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Lukas Kornher and Joachim von Braun

# EU Common Agricultural Policy -Impacts on Trade with Africa and African Agricultural Development

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## Abstract

The impacts of European agricultural and trade policies on agricultural development and food security in Africa are analyzed in this study. The research is prompted by the pending further development of the Common Agricultural Policy (CAP) after 2020. The proposal for the new CAP is based on higher ambitions with regard to environmental protection and climate change through mandatory ecological programs and an enhanced linkage of direct payments to the greening rules. The methodological approach comprises: (i) an examination and critical review of existing studies; (ii) an analysis and assessment of agricultural trade flows between the EU and Africa as a whole and in the context of case studies on meat and milk; (iii) a systematic consultation of leading experts in European and African agricultural and trade policy on trends and impacts of the CAP; and (iv) model simulations of the effects of possible reform projects on production in and trade flows with Africa. The study finds that direct payments to EU farmers continue to account for up to 50% of total farm income in the EU, but EU spending on agricultural development in Africa is rather small in comparison. The current EU agricultural subsidy policy hampers the development of African agriculture much less than it did before export subsidies and coupled subsidy payments were largely abolished. However, these earlier effects cannot be corrected quickly because agricultural productivity depends on longstanding favorable framework conditions and long-term investments in innovation. According to the expert consultation carried out for this study, a stronger environmental and climate orientation of the CAP is considered likely and would have a dampening effect on European agricultural exports to Africa. The model simulation estimates that European food exports to Africa would decrease under the expected EU policy changes. However, this reduction in European exports would be mainly taken over by other exporters. Investments in African agricultural development should be expanded by the EU. Although African raw agricultural material exports to the EU are largely free of duties, the access of processed products to the EU market is still limited due to complicated rules of origin and social and hygiene standards for goods imported into the EU. These standards are necessary but must be more transparent. The EU should provide more support to improve standards in Africa; otherwise, the export potential of African countries cannot be fully exploited.

Keywords: post-2020 CAP, agricultural development in Africa, EU-Africa trade JEL classification: F13, O13, Q1

## **Executive Summary**

### Motivations and Aims of the Study

This study is prompted by the pending further development of the Common Agricultural Policy (CAP) after 2020 and the consideration that, in the context of this potential change of EU agricultural policy, greater emphasis should be laid on African development, besides environmental, climate, health and distributional aspects. The aim of this study is to shed light on the impacts of European agricultural and trade policies on agricultural development in Africa, and the coherence of EU policies with development policy objectives. The consequences of Coronavirus controlling attempts that include border closures and market shut downs in both Europe and Africa have highlighted the key role of trade and market policies for development. The decision to establish the African Continental Free Trade Area (AfCFTA) provides another important reason to revisit EU – Africa trade policy relations in the important fields of food and agriculture.

With a total volume of 400 billion euros for the 7-year budget period, which currently represents about 36% of the total budget (EU28), CAP spending is the largest expenditure item in the EU budget. Total EU development expenditures for Africa amount to about one-tenth of that, and the share for agricultural development and food security is only about 2% of the EU agricultural budget. In view of the goal to establish coherence between the agricultural and development policy of the EU, and in view of the high risks for food security in Africa due to the economic consequences of COVID-19, this budget imbalance must not be ignored. Moreover, Africa's opportunities and problems are becoming increasingly relevant for the EU, future EU policy should be examined whether they benefits Africa's agricultural development. This includes investment in sustainable agricultural productivity, infrastructure, and institutions that are conducive to trade.

## **Common Agricultural Policy post-2020**

On June 1, 2018, the European Commission presented the draft legislation on the future of the CAP for the period after 2020. It provides for a small reduction in the total volume of agricultural subsidies for its now 27 Member States. The proposal is based on higher ambitions with regard to environmental protection and climate change through mandatory ecological programs and an enhanced linkage of direct payments to the greening rules. A stronger environmental orientation is also considered very likely among the experts interviewed for this study. However, the draft also envisages changing the green architecture of the CAP and giving Member States greater freedom in achieving the targets set out in national strategic plans. This flexibility could lead to an increase in the use of coupled subsidies in some Member States, which in turn would increase export surpluses for some agricultural products. This could lead to renewed incoherence with agricultural development policy.

