

Proposal for a new European agriculture and food policy that meets the challenges of this century

Jean-Marc Boussard, Aurélie Trouvé, Gilles Bazin, Jacques Berthelot, Lucien Bourgeois, Sophie Devienne, Krzysztof Gorlach, Vicki Hird, Stéphane Parmentier, Paul Silcock, et al.

▶ To cite this version:

Jean-Marc Boussard, Aurélie Trouvé, Gilles Bazin, Jacques Berthelot, Lucien Bourgeois, et al.. Proposal for a new European agriculture and food policy that meets the challenges of this century. [Technical Report] 2010. hal-02823094

HAL Id: hal-02823094 https://hal.inrae.fr/hal-02823094v1

Submitted on 6 Jun2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés. Proposal

for a New European Agriculture and Food policy

that meets the challenges of this century

12 July 2010

This paper is the result of joint work by researchers in social sciences specialising in agricultural policies and active in various member states of the European Union.

The work was initiated by the "European movement for food sovereignty and another CAP"(1), but the content was elaborated and endorsed only by contributors and signatories from the academic field.

This research was funded by Oxfam/Novib, the Netherlands and by Friends of the Earth Europe

The text, summary and annexes are available on <u>http://www2.dijon.inra.fr/esr/pagesperso/trouve/</u> and in print This version of the English text (12 July) differs slightly from the earlier version (11 June) in that points 4.2.3 (1st par.) and 4.2.8 and the related point of the summary on p. 7 have been clarified by linguistic improvements.

Coordinators :

Jean-Marc **Boussard**, former director of research at INRA, France (<u>jmarc.boussard@orange.fr</u>) Aurélie **Trouvé**, maître de conférences at AgroSupDijon, France, (<u>atrouve@enesad.inra.fr</u>)

Other contributors (alphabetical order):

Gilles **Bazin**, professor at AgroParisTech, France (Part 4) Jacques **Berthelot**, former maître de conférences at ENSAT, France (part 3 and annexes 1 and 4) Lucien **Bourgeois**, consultant, France (part 1.2 and 4) Sophie **Devienne**, maître de conférences at AgroParisTech, France (annex) Krzysztof **Gorlach**, professor at the Jagiellonian University, Kraków, Poland (part 1.2) Vicki **Hird**, consultant, United Kingdom (annex 2) Stéphane **Parmentier**, consultant, Belgium (part 3) Paul **Silcock**, consultant, United Kingdom (part 1.2) Anna **Witowska**, consultant, Poland (part 1.2)

Greet **Goverde**-Lips, secretary of Platform Aarde Boer Consument, the Netherlands, facilitated the process and the translations (<u>h.goverde@chello.nl</u>).

First signatories of the summary and the conclusion

Niek Koning, University of Wageningen, the Netherlands Onno Poppinga, retired, University of Witzenhausen, Germany Jean-François Sneessens, UCL University , Belgium Bruno **Guermonprez** Enseignant Politiques Agricoles, ISA, Lille, France. Gerhart **Hovorka** Bundesanstält für Bergbauernfragen ;Austria Jean-Christophe **Kroll** Professeur d'économie, Agrosup, Dijon, France Janice **Jiggins**, guest researcher, Communication and Innovation Studies, Wageningen University, The Netherlands. Thierry **Pouch** Chercheur associé, Université de Reims, Champagne Ardennes, France. Christian **Mouchet**, professeur d'économie rurale émérite, Agro campus Ouest, France

Jacques Marzin CIRAD, France

¹ Network of European and national organisations from various sectors : European Coordination Via Campesina, Friends of the Earth Europe, European ATTAC network, European Agriculture and Health Consortium, EU Greenpeace Unit, Food and Water Europe, Flemish platform VODO, Platform ABC the Netherlands, Oxfam solidarity Belgium, Terra Nuova, Hungarian Alliance for food sovereignty, UK Food Group, German Seeds action network , ...

Contents

SUMMARY

1 The domestic challenges of the CAP 2013

- 1.1 European socio-economic challenges
 - 1.1.1 Food security
 - BOX 1: Livestock feed and its consequences
 - 1.1.2 Employment and farm income
 - 1.1.3 Nutrition and health challenges
- 1.2 European environmental challenges
 - 1.2.1 Agriculture and climate change
 - 1.2.2 Agriculture and growing energy demand
 - 1.2.3 Agriculture and loss of biodiversity
 - 1.2.4 Agriculture and soil deterioration
- 1.3 Which production systems do we need?

2 From the past to the future situation: Short History of the CAP and lessons to be learnt

- 2.1 Evaluation of the CAP as it was before 1992
- 2.2 Evaluation of the CAP reforms after 1992
- 2.3 Critique of the proposed post-2013 CAP changes

3 International challenges

- 3.1 A multiple responsibility
- 3.2 What is export dumping and what are its causes and its main effects? BOX 2: Egypt's imports of European wheat
- 3.3 The legalisation of the EU's agricultural dumping
- 3.4 Agricultural dumping by the EU is the rule rather than the exception
- 3.5 Recent developments
- 3.6 The need for the EU to take overall responsibility for its actions, including putting an end to agricultural dumping

4 Post-2013 proposals

- 4.1 Why should the CAP restart on a new basis?
- 4.2 How can we achieve these objectives?
 - 4.2.1 The CAP does not need to scrupulously comply with WTO requirements
 - 4.2.2 Storage and flows management: still vital tools
 - 4.2.3 Border measures are necessary due to the volatility of world markets
 - 4.2.4 Market outcomes must reflect the economic realities of commodity chains
 - 4.2.5 Insurance mechanisms must be strengthened but cannot replace public intervention
 - 4.2.6 Remunerate social and environmental public goods provided by farmers
 - 4.2.7 Support demand for quality food products with high nutritional value
 - 4.2.8 Reforming budgetary tools

REFERENCES

ANNEXES: Four annexes go with this text and appear in a separate document. They elaborate on some specific points.

- 1 The Agrofuels problem
- 2 The marketing power problem
- 3 The USA agricultural policy
- 4 Compatibility with the WTO rules

SUMMARY

This document is meant to contribute to the public debate that has been launched in the European Union (EU) on the future of the Common Agricultural Policy (CAP) after 2013. In this contribution we wish to stress the necessity to thoroughly transform the CAP and to preserve strong regulatory tools at the European level.

The CAP has a history of successes and failures which yields important lessons that we should take to heart. It is now faced with two kinds of challenges: domestic and international. These considerations lead to a set of proposals.

I – The lessons from history

There have been two versions of the CAP:

- The 1960 version, which was in fact a continuation and adaptation of the former national policies, which in their turn were derived from the US agricultural policy as it was gradually developed by President Roosevelt's advisors in the aftermath of the Great Depression of the 30's; and:
- The 1992 version, aiming at the deconstruction of the preceding one, in order to let markets decide what and how to produce.

The 1960 CAP was successful in warding off famine in Europe, which was a serious threat in 1945. It allowed for a smooth transfer of manpower from agriculture to other activities, in a context of a rapid economic growth. It paved the way for a model of capital-intensive family farming, which was a welcome novelty for the agricultural sector. It had nevertheless very unpleasant side-effects, in the first place because it encouraged an unnecessary depletion of natural resources and in the second place because it led to an insuperable production surplus which had to be destroyed or dumped on international markets, thus preventing many developing countries from exploiting their own comparative advantages in agriculture.

The 1992 CAP was a reaction to the problems created in this manner. But instead of analysing the causes that led to this situation, the authors of the new policy course just reverted to the *statu quo ante*, that is, to the reign of markets, which was precisely the policy line which had led to such disastrous consequences. As the same causes have led to the same effects, we have recently seen markets ending up in as great volatility as in the 19th century, with all the associated problems regarding food security, especially for the poor. At the same time, it solved neither the budgetary cost problem of the CAP, nor the natural resources problem, because it is utopian (and contrary to elementary economic theory) to have two different markets for two linked products (commodities on the one hand and their externalities on the other).

Therefore it is time that we faced the task of getting to the roots of the problem: the advantages of isolating agriculture from markets, and the difficulties engendered by an awkward management of market substitutes.

This implies meeting two kinds of challenges.

II – The domestic challenges of the CAP 2013

European socio-economic challenges:

- Food security: The EU is still showing a deficit and the trade balance seems very unbalanced in terms of products. This is particularly the case for fruits and oleaginous plants. The objective of European food security is also defined as affordable agricultural prices for consumers. However consumer prices have not decreased as much as producer prices and the gap between them is widening.
- Employment and farm income: In the past 60 years, the only objective seems to have been to save on labour without reducing materials and industrial input. The consequences have been a large decrease of farm employment and a strong concentration of land and capital in ever larger farms. This has to be addressed in a situation of mass unemployment, at a time when fossil fuel resources are limited.
- *Nutrition and health chal*lenges: The choice of food by consumers, which is largely determined by its price and availability, has led to more and more problems connected with obesity and to other nutritional problems.

European environmental challenges

- Agriculture, climate change and growing energy demand. Agriculture will be influenced by the impacts of climate change, which will become more severe and frequent. However, agriculture itself is also responsible for climate change, directly and indirectly. Intensive agriculture becomes more and more vulnerable to increasing shortages. Greenhouse gas emissions from agriculture as well as transportation must be reduced, by developing the local production and consumption of food.
- Agriculture and loss of biodiversity. The severe loss of biodiversity is partly the result of an ever more intensive agriculture. The adverse impact of agriculture should be reduced so that it can instead function as a reservoir for biodiversity.
- Agriculture and water quality deterioration. Pollution from agriculture and increasing demand for water for irrigation have led to problems with water quality and quantity. Using more adequate inputs should lead to reduced demand for water and less water pollution.
- Agriculture and soil deterioration. Increasing the quantity of organic matter by natural means, minimising tillage of the soil and favouring specific rotations should lead to the conservation of agricultural land, its productive capacity, its environmental value and its role in shaping landscapes, and to conserving the quality of soils.
- Special consequences of livestock feed. The massive imports of animal feed, mainly soya beans, have been implicated as a major driver of deforestation in South America. In the European Union, these imports are linked to the development of an intensive production mode, leading to considerable environmental and social damage. Options for addressing these problems include finding alternative sources of protein for livestock feed, changing livestock production methods and reducing volumes of livestock production.

Therefore, considering the environmental and nutritional challenges that humanity is presently faced with, changing production methods is a necessity. It will require more labour-intensive family farms, a more balanced localisation of agricultural production throughout the European Union and the diversification of production in all regions.

III - The international challenges

Eradicating extreme poverty and hunger will largely depend on improving the living conditions of farmers and agricultural workers in developing countries, as the great majority of the 1.02 billion undernourished people in 2009 are people in developing countries directly or indirectly depending on agriculture for their livelihoods. Improving their conditions calls for various measures connected with policies determined by relevant international, regional, and national bodies. This necessary challenging of the policies concerned is notably a task for the EU.

Among other things, the liberalization of borders that the EU advocates under the structural adjustment programmes (SAPs) of the World Bank and IMF, the WTO and bilateral agreements, has opened developing countries' doors to low-price imports, notably of goods exported from Europe. This is where the CAP comes on the scene: it bears a major responsibility for the massive dumping of exports that it engenders.

The European Commission denies the CAP's responsibility for poverty and hunger of the rural populations of developing countries, arguing that the CAP reforms since 1992 have largely put an end to its dumping of agricultural exports. However, throughout this period most of the agricultural commodities exported by the EU were at prices well below their average production costs. In the course of the last 15-20 years the EU's dumping of exports concerned cereals (including wheat) and cereal-based products, milk and dairy products, sugar, poultry, beef and veal, among other things. It led to serious consequences in developing countries and notably in Sub-Saharan Africa, by depriving domestic producers of their markets and thus of their means of subsistence, preventing the creation of local food commodity chains and contributing to import surges in those countries.

Even if recent developments suggest that the magnitude of the unbearable competitive pressure that EU agricultural dumping continues to exert in many poor countries must be put into perspective, this behaviour undoubtedly bears a significant share of the responsibility for the food crisis and its exacerbation. In order to contribute to the eradication of hunger, the EU must first of all recognize the right to import protection in the SAPs, under the WTO, and in bilateral agreements (including the EPAs). As a corollary, the EU must put an end to the agricultural dumping for which its CAP is responsible. Setting up effective supply management systems founded on public control of production and on variable protection at the borders would contribute greatly to this.

IV – The proposals

In the first place, promote a new international framework for agricultural markets on a democratic basis, answering to social and ecological needs. The rationale of the WTO, bilateral free-trade agreements and the World Bank's and IMF's policies is questioned by many developing countries. These countries have a right to development and deserve relief of their social and ecological needs. Therefore, the CAP does not need to scrupulously comply with WTO requirements. On the contrary, the EU should support a new, more democratic framework for the multilateral oversight of agricultural markets, based on common interests and cooperation between countries, social and ecological requirements and the right to food sovereignty.

- Storage and flows management: still vital tools to guide production and prevent prices from fluctuating excessively. Operating stocks that are sufficiently large to guarantee food security should be allowed. Mechanisms are needed which will allow supply to be managed. Therefore, price guarantees should cover costs, but they should be coupled with limits on production of the same order of magnitude as domestic consumption. Finally, further tools should be permitted – possibly including production quotas - to counter the geographical concentration of agricultural activities, environmental risks and adverse social outcomes.
- Border measures are necessary due to the volatility of world markets. In order to achieve stable farm prices and to complement the supply management instruments above, the right to variable tariffs has to be linked to the duty not to export any product at prices below the European cost of production. This is a necessary condition for international legitimacy of the CAP and for retaining sustainable family farms in Europe, which have higher production costs than in many third countries.
- Market outcomes must reflect the economic realities of commodity chains. The relationships between producers, processors and retailers must be reordered in order to make margins more transparent and the distribution of added value more equitable. Only the public authorities can help to even out this balance of power. This type of reordering means that European competition law must be revised and *the Commission must recognize the unique nature of agricultural markets.*
- Insurance mechanisms must be strengthened but cannot replace public intervention. Insurance policies are effective against increasing climate and health risks, but it is costly and erroneous to believe that turnover insurance could replace public intervention when prices are concerned.
- Remunerate social and environmental public goods. Single farm payments are politically unintelligible and socially unacceptable for both producers and taxpayers. There is no justification for splitting the CAP into two pillars, with the one striving to undo the damage to employment and the environment caused by the other. Support must be linked to outputs. The CAP should use stronger incentives to provide better support for agriculture with a strong environmental basis (low inputs, pasture systems, organic farming...). If prices are guaranteed to a level covering production costs, subsidies should only be given to producers who have higher production costs because they work in less favoured areas, to those who achieve more in the field of sustainability than is required by the basic rules, possibly to farmers working on very small farms, and similar exceptions. Strict environmental and animal health rules enforced by European laws should be required of all farmers.
- Supporting the demand for quality food products with high nutritional value. Europe must develop a more systematic food support policy, targeted on specific social categories and products with high nutritional value. Part of CAP support could also be used to support regional or national chains of quality products.
- *Reforming budgetary tools.* Management of the CAP budget must be much more flexible so that resources can be adjusted to needs and deal with crises (in health, climate or on the markets).

