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FOOD SECURITY IN CENTRAL ASIA AND EASTERN EUROPE AND POSSIBLE SOLUTIONS FOR HUNGER AND MALNUTRITION IN THESE REGIONS

POTRAVINOVÁ BEZPEČNOSŤ VO VÝCHODNEJ EURÓPE A STREDNEJ ÁZII A MOŽNOSTI RIEŠENIA HLADU A PODVÝŽIVY V TÝCHTO REGIÓNOCH

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Even at the beginning of the 21th century, hunger and malnutrition are still serious problems for many countries in the world. It is estimated that every three and a half seconds a person dies because of insufficient amount of food. There are as much as 925 million undernourished people on our planet. Hunger and malnutrition present in fact a great risk to the health worldwide, even greater than AIDS, malaria and tuberculosis altogether. Eastern Europe and Central Asia are both regions with specific conditions and issues related to the poorer part of the population. The goal of this paper is to point out possible solutions for eradication of extreme poverty with specific focus on these two regions and to highlight the most important factors that have had an influence on the development of the agricultural sector in these regions.

Key words: food security, soaring food price crisis, global economic crisis, climate changes, investments in agriculture

The world is facing three global crises. They are related to the environment, economic crisis and food insecurity. The sharpest of them is the current economic collapse. The most frightening is the looming food crisis and world hunger which has recently registered 925 million starving people. The main causes of the unstable, unequal and unsustainable development in the world are population growth, globalization and urbanization as well as the growing energy demand and climate change.

In 2050, 9.2 billion people are expected to live in the world. The Earth has enough natural and human-based capacity to feed this number of the world population, however, in the first decade of the third millennium the hunger is the most serious issue and the agricultural experts are forced to admit that the environmentally friendly use of the natural resources in the field of agriculture and food security is significantly lagging behind the Earth potential, especially in the European and Central Asian region.

The number of undernourished people in the world increased by 75 million in 2007 and 40 million in 2008, largely due to higher food prices; the number of starving people further increased by 100 million in 2009, due to the economic crisis. 907 million people in developing countries alone are hungry. 33 countries currently face a food security crisis, 14 of which have been in this situation for more than a decade. When emergencies continue for such extended periods of time, traditional humanitarian and development paradigms are not suitable for providing effective responses.

Material and methods

The objective of this paper is to analyse different approaches for eradication of extreme poverty with specific focus on Eastern Europe and Central Asia. The other important processes which have had the significant impact on the development trends in the agricultural sector are taken into consideration, e.g. the transition process, the EU enlargement, the impact of the food soaring prices on the food security, the global economic crisis and the effects of the climate change on the poverty and food security in the Eastern Europe and Central Asian.

The data are downloaded from FAOSTAT and from a special questionnaire survey which was carried out by FAO Regional Office for Europe and Central Asia in Armenia, Hungary, Kyrgyzstan and Ukraine in order to evaluate the recent trends in Eastern European and Central Asian region caused by the global economic crisis.

Results and discussion

Current trends in the food and agriculture security in Central and Eastern Europe and in Central Asia

The current situation in the food and agriculture security in Central and Eastern Europe and in Central Asia is affected by several recent trends:

- the transition processes in Eastern European and Central Asian Countries,
- the EU Enlargement,
- the soaring-volatile food price crisis,
- the global economic crisis,
- the impact of the climate change.

It is well understood that the Central and Eastern European and Central Asian Regions, due to the transition, went through significant changes in the agricultural sector. These changes have had a strong impact on the development of food security in these regions. It is also important to underline that the transition caused a great deal of diversity among the countries of these regions. At its initial stage, the food security in Central and Eastern Europe and in Central Asia was characteristic with negative development trends. The number of hungry population was consistently increasing up to 2000 especially in CIS countries and in Southern and Eastern Balkan. Afterwards, these negative trends were reversed due to the revitalization of the agricultural sector. However, as the consequence of the soaring food prices and the global