### Effects of European agricultural and trade policy in Africa

Trade policy: In its present form, the CAP continues to promote food exports. In 2018, wheat (€3.3 billion), meat (€1 billion), dairy products (€1.7 billion) and processed food (€6 billion) were the main EU exports to Africa. Among these goods, the share of Africa's imports from the EU ranges from 25% (meat) to 44% (dairy products). In the current debate on CAP adjustments, effects on developing countries have so far played a minor role, although the EU describes coherence with its development policy objectives as an important element of its policy. There is widespread agreement that, in the past, coupled subsidy payments, export refunds, and direct market interventions have made a major contribution to increasing agricultural production in the EU and have led to the EU's increased export surplus. Low-priced food imports have weakened the agricultural sectors of African countries in the long-term and hindered the development of competitive agricultural production. These earlier effects cannot be corrected quickly because agricultural productivity depends on long standing favorable framework conditions and long-term investments in innovation.

**Regulatory framework:** Although African raw agricultural material exports to the EU are largely free of duties under various agreements, processed products are only free of duties if it can be ruled out under the "country of origin" principle that components of the final good were imported from a third country. The proof of origin requires a list of the production stages and ingredients as well as their origin. This condition often makes it difficult for African exporters to export processed agricultural products to Europe, hindering the creation of regional value chains. De-bureaucratized regulations (supported by advice from development cooperation) should create flexibility if the majority of the ingredients originate from the partner country or the respective regional economic zone. Social and hygiene standards for goods imported into the EU are necessary but must be transparent. According to EU regulations, social standards must comply with the principles of the International Labour Organization (ILO). However, currently, these are not implemented consistently. It would be helpful if the EU provided more support to improve standards in Africa; otherwise, the export potential of African countries cannot be fully exploited. This should also include capacity strengthening in Africa to check the adherence to health standards of EU food products exported to Africa.

**Effects of direct payments**: Direct payments to EU farmers continue to account for up to 50% of total farm income in the EU. As shown by the model simulations, a reduction in direct payments is not expected to have a significant impact on food production in Africa in the short-term because the decline in imports from the EU will largely be offset by imports from other world regions. In the long term, however, this could be different, as European agricultural enterprises may partly be kept in production locations by the direct payments where they would not be able to survive without these subsidies. Furthermore, the direct payments allow investment decisions that increase the productivity of variable production factors. The current

EU agricultural subsidy policy hampers the development of African agriculture much less than it did before export subsidies and coupled subsidy payments were largely abolished.

**Meat case study**: African countries on average import around 20% of meat products, a quarter of which come from the EU. Poultry accounts for the majority of African meat imports, with poultry parts accounting for three-quarters of African poultry imports from the EU. However, the European poultry sector benefits little from subsidy payments and European producer prices are relatively high in international comparison. The low export prices of poultry parts are a result of the low demand for these products in Europe and not a consequence of the CAP. This also means that a reduction of EU poultry exports through political measures (and the associated higher prices) would primarily burden consumers in Africa.

**Dairy products case study**: Many countries in North and West Africa are heavily dependent on milk powder imports, some of which exceed domestic production multiple times. The CAP has far-reaching impact in the dairy market. Following the abolition of the milk quota, European milk production has continued to increase, although low European producer prices are supposed to reduce the incentive to do so. However, dairy farms in the EU still benefit from income support. Direct payments, as well as coupled subsidies (in some Member States), provide incentives for investing in productivity-enhancing technologies, and in this way positively affect milk production. In addition, the EU provides a safeguarding against price risks through support purchases of milk powder,<sup>1</sup> which are re-supplied to the market below world market prices. On the other hand, in some African countries, the (proportional) production costs are lower than in European countries. At present, however, these African countries are not able to meet the rapidly growing demand for milk products on the continent. Investments in local value chains and improved infrastructure would increase African productivity and intra-African trade could gain in importance.

