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The European Common Agricultural Policy: Moving Forward

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Introduction

Before the European Union (EU) even existed as an entity, the Common Agricultural Policy (CAP) was designed as an approach in 1962 to unite western European countries to form a defense against food insecurity and to promote integration. Through subsidies and support, the CAP was able to fortify farmers during tough economic periods to prevent food shortages and bankruptcy in the agricultural sector. The CAP has recently undergone substantial reform as a part of Europe's 2020 plan, partially through a process called "greening" (Dragoi and Balgar 2015, 57). The most important addition to the CAP is the Rural Development Plan, which supplements farm subsidies with environmental and sustainability incentives. The European Union's implementation and recent reform of the Common Agricultural Policy has transformed the way farms are subsidized and supported. In doing so, the CAP on the supranational EU level has been able to make positive strides in environmental sustainability, pollution reduction, and increase in organic food production. CAP reforms have the ability to make positive changes in the nutrition and environmental safety of EU citizens' lives, and could go even further to provide incentives and programs. The CAP is an example of a new kind of subsidy used for positive gains for society as a whole, and not just the farmer. However, these subsidies are still not ideal. Though food security and production is still the primary focus of the CAP, significant achievements have been made in making rural development and sustainability an essential ambition.

The CAP has been met with criticism from multiple sectors. Like most subsidy programs worldwide, the CAP leaves small farmers and poorer EU countries behind, leaving large farmers to reap most of the benefits (Lacy 2015). Activists from the

agricultural sector argue the reformed CAP compels farmers to meet difficult environmental standards that will hinder productivity. On the other side, environmentalists contend that the CAP does not go far enough to protect Europe from increasing climate change and pollution.

Today, the challenge of the CAP is to strike a balance between rural development and renewable energy, and to maintain food security and production (Bolognini 2015, 194). The modern CAP has found a way to encourage farmers onto pathways of rural development, while maintaining motivation to continue farm production.

Literature Review:

Literature surrounding the EU CAP continues to address the concept of economic patriotism and interventionism, in both positive and negative lights. This is because in Europe, there is a constant tension between neo-liberal market integration and national economic policies. The European Union is a unique case, because it balances national interests with supranational interests in regards to the economy and policy-making. The EU strikes a balance between interventionism with neo-liberal elements (Clift 2013, 104).

Economic patriotism is defined by Clift as “economic choices which seek to discriminate in favor of particular social groups, firms, or sectors understood by decision-makers as “insiders” because of their territorial status” (2013, 103). The theory is related to, and encompasses elements of neo-mercantilism, economic nationalism, and protectionism. Under economic patriotism, state aid is analyzed as an economic intervention that attempts to advance economic self-interest of groups and actors

defined according to their territorial status (Clift 2013, 101). It implies that interests of the homeland are more important than the interests of the individual (Clift 2013, 104). Within the EU, this is seen through the redistributive properties of the CAP. Through taxes, the CAP redistributes money from the individual, and puts it into the hands of farmers and agriculture through the two pillar subsidy system (Cong 2012, 10). The agricultural sector is unique in the EU because European agricultural is about more than just producing a commodity. It also has a cultural value. Farmers are trusted to provide high-quality products, whose geographical origin determines part of their value (Grant 2010, 422). Europeans take pride in where their food comes from, as observed by the author's time spent in the South of France. Protectionists, including some Europeans, believe that farmers shouldn't have to be sacrificed based on their competitors around the world (Grant 2010, 422). Subsidizing farmers also contributes to guaranteed food security, which is an issue that has brought up recently during the Economic Crisis of 2008 (Grant 2010, 433). The farming sector contributes to broader national interests and goals, providing the link to economic patriotism (Grant 2010, 421).

Grant states that agricultural exceptionalism affirms that the agricultural sector is unique to other sectors because it is difficult to maintain an equilibrium between supply and demand. It cannot be treated like other sectors within the economy, because it does not behave in the same supply-demand fashion (2010, 422). Because of this, it is hard to regulate with traditional neo-liberal policies. Nevertheless, some neo-liberals, such as the United Kingdom Independence Party, think the CAP should be abolished because it stands in the way of the free market and uses too many consumer tax dollars to subsidize already relatively wealthy farmers (Clift 2012, 104, Vernet and Wysocki 2015).

Neo-liberals would favor innovative risk-based or insurance-related instruments to stabilize the market, not direct intervention. However, many don't realize that economic patriotism and neo-liberalism are not mutually exclusive. Neo-liberal economic policies can be designed to favor specific industries, as can economic patriotism, therefore the two can be compatible (Clift 2012, 104).

According to Clift, economic patriotism is not the same as economic nationalism, because it is agnostic to the shape, size, and nature of the "patrie¹", which may be demonstrated through supranational patriotism. This makes economic patriotism more regional rather than national (2012, 105). This supranational EU has been the cause of dispute while formulating policy for the CAP. The European Union is made up of 28 member states that are diverse in socioeconomic development and in their natural environment (Brodzinska 2015, 157). National differences impede a harmonious or harmonized European policy response or strategy (Clift 2012, 106). Interregional cooperation across the EU is necessary for the CAP to work to its best ability (Dragoi and Balgar 2013a, 40). Member States like France and Ireland have favored the continuation of subsidies and protection. In contrast, nations like Sweden and the UK prefer a more market-oriented, commercial agricultural policy, dealing mainly with the preservation of public goods (Grant 2010, 421). The European Commission must reach consensus for CAP policy through compromise in their mixed economy.

Grant argues that today the CAP tries to accommodate both protectionist and neo-liberal points of view (2010, 423). The CAP is transitioning from more protectionist interventionist policies towards policies with more flexibility and are more market-

¹ Patrie is a French term, referring to a homeland, and also on a larger scale, to heritage in general, learned from the author's time studying abroad in France.

oriented (Grant 2010, 433). For example, modern reforms no longer force the farmer to overproduce to receive a subsidy, but allows them to respond to the market signals. Farmers are paid in payments unrelated to their production, and instead receive direct payments based on factors like farm size and environmental sustainability (Grant 2010, 422). The CAP is now considered interventionist in alternative ways. The response to sustainability is also interventionist, but interventionist in terms of consumption, such as penalizing negative externalities and rewarding positive ones (Grant 2010, 427). In addition, member states can now be more flexible with how they distribute CAP funds. This helps strike a balance within individual Member states, who find themselves using both neo-liberal and protectionist elements to advance the economic interests of particular territorially defined groups, which are sometimes national and sometimes European (Clift 2012, 115).

