Food and Agriculture Policies for a Sustainable Future

The topic of agriculture policies and the priorities for tackling the challenges of the future of the agriculture and food sector is both vast and pressing. In fact interests, problems and considerations of an environmental and societal nature vary considerably depending on any one country’s particular economic and geographic situation. It is impossible to establish a coherent and comprehensive, or world-wide, agriculture policy given that the situations and the challenges vary from continent to continent, even from country to country. However, it is appropriate to recognise the special situations and challenges facing people whatever their country of origin and to work together with the goal of ensuring a sustainable future for agriculture in every region of the world.

Food and food security

Of the major challenges facing policymakers over the next few years, food security must be a priority.

From the very beginning, the purpose of agriculture was to meet people’s basic need for food. This role has not changed. On the contrary, it has become more important given an ever growing world population with a wide variety of food needs. Production methods have become increasingly efficient, but undesirable side effects have appeared.

For the citizens of the 21st century, the needs that agriculture has to satisfy are continually expanding: food, renewable energy, managing natural spaces, producing raw materials for an increasingly number of different industries.

The fundamental role of agriculture is still however to produce food. Not only must the right amount of food be available, but it must meet other criteria in order to satisfy mankind’s basic needs. It should be of high enough quality (hygiene, chemical and dietary) to ensure human and animal health and must abide by other social and cultural considerations.
Often tempted by profit, the agri-food sector has not always taken all these quality criteria into account.

Every player, including public authorities, is responsible for ensuring a high level of food security. Appropriate regulation can be a useful and efficient tool. However, we have to make sure that any legal provisions are proportionate to the risks. In addition these provisions have to be considered in the context of trade - on one hand so that market efficiency is not hindered and on the other hand to avoid distorting competition.

Given advances in scientific knowledge this approach requires an effective system of control and continuous evaluation of standards.

It should be emphasised that, in terms of food security, the precautionary principle should prevail over any other considerations of an economic order.

Although a plentiful supply of food is guaranteed in industrialised nations, the same cannot be said for the entire population of the world.

In developing countries the situation is often extremely unstable. Luxembourg therefore focuses on developing cooperation and transferring knowledge and technology. It also strives to respect its engagements under the United Nations’ Millennium Development Goals. Cooperation and free access to the world agricultural markets are fundamental to the development of the agriculture sector in emerging countries.

Price volatility strongly influences food security. The last spike in prices in the agriculture sector (2006-2008) affected most agricultural commodities. Soaring world prices have had repercussions on the price of food in all countries. Some exporter countries have benefited from the sudden rise in prices, but it has been disastrous for importing countries, in particular the least developed ones. In 2009, international prices returned to levels consistent with the long term trends. Nevertheless, in comparison with the levels of the last decade and according to most forecasts, agricultural prices will on average be higher over the next ten years.

Reacting to price fluctuations is highly advisable in order to guarantee access to food for developing countries, which, unlike industrialised countries, also have to deal with higher increases in their populations. Agricultural yields are stagnating. Average cereal and oil seed yields are relatively stable (+1.1% between 1990 and 2007) in the major producer and exporter countries such as the United States (US) and the
European Union (EU). The cause of this phenomenon is a slowdown in technical advances, a reduction in the intensity of the production process as a result of the low prices, and stricter regulations and environmental constraints.¹

Against this background further technical progress and innovation must be continuously stimulated.
Subject to fluctuations in oil prices, it is also timely to take into account the effect of land being turned over to produce agrofuels. The second generation of agrofuels has the advantage of not being in direct competition with basic food production, but may have a not insignificant influence on soil fertility in general and consequently on subsequent crop yields, given the risk of organic matter being lost from the soil.
Everything must therefore be done to ensure that agrofuel production includes the notion of sustainable development in its broadest sense.

A new threat to food security is land grabbing in emerging countries - either by the state or foreign investors. This worrying phenomenon demonstrates a clear imbalance in the world’s food sector. Luxembourg therefore invites the OECD to examine every aspect of this practice.

**Recognise and make use of the multifunctional agriculture in a well thought out way**

Agriculture produces a large number of effects on the natural environment. Society is more concerned about its negative effects however.
Producers must do likewise with the aim of ensuring sustainable production on their land.
Although a great deal of effort has already been put into it, there are still plenty of opportunities waiting to be grasped.
Although it is a public duty to protect the soil and the environment by means of regulations and controls, producers’ voluntary initiatives should also be recognised. The use of methods of production that respect the environment is increasing and society is showing a growing interest in agriculture that is more respectful of the environment, or even organic, as well as in fair trade or locally produced food – on condition that the first stage in food security (an adequate food supply) is assured.