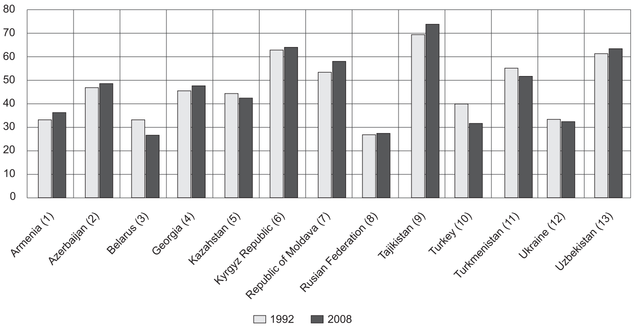

Figure 1 Share of rural population to the total, an average of 1992 compared to 2008 in %
Source: World Development Indicators, World Bank

Obrázok 1 Podiel vidieckeho obyvateľstva na celkovej populácii, priemer roku 1992 porovnaný s rokom 2008 v %
Zdroj: Svetové rozvojové indikátory, Svetová banka
(1) Arménsko, (2) Azerbajdžan, (3) Bielorusko, (4) Gruzínsko, (5) Kazachstan, (6) Kirgizsko, (7) Moldavsko, (8) Ruská federácia, (9) Tadžikistan, (10) Turecko, (11) Turkménsko, (12) Ukrajina, (13) Uzbekistan

economic crisis, the number of poor and hungry people is remarkable increasing, especially in South Caucasus States and in Central Asian region. In many of these countries, especially in those with lower incomes, the share of population in rural areas remains rather large (figure 1).

The second most important process in the agriculture sector of Central and Eastern Europe was the EU Enlargement. As the consequence of this process, the greatest progress and degree of commonality have been achieved in these new EU states, because all of them have adopted a common set of policies and regulations of the EU. The diversity in the development of the agricultural sector has been documented in numerous studies of the region. In general, the accession had a positive impact on the sector. It has resulted in a consolidation of production, higher current prices, higher export and import quantities and much higher farmers' income (Csaki and Jambor, 2009). However, besides the overall positive picture, there is the diversity stemming from initial conditions, pre-accession policies and the way of implementing the CAP as well as from macro-policy and institutional environment.

The new EU members are facing significantly increased competition in their domestic markets and there are also new market conditions with the quick emergence of vertically coordinated food chains including hypermarkets, supermarkets and multinational agro-processing companies. In general, the EU enlargement has had a positive impact on the agricultural development and on the food security of the new EU states. But in this part of Europe there are also population segments facing poverty, especially those who live in the marginalized areas or in the suburbs of the large cities.

The soaring food prices crisis have had a significant but contradictory impact on farmers and on consumers (on the one side on the poorer urban households and on the other side on the farmers – net food producers). From the end of 2006 this crisis has brought to hunger more than 75 million people including those from Eastern Europe and Central Asia. This crisis has been appearing as the confluence of different forces:

- weather – related production shortfalls (agricultural production has been affected by climate change: floods, harsher winters, earthquakes),
- gradual reduction in the stock levels (cereal stocks stand at their lowest level since 1980 dropping down by 3.4% per year, this refers also to the new EU states),
- increasing fuel cost (raised not only costs of production of agricultural commodities but also the transportation costs),
- investments in the agricultural sector fell from more than 17 billion USD per year in the early 1980s to less than 5 billion USD in the late 1990s.

The Food Price Crisis was followed by the Financial and Global Economic Crisis. Both crises have had a differing effect but both have led to social unrest in scores of countries, including some in these regions, and have added more than 140 million people to the number of hungry and undernourished people in the world. The economic crisis, which hit hardest in 2009, has depressed economic growth and the purchasing power of consumers, while impacting food and agricultural markets through depressed demand, declining exports, declining credit availability and increasing food insecurity. All of these shocks have been more severe for low income population, especially in food deficit areas, and for smaller farmers, too.

In Eastern Europe and Central Asia, among the most vulnerable countries belong Albania, Armenia, Bosnia--Herzegovina, Georgia, Kyrgyzstan, Moldova, Turkmenistan and Tajikistan. However, regarding this, it is important to mention that farm land is under stress. According to the World Earth Institute, the main reasons for world food supply decreasing are the population growth and accelerated urbanization, changes in the life-styles, falling water tables and diversion of water for irrigation towards the cities. There is a good potential for new land cultivation, notably in Eastern Europe and Central Asia. Regardless of this, new land is insufficient or difficult to use for food production due to property rights and insufficient infrastructure. Important for world demand of food production is scaling´ – up the global agricultural production. In this connection, Europe and Central Asia has to take the responsibility to mitigate the global warming negative impact and contribute to the environmentally friendly utilization of the global production potential.