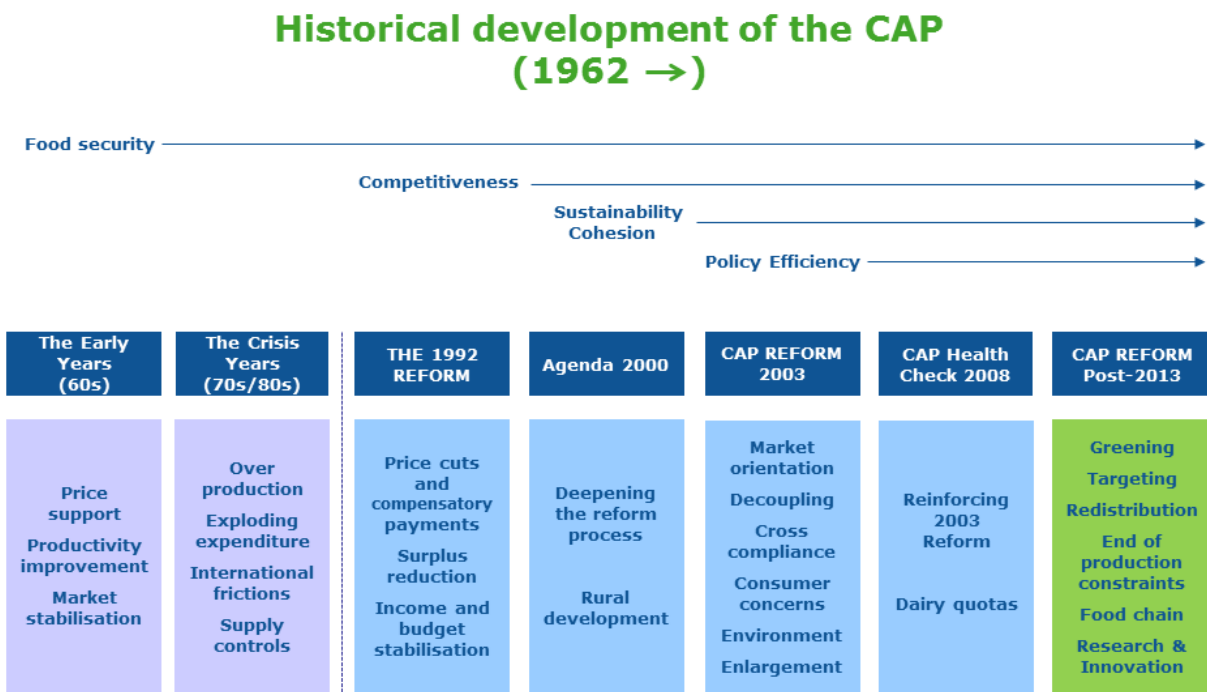
Background: What is the CAP?

The CAP was first introduced in 1962 to establish a market for free trade of agricultural goods between European nations, even before the formation of the European Union. After two World Wars, agriculture had been impaired and food shortages were common (Yamaç and Acar 2009, 424). By breaking down trade barriers, European nations were able to eliminate food shortages and establish a bond between them to help ensure peace. The CAP provides security that exporting countries will have a market and income for their product (Dragoi and Balgar 2013a, 34). Throughout the 1970s and 1980s, new incentives were put in place to modernize farming, provide farmers with education, and assist farmers in arduous environments. These incentives were in the form of artificial price support of agricultural goods. The

CAP went through a series of reforms in the 1990s and 2000s (European Union Commission, 2015). Figure 1 displays a timeline of the reforms from the early years through the most recent reform for the 2020 agenda, with the main priorities of the CAP indicated with arrows.

Figure

1



Source: European Union Commission 2013a

In 1992, the MacSharry reforms redirected payments so farmers were paid directly through subsidies, and price support in the market was decreased (European Union Commission, 2015). Today, price support is only used in times of crisis or national disasters (European Union Commission, 2013b). Through subsidies, farms were able to grow and increase production because farmers could afford things like

better machinery and more labor (Yamaç and Acar 2009, 428). The 1992 reforms maintained a safety net for producers by providing income support. During the economic crisis of 2008, the CAP still supported farmers through the direct payment system and was able to avoid a total catastrophe (Dragoi and Balgar 2013a, 39). This also began a wave of agri-environmental programs and rural development strategies (European Commission 2013, 2). Today, according to the European Commission Reform Report, the CAP has three main objectives: “viable food production, sustainable management of natural resources and climate action, and balanced territorial development“ (European Commission 2013, 2). The CAP is also unique, because in 2013, for the first time the European Parliament also had a part in drafting the reform. This is unique because the European Commission is usually the only branch of the EU to draft legislation, making this reform more widely agreed upon by Member States of the EU (Bolognini 2015, 202). The agri-food sector accounts for 14.2 percent of the total EU manufacturing output, so frequent reforms allow the industry to remain relevant and successful to the changing global economy (Yamaç and Acar 2009, 424).

The modern day two-pillar system was introduced to the CAP as part of Agenda 2000 in 1999. Pillar 1 of the CAP is dedicated to market-related expenditure, and Pillar 2 focuses on rural development. Each pillar has its own separate budget and objectives, but the 2013 reform establishes more connections between the two pillars. The CAP accounts for almost half the EU’s legislation (Cong 2012, 1). The CAP is the lion’s share of the EU budget, representing 37.8 percent, or 408.31 billion euros, of the entire EU budget ceiling for the 2014-2020 period. Based on the CAP budget, it is clear that food production and security remain the primary focus, because Pillar 1 receives significantly

more funding. For the 2014-2020 period, Pillar 1 receives 312.74 billion euros, while Pillar 2 receives 95.58 billion euros in funding (European Commission 2013, 3). The EU has also decided to reform policies that are too specific and too heavily support farmer's incomes. For example, the CAP has decided to phase out milk quotas, which were production based, with complete elimination by 2015 (BBC 2013). Today, The CAP fills 3 roles: a political one because it unifies EU member states, an economic one because it stabilizes agriculture markets, and a redistributive one because of the interstate budget flow for revenue payments because of shared EU budget costs (Bednarikova and Jilkova, 29).