Introduction

In 2013 a thorough reform of the Common Agricultural Policy (CAP) is expected. A public debate on the future of the CAP has been launched in the European Union, and a synthesis conference will take place in July 2010. This document is meant to contribute to this debate.

Parallel to the changes in 2003 and 2008, a new reform of the CAP is to be expected in 2013. The economic crisis has affected countries worldwide since 2008. This is generally considered to be a global crisis which has multiple social and ecological aspects. Its origins lie in the current economic system, characterised by market liberalisation. In addition, there is an ecological crisis as well as a global food crisis. Finally, the continually developing construction of an expanding Europe must also be considered. This context has led to a re-evaluation of the modes of agricultural production and food consumption as well as of the policies determining them.

This contribution wishes to stress the necessity to thoroughly transform the CAP and to preserve strong management tools at the European level. The first part proposes to deal with the ecological, social and economic challenges that agriculture and nutrition face within the European Union. The second part presents a critical evaluation of the CAP since its inception, taking into account the ecological and social challenges identified in the first part. The third part analyses the consequences of the CAP for the rest of the world and the international challenges more precisely. The European Union has specific international responsibilities with respect to agriculture: it is one of the most important agricultural and food markets of the planet and one of the most important export zones for agricultural products. The EU is also the biggest net food importer. Therefore it is impossible to examine the CAP without taking into account the international food and agricultural challenges. Finally the last part will develop a number of proposals for an alternative CAP, with effective answers to ecological, social and international challenges.

1. The domestic challenges of the CAP 2013

1.1. European socio-economic challenges

1.1.1 - Food security

Between 1939 and 1950, the countries of Continental Europe involved in the global conflict suffered from food deprivation. Moreover because of the Cold War countries in Western Europe were cut off from traditional exporting countries in Central and Eastern Europe and the shortage of currency led to supply difficulties on the global market. This situation impinges on people's frame of mind, many coming to fear food shortages. This explains why the possibility of surpluses was for a long time considered a lesser evil and why the intensification of the Cold War induced a strategic approach to food security in the European Economic Community (EEC).

In this period, the pursuit of food security was accompanied by an industrial dynamism that produced the necessary fertilisers, machines and buildings for farmers. This also created jobs for the children of farmers in a context of strong agricultural reconstruction and concentration of farms.

This development also enabled the EU to considerably reduce its deficit in agrifood products. Nevertheless, the EU is still showing a deficit,² although it has favourable agronomic conditions and a relatively large agricultural area compared to the number of inhabitants. The trade balance also seems very unbalanced in terms of products, with especially sizeable imports of fruits and oleaginous crops (see Box 1).

BOX 1: Livestock feed and its consequences.

Across the EU-27 in 2008, 240 million tonnes of animal feed were consumed. Of this, nearly 19% was imported from outside the EU, of which oilcakes, mainly of soya, accounted for 60%. While some soya is grown in Europe, much is imported, with 85% of soya imports to the EU coming from South America.

These imports have been implicated as a major direct and indirect driver of land use changes in South America. Soya bean farms cause some forest destruction directly, but they have a much greater impact on deforestation by consuming cleared land, savannah and transitional forests, thereby pushing ranchers and slash-and-burn farmers ever deeper into the forest frontier. Soya bean farming also provides a key economic and political impetus for new highways and infrastructure projects, which accelerate deforestation by other actors. When soya prices rose in 2007, in a four-month period the area of deforestation was doubled. Soil erosion, pesticide usage and pesticide exposure/poisoning are all associated with soya farming.

In the European Union, these imports are linked to the development, since the seventies, of an intensive production mode based on maize / soya, inspired by the United States. This resulted in a decrease of the acreage of grass and legumes (vegetable proteins). This way of feeding animals has also led to a concentration of European livestock farming near large European ports, as well as a decrease of the production of pigs, poultry and milk in many traditional livestock regions situated far from these ports. These developments in raising livestock have caused considerable environmental and social damage.

²

This is all the more true if one takes fisheries products into consideration and leaves out tobacco.

Options for addressing these problems include finding alternative sources of protein for livestock feed, changing livestock production methods and reducing volumes of livestock production, although these options all have a range of displacement effects. Replacing 100% of the 37 million tonnes of soya products imported to the EU on average from 2006 to 2008 (assuming this were technically feasible given soya requires specific climatic conditions) would require 29 million hectares of land given the average yield of 2.5 tonnes/ha in the 2006-08 period (the land area of the France is 29.4 million hectares). Replacing imported soya with other domestically produced protein crops such as oilseed rape, peas or beans would require a significantly larger area in order to provide the same crude protein content.¹ This would suggest that effort should be focused on developing protein crops, but also on reducing EU livestock production overall, switching to more sustainable production methods and reducing consumption of livestock products.

Sources: (IEEP, 2009; Mongabay, 2010)

The objective of European food security is also defined as affordable agricultural prices for consumers. At the production level there has been a relatively rapid price decrease in the past 35 years, especially since 1992 and the decision to reduce intervention prices. But consumer prices have not decreased as much as production prices and the gap between them is widening. A report by the European Parliament (2004) shows that the prices paid to producers decreased by 1.1% between 1995 and 2002, while the prices paid by the consumer increased by 11%. This should be put into perspective, specifically regarding the ever stronger concentration of processing and distribution companies (10 purchasing combinations control 40% of the European food supply) (Grivink, 2003).

1.1.2 - Employment and farm income

In the past 60 years, agricultural development has mainly targeted an increase in labour productivity, leading to a rapid growth in agricultural production. The progress is a lot less evident in the productivity of capital or of intermediate inputs. The only objective seems to have been to save on labour without reducing materials and industrial inputs.

The consequences have been radical: in a country like France the proportion of people working in agriculture decreased from 30% in 1945 to 2.2%, according to Eurostat. In the EU of 27 members the number is currently at 5.4%. The number of farms shows a parallel tendency (from 6 to 3 million farms in the EU of 6), with a concentration of land and capital in ever larger farms: in Germany the average area per farm increased from 10 to more than 40 hectares³ in the past 40 years.

Since the first oil crisis in 1973, unemployment has increased in many European countries, whereas the resources of fossil fuels were limited. It would have been a good idea to save more on scarce factors than abundant factors in the course of the past 30 years, in a context of mass unemployment, substantially exceeding 10% of the active population in many countries. The situation is particularly worrying in South, Central and Eastern Europe. In 2007 the average farm size was 22 ha in the EU-15 but only 16.8 ha in the EU-25 and 13.8 ha in the EU-27, after the entry of Bulgaria and Romania, and 46% of the farms have a standard gross margin⁴ below $\leq 1,200$. In many of these countries most of the

³ Source: Eurostat; Note that the inheritance of the large agricultural complexes of the former eastern Germany explains at least part of this figure.

⁴ The "gross margin" is the difference between receipts and direct costs, not counting labour, capital or amortisation. For each crop, in each region, the EC has defined a "standard gross margin", using typical input / output ratios. This standard gross margin is useful to compare the size of, for instance, grain producing farms and vegetable producing farms: thus, for instance, a 100 ha grain producing farm can be considered to have an equivalent size to a 10 ha vegetable producing farm, if the standard gross margin of vegetables per ha is ten times the standard gross margin of grains per ha.

farms are subsistence or semi-subsistence farms, playing an essential role as a "social buffer" for the rural population, and the number of people working in agriculture remains high, above 12%. This is also the case in countries like Greece or Portugal. Nevertheless, the number of farmers and farms keeps decreasing: in Poland, the percentage of the population active in agriculture has decreased from 28% in 1988 to 18% in 2008. It has halved in Hungary (from 15.8% to 8%).

The implicit agreement between the agricultural organisations and European governments was to accept this continuous reduction in the labour force on condition that the incomes of the farmers who kept working could advance at the same pace as those of other socio-professional categories. But during the past two years the agricultural incomes have decreased sharply because of increasing production costs and decreasing agricultural prices. For that matter, agricultural incomes depend strongly on direct public agricultural support, which constitutes 50% of incomes.

1.1.3 - Nutritional and health challenges

Europeans consume more and more processed food products with large quantities of sugar and fat (IOFT, 2005). The increase of obesity throughout the EU is particularly worrying. It has already affected a quarter of the population of the United Kingdom. The choice of food by consumers is largely determined by its price and availability. The massive use of pesticides is also costly for society in terms of public health.

1.2 – European environmental challenges

1.2.1 - Agriculture and climate change

Climate change is arguably the greatest environmental challenge facing Europe and the world as a whole. Over the past 150 years, the mean temperature has increased by almost 0.8 °C globally and by about 1 °C in Europe. Nine of the last ten years (2000-2009) rank among the 10 hottest years on record since 1880 (Earth Policy Institute, 2010). The change is certain. The cause is still in debate, despite a very high probability that the "greenhouse effect" bears the major responsibility. Without global action to limit emissions, the Intergovernmental Panel on Climate Change expects that global temperatures may increase further by 1.8 to 4.0 °C by 2100.

The impacts of climate change are already being observed across Europe and are projected to become more pronounced. Agriculture suffers from climate change although farming in Northern Europe may benefit from a limited temperature rise. The European Union is predicted to experience a shift of productive zones towards the poles. Agriculture will be influenced by climatic accidents (drought, flooding, storms...), which will become more severe and frequent. Supply of water is tightening as a result of reduced precipitation due to climate change, including in Europe. Climate change is also expected to lead to further soil erosion resulting from extreme events and loss of soil moisture due to increased temperature and reduced precipitation. Agriculture is also responsible for climate change, for around 10% of Europe's greenhouse gas emissions (LEI, 2008). It is the main source of methane (34%) and nitrous oxide (60%) emissions, and both of these greenhouse gases have a much larger warming potential than carbon dioxide. Agriculture emits these gases directly (nitrous oxide from fertilisers and methane from ruminants) and indirectly, due to the use of machines and transport as well as to deforestation (which results in the disappearance of carbon sinks). However, over the last period methane emissions have decreased, mainly as result of reductions in the size of cattle herds. Reductions have been as much as 46% for new Member States, and a more moderate 9% in the EU-15, over the period 1990 to 2000 (Dwyer, 2002).

1.2.2 - Agriculture and growing energy demand

There is a pressing need to reduce our dependency on fossil fuels as a key element of a strategy to reduce greenhouse gas emissions, as well as a consequence of the inescapable reduction of resources availability. However Europe is facing an unprecedented combination of an increasing demand for energy. Total primary energy consumption in the EU-27 increased by 9.8% between 1990 and 2005 (EEA, 2006). Much remains to be done to manage and reduce energy demand in the future.

Intensive agriculture consumes a lot of fossil energy for machines, nitrous fertilisers, transport, etc. Because of its excessive dependence on oil, agriculture has become vulnerable to the growing shortage of a fossil energy which is going to become more and more expensive. There is also a need to change our mix of energy sources as a result of climate change, "peak oil" and other factors.

This argument is used to promote the development of agrofuels. However, their environmental and social impact is strongly criticised and the competition with land for food production is also a point of concern. In view of the current production capacity of the EU, the objectives regarding agrofuels for cars as defined by the European Union seem therefore to be quite disputable (cf. Annex 1).

1.2.3 - Agriculture and loss of biodiversity

Europe has an incredible diversity of species and habitats yet we are currently witnessing a steady loss of this biodiversity, with profound consequences for the natural environment and human wellbeing. Habitats have been destroyed and degraded through fragmentation and isolation. Species have become extinct and populations reduced. Thus, the Worldwide Fund for Nature has predicted a loss of 50% of species between 2010 and 2050, with major declines occurring in just the last 20 to 30 years (WWF). This loss of biodiversity is the result of an ever more intensive agriculture⁵ leading to the destruction of hedges and the intensification of production and to dire consequences for wild fauna and flora (EEA, 2010). In the past 60 years European agriculture has increasingly complied with the demands of the industrial processes introduced by its customers: agricultural products have been homogenised and European farmers have adapted themselves to the required specifications. In doing so the number of species and varieties that were utilised has considerably decreased.

1.2.4 - Agriculture and water quality deterioration

Ensuring adequate supplies of clean fresh water is essential to life. Unfortunately the water quality in Europe has suffered for many years from pollution, nutrient enrichment and soil sediment deposition affecting the biodiversity of thousands of kilometres of waterways, harming human health, and in the end polluting coastal and marine waters. Diffuse pollution from agriculture in the form of nitrates, phosphates and silt is still problematic. Eutrophication and pollution from fertilisers, pesticides and intensive production methods are major concerns in many parts of Europe including Scandinavia, the Baltic states and parts of Eastern Europe, with salinisation an increasing issue in Southern Mediterranean countries. Increased demand for water for irrigation is also observed. Water availability is a key issue in drier areas such as Spain, Portugal, Malta, Greece and other Mediterranean countries; however other countries such as Poland are also concerned about high demand for water from intensive agricultural production methods (EEA, 2006).

⁵ When the terms 'intensive agriculture' and 'intensification of agriculture' are used here they refer to the intensification of inputs in relation to land, combined with the mechanisation and concentration of farms.

