Abstract: The latest reform of the Common Agricultural Policy has just been accepted, identifying important challenges for EU agriculture but proposing only limited changes to the previous CAP. Now it is time for the implementation of the new measures. However, from a theoretical point of view, it seems that the CAP can hardly meet the challenges it faces due to the inconsistencies between the predefined challenges and the measures proposed to meet them. The aim of the paper is to analyse the consistency between the challenges of European agriculture and the policy measures aimed at meeting them. It seems that not all measures are consistent with the challenges.

Keywords: CAP, challenges, measures, consistency

1. Introduction

The Common Agricultural Policy (CAP) is still at a crossroads. On the one hand, globalisation is changing the role of rural communities. On the other hand, CAP reform, budgetary constraints and WTO negotiations affect the support of agricultural communities. In general, CAP reform is perceived in the EU as being driven by the larger Member States which account for the majority of agricultural production in the EU. Several Member States (MS) still receive a lower rate of direct support per hectare under Pillar 1 of the CAP than others. It is commonly thought that disparities in rates of CAP support between MS have contributed to the cessation of agriculture in more marginal regions of Europe with subsequent concentration of production in other parts of Europe where CAP payments are higher (Herzon, 2008).

European agriculture faces many challenges in the 21st century, from which the following were identified by the European Commission (2010): food security, environment and climate change and territorial balance. Three main objectives are derived from these challenges (2010): viable food production, sustainable management of natural resources and climate action and balanced territorial development. To meet these challenges seems to require a radical change in the CAP. However, the new reform package largely maintains the status quo and does not resolve the fundamental incoherence, illegitimacy and unsustainability of the CAP. This paper provides an analysis of the challenges European agriculture faces and we question whether the reformed measures are even consistent with the EC’s own objectives.

The Communication of the European Commission published in 2010 identifies three key challenges for European agriculture (European Commission, 2010):

Food security. As the world’s population is expected to grow to around nine billion by 2050, global demand for food will significantly increase, resulting in a measurable growth in world food production. Over the next 40 years, agricultural production will have to increase by some 60%. The traditional CAP objective of food security will remain in place, although there is an increasing acknowledgement of the need to address social and environmental values too. The EU should be able to contribute to world food demand by preserving and improving its agricultural production capacity while meeting the high safety, quality and welfare standards required by its citizens as well. In order to meet this challenge, the CAP has to stabilise incomes and markets as well as improve the international competitiveness of its agricultural sector and the functioning of the food supply chain in times of greater market uncertainty, increased price volatility.
Environment and climate change. Farmers work close to nature and to living things but face increasing competition in a globalised agricultural food system. But food is more than just a commodity. European consumers demand healthy and safe food produced with respect for the environment and for animal welfare according to sustainable development criteria. The major challenge for the food system – and thus for farmers – is to make itself visible and recognisable to all European consumers for its quality, its safety, the diversity of its products, its capacity to adapt to changing demand and for being different to products that come from outside the EU. Furthermore, agricultural policy will need to respond to public demands linked to the maintenance of landscapes, the conservation of natural resources and biodiversity, food safety and sustainability. Farming practices can have beneficial (e.g. organic agriculture) or harmful (e.g. intensive agriculture) effects on the environment, while the provision of public goods can potentially offer several environmental benefits (e.g. biodiversity, climate stability, resilience to natural disasters, etc.). At the same time, climate change can have various effects on agriculture in the long run (e.g. flooding, drought, etc.). Therefore, the future CAP should help agriculture mitigate climate change through reduced greenhouse gas (GHG) emissions and various measures to increase production efficiency (e.g. energy efficiency, carbon sequestration, etc.).

Territorial balance. Agriculture is still an important sector in the rural economy, offering job possibilities and income to rural residents and generating many additional economic activities (e.g. food processing, tourism and trade). However, many territorial imbalances, mainly between Old and New Member States, exist in the EU. The CAP should tackle these imbalances by improving the vitality and economic potential of all the rural areas inside the EU.

Three main objectives are derived from these challenges, according to the Communication (European Commission, 2010):

Viable food production. In order to reach this objective, the future CAP should (1) contribute to farm incomes and limit their variability, (2) improve the competitiveness of the agricultural sector and enhance its value share in the food chain and (3) compensate for production difficulties in areas with specific natural constraints.