Decoupling farm income from investment behavior was introduced in 2003, and was strengthened under the 2013 reform. In the CAP, decoupling refers to the payments to farmers for how much land they have, not the quantity of goods they produce. Decoupling resource-use from economic growth is now essential to sustainability (Carson et al. 2013, 5). Under decoupling, also known as the Single Farm Payment Scheme (SPS), previous payments have been turned into entitlements. Therefore, farmers can claim the entitlements they possess by demonstrating that their eligible land is being operated and meets requirements of the Good Agriculture and Environmental conditions (Viaggi et al. 2010, 188). Cong states that the 2003 SPS reform may have been the most radical CAP reform to date, before the 2013 reform (2012, 2). The direct payment system guarantees a minimum income for farmers, regardless of the profit they make selling their products. Reform was needed due to a significant decrease in agricultural income in 2009 (Dragoi and Balgar 2013a, 37-38). Payments are no longer attached to the production of specific crops, which decreases

incentive for cultivation and investment because of the possibility of receiving payments without crop cultivation (Viaggi et al. 2010, 189). From 2015 on, farmers will have to follow three factors that promote environmental sustainability to receive full CAP funding: cross-compliance, greening, and rural development (European Commission 2013, 6). The expected results of decoupling are a change in crop mix, increased investment potential due to relaxed budget constraints, and increase in farm income due to flexibility in guaranteed payments (Viaggi et al. 2010, 189).

Targeted Actions:

The 2013 CAP reform creates a more holistic approach to agriculture, using the two pillar system in a complementary way. To make the two pillars of the CAP more cohesive, the Commission has established “targeted actions,” which will receive attention and funding through programs of both Pillar 1 and Pillar 2. The targeted actions for the 2014-2020 plan are the environment, young farmers, areas with natural constraints, small farmers, and producer cooperation (European Commission 2013, 9). Farmers must first meet the Basic Payment criteria (cross compliance standards) before being eligible for any other payments like the green direct payment, young farmer payments, or payments for farmers with land constraints (Dragoi and Balgar 2015, 59-60). The new financial framework leaves funds available for organic farming, young farmers’ payments, and funding farming in disadvantaged areas (Dragoi and Balgar 2015, 57).

According to the European Commission, Basic Payments will be awarded to young farmers under age 40. In addition to measures made through the Pillar 2 rural development programs, young farmers will be topped up 25 percent for the first five

years of installation. Start-up grants up to 70,000 euros and training and advisory services may also be given to young farmers. This program will be funded by 2 percent of the national CAP envelope, and is mandatory for all Member States to adopt (European Commission 2013b). In the EU, for every 1 farmer under age 35, there are 9 farmers over age 55. At present 4.5 million farmers in Europe (30 percent) are over 65, and only 6 percent are under 35 (European Union Commission 2013c). This reflects how unattractive farming has become for the younger generation. This also creates the possibility of future land abandonment (Carson et al. 2013, 48). By requiring Member States to provide incentives to young farmers, the CAP is ensuring long-term food security and establishing agricultural providers for the next generation. One study in Italy also found older farmers are becoming mentors for younger farmers. Young farmers are returning back to family farms and to the countryside as a consequence in economic crises in other sectors (Galluzzo 2015, 28). This provides further evidence to support young farmers in the EU.

Unlike the young farmers initiative, incentives in the CAP for small farmers are not mandatory for all Member States. In this regard, member states are given flexibility. Those States that choose to adopt the Small Farmers Scheme pay farmers an annual fixed payment between 500 and 1500 euros, regardless of the actual farm size. Small farms may also be given up to 15,000 euros in start-up aid (European Commission 2013b). There is no formal EU definition of what qualifies as a small farm, that is up to the Member State. Member States may benefit from this policy, such as Hungary, which found subsidies for SFS has lower administrative costs than other optional policies (Potori, Kovacs, and Vasary 2013, 123). This part of the CAP is highly beneficial to

small farmers, who in the past were excluded from CAP legislation. Before the 2013 CAP reform, small farmers either sold or leased their quotas to larger farms because they could not compete with the large industrial farmers. Farmers with the highest yielding land and who were competitive in the market, received the highest payments per hectare before the Small Farmers Scheme (Cong 2012, 2). Because subsidies were coupled with production of specific crops, the small farms could not receive the subsidies or produce enough to support themselves (Yamaç and Acar 2009, 229).

There are also optional target area programs in place for Areas with Natural Constraints (ANCs) and Less Favored Areas (LFAs). Member states may use up to 5 percent of their national CAP envelope for additional payments for ANCs and LFAs. These payments would be part of Pillar 1, and do not affect the Pillar 2 payments under Rural Development (European Union Commission 2013b). This increases the area of available farmland and encourages innovation in farmers located in difficult areas. One study in Italy found by increasing funding to farmers who live in ANCs and LFAs, or are affected by weather changes, it decreases the chance of out-migration from the countryside, both within and outside of the country (Galluzzo 2015, 20).

