## PRICE VOLATILITY, THE MAIN COMPONENT OF FOOD SECURITY – A REAL KEY TO A SUSTAINABLE DEVELOPMENT

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#### Abstract

The food crisis at the end of the last decade create agriculture prices, price volatility and food security on the top of the global agenda. Price volatility for the main commodities will remain in direct connection with the sustainable development. There are many factors that can influence the sustainable development and the connection between agriculture potential and the possibility of creating food security in our region. One of the great challenges of next decade at the global and regional is and will remain a serious problem especially for countries of the world which are dependent producers of raw materials. Agro food prices will remain as generate factor of national food insecurity. About 2,3 billion from world's population are depend on the agriculture production of commodities such as grain, sugar, rice, meat, cotton, ferrous and nonferrous metals, copper. The first step to a sustainable development understands the fact that a country's economy means more than the sum of its elements, that modifying a subsystem or another and will bring major changes to the final result.

### Keywords

Sustainable development, price volatility, food security, sustainable economic development, agriculture potential.

### Introduction. Concept notions on sustainable development.

It appears that, the best definition for sustainable development is the one proposed by Brundtland Report, which contains interregional integration aspect. Other examples could be the following:

• According to sustainability principle, all natural resources should be used clever and only for our real needs (Tietenberg, 1992);

• Sustainable development is the process that maintains our patrimony and national capital untouched for a period of time. We should leave the same capital as legacy for future generations; capital that comprehends possibilities for a standard potential we currently wish for (Winpenny, 1991);

• Sustainable development is a strategic development that concerns all goods, natural and human resources and financial resources which bring long-term prosperity.

Not long time ago, the concept of sustainable development supported by English scholars was criticized by French and Italian scholars. Political weight increased in the field of natural resources, by means of which principles of scholars in London were proved to be true. British economists certify sustainable development's multivariate feature, highlighting interrelations between economy and environment, emphasizing natural capital's specificity. This lead to economic visions about the world and to the seeming separation from neoclassic approaches.

Sustainable development was based on the following key ideas:

• Systematic approach of social human activities in the national space;

• The inclusion in the calculation of all types of resources in and unreacted in business;

• Observing products through their development; nature-nature cycle, thus a dynamic vision. Systematic approach of social human activities in the national space leads to the separation of this macro-system into the following sub-systems:

- Production subsystem (implies dominant technological production forces); economic sub-system with all its categories based on economic value;
- Superstructure system (political, judicial, social, cultural, administrative, etc);

• Surrounding environment where all social and human activities occur.

Flows of different intensities exist between these sub-systems which underline interrelations between them regarding material and immaterial quality of life for subject population.

## 1. Food security and sustainable development.

This components of agriculture sector, subjects to a wide range of economy-wide policies as well as measures specific to the sector itself. Further development of the food security aspects, connected at the sustainable development is expected as experience is gained in implementing it across a diversity of countries, especially on the Balkans regions.

The relationship between economic country stability and agriculture always are made by the most important food security factors: agriculture country policies and productivity, sustainability outcomes, price volatility, public - private partnership and agriculture potential.

Innovation, structural change and access to natural resources are key drivers of productivity growth and sustainable use of resources. Policies affect these drivers through four main channels or incentive areas:

• Economic stability and trust in institutions, which are essential to attract long-term investment in the economy;

• Private investment, which in turn requires a transparent and predictable environment that balances the interests of investors and society;

• Capacity building, including provision of essential public services;

• Targeted incentives for innovation, structural change and sustainable resource use in the food and agricultural system;

## 2. European actions and purposes for sustainable development.

Sustainable development means a better present and future quality of life. According to sustainable development vision, this process includes immediate and long-term purposes, global and local actions, economic and environment problems, all these elements being in tight connection. Such a vision cannot be carried only through policies, but society must embrace certain principles (political, economic, social, concepts).

EU provides a Sustainable Development Strategy with transparent purposes and actions based on seven priorities, most of them related to environment, from which we remind (Budica and Puiu, 2009):

1. Climatic change and clean energy;

- 2. Sustainable transport;
- 3. Sustainable consumption and production;
- 4. Natural resources management and conservation;
- 5. Public health.

Although people are concerned about finding efficient answers to constant problems raised by economic crisis (especially in Europe), problems of changing the worldwide economic pattern remain the same. Because we do not know yet, if mankind has created an authentic balance between consumption economy and the harsh necessity to protect the environment, of wisely using natural resources – characterized by their finite number and impossible regeneration over time.

A crucial moment for this approach that concerns the worldwide community – taking into consideration the simple fact that Earth is everyone's home and that beyond it do not exist other resources which can be used – was the creation of sustainable development concept. This international economic pattern was created two decades ago at the Conference in Rio de Janeiro (Brazil). After twenty years, politicians and researchers believe that an evaluation of the progress in theoretic consolidation is very useful as is an evaluation for sustainable development's capacity enhancement.