Sustainable management of natural resources and climate action. This objective also contains three elements: (1) enhancing sustainable production practices and securing the provision of environmental public goods, (2) encouraging green growth through innovation and (3) pursuing climate change mitigation and adaptation actions.

Balanced territorial development. The third objective is also made up of three policy sub-objectives: (1) supporting rural employment, (2) improving the rural economy and promoting diversification and (3) encouraging structural diversity in farming systems by improving conditions for small farms and developing local markets.

In order to meet these challenges, various measures are proposed in the latest CAP reform. It is worth while analysing whether these proposals are consistent with the challenges.

2. Material and Methods

This paper is based on publications addressing consistency between agricultural challenges and measures of CAP 2013 reform. Data published by the European Commission were used in the analysis. The database of the Food and Agriculture Organization of the United Nations has also been used in the examination. The literature on the possible impacts of CAP 2013 reform is already substantial. Several reports have addressed the challenges of European agriculture. However, the consistency between agricultural challenges and measures have received much less attention. Furthermore, there is a lack of available publications related to the consistency of economic, environmental and social challenges and CAP measures. The use of individual studies is furthermore hampered by the fact that these studies might use different motivations to assess consistence between agricultural challenges and measures. In addition, results are potentially biased because studies might differ in their focus on how to meet the challenges European agriculture faces.

3. Results

3.1. Consistency of economic challenges and measures

The EU should be able to contribute to world food demand and agriculture should therefore maintain its production capacity and improve it while respecting commitments in international trade and policy coherence for development. However, the EU is affluent and has the purchasing power to source supplies from the world market, even when world prices are high. Food security is thus not currently threatened in the EU. Poor households may still be hurt by periods of high prices but the best way to help them is through social welfare schemes. Moreover, the EU could take measures to increase its own production if a future need arose. In response to rising prices, farmers would expand cultivated areas, use more intensive farming methods and shift production patterns to increase yields. Targeted payments – for instance to preserve soil fertility and water resources, and maintain a critical level of farming activity – would be more effective than blanket subsidies to maintain existing levels of agricultural production or employment. Furthermore, money intended to reduce hunger and poverty abroad would be better spent by investing in agricultural research and infrastructure in developing countries rather than by giving it to European farmers.

Economic efficiency and competitiveness: This challenge is to be met via various measures among which probably the most important is the continued provision of direct payments. Established in 1992, and significantly changed in 2003, direct payments are now decoupled from production and alert to “green box” (non-distorting subsidy) requirements of the WTO.
Europe spent 70% of the CAP budget on direct payments in 2012 (European Commission, 2013), aiming to stabilize incomes of farmers. Direct payments were received by 5.4 percent of the EU’s population and accounted for 0.3 percent of its GDP (European Commission, 2013). Generally, well-functioning markets rather than state intervention are the best way to attain a demand-oriented, innovative and competitive farm sector. But the EU has a legitimate role to play in encouraging research and development in both public and private sectors, since the benefits of research and development are often shared across borders, and Member States can gain by pooling their research endeavours.

The current decoupled income aid suffers from substantial legitimacy problems. It is still calculated formally based on historical production references and it establishes the various levels of support that existed in the past according to sectors and territories. Furthermore, it does not reflect the changes recorded in the orientations of farms after decoupling, once flexibility to produce is established, and this distorts the markets. And it also does not reflect the changes in the prices or market costs recorded in recent times, consequently overcompensating producers of cereals and oilseed (direct beneficiaries of the price increases of agricultural commodities), while abandoning livestock producers (who are suffering from an increase in the cost of feedstuffs). Compensation for past price cuts is no longer necessary. Generalised per hectare payments are not targeted, whatever name is given or conditions attached to them (Tangermann, 2011).