Pollution and Sustainability:

The industrial food model in the past 50 years has led to environmental degradation and climate change that has led to multiple natural disasters (Yamaç and Acar 2009, 433). In the past, subsidies have increased use of fossil fuels and petroleum fuels because they rely heavily on output and production rates (Lacy 2015). Water, land, and forests may have been irreversibly damaged. Arable land in the EU is declining, as

well as its population growth (Carson et al. 2013, 33). Old methods of farming were more chemically dependent and were increasingly damaging to the environment (Yamaç and Acar 2009, 433). Excessive use of products that use fossil fuels like fertilizers, pesticides, and plastics have affected the natural equilibrium of ecosystems and increased the level of greenhouse gases (GHGs) in the environment (Dragoi and Balgar 2013b, 96). Agriculture is responsible for 9.6 percent of EU GHG emissions, including 75 percent of the EU's nitrous oxide emissions from fertilizer applications and 49 percent of the EU's methane emissions (EEB 2011, 4). Farming that can be viable long term is dependent on a well-balanced and functioning ecosystem (Carson et al. 2013, 1). Agriculture is the first victim of climate change and weather disasters caused by climate change. Because of this, it is important to support farmers who adopt green technology (Dragoi and Balgar 2013b, 96). Agri-environmental programs (AEPs) are designed to reduce agriculturally produced pollution and have been mandatory for EU member states since the CAP was reformed in 1992. AEPs also address the need to reduce agricultural overproduction, which contribute to soil pollution and erosion. (Laukkanen and Nauges 2014, 458).

Farmers were given examples of several methods and incentives through the CAP to decrease pollution. Farmers in the countryside are becoming one of the main drivers in the process of environmental protection by producing positive externalities (Galluzzo 2015, 19). According the to European Commission, for the mandatory greening policies, farmers must participate in maintaining a permanent grassland, crop diversification, and must maintain an "ecological focus area" (European Union Commission 2013b). In terms of crop diversification, a farmer must farm at least two

crops if his farm exceeds ten hectares, and three crops if his or her farm exceeds thirty hectares. The main crop may occupy up to 75 percent of the farmed land, with 25 percent left for additional crops (European Union Commission 2013b). Farmers are required to farm multiple crops to prevent mono-cropping and soil degradation. Crop rotation is one measure taken to reduce greenhouse gases and improve biodiversity. The “ecological focus area” must take up 5 percent of the farmers land and be set aside in a manner to “encourage biodiversity” (Dragoi and Balgar 2015, 58). This applies to farms larger than 15 hectares, and will increase to 7 percent of the farmed area in 2017 (European Union Commission 2013b).

It is necessary to address the importance of biodiversity to agriculture, because heavy agricultural production is causing ecosystems to become depleted. When there is a loss of biodiversity, a generation of crops can go extinct, with no way to get them back. This is a loss not just for the environment, but for agriculture as well (Brodzinska 2015, 157). Seven species of arable plants are considered extinct in Britain and a further 54 are threatened (EEB 2011, 2). It is estimated that by 2050 there will be a loss of 11 percent of the natural areas which existed in 2000 (Madau, Furesi, and Pulina 2014, 498). Other elements of biodiversity particularly at risk are pollinators and birds. The European grassland butterfly indicator shows a decline of some 70 percent since 1990, and farmland bird populations across the EU declined by 49 percent between 1980 and 2008 (EEB 2011, 2). Incentives are given in the CAP to preserving 7 percent of land as “focus areas” to permanently lay fallow to help reduce carbon dioxide emissions and promote biodiversity (Dragoi and Balgar 2015, 57). These grassland policies have been successful because the poorest regions are often grassland regions,

therefore best way to encourage social objectives to maintain grasslands is the grassland subsidy. Land use targeted through public policy is a strong driver of patterns of regional welfare (Mouysset 2014, 19).

Regarding maximum biodiversity performance, Mouysset observed that a tax on crops leads at best to medium objectives (up to 17 percent) while subsidies on grasslands are capable of achieving the highest performances (30 percent or more if the budgetary constraint is relaxed) (Mouysset 2014,18) . This supports the argument that subsidies are a successful method used to preserve biodiversity. Mouysset goes so far to argue that in contrast to what is commonly accepted, reducing first pillar subsidies would be the most relevant strategy to cost-effectively manage biodiversity and greening the CAP with medium ecological objectives. Increasing second pillar funds would positively affect biodiversity. Improving biodiversity would improve the quality of the overall environment, showing that the CAP is able to make positive strides in environmental protection. (Mouysset 2014, 22).

Another method used to combat climate change while promoting the natural landscape is agroforestry, which uses the cultivation of trees in agriculture. Agroforestry involves multi-cropping which is dispersed in small areas generating positive externalities. According to Galluzzo, it's a central factor in rural areas at risk of marginalization in order to reach a higher level of ecological sustainability. The increase in trees reduces emissions of greenhouse gases, and increases gas sequestration. Agroforestry also alleviates poverty in some rural areas, by bringing more arboreous crops to the region. The CAP agroforestry policies protected the countryside and forest environments, while cultivating arboreous crops, such as "chestnut, walnuts, hazelnuts,

scattered in small portions of Italian farms, producing intangible public goods in terms of positive externalities and niche products as truffle, mushrooms and forest fruits” (Galluzzo 2015, 21-23). There is evidence in progress in agroforestry, but not on the large scale. A study in Italy showed much of agroforestry actions have been conducted in lowlands and upland rural territories in Italy, affecting only a small percentage of farmers. This is also important to highlight, because one of the most important effects of agroforestation was to reduce the desertification in Mediterranean areas. The European Union and global food market relies heavily on Mediterranean areas for food supply, so there is possibility of food insecurity if desertification is not reduced (Galluzzo 2015, 23). Agroforestation is also important to improve the quality of land that has been exploited post-industrialization (Galluzzo 2015, 21). According to the European Commission, forestry has been addressed in the reform, by receiving, “strengthened and streamlined support through grants and annual payments”, but this action is vague and could use further action (European Union Commission 2013b). Galluzzo’s study underlines that a large proportion of agroforested areas are mostly located and scattered in lowland areas rather than in upland territories agroforested areas. Therefore, these lowland areas need financial support in order to ensure a persistent development in the countryside and to reduce the out-migration from rural territories (Galluzzo 2015, 26).