1.2.5 - Agriculture and soil deterioration

Conserving and looking after our soil is critical not only for agriculture and food production but also for the wider environment including water, biodiversity and ecosystem health. Soil is also second only to the oceans as a global carbon sink, holding an important role in the potential slowing of climate change. Maintaining the quality and productive capability of soil is therefore important environmentally as well as economically.

Despite this, soil is being exploited and irreversibly lost and degraded as a result of conflicting demands from different economic sectors including agriculture. Erosion, sealing, contamination, loss of soil structure, a decline in soil biodiversity and organic matter, and desertification are just a few of the threats to soils in Europe (EEA, 2010). In the long term the heavy use of chemicals reduces the organic matter and damages the soil's texture and the defences that it gives plants against pests⁶. Gradually improving the soil requires a complete overhaul of intensive agriculture.

In Europe, urban areas and related infrastructure are the fastest growing land consumers, mainly at the expense of productive agricultural land. During the 1990–2000 in Europe, of all areas converted to artificial land-use, 48% were arable land or under permanent crops and 36 % were pasture or mixed farmland (EEA, 2006). Rural landscapes are changing due to agriculture intensification, land abandonment and forest exploitation. Coastal and mountain areas are undergoing profound spatial reorganisations to accommodate intensive tourism and leisure activities.

1.3 - Which production systems should be favoured as regards these challenges?

The report of IAASTD (International Assessment of Agricultural Knowledge, Science and Technology for Development), published in 2008, concludes that it is necessary to change production methods thoroughly, considering the environmental and nutritional challenges humanity is presently faced with.

Specific ecological challenges for agriculture include:

- Reducing greenhouse gas emissions from agriculture and developing the energy autonomy of the farms and the use of renewable energy in the farms. This also means a reduction of the transportation of crops, livestock, inputs (such as fuel, fertilisers and seeds) and processed outputs, both within the EU and into the EU from other parts of the world, by developing the local production and consumption of food. By contrast, agrofuels as an alternative to fossil fuels would lead to a further intensification of production and loss of land needed to produce food (see Annex 1). The social and environmental consequences connected with the development of agrofuels cause us to recommend terminating their industrial production in the EU, reconsidering the objectives defined by the EU, and developing the sustainable production of energy from wood, biogas, even crude vegetable oils used directly on farms.
- Conserving and enhancing biodiversity, by reducing the adverse impact of agriculture and make it function as a reservoir for biodiversity, rebuilding the habitats and species which have been lost as a result of agricultural pollution, under-management and the disappearance of a lot of plants and animal species. This also leads to favouring maximum vegetation and the re-introduction of varied plots.

⁶ See "Earth Matters", Copenhagen issue, October 2009, Seedling, <u>http://www.grain.org/seedling/?id=643</u>. More and more fertiliser is needed to get the same results.

- Reducing demand for water and reducing water pollution by using natural inputs as much as
 possible and strongly reducing the use of artificial fertilizers and chemical inputs, by extending the
 principles found in the 1991 Nitrates Directive, according to which nitrogen content in the soil has
 to be monitored and limited. This is only achievable by means of a better adaptation of practices
 and cultivated species to ecological systems.
- Conserving agricultural land, both for its productive capacity, its environmental value and its role in shaping landscapes, in the face of increasing demands from other potential users, and conserving the quality of soils by increasing the quantity of organic matter by natural means, minimising tillage of the soil, and favouring crop rotation and leguminous plants.

In the face of the challenges identified above, it is important to recognize that all farming systems need to evolve to become more sustainable. These environmental demands require a thorough knowledge of agricultural practices and ecological systems, which seems more readily available in labour-intensive and small-scale family farms where farmers have been trained accordingly. These farms can also be handed over more easily and are therefore well suited to the arrival of new farmers. They are less capital-intensive but more labour-intensive and create jobs in isolated rural zones. They can retain the population while satisfying social conditions, thus reducing the growth of urban poverty pockets.

In conclusion, a lot of studies underline the concentration of agricultural activities in certain European regions and their specialisation in terms of productive orientation. This concentration and specialisation is accompanied by a duality, also geographically, of agricultural development methods, with on the one hand farms that are more and more concentrated, mechanised and intensive as regards production means (inputs, e.g. chemical fertilisers) and capital and on the other hand small, labour-intensive farms that deliver a large number of environmental and social services. This duality can also be observed in certain New Member States such as Poland. This concentration, specialisation and duality leads to stronger environmental pressure in certain regions, ecological costs caused by the distance between the production and consumption poles, as well as uneven access to environmental and social agricultural services. This pleads for a more balanced localisation of agricultural production throughout the European Union and a diversification of the production in all regions.

2. - From the past to the future situation:A short history of the CAP and lessons to be learnt

2.1. - Evaluation of the CAP as it was before 1992

2.1.1 - The basis of the CAP

The CAP was in operation from 1964, on the basis of principles worked out during the 'Stresa Conference' where the main interested parties from the six founding countries of the European Community had got together in 1958.

However, they did not start from scratch, for the CAP of those days was only the continuation, and the harmonisation as regards the details, of the policies that had already been in operation for at least ten

years in the different Member States. And those policies themselves were basically adaptations to particular circumstances of the policy that had gradually been developed in the USA by the team of President Franklin D. Roosevelt between 1932 and 1940 (cf Tracy, 1996).

The core of those policies consisted in the first place in isolating agriculture from the market⁷. In the second instance their objective was to gently encourage the adjustment of the means of production – soil, labour and capital – to one another, in such a way that the most effective combinations could be put in operation.

The idea of isolating agriculture from the market was based on analyses of the origins of the Great Depression of the 1930's. In the 1920's American farmers had invested heavily and run up debts, basing their calculations on the high prices – the highest in history – that had been paid during and immediately after the First World War. Prices fell abruptly in 1927, which first caused the bankruptcy of the farmers and subsequently, was one of the roots of the bank crisis of 1929. Analysts such as Mordecai Ezekiel, Rexford Tugwell and Richard Wallace in particular⁸ concluded that the market was not an adequate instrument for the long-term management of agricultural supply and demand based on the costs of production and demand by consumers. Therefore they recommended systems of guaranteed prices, coupled with supply control based on administrative methods. That idea was difficult to accept for the American public, liberal by nature. That is why it took more than ten years to get it going – even though the ideal recommended by Rexford Tugwell in 1931 would never be achieved.

The isolation from the market could take two quite different forms: one could let the market decide the consumer prices, in which case the state took responsibility for the difference between the guaranteed price and the "free" price by paying the difference to the producers in the form of "deficiency payments" (or by taxing them in case of high prices). One could also decide that the price guaranteed to the farmers was going to be the domestic price, which implied that the difference between the domestic price and the price paid to the supplier (or the sale price for the client) was levied on all imports. The Anglo-Saxon countries generally chose the first option for the reasons that it left the market as the regulator of demand and minimised the prices paid by consumers, satisfying the principle of "cheap food". The six founding members of the EEC opted for the second choice, based on what was already in use in France and Germany. In this way "variable import duties" were introduced, which were the main original feature of the CAP.

The idea of a "structural policy" was based on a related analysis – the inability of the market to adjust production factors – land, labour and capital - quickly enough to reach the most efficient proportions within a reasonable time horizon, and the consequent need to speed up adjustments. However, very soon, the idea of leaving this second aspect of agricultural policies to the Member States was agreed upon, so that only the price policy was really a common instrument.

An optimal structure can be achieved on large farms (e.g. 100 workers and 1,000 ha) as well as on small farms (e.g. 1 worker and 10 ha). That does not make any difference as regards the efficiency of production, but it is important for the distribution of incomes. On that point, there was strong consensus about the idea that the structural policy should aim at promoting "family farms" everywhere in Europe, where the workforce would essentially consist of the farmer himself and his family members. In a country such as France this took the shape of "lowered interest rates" for bank loans –

⁷ Of course, the authors of this doctrine did not present it this way (except Tugwell, who, in a book published in 1935, wrote: "The cat is out of the bag. There is no invisible hand... we must now supply a real and visible guiding hand to do the task."). But as soon as prices are fixed by the government, agriculture is actually disconnected from the market.

⁸ Cf Leuchtenburg (1963) and Lindley (1937). See also the publications of these authors, especially Ezekiel (1938).

in fact, subsidies for capital - "lifetime indemnities for leaving farming" for elderly farmers – in fact an encouragement to retire, a sort of buy-back of the workforce in excess, designed to readjust the acreage of the farms to the needs of capital-intensive family farming - and other measures of this sort. Similar measures were taken to encourage the establishment of agrifood businesses, for instance in France by means of "producer groups" and cooperatives. With different names similar systems were put in place in all the States of the community, even if they were organised in different ways locally – resulting from the fact that it was apparently impossible to adopt exactly the same measures in the regions for very different productions.

It took a long time to set up this set of mechanisms, and it was complicated by the enlargement of the Community, national rivalries and the fact that certain products such as fruits and vegetables could hardly be made to fit in with a guaranteed price system. We will not elaborate further on the details of the discussions during the "Brussels marathons". We will focus on the results instead.

2.1.2. Results of the CAP for production and prices

They were spectacular from the production point of view. At the beginning of the 20th century Europe was far from self-sufficient as regards food, to such a degree that the States found it necessary to launch colonial adventures in order to secure their provision from "virgin lands". The world wars did not improve things.⁹ At the beginning of the sixties, after about ten years of guaranteed prices, self-sufficiency had nevertheless been achieved, or it was at least within view. In 1992, the main problem was that of surpluses (at least in the eyes of the decision makers, for in reality Europe was still far from self-sufficient because of the imports of animal feed).

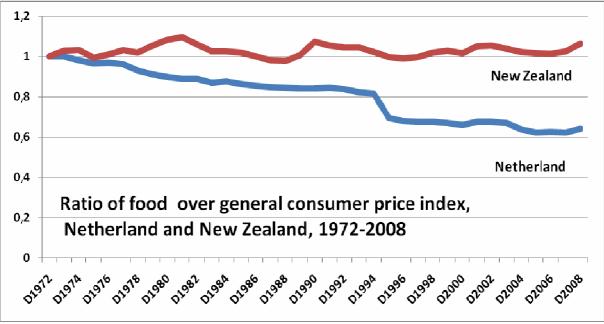
That result is the consequence of higher yields; for example the grain yields in the USA as well as in France were about 1 tonne (t) per ha in 1845, and had risen to 1.5 t in both countries in 1945, that is, a multiplication by 1.5 in a hundred years, but in 1995 the yields were 3.5 t. in the USA and 6 t. in France. That is a multiplication by just over 2 in the USA and by 4 in France, in 50 years. That rise in yields is a result of technical progress, but this would not have been possible without the accumulation of large amounts of capital by the farmers.¹⁰ And that accumulation of capital - largely borrowed – would not have been possible without the price guarantees that permitted banks to lend to farmers without too much risk.

All of this, contrary to the belief that "the CAP was financed by the consumer", happened without weighing too heavily on food prices, in spite of the fact that the Community prices were sometimes double those on the world market. This shows us in fact that the price of food in the European Economic Community has never evolved very differently from elsewhere. For example, in figure 1 the comparison between the development of consumer food prices in the Netherlands (a CAP country) and those in New Zealand (a comparably important country that has adopted a much more liberal agricultural policy) shows that in the Netherlands the food prices have decreased compared to other products between 1972 and 2008, and they have remained practically the same in New Zealand.

⁹ In March 1945, an American official who wanted to know how he could help Europe concluded that there might be need for "maize in April or coffins in June" (Bossuat, 1997, p. 52).

¹⁰ The techniques had been known since the middle of the 19th century but they could not be put into practice for lack of capital.





Source: International Labour Organisation statistical office

This is not a general law: one could easily find examples to the contrary. The food prices have fallen in Norway and they have remained reasonably constant in France¹¹. But this example shows that the policies of "high agricultural prices" are not automatically synonymous of "high food prices". There is a reason for this: fluctuating prices are expensive for the agrifood businesses: they force them to renounce certain productivity gains, thus discouraging them from lowering their prices, whereas the opposite phenomenon occurs when agricultural prices are stable. Such an interpretation becomes even more plausible in the case of the Netherlands because of the fact that after a sharp decrease in 1995 due to the CAP effect of opening up the domestic market to the international market, this tendency to decrease prices slowed down markedly from 1996, that is to say from the moment when the CAP changed and prices became more volatile.

A second important point that can be attributed to the "60s model" CAP is the development of new social relationships in the agricultural sector, a result of the policy of "family farms" described above. That made it possible for the quantity of capital invested in agriculture to increase without requiring the intervention of large firms, whose main comparative advantage is their easier access to financial markets. This observation even applies to the local processing industries, generally producer-owned cooperatives. Such a development did not happen all by itself: in 1950 many analysts, whether in market-economy or Communist countries, foresaw the unavoidable development towards more or less oligopolistic "large agricultural firms"¹². This development shows clearly that when prices are rather stable and when there are constant returns to scale¹³ nothing causes agriculture to develop into large

¹¹ Even this is not completely true: in a long series by INSEE, it appears that food prices in France decreased by 20% compared to other prices between 1960 and 1996, that is to say in the period of "high agricultural prices". Subsequently they increased again by 10% between 1996 and 2006 – a period of supposedly low prices.

¹² It is even possible that such growth was one of the reasons for the failures of t he "socialist" agricultures, be it in China or the USSR (and even in Israel in the kibbutzim).

¹³ If a technique is profitable on 1 ha, then it is just as profitable (no more, no less) on 10,000 ha. This is the reason why a collective farm with 1,000 workers and 100,000 ha is not significantly more (or less) efficient than 1,000 family farms, each with 100 ha and one worker.

firms. There is no doubt that such an individual capitalism constitutes an original social organisation pattern, which is considerably more humane than that of "large firms with employees".

2.1.3. The limits of the former CAP

Some clouds appeared on the horizon during these major successes. Three problems became apparent in the late 1970s and acute at the beginning of the 1990s.