**Effects of CAP environmental orientation**: According to the expert consultation carried out for this study, a stronger environmental and climate orientation of the CAP, which takes into account the indirect effects of intensive agriculture on the environment and climate, would have a dampening effect on European agricultural exports to Africa. In the model simulation, the implementation of the European Nitrate Regulation leads to a reduction in livestock farming and alters European meat production. As a result, European exports (especially of pork) to Africa would decrease by 33-52%, and European exports of dairy products by about 5-7%. However, this reduction in European exports would probably be mainly absorbed by other exporters, resulting in largely unchanged African meat consumption.

#### Preliminary conclusions on CAP reform and trade policy with Africa

i) The increased return to coupled subsidy payments and support prices now being considered in some EU countries, as already begun in 2013, is inconsistent with the objectives of the EU's

<sup>&</sup>lt;sup>1</sup> Between January 2018 and June 2019, 380,000 tonnes of milk powder were sold from the intervention stock, which is about 50% of the 2018 export volume to Africa.

development policy and should, therefore, be limited. Otherwise, there is a risk of increased unfair competition with Africa.

ii) The more targeted linking of agricultural subsidies to environmental and climate regulations increases the costs of agricultural production in the EU, especially in livestock farming, and could be expected to reduce the EU's production and export surpluses. This would create local incentives in Africa to invest in domestic agriculture.

iii) Extensive open market access to the EU for African agricultural products, in particular also processed food, without tariff escalation, shall be facilitated. Concession of result-oriented, long transition periods, and trade policies allowing for the protection of African agriculture (i.e. granting further scope to protect key agricultural industries beyond 2035) before African markets are fully opened shall be considered.

iv) In a future strategic EU – Africa trade agreement adapted to AfCFTA, trade preferences should be transferred to such an agreement. In addition, "Aid for Trade" programs should be maintained regardless of the FTAs.

v) New opportunities for direct digital trade in agricultural and food products from Africa should be facilitated, promoted and increased to create value addition in processed products (cocoa, tea, coffee) in decentralized rural areas.

vi) Appropriate quality, health, environmental and social standards of agricultural and food products traded in and with Africa should be developed further together with African partners. Employment effects should be taken into account. The EU should provide support on improving these standards in Africa, e.g. through "Aid for Trade" programs, as African export potential would otherwise not be fully exploited.

vii) Simplification of origin rules (supported through consultation with trading partners) should provide scope for flexibility, provided the majority of the ingredients originate in the partner country or regional economic area.

## 1 Background and objectives of the study

This study is prompted by the pending further development of the CAP in 2020 and the consideration that, in the context of such a further development of EU agricultural policy, greater emphasis should be laid on African development. It is clear that agricultural policies serve many objectives and that conflicts between different objectives, such as environmental, climate, health and distributional aspects, must be considered in reform projects. The aim of this study is to shed light on the impact of European agricultural and trade policies on agricultural development, including trade and production of agricultural products in Africa, and to assess whether these policies are consistent with development policy objectives.

A systematic survey and consultation with experts were carried out to obtain assessments of the current impacts and future development of the CAP. Model simulations were then used to calculate the impact of possible reform projects on trade flows with Africa and on African production.

In most African countries, the rural population is heavily dependent on agriculture. The agricultural sector in these areas is characterized by small-scale farming, which is an important part of the livelihood of about three-quarters of the rural population (Lowder et al. 2014). Due to the importance of the agricultural sector and the multiplier effects of increased agricultural income in downstream sectors, agricultural growth is two to three times more effective in reducing poverty in developing countries than growth in other sectors (Christiaensen et al. 2010). Agricultural development is therefore of fundamental importance to Africa for food security and improving living conditions. To this end, a detailed analysis and critical review of existing studies were carried out as well as an analysis and evaluation of market data for two case studies on the meat and milk sectors.

The impacts on developing countries have so far played a minor role in the discussions on adjustments to the CAP. The CAP is suspected of exacerbating obstacles to development through implicitly subsidized exports.<sup>2</sup> By contrast, achieving food security and rural development, especially in low-income countries, is a declared goal of the United Nations Sustainable Development Goals (SDGs). In the report on "The Future of Food and Agriculture", the EU Commission describes the global impact of the CAP and the need to consider the objectives of development cooperation (European Commission 2017).

