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# GLOBAL FOOD MARKET – NEW FACTORS INFLUENCING DEVELOPMENT

Grzegorz DYBOWSKI\*, Anna BUGAŁA

Institute of Agricultural and Food Economics - National Research Institute, Warsaw, Poland
\*Corresponding author: dybowski@ierigz.waw.pl

#### **ABSTRACT**

During the long period before 2002 the global index of real food prices showed downward tendency. This resulted from the dynamic economic growth, technological progress and supporting of agriculture in many OECD countries. The supply factors mainly determined global food price levels. Meeting food needs in developing countries was highly dependent onimports. This increased the role of food exporting countries which drove towards liberalization of international trade. In the years of sharp price increase followed by financial crisis, the new market forces appeared such as: support granted to biofuels in US and EU, competition for land of food and non-food agricultural products, links between food and fuel markets, increase in demand for food in emerging economies. In effect demand factors determining food market development prevailed over the supply ones. However, the duality existing in the global economic system has been also spreading to the global food sector. The developing countries could hardly benefit from high prices on international agricultural markets because they had no potential to start additional production in a short time. Price transmission from the global food market to local agricultural sectors was insufficient as well. This has brought about the loss of reliabilities of free market as a source of food for states with scaresnational food supply. The policy response of many developing countries has resulted in tendencies to increase self-sufficiency in food production.

**Key words:** global food market, factors, development, food price crisis.

## **INTRODUCTION**

Population growth, economic development and persistence of high food prices in the years 2007-2011 have increased concerns for food access and food security in development strategies in many countries. Agriculture becomes more and more capital, water and energy intensive. Other economic sectors compete with agriculture not only for energy and water, but also for land. Demographic pressure and unsustainable agricultural practices have increased the risk of production capacity breakdown and threaten biodiversity. International trade was for a long time an essential component of most countries agricultural development strategies.

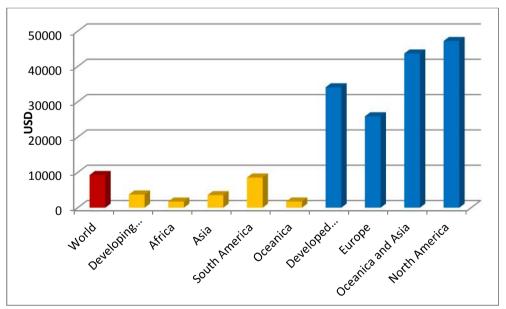
Food price crisis of 2007-2011 has brought about important changes in the global, regional and national food systems.

## MATERIALS AND METHODS

The aim of the paper is to draw the attention on the outer factors determining the development opportunities of some less developed countries, which are independent on their strategies and undertaken policy measures. Regarding the character of analysed phenomena the indirect observation method has been used as a base for deductive thinking as well as for revealing causal relationships. The analysis and conclusion presented in the paper have been based mainly on the Food and Agricultural Organization (FAO) of the UN data, especially on materials of the Committee on Commodity Problems and Committee on World Food Security.

## RESULTS AND DISCUSSION

During the long period before 2002 the global index of real food prices showed downward tendency. This resulted from the dynamic economic growth measured by GDP increase per capita, technological progress as well as supporting of agricultural sectors granted mainlyin the OECD countries. However, despitethis growth the diversification in economic development levels around the World remained enormous.

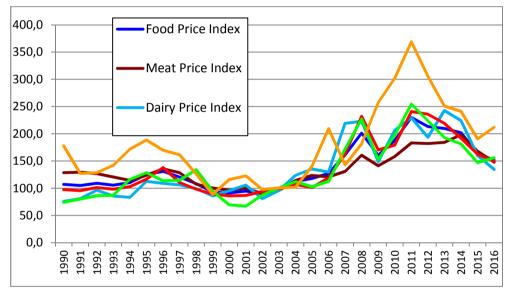


\*Source: based on the FAO data

Figure 1. GDP in USD per capita in regions (2010)