In the first place there was a tendency to produce surpluses. This was aggravated by a circumstance that had nothing to do with the basic philosophy of the CAP but was worrying all the same: a treaty, signed at the beginning of the 1960s, which authorised the unprotected import into Europe of products for animal feed called CSPs (cereal substitute products), as well as of "protein seeds" such as soya, rich in proteins, that are indispensable for improving the productivity of livestock. When European negotiators made that concession, those products were of no importance. As time passed the consumption of these products increased considerably as they were much cheaper than local products such as cereals or alfalfa, for which they were perfect substitutes. From then on the Community found itself considerably burdened with grain surpluses which it had to export with subsidies, while it was obliged to import ever larger quantities of CSPs and oilseeds products. That situation was basically absurd.

That uncontrolled production growth seemed even more absurd when one realised that it occurred under circumstances that could easily cause great damage to the environment: even without mentioning biodiversity or animal welfare or the greenhouse gas effect, it was clear that the depletion of organic matter in the soils, aquifer pollution and other similar effects of "productivist agriculture" were in the long run going to cause a grave problem for the sustainability of this type of production growth.

The subsidised exports of surpluses raised great objections on the part of the developing countries that received them. In principle, those countries should have been glad to receive cheap food at the expense of European taxpayers. They would have been able to lower their wages and become competitive in at least certain industrial activities. That argumentation is very naïve, however, for it does not take into account the dynamics that play a role in the creation of an industrial competitive advantage. Low wages are not enough (and perhaps not even necessary) to create such an advantage; physical and human capital are probably more decisive. European export subsidies (just like U.S. subsidies!) by themselves were not able to promote the industrial development of Africa and other poor countries. At the same time they seriously hampered the agricultural development of the countries concerned because they meant unfair competition with a local agriculture that lacked means of production and was therefore fragile. In the meantime the budget ran out of hand, even though it was rather modest as compared to the sums that were spent by the U.S. Treasury to put a similar policy in place (by means of "deficiency payments" instead of guaranteed domestic prices). Nevertheless it was equally worrying because of the increase in export subsidies. It was overrunning the budget, combined with the practical difficulty of storing the quantities delivered to "intervention". This led to modifications of that policy in a very reasonable direction at the beginning of the 1980s, when "production ceilings" were established (a mechanism that limited price guarantees to only a certain guantity - an idea already formulated by Tugwell in 1931, but which had only been put into practice for sugar beet production).

The establishment of production quotas for milk in 1984 made it possible to stop the increase of the supply of that product. It also offered the possibility in certain countries such as France to avoid a development that became apparent: the concentration of production in a small number of regions where it was easy (and therefore cheaper) to collect the milk, avoiding more difficult areas such as

mountains, where milk production was part of the traditional landscape and an aspect of the collective identity. The prohibition of the transfer of quotas from one region to another was quite effective from that point of view.

Yet the volume of quotas, which greatly exceeded domestic consumption both in the case of sugar (30%) and milk (10%), could not avoid the necessity of export subsidies.

2.2 - Evaluation of the CAP reforms after 1992

In 1992 it would have been possible to marginally reform the CAP, slightly reorienting a course which, though certainly needing some corrections, was mostly on the right track (Boussard, 1988). Instead, a radical overhaul was decided, based on principles completely different from the previous ones.

2.2.1. The 1992 CAP approach

The immediate political reason for this change was the need to take on board the U.S. drive to liberalise agriculture in the Uruguay Round negotiations. The economic justification was based on the alleged virtues of the market and its ability, through competition, to ensure price equality for any product at the lowest cost levels needed to satisfy demand.

As we have seen above it was precisely the reluctance to accept this hypothesis, disproved by the experiences of the 1930s that led to the post-war agricultural policies. By 1990, however, this lesson of the Great Depression had been forgotten. At the same time, a new set of political doctrines was becoming more popular in the political sciences regarding the the pressure power of lobbies. One of the key writers in this field was Olson (1965), who took the agricultural sector as an example in a wider ranging work. During the 1990s, other authors such as Gardner (1996) took his work further and drew significant conclusions from it for farming policies, arguing that the problems with overproduction and bad management of the environment on both sides of the Atlantic were the result of the fact that powerful lobbies had managed to impose much higher agricultural prices than those warranted by the supply and demand equilibrium. It was therefore necessary to go back to more reasonable prices, as determined by the market.

At the same time, still according to Gardner, through the higher prices they managed to impose, farmers had gained extra revenues that could not now simply be withdrawn: they had to be given compensation in the form of "direct payments". Authors such as McCallan and Josling (1985) laid the theoretical economic foundations for such payments claiming that, in a properly functioning market, guaranteeing lump-sum payments – that is, payments without links with production - to farmers did not hinder (on the contrary, it encouraged) matching marginal costs to equilibrium prices: the ideal market situation. In this way the principle of "decoupled" support for agriculture was set in motion. It was thought that such "decoupled" support made it possible to support farming incomes as much as was politically expedient without introducing distortions in the market, which could therefore still play a regulatory role in supply and allow producer-consumer information exchange.

2.2.2. The political context of the reform

In the early 1990s this approach won major political backing as it sanctioned the (electorally) crucial agricultural subsidies in the United States whilst preserving deeply-rooted U.S. liberal ideological tenets. However, given its impact on international trade, the implementation of this policy in the USA (first attempted through the 1996 Farm Bill) required that it should be regarded as a worldwide standard. From this point of view, the Blair House agreement demonstrated the Europeans' good will

but also their lack of critical approach and independent thought. This permitted the signature of the 1994 Marrakech Agreement which concluded the "Uruguay Round" and paved the way for the 1996 U.S. Farm Bill.

Does this theoretical stance bear any relation to reality? It is rather doubtful. It relies on a static view of economic forces that in fact operate in a dynamic context. Most agricultural economists now accept that all sorts of subsidies have always, at some point or other, a distorting effect. The U.S. example confirms this viewpoint: the most innovative provisions of the 1996 Farm Bill were soon repealed (in 1998-99) when it turned out that the system was not working as harmoniously as expected, and that urgent measures - establishing countercyclical support, depending on revenues - were needed, which in practice meant that prices paid to farmers were prevented from falling below a rather narrow range.

This was not the case in the European Union partly because the decoupling logic had not been pushed to its limits, so that the shortcomings of the system were less evident than in the U.S.

2.2.3. Implementation of the "first pillar"

The CAP, in the 1992-2013 period, can be characterised as being a series of transitional phases between two theoretical approaches. Up to 1992, it was a policy based on guaranteed fixed (or not too changeable) prices, generally higher than international prices, with stockpiling/destocking and export subsidies allowing for the adjustment of supply and demand by levying variable customs duties ensuring the protection of domestic products with higher prices. By the end of the period, agricultural decisions are supposed to be governed by world equilibrium prices, at least for commodity production. In between, direct subsidies would first be linked to "historical references" (namely, each farmer's production levels of 1986-92) and more or less "coupled" (the necessity to produce to get them). And then they would be decoupled progressively so that ultimately the subsidies of the "single farm payment" would be solely linked to farm size.

Similarly, prices would no longer be guaranteed but allowed to vary, "safety nets" would step by step become looser, slowly getting farmers used to increasing price volatility. Meanwhile intervention stocks would gradually be phased out, customs tariffs would be reduced to symbolic levels, and production quotas would gradually be enlarged until they would end up not being restrictive at all.

2.2.4. Setting up the "second pillar"

This approach could have been taken to its logical conclusion, namely, the total elimination of direct subsidies, but for one important issue: the environment. These environmental payments were added to the former payments to encourage investments and compensate farmers in disadvantaged zones. Agriculture does not just produce wheat or tomatoes, but also environmental goods such as landscapes or nuisances such as water pollution. These positive or negative "externalities" are not taken into account by prices. It is therefore impossible to rely on markets to indicate to producers what citizens want on this issue and consequently to arbitrate between the supply and the costs of these goods. Yet such externalities affect the general welfare. How can one ensure that a market-led agriculture supplies enough positive externalities (or reduces negative ones)?

For people imbued with an unswerving belief in the perfection of the market, the answer to this question was to create a market for these types of goods. True, it would be an artificial market but it would nonetheless steer farmers in the right direction. The state simply had to fix a price for each amenity produced or for each nuisance avoided, and make the corresponding direct payments. Thus direct subsidies would no longer be the unfortunate result of a historical mistake that allowed farmers

to rob their fellow citizens but rather a remuneration for services rendered.¹⁴ All that remained was to define the terms of the "contract" between farmers and public authorities, a task that has only just begun and which appears to involve titanic efforts. The difficulty is all the greater now that the CAP is trying hard to go beyond exclusively farming matters and is also tackling "rural development" issues.

2.2.5. First pillar assessment

2.2.5.1 - Some relative success

Apart from the last, rather anecdotal inconsistency, the 1992 version of the CAP had a rather compelling logic based on certain assumptions. But after 15 years of steady implementation, it is time to ask whether the results match the expectations and, therefore, whether those assumptions were correct.

On one point at least, expectations were met: the internal European grain prices (or "fodder units") became similar to world prices for all starch-containing plants. European cereal farmers have partially won back their internal market for feed cereals15. At least export subsidies were cut down to negligible levels for cereals and for all products even if, due to the 2009 fall in prices, they have made a hopefully temporary reappearance.

This has greatly reduced budgetary expenditure on price supports, thus offsetting partially the increased costs linked to direct payments (costs that were "invisible", in fact paid by the consumer, in the 1960 CAP model). The agricultural share of the overall European budget has decreased, as the authorities proudly claim (though increasing or decreasing budget lines cannot be an end in itself).

A second major success is the fact that the expansion of yields has, if not reversed, at least slowed down. The reason being that lower prices combined with decoupled subsidies (acting as a sort of negative land tax) are not much of an incentive to increase the use of all sorts of inputs, which leads to lower yields. That is precisely what opponents of "productivism" wanted, correctly pointing out the absurdity of producing beyond needs and in so doing damaging the environment to boot. In fact new production systems are emerging that are more autonomous and more economical. Which is not bad news.

And finally a third, at least relative, success is that the liberalisation of agriculture does not appear to lead to a transformation of the mainly (at least in Western Europe) family-based production into large capitalist businesses or into enterprises of the Eastern European state farms type. This was viewed as a possible upshot of liberalisation, but it does not seem to be taking place. All the same, the active agricultural population in Europe is decreasing and the average farm size is increasing through technical progress and the replacement of labour by machines in a sector with relatively stable demand.¹⁶

¹⁴ Moreover, this reasoning justified *direct payments* proportional to cultivated areas. In fact, the decoupling logic would have preferred those payments to be granted to the farmer independently of the means of production used, whether land or other means.

¹⁵ although the EU cereal surplus has shrunk so that the EU-15 has become a net importer from 2004 to 2008 in volume and the EU-27 a net importer in value

¹⁶ Large agricultural businesses persist in some of the "new member states", a legacy of previous times. Some are well managed and prosperous. But apparently they do not have the upper hand over the family-based Western farms. This seems to confirm the hypothesis that agriculture is a "constant yield" sector in which larger businesses do not have any comparative advantage (or disadvantage) over smaller ones.

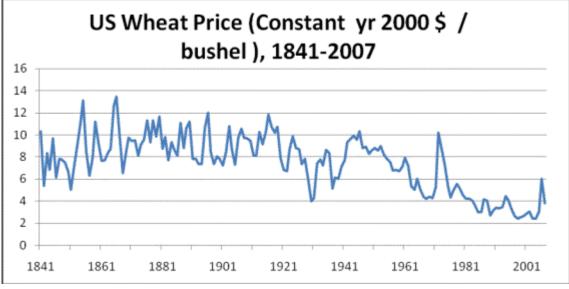
This is in principle a welcome development and was one important factor in the exceptional period of European economic growth from the 1950s to the 1970s, an era when the rest of the economy needed workers. Each time a farmer left the land, he also increased the country's ability to produce other, non-food goods. And, since the increase in productivity ensured that food production did not shrink, general welfare went up. Nowadays, such changes lead to higher unemployment, which is absurd and shows that our perhaps too liberal system is unable to make best use of human resources. This phenomenon concerns overall economic policies, not only farming policies. However, it could be asked to what extent it might also be important to advantage employment in agriculture.

2.2.5.2 - The problem of price volatility

Despite all these achievements, old problems remain and others emerged with the new orientation of the CAP.

The first problem (and one that could make the entire intellectual construction of the 1992 CAP model fall down) is price volatility. As farmers have started to notice, agricultural prices fluctuate more and more. International market prices move up and down and domestic prices - which have to match them - are consequently equally changeable. This should surprise nobody, but certain authors still seem amazed.¹⁷

Furthermore, although the international market was volatile during the 1970s and 1980s, it was less so than during the XIXth century, well before the reforms inspired by Roosevelt. It is, therefore, remarkable that the 2007 price hike followed by the 2009 price fall should have come as such a shock: these ups and downs were quite common in the 1850-1900 period (see figure 2). As the same causes in the same circumstances have the same effects, it was to be expected that such fluctuations would again become the norm if support measures were abolished, as happened in the XIXth century when governments lacked the means to intervene.





Source : J.M. Boussard's calculations, from Globalfindata and USDA

¹⁷ Their surprise might arise because this phenomenon contradicts the expectations of liberalisation supporters who claim that enlarging markets would cushion the random shocks linked to bad crops (see, for example, Bale and Lutz, 1979). In fact, it does not work that way. The sources of fluctuations are not exogenous but endogenous (cf. Boussard, 1996).

Price fluctuations are very damaging to farmers (giving wrong signals on consumer needs and on long-term relative goods scarcity) but equally harmful to technical progress, and therefore to the consumer. The devastating nature of these effects is clearly not yet fully recognised because it looks like a new phenomenon (when in fact we have merely become unaccustomed to it). Regrettably the authorities, which should anticipate and be prepared, apparently still view it as a one-off occurrence.

Moreover, such price variability while certainly harmful to developed countries is even more damaging for developing countries. By discouraging banks from granting loans to poorer farmers in developing countries due to their (reasonable) fear of default, price volatility makes it impossible for these farmers to accumulate capital - as their European and American counterparts had so successfully done during the price-support years. Thus price fluctuations hinder the solution of the world's food problems just as much as subsidised exports.