The CAP is one of the most important areas for shaping common European policy. With a total volume of 400 billion euros for the 7-year budget period, which currently represents about 36% of the budget (EU28), it is the largest expenditure item in the EU budget. The EU as a trading bloc plays a central role in international agricultural trade, which is why the CAP influences not only the common market of the EU Member States but also international

<sup>&</sup>lt;sup>2</sup> Cf. inter alia Reichert and Thomsen (2018), Coordination SUD (2019).

agricultural markets and trade. Due to tariff preferences and historically developed trade relations, the EU is the most important trading partner for the African continent and the main buyer of African agricultural exports. In 2018, the total volume of trade between the EU and Africa amounted to about 35 billion euros, accounting for about 25% of the total African agricultural trade.<sup>3</sup>

Changes to existing policies and the development of new policies that could influence sustainable development indicators and agricultural production and trade are at the heart of the current CAP reform debate. The coherence of agricultural and development policy was explicitly emphasized in the so-called European Consensus on Development.<sup>4</sup> In the 2013-CAP-reform, the external effects of the CAP were included in the reform process for the first time. Currently, the future budgetary framework for the period 2021-2027 is being discussed against the background of internal EU and global challenges and international agreements. In order to ensure both the coherence of policy measures with each other and consistency with international trade rules and treaties, it is essential to assess potential trade-offs and synergies (Latka et al. 2020). The current proposal of the European Commission<sup>5</sup> provides for further adjustments of the CAP in order to achieve the environmental and climate objectives agreed in the Paris Climate Convention<sup>6</sup> and the SDGs.<sup>7</sup> Additionally, the implementation of the European "Green Deal"<sup>8</sup> and the EU's announcement to make Europe CO<sub>2</sub>-neutral by 2050 testify to the political relevance of these goals, to which the CAP should also make its contribution.

The consequences of the CAP for food markets and producers in developing countries have long been the subject of controversial debates. In this discussion, European agricultural policy is, among other things, held responsible for the suspension of cheap agricultural products, enabled through subsidies for EU production, and the resulting price reductions on global agricultural markets (Blanco 2018). EU subsidies reach the EU partner countries in Africa via price effects along the respective value chains (Flaig and Boysen-Urban 2019). This results in lower prices for consumers and hampers the competitiveness of local producers in Africa (Rudloff and Brüntrup 2018). In this regard, exports of milk powder, poultry cuts, tomato paste, and wheat are regularly under examination (Matthews and Soldi 2019). The importance of the current European agricultural policy, on the other hand, is estimated to be rather low in several scientific studies (Matthews 2018; Matthews and Soldi 2019). Boulanger et al. (2018), for example, show that abolishing the CAP would lead to a slight reduction in EU

<sup>&</sup>lt;sup>3</sup> EurostatComex (2020)

<sup>&</sup>lt;sup>4</sup> European Council (2017). https://www.consilium.europa.eu/media/24004/european-consensus-on-development-2-june-2017-clean\_final.pdf

<sup>&</sup>lt;sup>5</sup> https://eur-lex.europa.eu/legal-content/DE/TXT/HTML/?uri=CELEX:52018PC0392rom=EN

<sup>&</sup>lt;sup>6</sup> https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

<sup>&</sup>lt;sup>7</sup> https://sustainabledevelopment.un.org/post2015/transformingourworld

<sup>&</sup>lt;sup>8</sup> https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\_en

exports and shift production only slightly towards Africa. This study sheds new light on these controversial assessments.

The present study is structured as follows: The following chapter describes the current agricultural and trade policy of the EU and discusses its coherence with its development policy objectives. Section 3 analyzes trade flows between the EU and Africa, and two case studies for poultry and dairy products, respectively, examine the impact of EU exports and, in particular the CAP, on African producers and consumers. Section 4 deals with the consequences of the further development of the CAP for Africa based on model simulations and expert assessments. Section 5 provides a summary of the conclusions and recommendations.