Meanwhile, there is no evidence that farm households in industrialised OECD countries have systematically lower incomes than other households, so policies to support incomes across the whole sector are unjustified (Swinnen, 2009). Agricultural income per work unit is not an appropriate indicator of standard of living as it depends on total household income of the family concerned. This means that farm income support has to be based on overall incomes of farm households where income from other sources often complements agricultural income. Direct payments have limited potential for supporting farm income, which is the official motivation of the support. If support was eliminated, land values would fall, structural change speed up and incomes from other sources grow, leaving the total income of farm households (remaining in the sector) more or less unaffected (Sahrbacher et al., 2007). Besides all these, it is pretty hard to understand why the CAP subsidises farmers’ incomes in times of increasing food prices. As evident from Figure 1, producer prices have increased for almost all countries and products concerned in the European Union from 2004–2006 to 2011. Cereals prices have experienced the biggest increase, followed by meat and milk prices (Figure 1). As price increases have reached 100% in many cases, direct payments contributing further to farmers’ incomes seem obsolete.

Direct payments are neither equitably distributed by farm size, nor by geographical location (Figure 2). The 80/20 rule applies - approximately 80 per cent of the support goes to 20 per cent of farmers (recipients). Small farmers, especially, are handicapped in many ways. Though they are eligible for direct payments, due to the small farm size and administrative procedures, most receive marginal amounts or do not even participate in the system. As Zahrnt (2009) and others have also emphasised, payment rates per hectare are also widely dissimilar, ranging from €500+ in Greece to €174 in Portugal. Furthermore, following the EU Copenhagen agreement, direct

Figure 2: Distribution of direct payments by member state and beneficiary in 2012.
payments were introduced at lower initial rates in the New Member States (NMS), which have still not reached the level of EU15 in Romania, Bulgaria and Croatia. However, the EU10 reached the 100 per cent payment level in 2013. Indeed, the NMS complemented for the transitional period of 10 years EU-funded direct payments with national supplements to make good the difference between their own payment rates and those of the Old (and largely richer) Member States.

Based on these critiques, the 2013 CAP reform changed the former system of direct payments and introduced various novelities (e.g. greening, small farm scheme, internal and external convergence, active farmers, etc.). However, it seems that even the modified system of direct payments is not consistent with the challenge to secure food supplies.

First, as the current system of decoupled direct support suggests, a farmer need not even produce to receive a fixed income. However, the fact that a farmer does not need to produce does not lead to the conclusion that he/she will not produce. There is no evidence that the reformed CAP will lead to a significant reduction in production due to the withdrawal of land from farming. It still needs to be kept in condition suitable for production which is not a cost free condition in the absence of agricultural activity. On the other hand, if a farmer does not produce agricultural commodities, it is hard to imagine how he or she contributes towards ensuring global food security. Consequently, stabilising farmers’ incomes does not necessarily mean guaranteeing food security. By seeking to stabilise all farmers’ incomes, current direct payments seem to focus on social and environmental issues instead of focusing on enhancing the competitiveness of farms.

Second, greening is also against food security – by introducing super-cross-compliance type measures (Matthews, 2011), the competitiveness and profitability of farms is decreasing. In addition, greening is a high-cost policy compared to payments directly targeting public goods. Moreover, many farmers treat ecological focus areas as a resurrection of set-aside abolished in 2008, while diversification of crops may lead to economies of scale being unrealised (Matthews, 2011). Even profit maximizing behavior is constrained to meet a minimum of environmental conditions. However, other elements of CAP reform permit measures aimed directly at enhancing competitiveness. Third, the maintenance of coupled subsidies might help achieve food security in specific regions, though the magnitude of its impact is doubtful. Fourth, specific programmes for small scale farms, on the one hand, decrease administrative costs of small farms, though on the other hand, it does not encourage creating efficient scale. Fifth, redistribution of direct payments helps decrease inequalities, though its extent is dubious as direct payments overall may exacerbate inequalities between farms in terms of incomes.

On the whole, it is pretty evident that problems raised above are partly treated by the new system of direct payments but not solved. The reformed policy seems to be an improvement on what went before. In addition, CAP limits the scope for interventions that address the economic challenges facing European agriculture. It is an interesting question whether direct payments will exist even after 2020.

Besides direct payments, according to the European Commission (European Commission, 2010), food security should be reached via the stabilization of agricultural markets. However, emphasis now is on a market orientation while maintaining market management tools that would be deployed in times of crisis. It is a serious concern for the future whether the CAP can really stabilize agricultural markets. The economic and food crisis of 2008 and 2011 highlighted that the issue of food security, which seemed to have been already solved since the 1970s, is now back to the policy agenda. Extreme price volatility, experienced in global markets since 2008, has serious consequences for the stabilisation of agricultural markets. Furthermore, it seems that food prices will remain at a generally higher level in the future.