2.2.5.3 - Some remaining problems of the former CAP

The deregulation of markets and decoupling of the CAP subsidies promote the geographical concentration of agricultural activities in the most productive regions (Daniel *et al.*, 2008), with environmental risks and social consequences in the regions where farms are disappearing. The distribution of direct payments also remains very unequal and continues to advantage the biggest and most productive farms, above all in dairy, meat and some arable crops, at the expense of Southern and Eastern countries and of some other products like fruit and vegetables. Increasing competition, with prices disregarding social and environmental costs, leads to practices like greater use of fertilisers, pesticides and irrigation, the removal of hedges, paths and ditches, increasing concentration of livestock with hygiene risks and damage to animal health, and increasing mechanisation with risks for human health and the environment.

2.2.6. Second pillar difficulties

A second, even more serious theoretical problem (curiously disregarded by experts) has to do with the CAP "two pillars" approach. The first pillar, discussed above, concerns the management or rather the refusal to manage markets. The second pillar focuses on the environment and "rural development" - which are supposed to be tackled by setting up a sort of externalities market. The problem is that it is not possible to manage the production of externalities independently of the production of commodities.

As Baumgartner *et al.* (2003) point out, agricultural externalities and commodities are "joint productions". Now, joint productions pose serious difficulties to production theory because the marginal cost of each component is no longer defined. Hence equalising marginal costs and price is no longer possible, making market equilibrium problematic.¹⁸ Pointing this out shatters most of the approach which claims that it is feasible to remunerate commercial and non-commercial goods separately, the ones on the basis of market equilibrium prices, the others on the basis of a "consent to pay" expressed by democratically elected authorities, both aspects being independently managed in the framework of the two pillars of the CAP.

The example of mountain milk illustrates the problem. It is more difficult to produce milk on mountains than on flatlands, hence the costs are higher. On the other hand, it is desirable to have cows in mountain pastures because they are a traditional landscape feature and they provide environmental and economic services. With geographically non-transferable milk quotas, mountain dairy activities

¹⁸ See, for example, Cornes and Sandler (1984) or Bidard (1997). Relying on a similar line of reasoning the WTO dispute settlement body stated that internal subsidies to U.S. cotton growers were not without distorting effects on international markets.

were automatically ensured. These arrangements entailed slightly higher costs in the dairy business (but experience showed them to be quite bearable), and meant an adjustment in remuneration and in mountain farmland values. However, with the abolition of milk quotas, it is clear that, due to competition, processing industries will do their utmost to only use milk from the plains. Society would then have to offer compensation to mountain dairy farmers and to processing industries collecting their milk, to persuade them to remain active in the highlands. Negotiations on the compensation amounts would be arduous. And these payments must avoid leading to overproduction in mountain areas. Moreover, compliance with contractual terms will have to be checked as will the actual presence of farmers on mountain pastures. In the end, the budget outlays involved might be greater than the costs associated with milk quotas.

An additional difficulty has to do with ascertaining what society really wants concerning farm externalities. It is not possible to have the electorate vote on issues such as permissible nitrate levels in groundwater, or the number of hedges per square kilometre in a given region. In any case, writers like K.J. Arrow (1963) have clearly shown that such votes were likely to lead to inconsistent results.¹⁹ Therefore decisions are taken case by case by administrative authorities on the basis of compromises between more or less vocal contending lobbies.

An interesting example of lobbyists' action results is the case of agrofuels. Even though elementary calculations would show that agrofuels could never meet the total demand for transport fuels, and other calculations shown that their benefits in reducing greenhouse gas emissions are meagre if not negative, they were developed on a relatively large scale in Europe as in the U.S., on the grounds that they would reduce overproduction, and please both environmentalists and the oil industry at the same time. Unfortunately, this development occurred at a time when shortage rather than overproduction was the problem. It thus reinforced the 2007 agricultural price crisis instead of mitigating it. Wiser management and a better appraisal of the situation would have prevented spending so much money on such a ridiculous endeavour; a surprising decision by people who are so anxious to re-establish the reign of markets.

In any case, the final upshot of the system implemented since 1992 was that, in the name of free markets, a truly extraordinary bureaucratic apparatus has been created. Cost-benefit analysis is still in its infancy and difficult to implement. Many observers get the impression that the real goal of these policies is to give a virtuous sheen to farm payments, without really tackling the problems involved in the relations between agriculture and the environment.

2.3 - Critique of the proposed post-2013 CAP changes

The 1992 CAP model has by no means achieved the results its authors expected. Can the reform proposals now being made by the same authors possibly do better? There are several reasons to doubt it.

- 1) Concerning risk management, the basic idea is still to rely on market mechanisms in a variety of ways:
 - *Widening* markets *to stabilize prices*, opening borders so that "good harvests" in one place make up for bad ones elsewhere;

¹⁹ The issue of "collective decisions" has often been studied ever since Condorcet's XVIIIth century work. The cited book by K.J. Arrow is just one example among many other contemporary contributions, including those of two other Nobel Prize winners, A. Sen and E. Ostrom.

- *storage* (private, of course) so that stockpiling operators, having an interest in buying cheap and selling dear, would automatically offset "bad years" with "good" ones;
- *futures markets* which in practice allow farmers to know precisely, at the time of sowing the price at which their harvest will sell (though it is possible that spot prices at harvest time are much higher than foreseen, or that futures prices are ridiculously low and totally unrelated to production costs);
- crop insurance (which helps share the burden of yield shortfalls);
- revenue insurance (a hybrid combining price and yield insurance);
- *catastrophe bonds* (in fact a reinsurance system for insurance companies facing clustered claims arising from natural disasters);
- *safety nets* (that is, minimum prices designed to have no effect if lower than marginal costs but to become guaranteed prices if higher);
- *direct contracts* passed between farmers and processing industries.

All these mechanisms take for granted that fluctuations are always due to exogenous random phenomena, unrelated to economic agents' behaviour. This premise may be admitted for yield variations. That is why harvest insurance usually works relatively well, even though farmers often prefer to ward off risks through technical measures (such as irrigation against droughts) rather than by pooling losses through insurance. But such a premise does not hold for price risks: prices vary due to agents' behaviour, which totally disqualifies insurance. In fact, any minimum price guarantees by any insurance scheme will result in escalating production, which in turn decreases prices, and therefore increases the probability of a claim.

For a similar reason, the enlargement of markets leads to greater rather than diminishing price volatility as national prices fluctuate in line with all the others in the world market, instead of good harvests in one country compensating for the bad ones in another.

Likewise, storage operators make mistakes, buying and selling stocks at the wrong time, making the situation worse rather than better. And the futures markets also go awry. Many other examples of market failures could be given. All this shows, firstly, that contrary to the currently prevailing theories among economists, we should expect great upheavals in international agricultural markets in the future. And, secondly, that the scientific hypotheses underpinning the new CAP do not correspond to reality. This is a very serious indictment for a policy supposed to govern what Europeans (and many others) will be eating for years to come.

2) The notion of managing the production of commodities and externalities separately conflicts with the above-mentioned problem of "joint productions". For the time being, there does not seem to be a way out of this conundrum.

3) The feedback effects of these phenomena on farming structures and revenue allocation are not yet fully understood but are undoubtedly significant. Some of the problems listed above, if not solved by state intervention, could perhaps be tackled by private companies through vertical integration, that is, direct contracts between farmers and industry concerning goods, specifying prices and quantities.

4) Regarding the idea of contracts between producers and processing industries, it raises the problem of who exerts market power and can limit possible abuses. On this point, see Annex 2 below, which treats the problem extensively.

Supporters of liberalism often explicitly propose this type of organisation of the food sector, viewing it as a way to manage both risks and externalities whilst getting rid of state bureaucracy. It remains to be seen, however, whether private bureaucracies are less cumbersome than public ones.

Above all, it must be understood that these vertically integrated companies signing production contracts with farmers benefit from oligopolistic positions over the final marketing of the products. Thus a public monopoly - subject to a certain degree of democratic control, imperfect but real - will have been replaced by private oligopolies able to charge consumers prices all the steeper as demand is inelastic. These circumstances are also clearly propitious for the banks that will finance takeovers and other wheelings-and-dealings around those companies' assets. But it is far from certain that the general interest would be well served, or that the lot of poorer citizens would improve. Thus, the agricultural price decrease over the last period has not been followed by a decrease of consumer prices because of increased margins and concentration of the agro-processing and distribution sectors.

3. - International challenges

According to the World Bank, 1.4 billion people are currently living on less than US\$1.25 a day.²⁰ The FAO, for its part, estimated the number of undernourished people at 1.02 billion²¹ in 2009 (FAO, 2009a), of which about 100 million joined the ranks of the hungry in just one year after international commodity prices skyrocketed in 2007/08. The geographical spread of the undernourished in 2009 was as follows (still according to the FAO): 642 in the Asia-Pacific region (the most densely populated region in the world), 265 million in Sub-Saharan Africa, 53 million in Latin America and the Caribbean, 42 million in the Middle East and North Africa, and 15 million in the developed countries. Hunger thus affects mainly developing countries, and first and foremost Sub-Saharan Africa, where one in three people is undernourished (FAO, 2009b). What is more, it affects rural inhabitants above all, who account for between 70% and 80% of the undernourished, depending on the source.²² As for the 20%-30% of the hungry who are urban poor, most of them are country people who migrated to the towns in hopes of a better life. This high proportion of rural inhabitants amongst the world's hungry is not surprising, for most developing countries, and especially the poorest of them, are highly dependent on agriculture. For example, according to the UNDP (United Nations Development Programme), agriculture accounts for 30%-60% of the LDCs' (least developed countries') GDP and for the majority of jobs in these countries (frequently up to 70%) (UNDP, 2007).

These indicative data show the extent to which eradicating extreme poverty and hunger is dependent on improving the living conditions of farmers and agricultural workers in developing countries. Such improvements call for the adoption of a host of measures coming under various policies (agricultural, economic, trade, land, energy, development, competition, and so on) by the relevant international, regional, and national bodies. Despite their diversity, these measures have a common denominator, namely, taking account of the legitimate interests and basic rights of farmers and agricultural workers,

²⁰ See the following page of the World Bank's Internet site, last consulted on 20 April 2010:

http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20040961~pagePK:64257043~piPK:437376~theSitePK:4 607,00.html , and

http://web.worldbank.org/WBSITE/EXTERNAL/ACCUEILEXTN/NEWSFRENCH/0,,contentMDK:20486990~pagePK:64257043~ piPK:437376~theSitePK:1074931,00.html.

²¹ Meaning those who are hungry almost every day.

²² See, for example, Mazoyer M.(2008).

which are usually neglected. The European Union should first and foremost feel obliged to challenge these policies.

3.1 - A multiple responsibility

Indeed, various European policies contribute to the undernourishment of rural populations in the developing world and to the precariousness of their living conditions. The CAP is one of these policies, even if it is not necessarily the policy that inflicts the greatest damage on the developing countries' agriculture. Other issues than those related to the CAP have to be taken into account as well, including:

• The liberalisation of trade (attacking import protection measures) that the EU advocates under the programmes of the World Bank and IMF, the WTO and bilateral agreements. This liberalisation has opened the developing countries' doors to low-price imports (subsidised or not) from Europe, Asia and the United States. It contributes greatly to import surges (unusually high increases in volumes of imports, associated with strong price drops of the imported products), with particularly dramatic consequences for the local population. By subjecting locally produced foodstuffs to unbearable competition, these surges of low-priced imports impoverish the domestic farmers and agricultural workers considerably. They trigger downward spirals in prices and farm income, the destruction of the small farmers' traditional lifestyles, exoduses and resettlement of farmers, and massive rural unemployment. What is more, in being accompanied by a significant decline in national food output in many developing countries, import surges add substantially to these countries' food shortages, and thus make them more dependent on imports. Moreover, they boost their public debts by increasing the need to finance imports. The phenomenon of import surges is far from rare: between 1984 and 2000, 17 developing countries alone recorded 767 import surges.²³

• The absence of effective regulation of the food-processing and retailing sectors' practices. The huge market power of these stakeholders enables them to pay their suppliers very low prices which are lower than farmers' production costs. (in Europe as well as in developing countries.). Agricultural workers in big industrial plantations suffer as well for the low prices contribute to their low wages. The industries' market power enables them to impose production norms and standards on their suppliers which are poorly suited to smallholder agriculture.

• The rapid increase of the EU's demand for agrofuels. This contributed to the skyrocketing of international commodity prices in 2007/08²⁴ and could do likewise in the future. In addition, European imports of commodities for the production or use of agrofuels are not subjected to sufficiently strict conditions in terms of environmental, economic and social sustainability in exporting countries. This encourages these countries to invest in unsustainable production of agrofuels (with deforestation, land acquisition at the expense of small farmers and other adverse consequences).

• The EU's aid to developing countries, which is insufficiently focused on poverty and small farmers' needs, and poorly coordinated.²⁵

²³ Cf Glipo A. (2006). These countries are Bangladesh, Benin, Burkina Faso, Cape Verdi, Côte d'Ivoire, the Dominican Republic, Guinea, Haiti, Honduras, Jamaica, Madagascar, Mali, Mauritania, Morocco, Niger, Peru, and the Philippines.

See, for example Ugarte D.G. and Murphy S. (2008) or Berthelot J. (2008).

²⁵ Practical Action, Terra Nuova and Vredeseilanden (2008). This paper is the background reader of the 'AAA CSO Monitoring Exercise', which is a critical evaluation of the European 'Advancing African Agriculture' policy by European civil

Regarding the CAP, its main contribution to hunger and extreme poverty in the developing world is the agricultural dumping that this policy engenders.²⁶

3.2 - What is export dumping and what are its causes and its main effects?

Economically speaking, export dumping consists of exporting a good at a price below its production cost. This practice is due less to the existence of subsidies than to an overall agricultural policy characterised by:

- 1. Prices that are below production costs on the domestic market as a result of the absence of effective systems for managing supply and guaranteeing domestic prices.
- 2. The granting of payments to domestic producers to make up for the difference between these prices and their production costs.
- 3. The absence of a ban on exports that benefit from direct or indirect subsidies.

In supplying "cheap food" (at least in the short run), dumping is a direct subsidy given by European taxpayers (in the case of EU's agricultural dumping) to the poor in developing countries, mainly those who live in urban areas. This is a comforting idea for the governments of the importing countries, to the point of making it difficult to eliminate²⁷. However, in the long run it is highly detrimental to the importing countries' populations, not just because it deprives domestic producers of markets and thus means of subsistence, but also because it prevents the creation of food commodity chains in countries that, according to all common sense, should gain a relatively large advantage from producing locally certain foodstuffs that they import. And it contributes to import surges.