# 2 International implications of the European agricultural policy

## 2.1 CAP components and their implications

Before the fundamental reform of the CAP in 2003, direct market intervention in the form of support prices and quantitative restrictions were the main policy instruments. As a result of the reforms, market intervention has been reduced to a minimum, and production-linked subsidies, so-called coupled support, have been replaced by decoupled income support (coupled to the area under cultivation), which have a much lower market-distorting effect. Market orientation is reflected in the share of financial support for farmers calculated by the OECD, which has almost halved since 2000, from around 35% to 20%.<sup>9</sup> As a result of these reforms, European agricultural prices now move in line with world market prices (Matthews et al. 2017).

Today, EU spending on the agricultural sector accounts for 36% of the total EU budget, which, in the EU's multiannual financial framework for the period 2014-2020, amounts to a total of 408 billion euros, 309 billion euros of which is designated for the 1<sup>st</sup> pillar of the CAP.<sup>10</sup> Most of these payments are income support linked to farm size. The potential impact of these income supports on production is examined in Chapter 4.

The dependence of the individual sectors on direct payments, measured by the share of direct payments in total income, varies greatly. Livestock farmers (or holdings with only grazing animals) receive about 50% of their income through direct payments. The average income share for arable farms and mixed grazing livestock/agricultural holdings is only slightly lower and still over 40%. Dairy farms receive just over 30% of their income from direct payments. Pig fattening and poultry farms benefit least from direct payments, at around 10% each. Taking into account all types of subsidies, beyond direct payments, the overall dependence on EU transfers increases further, particularly for field crops, milk, and cattle farming.<sup>11</sup>

Since the reform of the CAP in 2013, about 30% of direct payments are accounted for by the greening premium (Figure 1), which farmers receive for maintaining permanent grassland, greater crop diversification and rotation, and for keeping "ecological focus areas" on arable land. In addition to the greening premium, certain direct payments are linked to cross-compliance obligations in the fields of environmental protection, public, animal and plant health as well as animal welfare.<sup>12</sup> However, scientific studies estimate that the effects of greening on land use and agricultural production are relatively low.<sup>13</sup> Moreover, only minor effects on the various environmental indicators are found. In addition to the basic payments

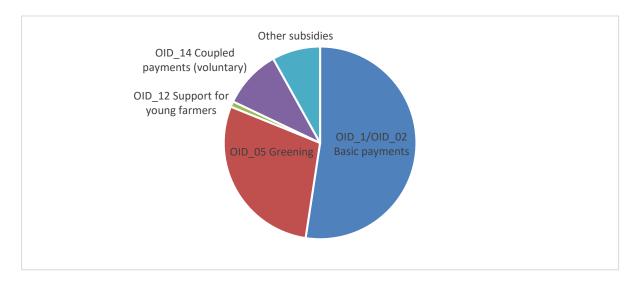
<sup>&</sup>lt;sup>9</sup> Producer and Consumer Support Estimates database, OECD. http://www.oecd.org/tad/agriculturalpolicies/producerandconsumersupportestimatesdatabase.htm <sup>10</sup> European Commission (2013).

<sup>&</sup>lt;sup>11</sup> http://capreform.eu/the-dependence-of-eu-farm-income-on-public-support/ and DG Agri, FADN (2020).

<sup>&</sup>lt;sup>12</sup> European Commission (2013).

<sup>&</sup>lt;sup>13</sup> See Pe'er et al. (2017), Gocht et al. (2016), Louhichi et al. (2017)

and the greening premium, the support for young farmers and coupled payments, which account for slightly more than 10% of the Pillar 1 payments, are among its main instruments. According to the rules, coupled payments can only be granted for those sectors or regions where certain agricultural sectors are of particular importance for economic, social or environmental reasons. Such support was temporally limited and was only granted to the extent necessary to provide an incentive to maintain current production levels in the sectors concerned until the Omnibus Regulation (EU) 2017/2393 removed largely any limit under the financial ceiling.<sup>14</sup>



#### Figure 1: Breakdown of Pillar 1 subsidies (2017)

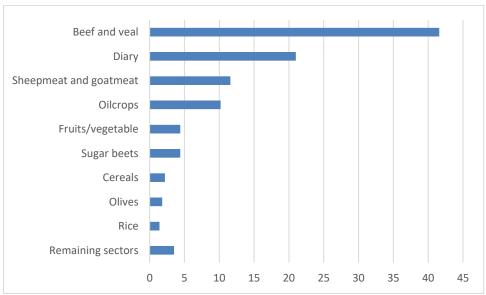
Source: European Commission (2020).