The long period of relatively low food prices had both positive and negative effects. Countries with agriculture as a dominating economic sector obtained low

incomes. In the same time meeting the food needs in many less developed countries was highly dependent on relatively cheap imports. This in turn increased the role of food exporting states which formed rather limited group located mainly in the temperate zone. Theyhad food surpluses so they drove towards liberalization of international trade in food products. Such liberalization was to some extend achieved due to Uruguay Round Agreement on Agriculture monitoring by the World Trade Organization (WTO). Most of the developing countries have benefited little from this Agreement and felt disappointed. That is why they put on the table quite different proposal for further trade liberalization than did the developed countries during another round (Doha Round) of international negotiation under the WTO. The differences of interests are such that the Doha round can hardly been expected to terminate successfully. However, despite the negotiations standstill,WTO proved to be very useful during the food crisis on the global market.



\*Source: FAO

Figure 2. Annual food price indices (2002-2004=100)

The food price crisis was caused by two sets of market factors. First, the traditional ones, such as: reduction of basic food products supply, low level of global stocks – the lowest for 30 years, increasing production costs caused by higher prices for basic agricultural inputs, increasing demand for meat and meat products resulted from higher incomes in some developing countries. Second, the new market forces which appeared in the years of sharp food price increase followed by economic and financial crisis started in 2009. Among them: very high level of world oil prices, support granted to biofuels in the US and the EU, competition for land between food and non-food agricultural raw materials, links of food and fuel markets,

increasing demand for food in emerging economies, inflow of speculative capital from the real estate market and higher turnover on agricultural future markets, seem to be the most important. In effect the demand factors started to prevail over the supply ones in determining food prices development.

Financial crisis contributed a lot to restraining further upward trend in food prices, but the second pick of their increase took place in 2011. Domestic prices in many countries were then even higher than in 2007. After 2011 world food prices decreased constantly. However, they were still staying well above their pre-2007 levels.

Rapid and high growth of food prices in a very short time evoked price shock in many food deficit countries. The dynamic of price increase for crops was faster than that for animal products while the consumption development structure was divers. This brought about increase in agricultural production, but its pace waslower relative to the initiating incentive. All these events exerted impact on the global food market. The main effects were as follows:

- the transmission of prices from global food market to local agricultural markets was insufficient to enable local farmers to benefit from high international and retail prices,
- many food import-depending countries have lost confidence in the global food market as a source of filling in the gaps in domestic food supply,
- up till the food price crisis food import was increasing faster than food production. In the years 2008-2011 the pace of imports growth was slower relative to production growth.

Table 1. Effects of food price crisis on global food market

	In USD per capita				Food
Years	food production	food imports	% of imports	World population	prices 2002- 04=100
2000	216	49	22,7	6,1	91,1
2008	429	112	26,1	6,8	201,4
2011	529	130	24,6	7,0	229,9
2013	542	136	25,1	7,2	209,8
2013/2008 %	126,3	121,4	X	105,9	X
2008/2000 %	198,6	228,6	X	111,5	X

\*Source: calculated basing on the FAO data

While analysing the basic reasons for food crisis of 2007-2011it becomes obvious that this is not population increase to be responsible for this, but sudden and sharp rise in world and retail food price levels which was accompanied by insufficient procurement power of consumers in many regions. This in turn brought about

lowering of imports share in total food supply. Slowing down in the dynamic of food imports increase versus food production growth also took place in the years 2008-2013.

The reasons for this should be looked for mainly among the ways in which the import-dependent countries responded to the sudden price shock. First of all the most of undertaken measures were of an immediate character and were aimed at meeting short term goals such as protecting the consumers or assuring access to food for the majority of population. The main measures included: the reduction of import duties, subsidies to production inputs, preferential rates of working credits, price control, a ban or higher taxes on food exports. The measures concerned first of allproduction and trade spheres and the response to the incentive was delayed. The introduced measures often violated the international rules that had been previously achieved - often with difficulty. Most of these political decisions led to reversal of liberalization trends indeveloping countries which again focused on self-sufficiency in food production. Food importing countries changed their development strategies giving priority to support for domestic production.