Still, export dumping does not necessarily ruin local producers. The extent to which this practice is or is not detrimental to these producers depends above all on the existence or absence of effective import protection in the importing country or region. This protection can take various forms, some of which may complement each other, e.g., customs barriers, import quotas, subsidies for local producers, etc. Where such protection exists, tragedies can be avoided and dumping policies can even prove relatively beneficial, as the case of Egypt's imports of European wheat shows (see box 3 below). The socio-economic impacts of these policies must be evaluated case by case, for what applies in a given context does not necessarily hold true in another one. In practice, however, these impacts often prove very detrimental for the populations concerned for, given the liberalisation of international trade and especially the opening of borders, the import protection required to avoid catastrophes is often lacking. The poorest countries are the most vulnerable in this context, inter alia because, unlike developed countries, they are not in a position to provide their own producers with appreciable subsidies.

BOX 2 : Egypt's imports of European wheat: The balance is rather in Egypt's favour

Bread plays a central role in the Egyptian population's diet. An Egyptian eats about 400 grams of bread a day on average. Wheat is thus a very strategic dietary staple for Egypt. However, the

society organisations. The document analyses the range of ways in which EU activities affect agriculture in Africa. See also Lines T. (2009) for other elements to be taken into account concerning the impacts of EU activities on agriculture in the developing world: 'EU Food and Agriculture Policy for the 21st Century'.

²⁶ Other aspects of the CAP are concerned, including the stock draw-down policy that has deliberately been waged since 2003, which has also contributed to the food prices increase in 2007-08. See Boussard, J.M., Gérard, F., and Piketty, M.G. (2003).

²⁷ See, for example, A. Diarra's thesis, (Diarra, 2010).

amount that is grown locally falls well short of the country's needs. The country's farm acreage is limited (Nile Valley) and the yields are already high (amongst the highest in the world). Egypt is thus forced to import a large proportion of the wheat that it consumes, i.e., more than 65% of the 13 million metric tonnes that its 76 million inhabitants consume each year (2003)^{28.} In the absence of effective import protection, it is likely that domestic farmers would be unable to withstand competition from subsidised cheap imports from Europe. However, the government has taken initiatives designed to protect them from the potentially destructive effects of these imports. A strict price control policy was instated years ago, wheat imports are managed by a government agency, wheat is bought from domestic producers at a high price, and bread sales to the poor are subsidised. Given this context, the dumping of EU wheat tends to have rather favourable effects for Egypt, which is thus able to cut its food bill whilst maintaining its farmers' incomes (Hermelin, 2008).

Finally, the harmful effects of policies that lead to dumping do not occur outside the countries or regions responsible for the dumping only. These policies can also cause various types of harm on these countries or regions' domestic markets. By keeping domestic prices low through compensatory aid, the EU gives its own products a large comparative advantage over certain imported foodstuffs on its own markets. This applies in particular to imports from developing countries. This can slow down these foodstuffs' access to the European market.

That being said, condemning the harmful effects that are induced on the domestic market of the countries or regions that engage in dumping appears to be problematic. Does the future prosperity of the developing countries' agriculture and national economies hinge primarily on international agricultural commodity and food trade? Isn't it much more dependent on the development of diversified agricultural and food production to supply the domestic market? Can the international markets legitimately claim to be more than residual markets?

3.3 - The legalisation of the EU's agricultural dumping

28

For years, the EU's agricultural dumping has been accused of being responsible for destroying the means of subsistence of farmers in developing countries. The European Commission (EC) rejects these accusations. If we dissect the Commission's reasoning, it can be summarized as being based on the following set of arguments:

(1) The successive CAP reforms implemented since 1992 have led to the progressive transition from an agricultural income support policy based on prices to a policy of support through direct payments. The overwhelming majority of today's payments are "decoupled" (supposedly independent from the ongoing year's price trends and production quantities);

(2) The lowering of intervention prices led automatically to lower export refunds;

(3) The CAP's payment scheme thus causes practically no distortion of trade as defined by the WTO, for the payments that come under the "export subsidies" category, the "Amber Box" and the "Blue Box", have for the most part been transferred to the "Green Box";

(4) The same reforms made it possible to reduce considerably the gap between European domestic prices and international prices. This gap will ultimately disappear, so that the EU will never again be exporting at prices below those on its own market.

(5) As the WTO defines it, export dumping is exporting a good at a price below the domestic market price, not below its production cost;

Cf Buccianti (2010) at http://www.rfi.fr/actufr/articles/100/article_65139.asp (Radio France International).

(6) The EU's dumping is thus essentially a thing of the past. It will have disappeared completely by 2013.²⁹

Combined with the way that the WTO conceives of agricultural support and export dumping, the successive CAP reforms that have taken place since 1992 have effectively legalised the bulk of the EU's dumping practices.³⁰

3.4 - Agricultural dumping by the EU is the rule rather than the exception

The EU has made massive use of the opening up of agricultural markets. The budget devoted to export refunds has, of course, plummeted, going from about €10 billion in 1991 (EC, 2008b) to a mere €926 million in 2008 (Berthelot, 2010b). However, this has had no effect on the magnitude of its dumping, for throughout this period most of the volumes of agricultural commodities exported by the EU were exported at prices well below their average production costs (Berthelot, 2006a). The share of export refunds in the direct and indirect subsidies for exported commodities (including feed subsidies) simply decreased considerably.

In the course of the last 15-20 years the EU's dumping concerned cereals (including wheat) and cereal-based products, milk and dairy product, sugar, poultry, beef and veal, amongst other things. As an example, the EU's cereal exports between 1995/96 and 2001/02 were supported to the tune of \notin 2.15 billion in total subsidies on average each year, of which \notin 1.673 billion were internal subsidies, or 3.5 times the \notin 477 million in refunds. As the annual mean value of its cereal exports over this same period was \notin 2.956 billion, the mean dumping rate was 72.7% (Berthelot, 2006a)³¹. The mean dumping rate for cereal exports in 2006 was 54.7% (Berthelot, 2010b).

The developing countries were prime destinations for the EU's cheap exports, as attested by the statistical analysis of the EU-15's export data provided by Comext (Eurostat). For example, from 1991 to 2006, these countries, especially those of Africa and the Middle East, were big markets for European exports of milk powder, sugar, and wheat. In 2006, developing countries received more than half of Europe's exports of these three products. For milk powder, Sub-Saharan Africa became the EU's number one trading partner, with European export volumes that rose steadily at the same time as they fell in the other parts of the world. Over this same period, developing countries also became the number one market in volume for European flour, with the rise in the EU-15's exports driven once again by Sub-Saharan Africa (Mosnier, 2008).

The consequences of the EU's export dumping in Africa, and especially in Sub-Saharan Africa (where European agriculture was long the leading supplier), have often been dramatic. The beef that the EU wanted to offload in the early 2000s (after mad cow disease) destabilised the local commodity chains of Côte d'Ivoire, Ghana, and Nigeria's coastal markets, which were ordinarily supplied by the herdsmen of Mali, Niger, and Burkina Faso. Cheap exports of Italian tomato paste precipitated the closure of numerous Ghanaian processing companies (Hermelin, 2008). Massive imports of milk powder from Europe thwarted the development of Burkina Faso's domestic dairy industry in 2005. At the time, producing a litre of local milk cost the country's dairy firms 300 CFA francs, compared with

²⁹ During the WTO's Sixth Ministerial Conference, in Hong Kong in 2005, the Commission undertook to put an end to all of its export aids.

³⁰ For a more in-depth explanation of how the EU legalised to a certain extent its economic dumping at export practices, see, for example, Berthelot J., (2005).

³¹ Here the mean dumping rate is the ratio of the value of the total subsidies for exported commodities over the total value of the exported commodities or, in this case, €2.15 billion/€2.956 billion.

only 200 CFA francs if they used imported milk powder (Estival and Boubacar, 2006). In Cameroon, cheap imports of frozen chicken primarily from the EU (Spain, Belgium, France, etc.) in 2003 caused an estimated loss of 110,000 jobs in the industry most them rural ones (poultry breeders and farmers), but with some urban ones, too (pluckers and vendors) (Bopda and Njonga, 2004).

In contributing to import surges, the EU's dumping also helped to make a host of developing countries more dependent on imports. Low-income countries that are net food importers, especially the LDCs (where on average 50% to 80% of household income is spent on food), are the ones that suffered the most from the exacerbation of the food crisis (UNCTAD, 2008).

3.5 – Recent developments

The EU continues to engage in massive dumping of agricultural commodities, and this behaviour without a doubt bears a significant share of responsibility for the food crisis and its exacerbation. At the same time, two recent developments suggest that the magnitude of the unbearable competitive pressure that it continues to exert in many poor countries must be put in perspective:

• The skyrocketing international agricultural commodity prices that characterised 2007/08 led to a temporary reduction in competition from exports (from Europe and elsewhere) in these countries. This may moreover offer some opportunities for redynamising local production chains here and there. But for how long?

• The EU has lost market shares to competitors such as Brazil and Argentina. Europe faces stiff competition from Brazil on the butchered poultry market, for example, as poultry is much cheaper to raise in Brazil, where grain and soya beans – major feed components – are abundant and cheap and the workforce receives markedly lower wages (Hermelin, 2008). That being said, the presence of Europe's agricultural sector in the developing world, especially in Africa, remains strong. For 2005-07, for example, 14% of ECWAS's (Economic Community of West African States) total agricultural and food imports come from Europe. These imports often compete with West African commodities (CTA, 2009). What is more, assuming that the Economic Partnership Agreement (EPA) negotiations are successful, the EPAs are likely to bolster European exports to all of the ACP (African, Caribbean and Pacific) countries.

3.6 - The need for the EU to take overall responsibility for its actions, including putting an end to agricultural dumping

Eradicating poverty and hunger and feeding 9 billion people decently by 2050 is possible. However, to achieve these goals, a radical change of direction is necessary in all international, regional, and national policies affecting the agriculture and food sectors. This requires putting the food sovereignty objective of maintaining and developing sustainable smallholder farming based on agro-ecological practices at the heart of its policies.

Guaranteeing this maintenance and development requires all of society's players, in the developed and developing world alike, to shoulder their responsibilities in this connection. This means, amongst other things, having the EU recognise the right to import protection in the programmes of the World Bank and IMF, under the WTO, and in bilateral agreements (including the EPAs). To protect their populations from the potentially destructive effects of cheap imports, whether the latter are subsidised or not, developing countries must be able to use the necessary tools, including variable customs duties and import quotas (two tools that are particularly accessible to the poorest countries). As a corollary, the EU must put an end to the agricultural dumping for which its CAP is responsible. Setting up effective supply management systems based on public control of production and variable protection at borders would contribute greatly to this. It would put an end to under-priced European exports in developing countries whilst guaranteeing more stable and remunerative prices for Europe's producers.

Seen from an international perspective, the EU as a major player in world trade should assume a fundamental role in the reconsideration of the 'Marrakech' logic that led to the creation of the WTO. This is now more necessary than ever. Without traditional market management tools, any effort to hit sustainable development targets such as poverty elimination and the right to food is rendered meaningless. Economic liberalisation deprives countries and regional groups of the indispensable defences that those tools provide. Countries and regional groups should be able to define their own policies, especially for agriculture and food. Instead of favouring the liberalisation and deregulation of markets the EU should defend and respect food sovereignty.

4 - Post-2013 proposals

4.1 - Why should the CAP restart on new basis?

The 2013 deadline for reforming the CAP was decided ten years ago. At the time, it was thought to provide an appropriate deadline for finally abolishing the market intervention instruments which were serving as a deadweight in the WTO negotiations. However, the WTO negotiations have failed to reach any agreement. On the contrary, many developing countries, such as India, question the rationale for such negotiations and the virtues of the free market.

At the same time, a profound economic crisis burst in 2008, creating large public deficits. In this context, the legitimacy of the CAP's support for farmers becomes a political issue, the more so as the economic crisis creates unemployment while the CAP's incentives tend to encourage the substitution of capital for labour, and therefore to decrease the number of active workers in agriculture. In parallel, the climate crisis leads to a reappraisal of production systems. And finally, the food crisis of 2006-08 highlighted the increased food dependency of developing countries, as well as the failure of the policies recommended by international organisations to avoid such a situation. In this respect, the recent milk crisis illustrates the consequences of increased price volatility and the deregulation of agricultural markets.

In this new context, it is not possible to continue along the path decided ten years ago. We need clear objectives for a new CAP:

• Ensure safe and healthy food for all in the EU, and contribute to the improvement of food security in the rest of the world – which should start with removing EU dumping.

- Secure a decent agricultural income to farmers, and reasonable prices for consumers
- Maintain agricultural employment and protect the environment in all rural areas, maintain the quality and diversity of agriculture and food products, encourage proximity between production and consumption, and limit budgetary expenses.

• Assert European willingness to foster international cooperation by supporting developing countries' demands to protect their food production, as well as to decrease excessive commodity price volatility.

This policy should be similar in all countries of the EU-27: in a single agricultural market, public support should be the same in order to avoid distortions of competition and to demonstrate solidarity."

"Disagreements between Member States have led to a transfer of agricultural policies from the European to the national level and dismantling of the CAP. However, Member States cannot regulate the markets individually and it leads to distortions of competition if they try to do so in a single market. Price stabilisation and supply management can only be achieved at the right level. So the transfer of agricultural policies to the national level necessarily leads to liberalisation of European agricultural markets. A European policy also remains necessary for reasons of financial solidarity between Member States and for social and territorial cohesion. Finally, thanks to its economic and political weight, the EU can play a decisive role in international negotiations, stand up to the multinationals and work towards a major transformation of world agricultural rules.

4.2 - How can we achieve these objectives?

Below are some indications of possible solutions.

4.2.1 - The CAP does not need to scrupulously comply with WTO requirements.