Looking at the support provided to each sector through coupled payments (Figure 2), it is clear that in particular beef producers benefit from coupled support. This sector accounts for the largest share of voluntary coupled payments within EU member states, which is about 40% of the total budget for coupled payments in 2016 (EUR 1582 million). It is followed by the dairy sector, which accounts for just over 20% of the total payments (EUR 849.2 million) and the sheep and goat sector, which accounts for 11.7% of the financial framework (EUR 456.8 million). Most support is granted in France, Spain, and Italy. Both the poultry and the pork sector are not eligible for coupled payments.

The CAP continues to make use of direct market intervention, although the share of expenditure on this has fallen sharply. These measures are intended as a safety net for farmers in case producer prices fall to too low a level. This occurred when prices for dairy products and vegetables fell sharply in 2015 as a result of Russia's import restrictions.

<sup>&</sup>lt;sup>14</sup> European Parliament (2015) and European Parliament and European Council (2017).

The second pillar of the CAP is geared towards rural development in the EU. It aims to ensure the competitiveness of farmers who take greater account of environmental considerations in the management of agricultural land and provide public goods in rural areas through extensive farming. These measures include support for the conversion of farms to organic farming and the maintenance and restoration of wetlands. The agri-environmental programs of Pillar 2 are designed to compensate farmers for voluntarily meeting ecological standards. A special feature of Pillar 2 payments is the co-financing by national governments. However, this provision gives the EU member states the possibility to reallocate Pillar 1 payments as rural development contributions. Accordingly, the distribution of payments between Pillar 1 and Pillar 2 varies considerably between EU member states (Matthews 2018b).



**Figure 2: Percentage of coupled payments by sector (2016)** Source: DG Agric (2018).<sup>15</sup>

Despite the reduction of market-distorting subsidies as a result of the CAP reforms, important points of criticism regarding implementation remain. It is also unclear to what extent direct payments actually contribute to farmers' income, as direct payments are often transferred to land rents.<sup>16</sup> Furthermore, the agri-environmental objectives are not met by the current CAP instruments. Von Cramon-Taubadel and Heinemann (2017) also argue that the opportunity costs of the CAP should be taken into account. For example, about half of the CAP payments would be sufficient to reach the UN target of increasing EU development aid to 0.7% of the GDP.

<sup>&</sup>lt;sup>15</sup>https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/direct-payments\_en.pdf

<sup>&</sup>lt;sup>16</sup> Cf. Hennig et al. (2014) and O'Neil and Hanrahan (2016).

### 2.2 EU trade policy with Africa

Over the last 25 years, the CAP reform process has eliminated some of the trade-distorting policies. Export refunds were already eliminated before the last CAP reform in 2013. The EU is also working at WTO level to make export subsidies by 2020 a violation of WTO rules (Matthews and Soldi (2019). Variable import restrictions, which ensured that the prices of agricultural imports did not fall below those of domestic products, were replaced by fixed import duties.

Various trade agreements have given African countries improved access to a common market, which is open to Least Developed Countries (LDCs) anyway due to the "Everything but Arms" agreements. With other countries, such as Ghana, Cote d'Ivoire, Kenya, and South Africa, agreements have been reached within the framework of the Economic Partnerships Agreements (EPAs) negotiated at the regional level, which give these countries free access to the European market and in return demand a gradual opening of their markets. This arrangement allows the respective trading partners to exclude sensitive agricultural products from free trade or use protective measures that favor local producers. However, these exemptions are set to expire by 2035.

However, African exports are only exempt from custom duties if it can be ruled out that components of the goods have been imported from a third country, in alignment with the "country of origin" principle (i.e. rules of origin). This is often difficult to document for processed products. This regulation is handled differently internationally and can be implemented by proving transformation through altered custom tariff numbers (according to HS code), a minimum requirement on the share of national added value (measured by product value), technical regulations or a combination of these requirements (Cadestin et al. 2016). The proof of origin requires the listing of production steps and ingredients as well as their origin. The more complicated the required proof is, the more difficult it is for producers in developing countries to provide it (De Melo and Regolo 2014). Bureaucratic regulations, such as a relatively short validity period of the certification and the lack of the possibility to correct minor errors by a re-submission of the application, make the certification process even more complicated and costly (Thompson-Lipponen and Greenville 2019).