Another phenomenon contributing to recent changes and future prospects is the climate change. Many of the countries in these regions are already experiencing effects of the climate change which are accompanied by a legacy of environmental mismanagement that increases vulnerability towards the effects of global warming. Such effects also vary greatly from country to country but can add local production instabilities to those arising from global market effects and put even more pressure on land and water constraints in coming decades.

Trends in world hunger and the food consumption share

World Summit on Food Security was convened by FAO in November 2009 in Rome in order to accelerate steps to reverse the alarming situation with the starving people and to collectively accelerate steps to set a path for achievement of progressive realization of the right to adequate food in context of national food security. The High Level Expert Meeting had been convened before the mentioned summit. The best experts of the world were asked to give effective solutions for feeding of 9.02 billion people equitably, healthily, safely and sustainably in the year 2050. 60 heads of states and governments, 191 ministers from 182 states and the European Union participated on the summit altogether. The summit adopted the official Declaration; however it is crucial to note that this document contains neither measurable targets nor specific deadlines, which would make it easier to monitor the implementation.

It should be noted, that there was a slow, but steady decrease in the number of hungry until the 1995–1997 period. But the fact that hunger was increasing even before the food and economic crisis suggests that present solutions are insufficient.

The region of Europe and Central Asia is not considered to be an emergency region in terms of food security. However, it should be noted that about 30 percent of the population (about 145 million) are still considered either poor or vulnerable. Now, the number is expected to rise by about 5 million people for every 1 % decline in GDP. That is why there are additional 13 million poor people in Eastern Europe and Central Asia in 2009 instead of the decrease foreseen for this group before the crises (from 145 to 130 million). 60 % of the 145 million poor people (87 million) could be hungry or malnourished.

Factors of the food crisis

The FAO food price index rose 52 percent on average, from mid – 2007 to mid – 2008. Then, in July 2008, food price began to decline. The downward trend should not be interpreted as the end of the food crisis. Global cereal prices are still more than 63 percent higher as they were in 2005 according to the International Monetary Fund. The same factors which caused the food crisis are still present:

- agricultural productivity is low,
- the population growth rate is still high in many of the most food insecure states,
- water availability and land tenure are significant problems,
- the frequency of floods and droughts is above long-term averages – most likely as a result of the climate change,
- investments into agricultural research and development are much lower than recommended and they are not directed towards the crops most important for the poor.

Investments would play a crucial role in improving the hunger situation especially in the developing states. In spite of the fact that the number of the hungry has been increasing since the mid 1990s, the share of Official Development Aid (ODA) for agriculture declined substantially in 2007. After adjusting for inflation, the level of ODA was 37 % lower than in 1980. There is no hope for an increase of investments in agriculture sector and we also cannot claim that the investments into agriculture reached the lowest level.

Conclusion

The countries of the regions of Europe and Central Asia have faced many challenges in the last two decades, and most of them have experienced massive changes in social and economic institutions and policies. The structural changes in the national agro-food sectors have been challenged by cyclical factors of the agricultural production, such as the fall in production, decrease of stocks, liberalization of the world trade, volatile food price crisis and the global economic crisis.

During the transition period, the EU enlargement, volatile food price crisis and the global economic crisis, some policies and some countries have been clearly more successful than the others and much can be learned from their successes and failures. However, the lessons learned from dealing with adversity in these regions during the previous years can be valuable for effective steps in favour of the resolution that challenges multiple recent crises. In order to stimulate the economic growth in the agricultural and food sector across the regions, it is important to introduce and effectively implement the short and long run policies and priorities. The most important principle is that the policy makers have to avoid a situation when the short run policies conflict the long run development. For Europe and Central Asia, it is important:

- to improve the efficiency of the early warning systems, including farms/farmers and government levels,
- to promote the food production programme by implementing the FAO Twin-Track approach,
- to accelerate the local adaptation and dispersion of currently existing improved technology,
- to continue with acceleration of the reforms,
- to enhance the transfer of ownership and full ownership rights for land and other productive agricultural and rural assets.