Water and Soil

It is estimated by the EU that agriculture uses 44 percent of Europe’s total water supply (Madau, Furesi, and Pulina 2014, 496). Agriculture contributes 50-80 percent of the total nitrogen load to freshwater in Europe for multiple reasons. Pesticides have

been found in groundwater in all EU countries that have been tested, supporting the case for a decrease in pesticide use. (Carson et al. 2013, 53-54) Pesticides are also known to be found in drinking water. In 2008, 17 percent of the population of Eure-et-Loir, France received drinking water with pesticides above legal thresholds. French national data shows that, in 2008, 5 million people received, at least one time per year, drinking water which did not comply with the regulation on pesticides (EEB 2011, 19). Therefore, pesticides can be damaging to humans as well as the environment. Farm runoff of manure also contributes to nitrate pollutants in water (Dragoi and Balgar 2015, 57).

Water pollution is a problem in all EU Member States, especially in nations around the Baltic Sea Region (BSR), such as Finland. The Baltic Sea contains seven of the world's ten largest marine dead zones, where the sea's oxygen has been depleted by algae blooms caused by the build up of nutrients, which is suffocating the sea (EEB 2011, 22). Finland needs to drastically reduce water pollution in order to improve overall quality of both its freshwater sources and the Baltic Sea (Laukkanen and Nauges 2014, 474). Applying artificial fertilizers, draining, and "modern forms of grass conservation" can lead to soil erosion, loss of organic matter, increase water runoff, and increase greenhouse gases. This means a balanced, more natural approach to farming is needed (Carson et al. 2013, 24). Farmers who agree to participate in the general AEP subprogram must take measures such as limiting fertilizer use, and construction of vegetative strips along waterways (Laukkanen and Nauges 2014, 460). Farms are compensated by an area-based payment, which means they are basically paid uniformly per hectare within the region. Support is also given to farmers in arid climates

to let their land lay fallow. This is to counteract nutrient loss in the soil. When improving conditions of polluted water, the condition of soil is also improved because they are commonly polluted by the same chemicals (Laukkanen and Nauges 2014, 459).

It is hard for policymakers to create laws for possible sustainability, let alone to measure their possible effects (Madau, Furesi, and Pulina 2014, 489). Even so, there have been experiments and estimations done to predict future environmental gains due to the CAP. For example, one study was done in the Mediterranean region. With the predicted EU reform model that requires farmers to set aside 7 percent of their land to lay fallow, there is a clear increase in soil humidity predicted for all fields set aside by farmers with revegetated shrubs. Farmland set aside for revegetation would create a runoff blocking effect by absorbing runoff with new greenery that would protect fields located in the lowlands against soil loss by water. This also reduces sediment yield to wetlands. In this particular study, this illustrates that the CAP reforms would help preserve the Estana lakes, and other Mediterranean ecosystems like it (Lopez-Vicente et al. 2014, 4294-4295). This technique has been used in other Mediterranean regions to address scarcity of surface water, like in Israel for crop irrigation (Lopez-Vicente et al. 2014, 4295). In another study researched by Matthews, fallow land rotations had positive impacts for water consumption, nitrogen losses, biodiversity, GHG emissions, and energy consumption. This study is another example which supports the argument that CAP has the ability to counteract past pollution and positively impact the environment (Matthews 2013, 11).

As a result of the CAP, studies have shown pesticide levels are decreasing in most EU countries, except Germany, Netherlands, and Belgium. Additionally GHG

emissions have declined steadily since 2009 (Carson et al. 2013, 57-58). Even before the 2013 CAP reform, the area of pastures increased from 2002-2006 by 9 percent in Sweden after passing the policy of decoupling, and fallow area initially increased by 42 percent between 2003 and 2006 (Trubins 2012, 166). After 2003, the area of temporary grasses and grazing increased by 23 percent in Sweden (Trubins 2012, 162). In another study described by Cong, “based on two micro-economic models (AgriPolis and MODAM), Uthe et al. found that in the case of grassland, decoupling led to improvement of the environment as a result of the cross-compliance obligations” (Cong 2012, 3).

Despite the success of AEP programs to target pollution, there is still criticism against the way the policy is carried out. For example, requirements for participating in AEPs tend to be general and payments are given based on environmentally harmless outcomes and not measurable results (Laukkanen and Nauges 2014, 459). Actual enforcement of fertilizer constraints is weak. Only 5 percent of farms are audited each year and sanctions are mild. Policies need to be more targeted and specific in order to be more effective, like taxing fertilizers or emphasizing payments for land devoted specifically to water protection. (Laukkanen and Nauges 2014, 474).

Biofuels

The CAP has also been used in a way to grow products for biofuels and energy crops. The EU imports 53 percent of the energy it consumes, making it smarter economically to find new renewable energy sources (Bolognini 2015, 199). Using crops for both food and other purposes, like fuel, is known as multi-functional agriculture, which became a focus of the EU with Agenda 2000 (Madau, Furesi, and Pulina 2014,

488). The European goal is to increase shares in energy mix of renewable energy to 27 percent by 2030. Crops like rapeseed, sunflower, soy, corn, and miscanthus are considered “energy crops,” which are cheap to produce and can be used as biofuel. Biofuels are cleaner fuels and lead to a decrease in fossil fuels and GHGs (Bolognini 2015, 200). In Germany, 95 percent of maize previously used as fodder is now used for biofuel production. Germany and France have the largest areas devoted to biofuel (Carson et al. 2013, 42). After Hungary’s accession to the EU, their sunflower oil and rapeseed oil production doubled, paralleling the increasing popularity of biofuel, which relies on these two oils heavily (Potori, Kovacs, and Vasary 2013, 118). Increasing use of biofuels has the potential to significantly reduce the levels of greenhouse gases and use of fossil fuels. However, promotion of bio-energies can conflict with the rational management of water resources because the possible conversion from non-irrigated crops to certain irrigated energy-supplying crops could result in more use of water (Madau, Furesi, and Pulina 2014, 494). Land set aside used for the cultivation of energy crops showed environmental impacts similar to those of the main alternative conventional agricultural systems. Therefore, although the use of biofuels lowers GHG emissions in the environment, the producing of the biofuels themselves still has a negative environmental impact if they are not handled efficiently (Matthews 2013,11). These are examples of how some of the CAP goals are in conflict with each other. Dramatic increases in demand for bio-fuels could also affect supply and prices for EU food and non-food goods (Madau, Furesi, and Pulina 2014, 494). Some feel using agriculture for energy crops is risky and threatens food security (Bolognini 2015, 201). Biofuel and renewable energy targets add further to the demand for agricultural

resources within the EU, increasing the competition for land with nature (Matthews 2013, 2). The goal for Europe is to develop new kinds of renewable energy without compromising food security (Bolognini 2015,194).