In addition to the stabilization of farm incomes, the European Commission seeks to increase the competitiveness of European agriculture, thereby meeting the challenge of global food security. However, its policy lacks coherence. First of all, the enhancement of competitiveness pertains to the second pillar of the CAP, though some elements (market stabilization, direct payments, etc.) will remain in the first pillar. It is a question, therefore, as to whether measures in the two pillars collectively target this issue.

Enhancing competitiveness has implications for trade policy. EU agriculture as a whole is required to compete in the world market, and trade policy determines the way it does so. In order to enhance the competitiveness of its farmers, the EU has many trade policy tools, from increasing import tariffs to banning imports of specific agricultural products coming from outside the Community, but only a limited use of these mechanisms is respected by the WTO. However, competitiveness can also be strengthened by further reform in case EU tariffs remain in place as they are unlikely to disappear anytime soon.

One option for increasing farm profitability in the short-term is to further increase subsidies to farmers, thereby reducing their already high costs of production. However, in the long-run this is likely to damage competitiveness as subsidies artificially shield farmers from healthy competition hindering the evolution of a more modern, more efficient agriculture. Direct payments may allow farmers to withstand international competition. However, such “artificial” competitiveness keeps agriculture dependent on government payments.

Increasing European food safety standards are also against the competitiveness of EU agriculture. Cross-compliance, greening requirements as well as plant and animal welfare measures imply additional costs for European farmers compared to their third country counterparts. Therefore, it is dubious how the CAP, based on high standards, will increase competitiveness in the long run as Europe faces increasing competition in the globalised agricultural and food system. However, imported foods have to meet the EU’s food safety standards, and in that regard face the same costs. Surely the logical response is to ensure competitors meet these standards and therefore it is legitimate to use the CAP, in combination with the instruments and institutions to achieve a level playing field.
Furthermore, food is more than just a commodity. European consumers demand healthy and safe food and thus a major challenge for European farmers is to make their products visible and recognisable to all European consumers for their quality, safety and diversity and thereby making them different to products coming from outside the EU.

Moreover, genetically modified organisms (GMOs) issues are also on the table when talking about agricultural competitiveness in Europe. Do GMOs have a European future, or will they continue to be marginalized by many European consumers and governments? And if so, will this be accepted by the EU’s major trading partners, or will it lead to trade conflict and new disputes in the World Trade Organization? As the share of genetically modified products is increasing in world trade, agricultural competitiveness is largely determined by the decision on their use.

Successive reforms of the CAP since the 1980s have introduced a more market oriented focus and the results have led to an improvement in underlying equilibrium between supply and demand. The CAP sets no target for production and simply recognizes that the EU should be able to contribute to world food demand. The CAP is far from perfect but it is changing in a way that is more economically rationale but the financial burden of the CAP on EU taxpayers and consumers has not changed very much.

3.2. Consistency of environmental challenges and measures

The rationale for rural development and environmental payments must also be re-examined as most of them are not sufficiently linked to public goods. In order to strengthen multifunctionality, present rural development and agri-environmental payments have to be linked more closely to genuinely European public goods. This will enhance transparency, the public legitimacy of the CAP, underline MS’ solidarity towards the provision of public goods and lower its profile in the budget review. Agriculture is more than about producing food, it manages the landscape. People in the EU not only demand good food, but that they also want biodiversity to be protected and they want rural areas to remain sustainable in every sense. The EU therefore must ensure that it provides a future for rural areas, both economically, but also in terms of biodiversity and renewable natural resources. There is a fundamental jointness in land management between the agricultural (or other marketed outputs) and environmental services. So farm products could be the principal output and environment the by-product, co-product or vice versa. The production of marketed and non-marketed goods and services has a specific relationship in their production, being complementary or substitutes. It is important to make a distinction – in a very articulated way – between public goods (non-excludable and non-rivalled) and externalities (effect outside the market mechanism affecting output or wellbeing).

