the market and their employment in the social economy. However, the other side of this process is the phenomena of **population aging in the villages** (senilization) and the devitalisation of the villages, with the all other negative socio-economic consequences. One of the side effects in Serbia is village decay and number reduction, which is best illustrated by the fact that of 4,600 villages in Serbia one of four (about 1,200 in total) is in the process of disappearing (more than 86 per cent of them recorded a population decline). In our villages, more than 50,000 houses are abandoned, about 500,000 hectares of arable land is neglected. Vojvodina has 425 villages. Not one of them has a growth, but the decline in the number of residents, with process of village's disappearance (Pejanović, Njegovan, 2009).

In villages throughout Serbia live around 260,000 single men and around 100,000 single women under the age of 40 (Pejanović, Njegovan, 2009). According to data of the Republic Statistical Office among 164,884 people are illiterate, 82.1 per cent are women who mostly live in rural areas, they are housewives and have an average of 71.5 years. Only a tenth of the rural households are women-owned, 84 per cent of them do not own land, 93 per cent of them do not pay pension and disability insurance and 17 per cent of them have no health insurance (because they have no money). In Serbia only 14 per cent of rural children, aged three to five years, go to kindergarten (Census 2002). The problem is that rural schools are worse equipped than those in urban areas, students achieve lower results than their peers in the city, and kindergartens are almost gone.

Deagrarisation is a **modern phenomenon** related to structural changes in the economic and social development of countries. In developed countries, deagrarisation is a side effect of building a modern economic structure, where the secondary sector dominates instead of the primary, and then goes tertiary sector (services sector). Today, analogous process takes place in developing countries, but often in **deformed** form. The deformed form of deagrarisation is manifested through the rapid transfer of labour and uncontrolled "escape" from agriculture and the countryside, which is a worrying phenomenon. And instead of the positive, we have a **negative effect**, which has multiple manifests: **(1) deagrarisation didn't build a modern economic structure** (since 1986 till 2000 primary sector participation in the GDP of Serbia shows exceptional growth trend and the tertiary sector declining trend); **(2) we made villages empty** and without a quality labour; **(3) we overcrowded towns and created a new problem - instead agrarian overpopulation we got urban (city) overcrowding**, followed by mass unemployment and impoverishment, with a range of supplementary (additional) problems.

Therefore, deagrarisation in Serbia appears as a **limiting factor of agricultural and rural development**. In fact, deagrarisation has mostly **negative consequences** for our country: **(1) demographic consequences** (aging of the agricultural population, feminization, devitalisation); **(2) social consequences** (vulnerable socio-cultural heterogeneity of the villages, reduction of rural families and weakening of internal connections in comparison with previous family communities); **(3) the consequences of the agrarian structure** (marginalization and shutdown of individual properties, changes in the perspective of social reproduction of individual properties).

**The causes** of this phenomenon are numerous and can be grouped into social and economic factors. In our opinion, primary causes are **economic factors of deagrarisation**. Among the numerous factors the most important factors of deagrarisation are: a strategy of industrial development of economy; unfavourable economic situation of agriculture; low incomes in agriculture and low motivation; employment policy (in cities); technical changes in agriculture; others (social) factors of deagrarisation.

### **Instead of a conclusion: the proposal of measures and actions**

Agricultural production is heavily influenced by the global economic and financial crisis, the demographic crisis and climate and other global changes, with the dramatic rise in food and oil prices (Pejanović, 2010). In such circumstances, Serbia must **redefine** the place and role of agriculture in economic development and take appropriate measures and actions aimed at overcoming the crisis situation in which there is agriculture.

The importance of agriculture for development of the Republic of Serbia is a huge and irreplaceable, which is evidenced by the fact that one of four households in Serbia is engaged with agriculture (Census, 2012).

Numerous **measures and actions** are necessary to mitigate the impact of the global economic crisis and **to stop the negative trends of the crisis** in agriculture of the Republic of Serbia which follow the transition:

- The adoption and consistent implementation of **national development strategy and development programs** (or action program of development) for **agriculture, food industry and rural development**. The modern, conventional and organic farming and food industry (agro-industry) should be **the basis of development of the economy** and should contribute significantly to the rapid development of other sectors of the Serbian economy, and thus help the economy to overcome the economic crisis.
- The global economic crisis requires **adjustments** in all areas, including agribusiness. Rationality, efficiency and productivity are imperatives at the micro and macro level. For a faster crisis overcome it is necessary **to stimulate the development of agriculture** with subsidies and loans as well as investments in irrigation systems. Parallel with this, to develop modern **agro-industry**, as leading sectors of Serbian economy.
- **Climate change**, which is obvious, requires a system of long-term measures and actions to mitigate this natural phenomenon.
- What is also required is **a change of management concept in agriculture**. The liberal concept with his famous principle: "Let things go their own course" (*laissez faire*) has experienced and is experiencing meltdown in developed countries. In agriculture it revealed itself through the message to farmers: "You know best what to do" and due to the uncontrolled import of everything and disorganized export. What is necessary is a new concept based on a partnership (not paternalistic) role



of the state and the regulated market, protected from the impact of monopoly, in which free competition is “engine” of progress. Firm “rules of the game” are necessary, which will be strictly and consistently followed by all participants. The state is responsible for establishing the rules, for the creation of conditions for their application, as well as for the stability of the business (business environment). Planning function should be reaffirmed, based on the modern economic principles and according to developed countries. It is necessary to establish a commodity-stock spot and futures trading of agricultural products.