Organic Food

The CAP has put significantly less emphasis on organic food² and nutrition than it has put on the environment. Still, it is an improvement from the previous CAP programs which had no incentives at all for organic food or food nutrition. In most EU countries, organic food production is increasing, but the EU still imports most of its organic food, especially from Turkey (Ataseven 2014, 203). Organic farming made up only 4.7 percent of EU farms in 2011 (Carson et al. 2013, 63). In addition, consumer demand for organic foods is increasing, although organic markets only made up 2 percent of EU food expenditure in 2007 (Carson et al. 2013, 41). Spain, Italy, Germany, France, and the UK make up 56.3 percent of organic farming in the EU, meaning the production of organic food is not widespread across the EU (Ataseven 2014, 209). Motivation for organic food is not only because of its health benefits, but also for other environmental results like cleaner water, reducing overproduction, and increasing export opportunities. Organic food does not use pesticides, which contributes to food safety concerns as well as reduces possible soil contamination or degradation (Ataseven 2014, 206-207). Organically managed soils contain 30-40 percent more earthworms which are extremely important for enhancing soil fertility and structure (EEB 2011, 7). In general, biodiversity is up to 50% higher on organically managed farms than on conventional farms (EEB 2011, 13).

² According to the European Environmental Bureau, organic food is described as "systems growing healthy plants without the use of synthetic fertilizer or agro-chemicals." (EEB 2011, 12).

Organic producers in EU can be given financial support through the CAP reform towards certification and inspection fees, while also receiving other forms of aid such as free advice, training, and investment aid (Ataseven 2014, 206 and 208). Subsidies may be given to organic farmers not only for sustainable activity, but also marketing activities (Ataseven 2014, 207). Organic farmers are also given other incentives through other CAP programs such as green payments through Pillar 1, or the Natura 2000 program funded under Pillar 2 (European Commission 2013, 9). However, payment levels for organic farming can vary from crop to crop (Ataseven 2013, 209).

Nutrition

There have been experimental studies done to decide whether the CAP should introduce a food and vegetable reform focused on better nutrition and childhood obesity. In June 2007, the Agricultural Commissioner proposed a 103 million euro fruit and vegetable school program with co-funding from member states, but these plans were at first rejected by the Commission, who feared there was not room in the budget (Sa and Lock 2008, 558). DG AGRI conducted an impact assessment process from September 2007 to May 2008 to help inform new policy creation in Autumn 2008. The object was to assess the potential impact of a school program and public health and diet, social inequality, agricultural markets, and finding the best value for the EU funds. Before official policy was made, the Commission wanted to make sure that fruit and vegetable programs in schools would work and be worth the spending. Over 70 percent of studies conducted displayed a positive impact on fruit and vegetable intake in schools. This study was conducted worldwide, including the EU, USA, and New Zealand (Sa and Lock 2008, 559-560). The programs helped to reduce health and social inequalities,

because each child is offered the same knowledge, and low income students are offered reduced or free fruits and vegetables (Sa and Lock 2008, 565).

These experimental studies led to a program financed by the CAP known as the School Fruit and Vegetable Scheme (SFVS). There are 25 participating member states in the SFVS and the program will be funded 150 million euros as part of the 2020 reform plan, which is an increase from the previous 90 million euro budget. The program is also co-financed by the Member States (European Union Commission 2013b). The products distributed are fresh produce rather than processed products, and are fruits and vegetables of local origin, supporting the local economy. Frequency of distribution varies from every day, like Denmark, Romania, and Ireland to once a week like Belgium, Italy, and Malta, depending on the member state (European Union Commission 2014 14 and 17). In the school year 2012-2013, 61,396 schools were participating in the SFS, aiding 33 percent of the population of six to ten year olds and 8.6 million students total. Each portion per child costs about 30 cents per unit (European Union Commission 2014, 4-5). In addition to fruit and vegetable distribution, methods of education noted by Member States have included those directly linked to agriculture, like farm visits, market visits, school gardens, tree planting. Educational methods cited by Member States include “pedagogical kits for teachers and pupils, leaflets, seminars, training sessions for teachers, publication in schools newspapers, creation of web sites, interactive games on health and nutrition, photo competitions, exhibitions, rewarding gadgets, cartoons, video clips” (European Union Commission 2014, 19).

This study is an example of how the CAP can make a positive impact on nutrition standards. Low intakes of fruits and vegetables accounts for diseases in 4.3 percent of

men and 3.4 percent in women (Veerman 2006, 31). If the CAP increased accessibility of fruits and vegetables to children and lower income individuals, and each received the recommended daily value of fruits and vegetables, public health would be much higher and life expectancy would improve and increase six months for men and four months for women (Veerman 2006, 32). The CAP has potential to make a positive change in equality of opportunity by implementing student lunch programs and increasing awareness and accessibility to fruits and vegetables.

Criticisms of the CAP

There are still many critics of the CAP today, from the economic, environmental, and agricultural sectors. Throughout history, subsidies have become increasingly political, and are less focused on supporting struggling farmers (Lacy 2015). Critics of the CAP who are market liberalists say it is a “costly luxury,” because it is a form of interventionism that stands in the way of the free market and competition (Dragoi, and Balgar 2013a, 35). Subsidies also have the ability to distort trade and the World Trade Organization (WTO) must respect EU subsidies, meaning the CAP affects the global market (Yamaç and Acar 2009, 433).