The CAP is faced with numerous environmental challenges, including, inter alia, GHG emissions and climate change, soil depletion, water/air quality, habitats and biodiversity. These challenges are best tackled by focusing on the sustainable management of natural resources and climate action with three-sub-objectives: sustainable production practices and the provision of environmental public goods, green growth through innovation and climate change mitigation and adaptation actions (European Commission, 2010). The long run sustainability of agriculture in the EU depends on maintaining the underlying natural resource (soil, water, air and biodiversity) base. Although farmers are the managers of the majority of land and water resources across the EU, agriculture provides a modest or even declining share of economic activity in most rural areas (Cunha and Swinbank, 2011). In practice, the latest CAP reform elaborates greening measures, while green growth and climate change mitigation and adaptation actions seem to remain merely as high-sounding rhetoric.

At least some environmental public goods should justify EU support. For example the fight against climate change, which is a global challenge justifying a supranational response. Monitoring greenhouse gas emissions in order to apply cap-and-trade schemes or carbon taxes is difficult in agriculture. Payments for climate-friendly farming practices may well be needed to induce farmers to go beyond minimum legal requirements. The protection of biodiversity also warrants EU support because animals, ecosystems and biodiversity-threatening pollution cross borders. Similarly, keeping water clean and preventing water scarcity as well as floods is an EU concern because Europeans share rivers, lakes and seas.

In the current system, cross-compliance represents the compulsory basic layer of environmental requirements and obligations to be met in order to receive full CAP funding. On top of this, from 2015 onwards, the CAP introduces green direct payment rewarding farmers for respecting three obligatory agricultural practices, namely maintenance of permanent grassland, ecological focus areas, and crop diversification. At least 30% of the budget of each rural development programme must be reserved for voluntary measures that are beneficial for the environment and climate change (agri-environmental-climate measures, organic farming, areas for natural constraints, Natura 2000 areas, forestry measures, and investments which are beneficial for the environment or climate. However, still greening measures have many deficiencies.

First, linking direct payments to the provision of public goods is an “inefficient approach” as money is paid to individual farmers and not for the provision of public goods. Since 1992, direct payments have been given for many reasons but it is clear that the system is still based on the reference yields of 1986-1990 (2000-2002 for the new members). Thereby it implicitly assumes that those receiving a high amount of direct payments (e.g. those had high yields in the reference period) provide numerous public goods, which is not the case. In marginal regions, where the costs of production are high, direct payments can contribute to maintaining biodiversity and landscape preservation (Brady et al., 2009), though these payments are the highest in fertile regions due to their origin as compensation for price cuts. As evident from Figure 3, there is no clear relationship between direct payments and NATURA 2000 areas (as a proxy for measuring agri-environmental status). We cannot state that those regions with higher environmental values receive more direct payments. Actually, the correlation between the two indicators is negative at the EU27 level (-0.29) (European Commission, 2013).
Secondly, the Communication seems to neglect the fact that one of the biggest problems with the provision of environmental public goods in agriculture lies in the insufficiency of measurement methods. If we are to achieve global objectives for halting/slowing down biodiversity loss, it is important that we demonstrate the economic value of ecosystem goods and services. However, the value of a landscape or the value of biodiversity is hard to measure, and it is unclear what kind of methods the Commission proposes for solving this problem. Over the past decade, progress has been made in understanding how ecosystems provide services and how service provision translates into economic value. Yet, it has proven difficult to move from general pronouncements about the tremendous benefits nature provides to people to credible, quantitative estimates of ecosystem service values. Spatially explicit values for services across landscapes that might inform land-use and management decisions are still lacking (Balmford et al., 2002).

However, if we are to achieve global objectives for halting/slowing down biodiversity loss it is important that we demonstrate the economic value of ecosystem goods and services. It is possible to develop economic tools and to build policies which take proper account of the real value of biodiversity. Ecologists and economists can work in an interdisciplinary manner to improve our understanding of the way that ecosystems function and how this relates to the flow of benefits to mankind. However, it will be a political choice as to whether to use these tools and to apply these policies. Searches have revealed a disappointingly small set of attempts to measure and value these services (Constanza et al. 1997; United Nations, 2003; Reid, et al. 2005; Stern, 2006; WWF, 2008, European Commission, 2008; Parker et al., 2008). Nevertheless, the question remains: If these services are valued by society, why are there no markets for environmental services? Spatially explicit values for services across landscapes that might inform land-use and management decisions are still lacking (Balmford et al., 2002).