Admittedly, an agreement, once signed, must be applied, until the parties agree upon its revocation. Yet there exist circumstances which make such compliance problematic. For instance, since the crisis the Maastricht Treaty's clauses regarding budget deficits have not been enforced, because they are not enforceable any more. With respect to the WTO, similarly, there is no point applying agreements which are openly violated both by other parties and by the present CAP itself. Details are provided in Annex 4, which shows that the CAP does not comply with all the clauses of the Marrakech Agreement.

Thus, WTO and bilateral free-trade agreements, and World Bank and IMF policies, must be revisited in the light of the fact that they are based on unrealistic economic theories. In almost all countries, support for farmers remains necessary in one way or another: almost all rich countries use active agricultural policies or indirectly intervene extensively in the markets. The EU is no exception.

Therefore, the CAP does not need to scrupulously comply with WTO requirements. On the contrary, EU should support a new, more democratic framework for the multilateral oversight of agricultural markets, based on common interests and cooperation between countries, social and ecological requirements and the right to food sovereignty (i.e. the right of each country or groups of neighbouring countries to define their own agricultural and food policing, while not practising any kind of dumping).

4.2.2 - Storage and flows management: still vital tools

Since upstream intervention in the food supply chain is less costly than downstream correction of price or revenue fluctuations, such instruments must be given priority. Public intervention mechanisms should be devised in order to operate a stock which must be sufficiently large to avoid food crises and guarantee food security.³² Insofar as such a stock is not feasible at the international level, it must be set up at the EU level. It must also be recognised that the mechanisms put in place by the CAP in the 1960s show their limitations when it comes to stock accumulation. Therefore, from now on they should be linked with mechanisms to restrict their use (in terms of time and quantities). Mechanisms are

³² Many reasons justify public storage. In particular, in a context of decreasing trends of all agricultural commodity prices or at least of strong volatility of prices, no private operator will have any incentive to store more than necessary to satisfy his or her customers until the next season.

therefore needed which will allow production and supply to be managed and which can be adjusted to stock levels (particularly quotas and freezes).

Once again, it should be stressed that with a "constant return to scale" production function (see 2.1.2), the guarantee of a fixed price for unlimited quantities is bound to lead to a virtually infinite production. The price guarantee must therefore be accompanied by a limit on quantity – a "production quota" for short. This is what worked well with milk quotas in Europe until recently, at a relatively low cost for the common budget.³³

As a first option, it should be possible to sell quantities in excess of the quota on the market. However, in order to prevent economic dumping, they could be submitted to export taxes, equivalent to the value of all domestic subsidies received by these products.

Another option would be to prevent any supply above a certain quantity equivalent to domestic consumption by penalising any additional supply. However, this would lead to giving up any exports of these products. Moreover the guaranteed prices must cover the production costs in order to ensure that the quantity under quota will be produced, although it is not necessary for it to provide producers with excessive rents.

Several options exist for establishing the domestic price: it could be adjusted to the "quota price";³⁴ it could also be adjusted to the production costs of the most productive farmers, with subsidies given to all farmers that are working under conditions that lead to higher production costs. For both these options a variable duty at the border is required to adjust the prices of imports to the domestic price. Finally, in a last option, the domestic price is equivalent to the world price with deficiency payments to make up the difference between the guaranteed and the current domestic (and international) price. However, even if it is more compatible (at least in theory) with WTO requirements,³⁵ this last option does not allow a remunerative price for farmers. It does not prevent the strong volatility of prices, which can be very costly (see above, part 2).

If the majority of world producers agree to similar rules, it can then be shown that remaining fluctuations are much weaker than if the free market were to operate on all quantities produced. In such a system, the production of the quantity under guarantee is certain. A minimum level of food security is therefore ensured, since the sum of quantities at guaranteed prices is of the same order of magnitude as internal consumption. This will thus provide most of the benefits of guaranteed prices, without the disadvantage of seeing overproduction disturbing international markets.

Finally, in the face of the geographical concentration of agricultural activities, some tools should be implemented at the European and the national levels. They could be subsidies to farmers in Less Favoured Areas (see below), but also milk quotas as in France which fixed the supply in each region. Dismantling these quotas) will accelerate their geographical concentration in the most productive regions, which would entail environmental risks and social consequences. Therefore it remains necessary to think about tools for regulating according to the geographical location, which can for instance take the form of quotas.

³³ The milk market regime is one of the most economical, accounting for 6% of the total cost for the CAP in 2008, compared with 18% in 1984 when the quotas were established.

³⁴ In this option, the quotas are marketable.

³⁵ In Article 6 of the GATT treatise, dumping is defined as selling abroad at a price "less than the comparable price, in the ordinary course of trade, of the like product when destined for consumption in the exporting country". It obviously excludes the possibility of maintaining a high domestic price for the consumer of the commodity under quota. But it does not prevent, in principle, the consumer paying the international price, and the producer being supported by a deficiency payment.

4.2.3 - Border measures are necessary due to the volatility of world markets

As a consequence of the proposals set out above, *the right* to customs duties is a vital tool for any agricultural and food policy. It has to be combined and defended together with *the duty* not to dump products on third markets. Variable tariffs are necessary to avoid, when necessary, that products at prices below the production costs of the importing country should enter the domestic market, ruining the effects of the internal regulation of production and market. The right to variable tariffs is linked with the objective to retain farmers on the domestic market, which can be justified with regard to the objective of domestic food security and multifunctionality. This is relevant for all countries or Unions of countries. In the European case, that would of course include animal feeds: this would reduce the dependence on imported vegetal proteins and the environmental and social consequences associated with it (see part 1).

The proposals to lower customs duties made as part of the Doha Round herald considerable market disturbances, particularly for meat markets in Europe. There is no reason why Europe should stand alone in shouldering the damaging consequences of liberalised agricultural trade. So, it should not feel obliged to agree to new concessions just to conclude the Doha Round. Insofar as only a minority of exporting developing countries would seem to benefit from the current proposals, the lack of agreement cannot be seen as a political failure, but rather as a simple reaction to the economic situation.

Moreover, the pursuit of the process of dismantling the protection and support policies, which was an the objective of the Doha Round negotiations, does not respect the conditions laid down by ministers in Marrakech in 1994 and written into Article 20 of the Agreement on Agriculture, which states that "non-trade concerns" must be taken into account in future negotiations. Further discussions in Geneva must therefore be put on hold, and this pause should be utilised to carry out both evaluations of the results of past negotiations which are formally provided for in Article 20 and to rethink the "agriculture negotiation methods" established by the President of the Agriculture Committee, so that non-trade concerns can be taken into account. This pause should also allow the European Union to define the role it intends its agriculture to play over the coming two decades and to clarify, in terms of quality and quantity, how it intends to ensure their food to European citizens and to set the budget that will be allotted to the food and agriculture. In parallel, the EU must carry out an analysis of all the rights and requirements it has under all WTO agreements. This work should allow the European Council and Parliament to establish, in as concrete and precise a manner as possible, the new commitments or obligations the Union can accept in the Doha Round and the protection methods it can use to meet the objectives set for its agriculture.

Beyond the above remarks, of defensive character, the EU should be aware of the fact that, in 2013, it will stand as the only political power and member of the WTO in the position of refounding both the CAP and the Marrakech Agreement on the basis of food sovereignty. This is a historic opportunity, which should not be missed.

4.2.4. Market outcomes must reflect the economic realities of commodity chains

Growing concentration in the hands of only a few companies, leading to monopoly or oligopoly power, have given excessive power to these parts of value chains which has even led to abuses of power. They squeeze the incomes of both consumers and farmers. Abuses arise from increasing concentration of market shares by processing industries, and, above all, by supermarket chains in most EU member states, as well as from their buying arrangements at the national level and the EU

level. Suppliers now have fewer alternative outlets to sell their produce and this means a change in bargaining power between them and these "downstream" industries³⁶. As a result, some suppliers have gone under, or survived on very low profit margins. This survey found that small and medium enterprises (SMEs) in the food sector and farmers have been especially vulnerable.

The relationships between producers, processors and retailers must be better organised in order to make margins more transparent and the distribution of added value among the different operators of the food chain more equitable. Several kinds of solution can be imagined:

- In the first place we should note that a 'bottom-up' movement is taking place that circumvents the problems outlined above. Citizens get their food straight from the farmer, and farmers form cooperatives that supply consumers or groups of consumers directly. However, this development remains somewhat limited.
- Farmers' organisations can act on supply and prices from a position close to the situation in the field and the products. They work well in some high added value sectors (Comté, Champagne, etc.) but a lot less well where the added value is distributed in a highly contentious way (basic milk or fruit and vegetables, for example), where it is linked to the margins of large-scale retailing, which is still not part of these negotiations, and where there are no rules to protect the producers and the present conditions of production. Moreover, this type of organisation means that European competition law must be revised and that the Commission must recognise the unique nature of agricultural markets.
- It is only the political will of the public authorities that can even improve this balance of power along the chain. The EU and its member states could act on competition law and other policy areas, in order to limit the growth of monopolies at local or even national level, to ensure that some abuses of power become unlawful, e.g. retrospective discounts or last-minute changes in contracts and to curb abuse across borders.³⁷
- Finally, agricultural policy itself can be used to curb supermarket power and abuses. Thus, with their system of milk quotas,³⁸ Canadian farmers get a much largest share of the consumer's dollar than in countries with more liberalised agricultural markets, while dairy products in their supermarkets are less expensive.

4.2.5. Insurance mechanisms must be strengthened but cannot replace public intervention

Climate and health mutual funds insurances are solutions that must be evaluated in terms of budgetary and economic efficiency before they are spread more widely to all production types.

³⁶ A recent Communication from the European Commission identifies "significant tensions in contractual relations between actors of the chain, stemming from their diversity and differences in bargaining power. It also highlights the lack of transparency of prices along the food chain as well as the increased volatility of commodity prices. Finally, it shows that the internal market for food is still fragmented across products and Member States" (former EU Agriculture Commissioner Marian Fischer Boel, "Food prices in Europe"). This Communication is an outcome of an inter-service Task Force, led by Directorate Generals AGRI and ECOFIN, to which Commissioners Kroes and Kuneva contributed.

³⁷ For example, EU-wide rules are needed to dissuade supermarkets from re-locating to or buying goods in countries with weaker regulation on buyer power (e.g. through subsidiaries).

³⁸ Canadian farmers are members of the provincial marketing boards and sell all their milk to it. The marketing boards are governed in every province by dairy farmers. They have the legal authority to regulate, decide on prices and inspect the milk quality. The farmers and representatives of the government decide on these issues together in annual meetings. Representatives of the industry and retailers are also present at the meetings; they can voice their opinion but have no voting rights. It should be noted though that Canada is not an exporting country.

Backing from public authorities (reinsurance) seems necessary given the increased frequency of these risks, which could become systemic (diseases or drought on an EU-wide scale).

It must be stressed that insurance is possible only in the presence of exogenous, independent and individually small risks, the probability of which can be assessed with precision. This excludes any price or income risk. In particular, the turnover insurance mechanism practised mainly for large-scale cultivation in the United States should not be considered as a model to be imitated. Indeed, it is a sort of disguised unlimited price guarantee, with all the defects associated with such mechanisms. It can prove very costly due to price volatility and the amounts absorbed by insurance companies (\$8 billion forecast for 2010 in the United States, \$2 billion of which for companies).³⁹

4.2.6 - Remunerate social and environmental public goods provided by farmers

The way in which agriculture and the environment interact can be either positive (maintaining the countryside, safeguarding biodiversity, reducing natural threats, etc.) or negative (polluting water resources, soil erosion, deterioration of habitats, etc.). So agriculture can provide not only food and non-food agricultural products, but also environmental services and, more broadly, public goods in rural areas, through countryside management and contributing to the maintenance of the rural social and economic fabric (most particularly market activities and public services that are fundamental to the vitality of the countryside).

Presently, as a sanctioning tool, support is more directed towards limiting "negative" than to encouraging "positive externalities". Although buffer strips or grassy banks along watercourses do represent progress in the support mechanism, this type of "agricultural best practice" remains a minimal requirement which does not call into question either the quantities of inputs used or production methods. Furthermore, even with an increase in the payment modulation decided on by the Health Check, we must emphasise the limited impact of the Agri-Environmental Measures (AEM). The five-year contractual duration of AEM's does not encourage sustainability in agro-environmental commitments when faced with decoupled payment rights which are non-contractual and more of an incentive in terms of the sum offered.

In order to overcome these insufficiencies, the new CAP must be reoriented. In this respect, the identification of environmental public goods through the "new challenges" in the CAP Health Check are an interesting phase in integrating the environment into rural development programmes and should be applied more generally to the CAP as a whole.

Some production systems already provide environmental services: for example, low-input agriculture, pasture systems and organic farming. The CAP should use stronger incentives to provide better support for these types of agriculture. Remuneration of public goods and environmental services should be written into contractual and community provisions at the local level over a span of about ten years in order to guarantee that commitments will be implemented over the long term.⁴⁰ This support should also be weighted according to employment, which is a production factor just as important as land.

³⁹ For example, each eurocent of covering the risk of a drop in the European milk price could potentially cost insurance companies €2 billion. Managing dairy production volumes according to prices and the level of demand is just as effective a measure and is much less costly.

We could imagine some kind of contractual mechanism to provide public goods. The contracts could correspond to o the varying levels of commitment shown by the farmer, who would be remunerated according to constraints (extra costs) and services rendered. It would range from conventional agriculture to integrated farming, with high natural and biological value, perhaps with rising levels of support that would be higher in areas with natural handicaps or of high environmental value.

More fundamentally, since the production of market goods is inextricably linked to that of non-market agricultural goods, the two cannot be managed separately, which means that there is no justification for splitting the CAP into two pillars, with the one striving to undo the damage to employment and the environment caused by the other. The above-mentioned environmental measures should therefore be linked with commodity support programmes, any commodity subsidy being subject to environmental conditions.

Finally, if prices are guaranteed to a level covering production costs, any subsidy should be given according to producers with higher production costs, because of localisation in least favoured areas, because of stricter production ways than base rules and possibly because of very small size of farms. In this situation, there would be no reason to implement cross-compliance: the environmental and animal health rules should be respected thanks to stricter European rules.