The CAP burdens European tax payers and consumers because of the high prices it creates. This means it affects the average European citizen twice, once through taxes, and again at the market (Dragoi and Balgar 2015, 59). The cost of the CAP is paid for by all citizens, but the benefits are received primarily by the farmers (Yamaç and Acar 2009, 429). The 2013 CAP reform works in the consumers’ favor, who are the tax-payers who help finance the CAP. This is because the reforms free the farmer from production quotas, so the farmer can produce based on consumer and market demand

(Dragoi and Balgar 2015, 59). Pressure for reform comes from the EU budget deficit, as well as pressure from international trading partners (Bednarikova and Jilkova 2012, 28). Some say the CAP is a form of interventionism that may affect competition in the free market (Dragoi and Balgar 2015, 57). EU agricultural policy is also commonly criticized for being high cost and low efficiency, but also because of its previous market price distortion and export support, though this has decreased through the 2013 CAP reforms (Bednarikova and Jilkova 2012, 26-29).

Farmers, on the other hand, argue that more reverence should be given to food security, farm incomes, and stabilizing agriculture prices (Rutz et al. 2013, 24). Some farmers argue the greening measures could drive them out of business through the layered payment approach, which requires cross compliance before receiving additional payments. However, policymakers argue that these measures only cover about 30 percent of payments, and encourages competition and long term sustainability, which is good in the long run for the farmer (Dragoi and Balgar 2015, 62). For example, in Hungary, reducing direct payments above 150,000 euros by 5 percent would affect only 225 of the 176,300 farms which received direct payments in 2011, showing that new Pillar 1 qualifications would not harm or discourage wealthy farmers. In addition, the majority of farmers who gave up farming after the introduction of the single payment scheme were smallholders with areas less than 10 hectares. These new reform policies would have no significant impact on large farms (Potori, Kovacs, and Vasary 2013, 119-120).

Environmentalists aim to do away with the two pillar system, and assert that more support should be given to organic farming, with a greater goal of self sufficiency

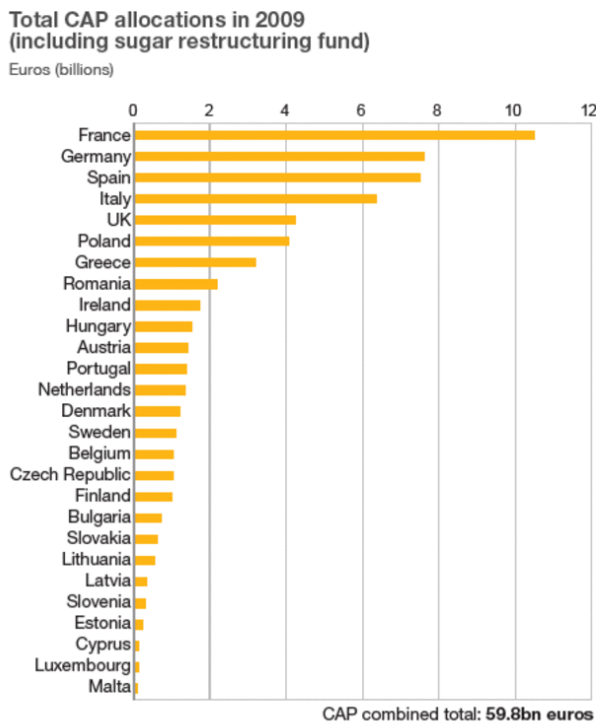
on the local level. They also called for direct support for ecosystems, higher standards for animal welfare, and greater emphasis on environmental conservation (Rutz et al. 2013, 24-25). Results are not being achieved fast enough, as goals were to halt biodiversity loss by 2010, but now the horizon has shifted to 2020 (Galluzzo 2015, 22). Some environmentalists also argue that although the legislation for sustainability is there, the actions themselves are not enforced. For example, farmers are rewarded based on carrying out managing tasks, not necessarily for measured environmental performance, and payment levels are not based on the actual cost to carry out environmental measures (Cong 2012, 1). It is generally agreed by farmers and environmentalists alike that greater interest should be given to young farmers and also to protecting forestry (Rutz et al. 2013, 24-25).

Certain member states are also critical of the CAP. One of biggest barriers to the CAP is the conflict of national interest. The CAP becomes more complex with each member state added because of the combined diversity of environments and agricultural systems (Dragoi and Balgar 2013a, 37). The diverse states must all adhere to a one-size-fits-all policy. The term “common policy” is fitting, because 90 percent of agricultural production belongs to the EU, not the individual member states (Dragoi and Balgar 2013a, 34). The countries that put the most money into the programs (net contributors), are not necessarily the same as those that receive the biggest benefits (net recipients). This means that though some Member States may put more money into the CAP through taxes, they do not receive as much funding as other nations because the taxes are redistributed based on which nations have the most farmers and qualify for the most farm aid. Net contributors tend to be countries with high GDP but

less arable farmland, like the United Kingdom and Germany. Net recipients are smaller countries with climates that favor farming, like France, Spain, and Italy. It is difficult to find the right balance between “winners” and “losers”, and the EU does not want the gap between the groups to widen (Yamaç and Acar 2009, 424-425). Nationally France benefits most, with about 17 percent of CAP payments, followed by Spain (13 percent), then Germany (12 percent), Italy (10.6 percent) and the UK (7percent). France is the biggest agricultural producer, accounting for some 18 percent of EU farm output. Germany comes second, with about 13.4 percent (BBC 2013).

Figure 2

Figure



3 Source: European Commission

Source: BBC 2013

Figures 2 and 3 exemplify the disparity between CAP funding and which member states provide the most employment in agriculture. It is clear that those who employ the most people do not necessarily receive the most funding. This data is used

to question where the funding is actually going, if the countries with the most farmers do not receive the highest CAP payments (BBC 2013). One possible problem argued is that the SPS rewards the largest farms with the largest payments, so the CAP because a redistribution system, possibly redistributing from the poor to the rich SPS also has the tendency to be distributed to farmers in richer regions, as shown by the top receivers in Figure 1 (Cong 2012, 1-2) .