Note: Direct payments are calculated per hectare (based on UAA data).

---

**Figure 3: Relationship between direct payments and NATURA 2000 areas in EU27 in 2012.**

<table>
<thead>
<tr>
<th>Country</th>
<th>Direct payments (euro/ha)</th>
<th>NATURA 2000 (in % of UAA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>50</td>
<td>2.5</td>
</tr>
<tr>
<td>Belguim</td>
<td>45</td>
<td>3.0</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>40</td>
<td>2.0</td>
</tr>
<tr>
<td>Cyprus</td>
<td>35</td>
<td>1.5</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>30</td>
<td>2.0</td>
</tr>
<tr>
<td>Denmark</td>
<td>25</td>
<td>1.5</td>
</tr>
<tr>
<td>Estonia</td>
<td>20</td>
<td>1.0</td>
</tr>
<tr>
<td>Finland</td>
<td>15</td>
<td>0.5</td>
</tr>
<tr>
<td>France</td>
<td>10</td>
<td>0.5</td>
</tr>
<tr>
<td>Germany</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Greece</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Hungary</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Italy</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Lithuania</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Malta</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Poland</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Portugal</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Romania</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Slovenia</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Spain</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>5</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: Own (Authors’) composition based on European Commission, 2013

---

One important characteristic of most markets for environmental services is that government or some other authority plays a central role in setting them up. The reason is that environmental services, to varying degrees, defy ownership - they are public goods. One way to get around this is to create a good related to the environmental service that has private-good characteristics, as has been done for markets in carbon and water quality trading, and wetland damage mitigation. These markets would not exist without government programmes that require regulated business firms (such as industrial plants and land developers) to meet strict environmental standards. In essence, legally binding caps on emissions (water and carbon) or mandatory replacement of lost biodiversity (wetland damage mitigation) create the demand needed to support a market for environmental services (Ribaudo et al. 2008).

Thirdly, the CAP seems to do little to meet the EU’s overall objective in its Biodiversity Strategy for 2020 - to halt the loss of diversity and to restore degraded ecosystems. Ecological Focus Areas (EFAs) are limited to less than 50% of the EU arable area and permanent crops, grasslands or pastures do not need EFA. EFAs can also include land uses with doubtful benefits for biodiversity. In the absence of specific management guidelines, EFAs will likely contribute little to biodiversity. Cultivating three crops on large, intensively managed farms is unlikely to enhance biodiversity and these targets are currently lower than existing average crop diversity in many Member States. In addition, the new regulation did not do more to improve the cost-effectiveness of Pillar 2 schemes in terms of uptake and biodiversity outcomes (Pe’er et al., 2014).

Fourthly, the provision of public goods requires significant institutional and administrative infrastructure for the effective management. It is doubtful that these programmes can be well-administered without a measurable increase in bureaucracy both at the EU and national level. However, such an increase would result in cost increases and work against the “cutting the red tape” principle, as indicated in European Commission (2010).

Fifthly, the relationship between greening and current agri-environmental programmes remains unclear. The question is what the greening component could potentially deliver that cannot yet be delivered by the existing instruments. It is unclear as to why the respective set of agri-environmental actions should be moved from the second pillar to the first pillar with its implications for decision making and financing. As the payments under the greening component will be financed out of the EU budget, without any national co-financing, member states will not feel the need. Member States are likely to try to maximise such payments to their farmers. So the choice of actions, chosen from the menu for implementation of the greening component, in the individual Member States is not primarily based on the most needed and effective agri-environmental policy but on what promises the largest transfers to domestic farmers (Tangemann, 2011).

Sixthly, it is not clear whether subsidies from the first pillar are more efficient than those from the second. It is well known the t the difference between the two pillars is that Pillar 1 measures apply to everyone, Pillar 2 are self-selected by a...
minority of farmers. As the principle of equivalence, developed by the latest CAP reform, suggests, farmers participating in specific agri-environmental programmes (organic production, Natura 2000 etc.) automatically meet greening requirements, implying that second pillar instruments are better serving the environment than first pillar ones. As a consequence of the CAP 2013 reform the share of first pillar funds are increasing at the expense of the second. Based on these problems, another question arises as to what effect the “greening component” would have on the expenditure balance between the two pillars.