Compliance with the rules of origin thus distorts producers' procurement decisions and leads to inefficiencies in production, also in the country of destination. These regulations, therefore, make it difficult for African producers to export processed agricultural products to Europe, which undermines the development of regional value chains. The reform of the Generalized System of Tariff Preferences (GSP) in 2014 granted some developing countries tolerance ranges in compliance with the rules of origin. Regulations under the EPAs could remedy this situation and increase exports of processed products by allowing regional accumulation, i.e. the implementation of rules of origin for regional trade zones as a whole. No such EPA agreement exists with the economic heavyweight Nigeria. The EU has concluded the EU-Mediterranean trade agreements with the four North African countries. These are bilateral agreements other than the EPAs. There are still trade barriers at the EU-side with these agreements. They provide for exceptions to unrestricted market access for some agricultural products (Rudloff, 2019a). For example, imports of fruit and vegetable products are seasonally regulated (Romdhani and Thabet 2018). However, the advantages of a complete opening of markets are also disputed in the North African countries (Rudloff 2019b).

While a liberalization of the current EU customs tariff policy creates hardly any opportunity for the import of additional African exports, the tariff preferences between the EU and Africa favor trade among each other (Chipolina and Salvatici 2019). The reason for this is high import tariffs for agricultural exporters such as Brazil, which would very likely compete with African exporters if free market access was granted. Sugar exports to the EU would be one of the commodities most affected.

Non-transparent social and hygiene standards for goods imported into the EU are also a nontariff trade barrier, as the EU requires the recognition of its standards and regulations when granting tariff preferences (Zezza et al. 2018). According to EU regulations, social standards must comply with the principles of the United Nations and International Labour Organisation (ILO). However, some studies show that the EU does not consistently monitor and demand compliance with labor rights or that these have virtually no effect (Campling et al. 2016; Marx et al. 2017).

Hygiene standards include sanitary and phyto-sanitary standards. From a European perspective, these standards are necessary to protect humans, animals, and plants from diseases, epidemics or contamination. From the point of view of exporters, they are often an obstacle in gaining access to the European market.<sup>17</sup> Since the EU follows the precautionary principle when setting standards or granting import licenses, access to the European market will be further hampered for producers from Africa (Wieck 2018). Moreover, different directives at the destination of exports (EU, USA, India) cause high administrative costs. Standards can also have important trade-enhancing effects, for example by increasing trust in product quality. The overall effect of technical barriers to trade on African export capacity is difficult to quantify but empirical studies find a trade impeding effect of technical barriers, particularly for agri-food exports from a developing country exporter to a developed country importer which goes beyond the trade-enhancing effects (Li and Beghin, 2012).

<sup>&</sup>lt;sup>17</sup> For example, often no or only a few countries are listed as suitable for exporting poultry products to the EU. The European Food Safety Authority also carries out random safety checks to prohibit the import of these products if necessary. Most frequently affected are African exports of fish and seafood, nuts, and fruit and vegetables (Kareem 2014).

## 2.3 In-coherences of European agricultural and development policy

In addition to agricultural and trade policies, the EU has a coordinated common development policy. Development policy is also a cornerstone of EU Foreign Policy. The development policy is set out in the European Consensus on Development, which the Member States agreed on in June 2017.<sup>18</sup> The Treaty on the Functioning of the European Union emphasizes the Consensus on Development as an EU priority, which calls in Article 208 for the incorporation of the objectives of European development policy when implementing European policies and for an impact assessment of these policies on developing countries. Thus, there is a policy framework for the issue of the potential negative impact of the CAP on the African economy raised in this study. In addition, the EU has committed itself to sustainable development objectives, in particular the SDGs and the objectives of the Paris Climate Change Convention.