¹ INRA, Volatility of agricultural prices and market intervention methods. The increase in the years 2006-2008, Vanessa Persillet, October 2009.
At least as far as industrialised nations are concerned, it is a fact that society is demanding natural spaces for leisure and perceives the natural landscape as one of our public goods that should be protected. At the same time, producers are required to protect the environment and biodiversity. The public authorities are urged to maintain the balance between satisfying the needs of society and protecting the environment, while guaranteeing the freedom required for market development and innovation.

Intensive production methods aimed at satisfying basic food needs coupled with economic considerations directed towards maximising profit are not always compatible with protecting the environment. A degree of well thought out intensification will however be necessary to ensure the basic food needs of a growing world population are met.

It is essential that society agrees to honour food producers’ efforts to protect the environment, ensure the well being of livestock and meet other demands made by society in general. Food production, whose quality must be beyond reproach and respect the environment, cannot be at any price. Consequently and simply in terms of supply, food security may be in direct opposition to protecting the environment, unless some solidarity comes into play that would create an acceptable balance.

The price producers obtain on increasingly globalised markets often do not adequately compensate for the additional efforts made by those farmers that are environmentally responsible and respect the standards of production demanded by consumers. Society should therefore accept the need to compensate the very real efforts made by producers to protect the environment, in its broadest sense, through public aid measures.

Climate change presents a new challenge for agriculture as well as opening up new opportunities – further proof of its many functions.

On one hand production methods should be adapted in order to limit the production of greenhouse gases and on the other hand agriculture could develop the renewable energy production sector or develop new carbon capture techniques and enter new markets. In this regard, the principal role of agriculture, which is to guarantee everyone has sufficient, good quality food, should not be forgotten.

In the future, agriculture will have to take on a number of important functions in order to satisfy the needs of the population. The multifunctional nature of agriculture is a reality and
presents opportunities that should be managed, developed and supported. The agriculture sector however needs support from research institutions and industry in order to be able to fulfil all these functions.

Innovation – a must for meeting the challenges

Although the logic of these reflections appears coherent, it is obvious that the extent of the variables in play is not yet known with sufficient precision. External influences that interact and change the balance are worth exploring, as are alternatives to the planned solutions: eating habits and changes to them, the availability of water and land in relation to climate change, the production of renewable energy and its potential in line with new technologies.

Particularly in the context of climate change, further research is required in order to develop efficient and sustainable methods of production. Genetic selection of plant species with a view to obtaining suitable varieties, the development of cropping techniques and agricultural systems that respect the environment and management of water resources - including the risk of flooding - should be considered priorities.

Developing new technologies needs our full attention and may not only provide solutions to numerous problems but also produce new risks. The introduction of GMOs has demonstrated that careful, long term monitoring of new technologies is needed and must be guaranteed.

In order to establish effective and practicable solutions, it is important to improve both research cooperation and the transfer of knowledge to the agriculture sector, agricultural advisors and farmers. Regular monitoring, including an analysis of the solutions implemented, is essential in establishing the success or failure of the solutions.

Training for all players in agriculture is targeted in order to deal with the challenges that face present and future generations. It is vital to train critical and analytical minds to ensure lively and responsive workers.

Security for producers
Apart from the known economic cycles, producers have in the recent past suffered from the negative effects of price volatility - most particularly farms producing milk and cereals. As the first link in the food chain, producers themselves have suffered greatly from the damaging consequences of the recent slump in prices. Often farm organisation either does not, or only to a limited extent, lend itself to internal reorganisation or to new directions that would limit the damage. And in addition, the consequences of the vagaries of the climate differ depending on the region or orientation.

Agricultural production could develop better in a more stable environment that enables more reliable medium or long term projections. Safety nets guaranteeing a minimum income would provide an appropriate response. In addition a market management system, in combination with maintaining strategic stocks, should be an integral part of the safety net in order to soften the effects of both upward and downward price variations.

**Sustainable development**

The notion of sustainable development is and must be the basis for any reflection about the future of food and agriculture policy. Although a consensus has been reached on a universal definition, evaluating the notion of sustainable development has not yet been adequately discussed.

It is therefore important to further strengthen monitoring; in particular by putting in place appropriate indicators that would help to position agricultural policies and provide information about the way they should develop. We are of the opinion that the OECD is in a good position to investigate this matter further.

**Conclusions**

The future for the development of agriculture is far from certain, but it is obvious that there will be a future. In order to better plan this future and more effectively focus our action, we have to stimulate and support efforts directed at giving us a better understanding of both the environment in which we live and the effects our actions have on our environment.