Through over 100 chef of states and 30.000 officials of mass-media and community institutions, mankind has proved that it understands some critical issues that influence both the present and future; mainly some severe development disparities and fast damage of natural resources. Scientific papers were created to highlight resources` limited feature and the dominant growth patterns unsustainable feature.

# 3. Agricultural commodity price volatility factor of global food insecurity

Volatility of commodity prices is a serious problem especially for countries of the world which are dependent producers of raw materials. About 2,3 billion people, depend on the production of primary goods such as grain, sugar, rice, meat, cotton, ferrous and nonferrous metals, copper.

Basic commodity prices are particularly volatile in the short terms; sometimes they vary even more than 50% - 60% in one year. Clearly, these grimaces of the economy - lower commodity prices will lead to small gain for farmers and thus fewer jobs for workers in rural agro-industry.

Food insecurity combined with the inherent uncertainty induces unstable prices and complicates the whole management and financial planning at local, regional and global level. All these in turn have a negative effect on countries dependent on raw materials and manufacturers. But price volatility itself is not the most serious problem, is rather national and individual income volatility obstructing medium and long term planning of governments, depending on the cargo units, and thus widens inequality between countries and lead to further degradation business.

# 4. Price dynamics for agricultural commodities. Price indices calculated by the United Nations Food and Agriculture Organization - UNFAO

Food markets have been affected by weather concerns and political tensions in the Black Sea region, which have boosted the FAO Food Price Index since February. While the 2014 global food import bill could stabilize at USD 1.29 trillion, animal product bills are set to increase, sustained by rising volumes and prices. In recent months, weather and geopolitical tensions pushed up wheat prices in international markets. However, the early supply and demand outlook for wheat in the 2014/15 marketing season points to a generally balanced situation, with world stocks remaining at relatively comfortable levels in spite of a forecast decline in world wheat production. With world production of coarse grains headed towards a sharp decline, inventories will have to be drawn down to meet the projected demand in the 2014/15 season.

Price volatility measures the rate at which prices rise or fall in a certain period of time. High volatility in world prices indicates that for farmers, and especially those in Europe, it is difficult to decide on their future production because of uncertainty about future prices. Conflict crises in various regions of the globe directly affect the food security of vulnerable populations whose access to food are reduced by high prices and cannot afford to buy in bulk when prices are low.

Dynamics of prices for agricultural commodities in the charts below is more worrisome, the food production and food in the near future. The FAO Food Price Index is a measure of the monthly change in international prices of a basket of food commodities (figure 1).

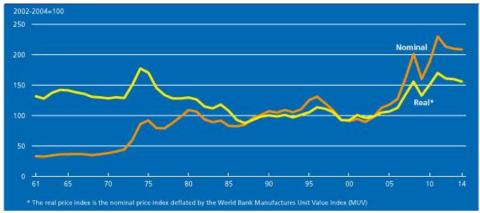


Source: www.fao.org; from 07.08.2014



Source: www.fao.org; from 07.08.2014

Fig. 3 Food production, utilization and stocks



Source: www.fao.org; from 07.08.2014

Fig. 4 Food price index in nominal and real terms

Cereal price index calculated and published by FAO increased on average 185.4 points in July 2014, approximately 16,6% (36.94 points), below one year ago. The recent sharp slide in cereal prices reflected significant falls in international prices of maize (down 9.2 %) and wheat (down 5.8 %), a reaction to excellent production prospects in many major producing countries and to the anticipation of abundant exportable supplies in the 2014/15 marketing season. However, cereal prices edged marginally higher, on renewed import demand. (Figure. 3)

Dynamics of prices for agricultural commodities price indices calculated by FAO indicates clearly a big drop in prices (price volatility) on the first part of the production increases in key commodities. Given this situation of the main agricultural products base amid considerable volatility, the effect of contraction rebounds on global markets.

#### Conclusions

Dimension of Food security has become over past decades a multidimensional and complex problem. The most important component of it, price volatility, which may occur in key moments of the further development of the market, requires countries and the international community to find sustainable solutions. From this perspective, as a nation we need to respond properly at the food insecurity, national strategies must be based on a specific analysis of the internal environment in terms of nutrition, with reference to both food supply and direct access to food security. All these measures should include policies and strategies that take action to reduce volatility impact for vulnerable populations, with benefits for both consumers and producers. All this strategies require a strong, developed and implemented research, to enable the support and involvement of civil society, private sector and farmer organizations.

For every country should be implemented real targets, such as innovative information systems to monitor food markets, assess hunger and malnutrition, and provide early warnings and a specific assistance. To overcome the impact of the food prices surges on the most vulnerable consumers, social safety nets are a source of risk prevention. In addition, such social safety nets connected with food reserves may enforce market prices in national markets. Risk management instruments are another sort of policies that have a specific purpose in controlling the impact of food price volatility on producers. Countries should be aware of choosing such risk management strategies to stabilize their food import bills.

Volatility in commodity prices core is and had been a big concern, extremely hard to deal with. The fact is, that, the mankind always knew about this issue and that the governments should be confident in solving price volatility.

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