Innovation, green growth and climate change mitigation are also important objectives of the CAP, though the 2013 CAP reform did not elaborate measures in this regard. We are not aware of the exact places and the magnitude of impacts of climate change, for instance, nor is it clear how the CAP would tackle the obvious challenges in this regard. Although the fifth priority of the second pillar is related to climate change, implementation remains opaque.

3.3. Consistency of social challenges and measures

European society is becoming increasingly urban and people in rural areas are at risk of becoming social minorities with reduced political and electoral clout. Rural industries have to diversify into new areas such as green tourism and farming itself is now often a part-time occupation. Many farmers have to juggle other jobs just to make ends meet. However, many of those living in rural areas are responsible for managing the land and sustaining their most valuable natural resources, such as water, soil and wildlife biodiversity. They are also responsible for the development of renewable energy sources including biomass, wind and solar power.

The objective of balanced territorial development is planned to be tackled by supporting rural employment, improving the rural economy and promoting diversification and encouraging structural diversity in farming systems by improving conditions for small farms and developing local markets. Measures elaborated for reaching these aims are the Common Strategic Framework, the new rural development priorities, the simplification of rural development subsidies, the introduction of minimum spending requirements (agri-environment 30%, Leader (or CLLD) 5%) and the introduction of European Innovation Partnerships. Although these measures bring new concepts to European rural development policy, several concerns emerge regarding their effectiveness. First and foremost, it is still not clear what rural development is about in the CAP. On the basis of the former four axes, the current six priorities and their associated funding, rural development is mainly about agricultural competitiveness enhancement and agri-environmental support.

Increasing quality of life, creating jobs, alleviating rural poverty, decreasing the urban-rural income gap or developing rural infrastructure remain just slogans without any clear measures for reaching them. This argument is also strengthened by the fact that of the 20% of the CAP budget is spent on rural development, only 20% is spent on classical rural development – so that just 4% of the CAP budget is spent on core rural development issues. As Figure 4 suggests, that vast majority of rural development funds were spent on the first two axes in the EU in 2007-2013, while classical rural development played just a marginal role in most member states.

The exact place of rural development within the EU policy framework is also unclear. On the one hand, the CAP has recently expanded its traditional agricultural focus to a broader array of rural actors via Axis 3 and 4 (territorial approach, though many measures of the other axes (sectoral approach) also have a number of second order effects (e.g. enhancing local agricultural employment, tourism retaining people in rural areas). This process strengthens the retention of rural development policy inside the CAP together with the fear that cohesion policy would be more likely to focus on urban centres rather than rural areas. On the other hand, there are also strong grounds for arguing that rural development should be reallocated into Cohesion Funds. One of the strongest arguments, put forth by DG Regio, is that such a shift would bring increased coherence in rural development at the EU level. Given the birth of the Common Strategic Framework, it seems that rural development will still be funded as part of the CAP, though the effectiveness of rural development programs is a key question for the future.

4. Discussion

Regarding the future of the CAP, several general dilemmas emerge, having impacts on economic, environmental and social measures. First of all, it is questionable to what extent national agricultural policies will increase their role inside the CAP. Several signs of the latest reform indicate that Member States get more freedom in the implementation of the CAP (distribution of the different components of direct payments, defining national rural development priorities, etc.) This is an important issue as different national implementations might alter the overall consistency between challenges and measures.

The second dilemma is raised in connection with the structure of the two pillars. Although the first pillar has traditionally dealt with agricultural markets (and direct payments later) and the second with rural development, many measures are questioning this division of tasks (e.g. greening in the first
piller, payments for young farmers and LFA from both pillars, competitiveness enhancement from the second pillar, etc.). A consistent CAP would require a clear division of work. Maintaining two pillars, one requiring co-financing and the other not, will also maintain the bias against rural development payments, which need to be matched with domestic funds.

Last but not least, it is still questionable whether the “one size fits all” approach is working for the CAP. Can we apply the same policy for different regions? The current CAP has been planned for meeting the needs of the founders and Old Member States, though needs of the new members are hardly touched upon (Gorton et al., 2009). This issue might also alter the CAP's capacity to meet the challenges European agriculture faces, especially considering possible new accession rounds.