In addition, it is difficult to get Member States to agree on certain policies, because each country has its own specialty and its own national interests. For example, the Netherlands favors freer trade with third countries with things like grain, and France and Italy were against Spain's accession to avoid Mediterranean competition (Yamaç and Acar 2009, 426). The process of policy-making in the EU also affects the CAP. This is because laws are proposed by the Commission, but then must pass a unanimous vote by the European Council. This sometimes leaves the CAP policies too watered down and up for interpretation for Member States (Yamaç and Acar 2009, 430-433). However, CAP policies with the 2013 reform are flexible so that Member States can adjust based on their needs. Examples of this are the optional Small Farmers Scheme and limited coupled payments to take account for existing conditions (European Union Commission 2013b). The flexibility of policies and additional payments for land constraints benefit countries that have a very fragmented farming population of large scale farmers and small subsistence farmers, like Romania (Dragoi and Balgar 2015, 60).

Another argument against the CAP, and subsidies in general, is that farmers begin to farm only to receive the subsidy, not to the needs of the market or their own

motivation. From a global perspective, subsidies only benefit the farmer and their own country, not other countries or markets around the world. This becomes bad for the consumer and bad for small countries in the world (Lacy 2015). Protectionism and subsidies by industrialized nations cost developing countries around 24 billion U.S. dollars annually in lost agricultural and agro-industrial income (EEB 2011, 20). The CAP is seen by some as as part of an unfair trade system rigged in favor of the richer countries, perpetuating inequalities in global food distribution. The average annual subsidy per farm is about 12,200 euros. But payments per hectare range from 527 euros in Greece to 89 euros in Latvia, because of the transitional arrangements for new member states. New Member States are allowed national farm aid to compensate for lower EU subsidies, but these are not enough to fill the gap. Small farmers also put at a disadvantage compared to large farmers, even with the SFS. Large agri-businesses and big landowners receive more from the CAP than Europe's small farmers who rely on traditional methods and local markets. About 80 percent of farm aid goes to about a quarter of EU farmers, which are those with the largest holdings. Some, like Copa-Cogeca, say farmers need to obtain a fair income from the market. Farmers state that other players in the food chain, such as distributors and commodity speculators, reap the rewards while their income is falling. In a sense, the “middle man” like those who transport the goods and ship them out, sometimes receive more money than the farmers themselves (BBC 2013).

It is also possible in the future that farmers might lie about their income in order to qualify for more subsidies (Cong 2012,11). In addition, farmers may be able to receive subsidies, while not “actively farming.” This concern of “passive farming,” is

when farmers leave all of their land fallow or idle and continue to receive CAP payments (Trubins 2012, 162). CAP payments make up 40 percent of income on average for farmers. In some cases, CAP payments may make up 100 percent of a farmer's income, making farming loss-producing. Therefore, in theory, some farmers would be better off ceasing farming and just living off CAP payments, so long as no one checked up on them. This is why viable food production has to remain a priority of the CAP (Carson et al. 2013, 32). The direct payment system guarantees a minimum income for farmers (Dragoi and Balgar 2013a, 37). Without the CAP, farmers would not be able to support themselves. The agricultural industry is not ready to remove the CAP, even though it has been around since the 1960s (Carson et al. 2013, 32). However, this is why the CAP has undergone reform and passed active farmer legislation in 2013, so that farmers must be considered active in order to receive any kind of CAP payment. (Trubins 2012, 168).

Conclusion:

Criticisms of the CAP allude that the policy is not ideal for all parties involved. Smaller and poorer nations and individuals are not being addressed to the same extent as large and rich nations and farmers, which have more powerful voices (Lacy 2015). There are still problems with the SPS, because it is not addressing the priority of food security to its full advantage. The SPS's contribution to food security is not as large as imagined because the bulk of the payments are paid to the most fertile regions where market prices are enough to guarantee food production (Cong 2012, 1). It can also be difficult to change CAP legislation because it has been so deeply institutionalized and

because the agricultural lobby has grown significantly since the development of the CAP (Carson et al. 2013, 32).

Still, the most recent CAP reform in 2013 has improved standards to attempt to mitigate these problems. The SFS, although optional, gives extra support to owners of small farms who may be overshadowed by larger, more powerful farms. The new CAP is an effort to promote sustainability, while still focusing on food security. The European Commission was faced with creating a policy to be able to fit all 28 diverse Member States, so it is impossible to create the ideal policy that caters to each nation's and individual's needs. The new CAP aims to be more transparent and equitable in terms of distribution of direct payments (European Union Commission 2013a, 8). The CAP has still undergone radical change throughout the past decade, transitioning from artificial price support, then to coupled payments based on production, and finally to decoupled payments independent of production rates. Farmer's output decisions are now based on consumer demands and are not distorted by output subsidies (Cong 2012, 1). The CAP is still a unique subsidy program that allows Member States choice and flexibility, while still enforcing environmental regulations and providing incentives to promote biodiversity, agroforestry, and decreases in pollution.

It still remains important for the EU to address the issues of climate change and environmental degradation. Climate change is believed to affect crop varieties and productivity, cultivated land areas, increases in demand for irrigation, increased drought and water scarcity, and soil degradation. It is also predicted to increase water salinity, higher winds, increases in rainfall, greater inter-season variability, and higher levels of carbon dioxide (Madau, Furesi, and Pulina 2014, 496). As stated earlier, it is predicted

that agriculture will be the first and most affected industry by climate change. This is a direct threat to food security, which is major reason why it is supported by the CAP (Madau, Furesi, and Pulina 2014, 495).

Overall, the CAP is moving forward to encourage environmental sustainability and better nutrition. The recent reforms have created a new kind of subsidy program with policies that have caused real, measurable changes as stated throughout this paper. The future of the CAP after 2020 is unpredictable, but the European Commission will have to decide whether to listen to CAP critics and how to continue to adapt the CAP to the increasingly globalized economy. CAP priorities have continued to change through the years, and may go on changing in upcoming decades.

Acronym Glossary:

AEP - Agri-Environmental Program

ANC - Areas of Natural Constraints

BSR - Baltic State Region

CAP - Common Agricultural Policy

EU- European Union

GDP - Gross Domestic Product

GHG - Greenhouse gas

LFA - Less Favored Areas

SFS - Small Farmers Scheme

WTO - World Trade Organization

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