In the frame of the long run policies, it is important to stimulate the economic growth through:

- the enhanced investment,
- improved market functioning
- introduction of the risk management tools for farmers which can mitigate important elements of a farm income, such as yield and price variability,
- enhancement of the rural development and rural infrastructure with emphasis on new opportunities in green technology due to climate change mitigation policies, agriculture and food security, transition of the agro-food sector, soaring food price crisis, volatile prices, global economic crisis, climate change, short and long run policies, investments in agriculture, food index, early warning system and bioenergy.

Súhrn

Na začiatku 21. storočia sú hlad a podvýživa stále vážnym problémom pre mnoho krajín sveta. Počet podvyživených sa odhaduje celosvetovo na viac ako 925 miliónov a situácia sa nezlepšuje. V globálnom meradle sú hlad a podvýživa závažnejším ohrozením zdravia ako AIDS, malária a tuberkulóza dohromady. Východná Európa a stredná Ázia sú regióny so špecifickými podmienkami a problémami týkajúcimi sa chudobnejšej časti ich populácie. Cieľom príspevku je poukázať na možné riešenia extrémnej chudoby z ohľadom na tieto dve zemepisné oblasti a tiež na faktory ovplyvňujúce vývoj poľnohospodárstva v tomto regióne.

Kľúčové slová: potravinová bezpečnosť, potravinová kríza, svetová ekonomická kríza, klimatické zmeny, investície do poľnohospodárstva

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PARTICIPATION OF DEVELOPING COUNTRIES' PRODUCERS IN GLOBAL NETWORKS – THE CASE OF COFFEE

ZAPOJENÍ PRODUCENTŮ Z ROZVOJOVÝCH ZEMÍ DO GLOBÁLNÍCH SÍTÍ – PŘÍKLAD KÁVY

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One of the indisputable consequences of globalization is the world-wide linking of market agents and creation of global networks. The possible impacts of these processes are apparent also in the agro-food sector, especially within the networks of commodity chains. Coffee, the second most heavily traded commodity in the world, is a typical example, featuring as a global commodity chain. It means that its individual production stages are miles distant. The first stage of analyzed value chain, coffee growing, is situated in developing countries of Latin America, Asia and Africa, while the processing and consumption are carried out mostly in developed countries such as the US or the EU. This paper is focused on the analysis of the individual production stages within the coffee commodity chain. Furthermore, the position of developing countries producing the raw commodity, interrelationships along the whole value chain and market concentration on the individual stages are subjects of the analysis as well. The results have been obtained within the frame of the research project MSM 6215648904 "The Czech Economy in the Process of Integration and Globalisation, and the Development of Agricultural Sector and the Sector of Services under the New Conditions of the Integrated European Market" of Mendel University in Brno, Faculty of Regional Development and International Studies.

Key words: global commodity chain, coffee, developing countries, agro-food sector

After implementation of important economic reforms resulting in market liberalisation in developing countries in the 1980s, there has been an intensive discussion about the nature of the changes caused by market liberalisation and de-regulation, and over the results of these processes.

In the early 1990s, problems such as 'setting the right prices' and 'appropriate incentives' went aside and the main interest was focused on the role of globalisation in economic restructuring, and on the issues of institution building and good governance. These issues were analysed at the international, regional as well as national and sectoral levels. However, relatively small attention has been paid to the development of commodity markets and to the possibilities (and restrictions) of their economic upgrading in favour of developing countries. International trade is supposed to be an important source of income for the countries; however, they are still poor. A lot of low-income countries have been producing and trading tropical commodities. Coffee belongs to the most traded (not only) agricultural commodities. Despite the fact, a "coffee boom" has emerged in the consuming countries, international coffee prices have fallen dramatically down and their primary producers have been caught in the "coffee crisis".

Significant spatial separation of raw commodity production and consumption of coffee products with significantly increased added value accordingly challenges for an establishment of constituent entities involved in the commodity chain, including an assessment of the possible uneven distribution of economic forces.

According to Swinnen (2009), the rapid globalization of the agro – food network integrating consumers, food companies and agricultural producers led to a significant restructuring of production, sale and marketing systems worldwide, some already well advanced in developing and transition countries. Although the transaction cost theory deduced (and empirical literature often confirmed) higher possibilities for large farms in the vertical connection, empirical works indicate a much