Based on the arguments above, it seems that European agriculture will hardly meet the challenges it faces as there exists just a partial consistence between agricultural challenges and measures. It is doubtful how the CAP meet the challenges it faces. The EU needs an agricultural policy, but it needs one that focuses on areas where European action creates the greatest value. The first pillar should be phased out, and new schemes designed in which aids are granted not on past, but on future behaviour. Under the second pillar only those policies that promote genuine European public goods, are efficiently targeted at their objectives, and avoid excessive payments, should be retained.

We believe that fundamental challenges are needed in the future, addressing the key challenges as follows:

**Phase out the system of direct payments.** Direct payments are not effective in making European agriculture more food secure nor are they capable of making efficient contributions to the provision of public goods. Better targeted policy instruments are needed to make European agriculture food secure and competitive. Innovation based on research and development, education and training, advisory services and appropriate institutions serving agriculture are the major means of raising productivity, thus enhancing competitiveness. From the food security side, there is no need to make direct payments in order to stimulate extra production in Europe. In response to the challenge of global food security, more food production in Europe cannot make a contribution to that goal as it would make it more difficult for developing country agriculture to create income and employment opportunities (Tangermann, 2011). Europe has to concentrate on competitiveness and productivity.

**Invest in climate smart agriculture.** Greening, as we suggest, is not an efficient policy instrument in meeting the environmental challenges European agriculture faces. The future CAP should focus on adapting European agriculture to climate change by heavily investing in research and technology. Conducting research and developing tools for quantifying environmental impacts of farming practices is of great importance as well. A proper monitoring and evaluation system should be created for measuring environmental impacts on the farm level and giving feedbacks to policy makers on the efficiency of environmental instruments.

**Create a real rural development policy.** The future CAP should clean rural development policy by focusing solely on classical issues of rural development like poverty reduction, job creation and investment in rural infrastructures with the overall aim of increasing rural quality of life. It is a reasonable objective for a common policy for agriculture to contribute to reduction of poverty and cohesion.

**Build the CAP on one pillar.** All challenges should be associated with a single pillar, thus creating a food, an environmental sustainability and a territorial balance pillar. Such a system would be more transparent and better focused as well as it would create a better division of consistency and challenges.

**5. Conclusion**

The latest reform of the Common Agricultural Policy has just been accepted, identifying important challenges for EU agriculture but proposing only limited changes to existing policy. Now it is time for the implementation of new measures. However, from a theoretical point of view, it seems that the CAP can hardly meet the challenges it faces due to the lack of consistency between economic, environmental and social challenges, and CAP measures proposed to meet them. Economic, environmental and social challenges, identified by the European Commission, do not seem to align with the measures proposed to meet them. Therefore it is questionable how European agriculture will meet the challenges it faces in the future. However, Horizon 2020, the biggest EU Research and Innovation programme with nearly €80 billion of funding available for the period of 2014-2020 may contribute substantially to innovation making it easier for the public and private sectors to work together in delivering innovation. Reconciling production with the sustainable management of land and other natural resources is the major challenge for agriculture. Research and innovation are crucial to support the move towards more sustainable primary production taking into consideration economic, social and environmental objectives. Research and demonstration activities are supposed to encourage cooperation across basic and applied research disciplines, as well as between researchers, practitioners, businesses and other stakeholders. The expected results in relation to CAP should benefit a diverse primary production sector and ensure that high quality products and services continue to be delivered in sustainable ways.

**References**


Reid, Walter V.; Mooney, Harold A.; Cropper, Angela; Capistrano, Doris; Carpenter, Stephen R.; Chopra, Kanchan; Dasgupta, Partha; Dietz, Thomas; Kumar Duraiappah, Anantha; Hassan, Rashid; Kasparsen, Roger; Leemans, Rik; May, Robert M.; McMichael, Tony (A.J.); Pingali, Prabhu; Samper, Cristián; Scholes, Robert; Watson, Robert T.; Zakri, A.H.; Zhao, Ash, J. Neville; Bennett, Elena; Kumar, Pushpamgr; Lee, Marcus J; Raudsepp-Hearne, Ciara; Simons, Henk; Thonell, Jillian and Zurek, Monika B (2005): Millennium Ecosystem Assessment: Ecosystems and human well-being – biodiversity synthesis. Washington D.C.: World Resources Institute.