4.2.7 - Support demand for quality food products with high nutritional value⁴¹

So far, Europe's food and agricultural policy has been largely focused on steering supply and has taken little interest in guiding demand. Aiming at quality food for all, where unemployment and poverty are on the rise, Europe must conceive a more systematic internal food aid policy,⁴² targeted on certain specific categories (social sectors in difficulty, catering, particularly in schools) and on certain products with high nutritional value (fruit and vegetables, certified products, etc.). Such support would work along the same lines as the health and nutritional programme in the fight against obesity and as the goals of the French Environment Summit (6% of Agricultural area used for organic farming by 2012). The EU could review the mix of products which have received support under the CAP until now, and facilitate the consumption of healthy and nutritious foods, like fruits and vegetables, and discourage the consumption of less healthy foods.. Part of CAP funding could also be used to support production recovery while at the same time expanding the demand for quality agricultural products. Charities and local communities could therefore be given support in developing contractual trade relations with producer groups in regional or national chains in exchange for stable and lucrative prices.

4.2.8 - Reforming budgetary tools

Some more technical adjustments to the CAP, which we will not go into here, are also proving necessary, in order to implement the aforementioned principles and action plans. What is sure is that rebuilding the CAP on remunerative prices would reduce significantly the present agricultural budget while enlarging its services. Indeed these prices should ensure a fair income without massive basic direct payments to the farmers⁴³. Only a minority of the producers would need (capped) direct payments, namely the producers with higher production costs, the farmers providing public goods beyond the basic norms required from all farmers and the producers supplying the demand for quality food products with high nutritional value.

⁴¹ The notion of quality leads to many academic and political debates. In any case quality can be based on high nutritional value, on environmental and social positive effects. Even if it is contrary to the European competition law, the local aspect of food production should be included in the EU policy for several reasons (reducing the environmental cost of the food transport, reinforcing the ties between producers and consumers, maintaining the cultural diversity of the food, etc.).

⁴² The European Food Aid Programme for the most vulnerable (PEAD) allows food products to be distributed through charitable associations. The PEAD is restricted to certain staple products (cereal-based products, sugar, and especially rice, which accounts for two-thirds). Expanding it to encompass fruit and vegetables seems necessary so as to diversify its nutritional benefit.

⁴³ The EU-27 direct payments have reached €39.114 billion in 2009

Moreover, the annual nature of the CAP budget must to some extent be called into question. Given that one of the fundamental goals of this policy is to mitigate market imperfections - since markets are structurally unstable and can change violently from one year to the next - it is clear that financial intervention mechanisms should be adjustable over time..

Mechanisms should be created for multi-annual equalisation payments and for carrying forward savings and expenditures, as well as cyclical adjustment mechanisms for Member States' participation in CAP financing, so that resources can be adapted to financing needs over time.

REFERENCES

- Arrow, K.J. (1963): *Social choices and individual values.* Cowle Commissions Monographs n°12, Wiley, New York.
- Bale, M. & E. Lutz (1979) : "The Effect of Trade Intervention on International Price Instability" *AJAE* 61 (3, Aug.): 512-516.
- Baumgartner, S., Dyckoff, H., Faber, M., Proops, J., Schiller, J. (2003) :" Joint production ". Internet encyclopaedia of ecological economics,
- Bazin, G. (2010) : « Quelle PAC pour quelle agriculture européenne après 2013? » Document de travail, Académie d'Agriculture de France, Paris .
- Bidard, C.(1997) « Pure Joint Production » Cambridge Journal of Economics 21(6): 685-701.
- Berthelot J.,(2005) « La boîte verte : une boîte noire qui cache la boîte en or », *Solidarité*, 9 December 2005, 18 pp.
- Berthelot , J. (2006-a) : « Souveraineté alimentaire, prix agricoles et marché mondiaux », ROPPA (Réseau des Organisations Paysannes et de Producteurs agricoles de l'Afrique de l'Ouest), November, 15 pp.
- Berthelot J., (2006-b) : « Le dumping total de la viande bovine de l'UE de 1996 à 2002 », *Solidarité*, 19 April 2006, 7 pp
- Berthelot J., (2006-c) : « Le dumping total des produits laitiers de l'Union européenne de 1996 à 2002 », *Solidarité,* 31 January 2006, 6 pp.
- Berthelot J., (2008) « Démêler le vrai du faux dans la flambée des prix agricoles mondiaux », *Solidarité*, 9 October 2008, 57 pp.
- Berthelot, J. (2009), « Agrocarburants et sécurité alimentaire », *Solidarité*, 14 June 2009, http://www.solidarite.asso.fr/article.php3?id_article=99&debut_documents_joints=10#pagination_ documents_joints
- Berthelot J (2010-a), « Comment réduire la forte dépendance de l'Europe orientale de ses importations de produits laitiers venant de l'UE », *Solidarité*, 18 May 2010, 15 pp.
- Berthelot J (2010-b), « Le taux de dumping des céréales de l'UE-27 exportées en 2006 », *Solidarité,* 17 May 2010, 4 pp.
- Berthelot, J. (2010-c)," <u>Incompatibility of the CAP subsidies with the WTO rules</u> »,Seminar *Can the CAP after 2013 go without regulation of the markets?*, Collectif Stratégies Alimentaires, Brussels, 1 April 2010, <u>http://www.csa-be.org/IMG/pdf Jacques Berthelot.pdf</u> or on the website of Solidarité.
- Bopda A. and Njonga B.(2004): « L'importation massive de poulet congelé au Cameroun. État des lieux, enjeux et alternatives », SAILD (Service d'appui aux initiatives de développement), ACDIC (Association citoyenne pour la défense des intérêts communs), April 2004, 168 pp

- Bossuat, G. (1997) « La France l'aide américaine et la construction européenne, 1944-1954 » Comité pour l'histoire économique, Ministère des finances, Paris.
- Boussard, J.M., Gérard, F, and Piketty, M.G.,(2009) *Should Agriculture Be Liberalized? Theory, Models and Reality,* Sciences Publishers, Enfield (NH)
- Boussard, J.M. (1988) "A French perspective on supply control and management", *Journal of Agricultural Economics* Vol. 39, n°3 : 325-339
- Buccianti A., "L'Egypte : don du Nil et du pain subventionné !", , consulted 2 April 2010 on http://www.rfi.fr/actufr/articles/100/article 65139.asp
- Choplin G., Strickner A., Trouve A. (dir.), (2009) : *Souveraineté alimentaire, que fait l'Europe?*, Attac et Via Campesina Europe, Syllepse, Paris.
- Cornes, R. & T. Sandler (1984) : "Easy rider, joint production, and public goods". *The Economic Journal* 94 (6) : 580, 598.
- CTA (2009) : « Négociations de l'APE Afrique de l'Ouest-UE », March 2009, 28 pp.
- Daniel, K. ; Chatellier, V. ; Chevassus-Lozza, E. (2008). « Localisation des productions agricoles dans l'UE. L'enjeu de l'évolution des politiques agricole et commerciale », *Chambres d'Agriculture,* n°969.
- Diarra, A. (2010) *Echanges internationaux et développement de l'élevage laitier au Sénégal*, Thèse, Université de Paris Sud.
- Dwyer, J. (2007). "The State of the Rural Environment in Europe. What Challenges and Opportunities for Future Policies? "Background paper for LUPG & BfN conference. September 2007
- Earth Policy Institute (2010). "Past Decade the Hottest on Record." Article by Amy Heinzerling, referring to NASA GISS data. Available at: http://www.earthpolicy.org/index.php?/indicators/C51/global_temperature_2010
- EC (2008 a) "The Common Agricultural Policy: sorting the facts from the fiction", MEMO/08/422, 20 June .
- EC (2008 b) : "DG Agriculture and Rural Development, The "Health Check" of the CAP reform". *Legislative proposals*, EC, May 2008.
- EEA, 2004. Agriculture and the Environment in the EU Accession Countries Implications of applying the EU common agricultural policy. Referenced in Dwyer, J. (2007)
- EEA (2006). The European Environment State and Outlook 2005. Referenced in Dwyer, J. (2007)
- EEA (2007) *Europe's Environment The Fourth Assessment.* State of the Environment Report No 1/2007.
- EEA (2009) Progress towards the European 2010 Biodiversity Target. EEA Report No 4/2009.

EEA (2010) Content from the European Environment Agency website. Available at: http://www.eea.europa.eu/

- Estival L. and Boubacar S.,(2006) : "Des subventions aux effets dévastateurs", *Alternatives économiques* No. °251, October 2006, pp. 46-50.
- Ezekiel, M. (1938) : "The Cobweb Theorem". Quaterly Journal of Economics 53 : 225-280.
- FAO (2006, a) « Poussées d'importations : quelles sont les facteurs internes qui y contribuent? » , Dossier No.4, October 2006, 4 pp.;
- FAO (2006, b) , » Poussées soudaines d'importation : quelles sont les causes extérieures? » , Dossier No. 3, November 2006, 4 pp.
- FAO (2007), "Import Surges in Developing Countries: The Case of Rice," *Commodities* No.2, 2007, 6 p.
- FAO (2009,a), The State of Food Insecurity in the World, Rome, 2009, 66 pp.
- FAO, (2009, b) « Les victimes de la faim sont plus nombreuses que jamais », Rome, 2009, 4 pp.
- Gardner, B.L. (1992) : "Changing economic perspectives in the farm problem". *Journal of Economic Literature* 30(1) : 62-101.
- Glipo A. (2006). "Achieving Food and Livelihood Security in Developing Countries: The Need for a Stronger Governance of Imports". ECOFAIR TRADE DIALOGUE Discussion Papers N^o2. Heinrich Böll Foundation, Misereor, Wuppertal Institute for Climate, Environment and Energy, 64 pp.
- Grievink, J. W. (2003) "The changing face of the global food industry". OECD conference on changing dimensions of the food economy: exploring the policy issues, The Hague, 6 February 2003 webdomino1.oecd.org/comnet/agr/foodeco.nsf/viewHtml/index/\$FILE/GrievinkPPT.pdf.
- Hermelin B.,(2008) : "Exportations : les européens, plaie des pays du Sud? ", *Alternatives internationales*, special issue No. 6, 2008/12.
- Hertel, et al. (2010) "Effects of US Maize Ethanol on Global Land Use and Greenhouse Gas Emissions: Estimating Market-mediated Responses", *Bioscience*, March 2010, Vol. 60(3), http://www.aibs.org/bioscience-press-releases/resources/Hertel.pdf
- IEEP (2009): "Exploring Policy Options for More Sustainable Livestock and Feed Production". Report for Friends of the Earth.
- International Obesity Task Force (IOFT) : « EU childhood obesity out of control », 2005, www.iotf.org/popout.asp?linkto=http://www.iotf.org/media/IOTFmay28.pdf.
- LEI (2008) "Agricultural Trade Liberalization and Greenhouse Gas Emissions. A simulation study using the GTAP-IMAGE modelling framework", The Hague.

- Leuchtenburg W.E. (1963) : *Franklin D. Roosevelt and the new deal 1932-1940.* Harper and Row, New York.
- Lindley E. K. (1934) : The Roosevelt revolution first phase. Victor Gollancz, London.
- Lines T. (2009). "EU Food and Agriculture Policy for the 21st Century. Alternatives to the CAP", 30 p.
- Mazoyer M.,(2008) "Pauvreté paysanne, sous-alimentation et avenir de l'Humanité", in Desgain S. and Zé O. (Editors), *Nourrir la planète. Comprendre la souveraineté alimentaire*, CNCD, éd. Luc Pire, pp. 11-29.
- Mongabay (2010). Article of 17 January 2008 Amazon deforestation surging due to oil, soy prices. Available at: <u>http://news.mongabay.com/2008/0117-amazon.html</u>
- Mosnier A.,(2008) *Réformes de la PAC et présence européenne sur les marchés des PED*, GRET (Groupe d'échange et de recherche technologiques (Technological Trade and Research Group)), June, 37 pp.
- Olson, M, (1987) [1965]. The *Logic of Collective Action : Public Goods and the Theory of Groups* Harvard University Press; French translation : Logique de l'action collective, PUF, Paris, 1987.
- Parmentier S, Bailly O., Coton (2005). *Des vies sur le fil. Agriculture, environnement et conditions de travail*, Oxfam-Magasins du monde, 152 p.;
- Practical Action, Terra Nuova and Vredeseilanden (2008), "Advancing African Agriculture: The Impact of European policies and practices on African Agriculture", 34 p. Available at http://www.epfs.eu/uploads/documents/AAA%20background%20reader%20version%208%20October.pdf
- Schelhaas, H. and C. van Bruchem (2009): *De landbouw tussen voedselcrises en overschotten*. Landbouw Economisch Instituut, Den Haag.
- Sen, A. (2009) The idea of justice Penguin books, London.
- Stichele , M. V. & B. Young (2009) : The abuses of supermarkets buyers power in the EU food retail sector. SOMO, Amsterdam.
- Tracy, Michael (1996) : *Agriculture in Western Europe: Challenge and response 1880–1980*. Granada publishing Co, London.
- Pontvianne A., 2007, "Les grandes agricultures mondiales face à la libéralisation", in : INSEE : L'agriculture, nouveaux défis.INSEE, Paris 2007.
- Ribbe, L. (2007) Observations on the Environmental Compatibility of EU Agricultural Budget. Report by Euronatur for German Federal Environment Ministry.

Science (2004) Article on 21 May 2004.

Ugarte, Delle Torre, D.G. and Murphy S., (2008) : *The Global Food Crisis: Creating an Opportunity for Fairer and More Sustainable Food and Agriculture Systems Worldwide*, Heinrich Böll Foundation, Misereor, 46 pp.; UNDP (2007). Globalization, Agriculture and the Least Developed Countries, New York, 12 pp

UNCTAD (2008), Addressing the global food crisis. Key trade, investment, and commodity policies in ensuring sustainable food security and alleviating poverty, United Nations, New York and Geneva, 61 pp.

Versteeg, R. (2007) "Dairy Farmers of Canada in 2007", http://www.epfs.eu/DocDetail.aspx?l=007.011&lang=ENG&id=105.

WWF-UK (2007) UK Research – Priorities for Europe. Referenced in Dwyer, J. (2007)