- **Comprehensive reforms** must provide a satisfactory level and quality of agricultural production, with **harmonization** with EU standards and principles. It is necessary to reduce the cumbersome administration, to develop advisory services, to introduce the register of agricultural land, to provide transparent government spending and control the expenditure of agricultural funds.
- **Rebalance of the budget** should allocate a significantly larger amount of funds to the agricultural budget, in order to stop the negative trends, particularly in animal husbandry and to revive agriculture and the villages, as well as realization of EU competitiveness and rural development projects. Selective approach is required for spending budget, with clearly defined criteria (creation of a law on incentives). Investing in well designed and profitable projects (e.g. irrigation, new techniques and technologies, etc.).
- **Subsidies and incentives** in agriculture should include the following system of measures: premiums for certain agricultural products; regressions for the use of biological growth factors and other production costs; subsidized interest rates; export subsidies (up to joining to the WTO). Funds for this purpose should be provided from the budget of the Republic of Serbia.
- **A new agricultural policy** is necessary, which will be the carrier of agricultural development and will indicate registered **commercial farms**, including (equally) family and large farms. **According to the new EU agricultural policy** (CAP) for the period 2014-2020, the new agricultural policy implies a greater involvement of the state in agricultural and rural development promotion, in regulation of the market of agricultural products, in foreign trade policy of agricultural products and so on. Among the most important innovations of the EU agricultural policy to be followed are: harmonization of subsidies (reduction of subsidies for large producers and enhancement of production and direct payments to small producers), with a mandatory compliance of the prescribed standards of product quality. Additional investments are planned, if at least seven per cent of arable land is used for organic production, with the maintenance of permanent pasture at the farm and crop diversification. More EU funds will be available for investments in rural development and investments in research, innovation creation and knowledge transfer.
- It is necessary to conduct an adequate and consistent **land policy**, as a set of measures by which influence to the rational and sustainable use of agricultural

land could be made, as well as rare and valuable resources available in our country. **Land management policy** must be conducted, because the small demesne is a serious limiting factor to the modern, market-oriented development of agricultural production.

- Encourage and provide modern **business networking of companies in agribusiness**, through associations, cooperatives, clusters, agricultural commerce, lobbying associations, non-governmental organizations. Situation with cooperatives and current problem with social ownership of cooperatives should be solved with a new law on cooperatives. Reaffirm **cooperation**, particularly between large, small and medium-sized farms, as well as within the agricultural industry.
- **Quality competitiveness** can be achieved with: standardization, investment in new technologies and knowledge. Food safety must be the imperative of quality.
- Encourage the development of **entrepreneurship in agribusiness**, through the implementation of the concept of integrated rural development to develop **multifunctional agriculture**, and through the new concept of regional development to make faster local economic development.
- Investments in science, research, education and extension. In one word, in **the knowledge**, that is the only factor that is not subject to the law of diminishing returns, but on the contrary to the law of increasing returns. This is confirmed by the experience of some EU countries, but also of our country, where the agronomic sciences and profession gave and gives good results.

Therefore, the development of agriculture in Serbia should be focused on modernizing and changing production structure towards bigger market organization and improvement of overall efficiency. Production and technological restructuring and productivity growth in agriculture, as well as greater competition in the domestic and international markets, should be based on economic, energy and environmental criteria.

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## O UZROCIMA KRIZE POLJOPRIVREDE REPUBLIKE SRBIJE

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### Rezime

*Poljoprivreda Republike Srbije nalazi se u dugoročnoj i višestrukoj krizi: krizi upravljanja, krizi organizovanja, finansijskoj krizi, krizi konkurentnosti, krizi investiranja, krizi tržišta, krizi agrarne politike, krizi poverenja, i drugim oblicima krize. Cilj rada je da se istraže mnogobrojni uzroci ograničenja razvoja poljoprivrede Republike Srbije, pri čemu autori posebno ističu sledeće: nepovoljna agrarna struktura i neorganizovanost poljoprivrednih proizvođača; neuređenost tržišta agrarnih proizvoda; nekonkurentnost; neadekvatna uloga države; deagrarizacija i demografsko pražnjenje sela. Korišćene su kvalitativne metode analize, sinteze i komparacije, kao i pomoćne kvantitativne statističke metode. Autori zaključuju da su potrebne sistemske i radikalne mere i akcije na makro i mikro nivou, kako bi se prevazišlo teško stanje u kome se nalazi naša poljoprivreda, kao strateška delatnost Republike Srbije.*

**Ključne reči:** *kriza poljoprivrede, Republika Srbija, uzroci, posledice, mere i akcije.*

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Rad je deo istraživanja u okviru dva projekta finansirana od strane Ministarstva prosvete, nauke i tehnološkog razvoja Republike Srbije: Održiva poljoprivreda i ruralni razvoj u funkciji ostvarivanja strateških ciljeva Republike Srbije u okviru Dunavskog regiona, broj projekta III46006, kao i Proizvodnja tvrdog sira sa dodatnom vrednošću od mleka proizvedenog u organskim i samoodrživim sistemima, broj projekta TR31095.

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