Table 2. Measures undertaken in developing countries in response to food price crisis

Measure	Central Africa	Near East and North Africa	Latin America	Asia
Food aid	XXX	-	XXX	XX
Food for labour	XX	-	-	XX
Giving extra food	XX	-	XX	Х
Food price control	XXX	-	XX	Х
Subsidies to food prices	Х	XXX	-	Х
Tax reduction	XXX	X	xxx	XXX
Subsidies to inputs	XX	-	-	-
Subsidies to production	X	X	-	X
Ban to food exports	XXX	X	XX	XXX
Reduction of import duties	XXX	XXX	XXX	-

\*Source: based on the FAO documents

The duality prevailing in the global economic system has been also spreading to the global food sector. Technological progress in agriculture contributed to the acceleration of food production dynamic, but the globalisation of the agri-food market resulted in continuing drastic inequalities in access to food in many less developed countries. The developing countries could hardly benefit from high prices on international agricultural markets because they had no potential to start additional production. Agricultural inputs were expensive and price transmission from the global food market to local agricultural sectors was delayed and insufficient. Economic surplus was being captured by middlemen and over-national corporations.

In the vast majority of countries, either the policy or the level of agricultural income excludes the switch to sustainable growth of food sector, which would be a highly desirable development path at the moment. The competition between the production goals and the environmental aims is still too strong. This is also the main obstacle to sustainable development of agriculture at the global level.

The increasing demand for food due to both supply-related (decrease in agricultural land reserves, climate change) and demand-related factors (growing population, increasing income in some regions, changing mode of consumption) makes the issue of securing access to food for the entire world population increasingly serious. In the short-term perspective, the shortage of food in relation to the constantly growing demand is to a large extent an economic phenomenon. In the global perspective, there is spatial diversity of the development of agricultural sectors, and particularly, the condition of their surroundings. However, economic growth in many countries, which results in increasing demand for food, calls for the increase in global food production.

Taking account of the fact that the opportunities for further territorial expansion of agriculture are limited, the increasing demand for food requires the increase in agricultural production from the current agricultural area. From the long-term perspective, this should be sustainable development, i.e. development that would not be a burden to future generations' consumption. Hence, what is needed is an increase in the efficiency of agricultural production factors on the global scale. Land, which is a specific factor for agriculture, becomes the place where goods that compete with food and traditional agricultural raw materials for the processing industry are produced. At the same time, it is the factor that is mostprone to risks related to civilisation, such as climate change, water shortage, pollution.

Demographic, social and technological factors are becoming more and more important while creating development strategies at the both local and regional levels. Shifting from natural agriculture based on land use to the capital, water and energy intensive agriculture has resulted in weakness of the position of traditional farmer who is not able any more to assure capital necessary to finance modern technology. This leads to diminishing of the number of small farms and increases the dependence on financial institutions.

### **CONCLUSION**

Adequate supply of food does not guarantee food security at the household level. Access to food depends first of all on income, food prices and ability to obtain social aid. In other words, it depends on social factors like gender, location in

society and an individual household hierarchy, social infrastructure as well as political and economic stability.

As far as global scale is concerned, rising incomes and the urbanisation process of lifestyles, drive changes in diets. Food consumption patterns are shifting from being cereals-based to being more diversified and protein-rich. More and more meals are also consumed away from home. These changes are expected to continue.

Developing countries will remain the engine of growth for global production and consumption of food products. The changing structure of demand should promote stronger increase in livestock production compared to the crop sector. Human consumption will continue to evolve in favour of proteins, fat and sugar although cereals will remain at the core of it.

The food price crisis has typically been viewed as a general phenomenon and interpreted from the global standpoint. However, its effects have variedacross commodities, regions and countries. Because of impact of policies, infrastructure and exchange rates domestic food prices often behave differently and were less volatile than world food prices. It is also worth noting that their increases were not solely the effect of growing prices on the world food market. Social, demographic, institutional and policy factors play a big role as well.

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