Article 55 of the European Consensus on Development describes the supporting role of 'good governance' of EU Member States for sustainable agriculture and forestry in developing countries. Sustainable agriculture is seen as a driving force in the fight against poverty and hunger (SDG 1 and 2). According to the European Consensus on Development, small-scale agriculture should play a significant role in achieving food security, combating soil erosion, preserving biodiversity and creating jobs. Explicitly mentioned are measures to support the establishment of agricultural organizations in order to increase agricultural productivity as well as support to improve sanitary and phytosanitary conditions in developing countries. The diversification of local and regional production systems is seen as the key to achieving a sustainable agricultural sector with value chains that create value addition and jobs in agribusiness. In the Joint Africa-EU Strategy, the EU also assures its support for the Comprehensive Africa Agricultural Development Programme (CAADP), which aims, among other things, to increase local food production.<sup>19</sup>

In the economically linked global agricultural economy, national and regional agricultural policies always have indirect effects on other countries and regions (von Braun and Diaz-Bonilla 2008). Therefore, the CAP affects the African food system and is suspected to contradict the objectives of the European Consensus on Development. In this, it is important to distinguish between two aspects through which the CAP affects the agricultural sector in developing countries. On the one hand, trade and price effects that displace local production in developing countries, and on the other hand, the EU's demand for raw materials that affects local production structures.

According to OCED (2020) statistics, the EU's development expenditures for Africa during the current budget period 2013-2020 amounted to an average of 6 billion euros annually. This

<sup>&</sup>lt;sup>18</sup> European Council (2017). German version available at: https://eur-lex.europa.eu/legalcontent/DE/TXT/PDF/?uri=OJ:C:2017:210:FULLrom=EN

<sup>&</sup>lt;sup>19</sup> <u>https://www.africa-eu-partnership.org//sites/default/files/documents/eas2007 joint strategy en.pdf</u>

corresponds to about one-tenth of the EU's agricultural budget.<sup>20</sup> Only a small part of about 10-15% of total EU development payments is spent on agricultural development, food security and WASH (water, sanitation and hygiene). Hence, EU agricultural development payments to Africa represent only about 2% of the EU agricultural budget. The established demand for coherence between agricultural and development policy should no longer exclude this budget imbalance. Since Africa's opportunities and problems are becoming increasingly relevant for the EU, future EU policy should not only be examined to see whether it is coherent with its development objectives or even damaging to Africa but whether it benefits Africa's agricultural development. This requires, among other things, investment in sustainable agricultural productivity and infrastructure conducive to trade.

#### Displacement of domestic production through trade and price effects

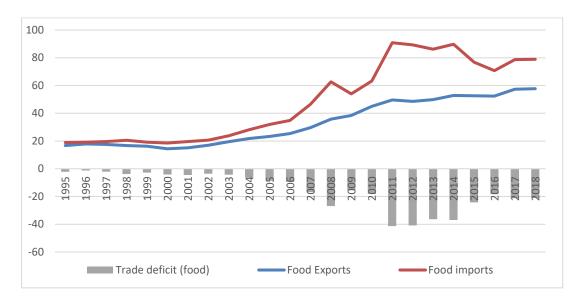
The first and most frequently cited mechanism describes the displacement of domestic food production in Africa by imports from the EU when these are cheaper than domestic products. This could happen directly through EU imports or through increased EU exports lowering global agricultural prices. A further price effect results from the stabilization of product volumes through trade policy measures. Such stabilization in the EU led to increased volatility in international prices and this volatility then reduces incentives to invest in agriculture in the rest of the world (Kalkuhl et al. 2016; Haile et al. 2017).

The European Commission's evaluation of the CAP 2011 highlighted the external dimension of European agricultural and trade policy and stressed the need for its coherence with development and external policies. However, the evaluation was limited to an assessment of existing studies and did not come to a clear conclusion (Blanco 2018). In the course of the discussion on the post-2020 CAP reform, further assessments of the CAP were carried out. The SCENAR 2030 study commissioned by the EU Commission concludes that the CAP has a strong influence on the EU agricultural trade balance and that, without the CAP and associated trade policies, the EU would have a significant agricultural trade deficit. The sectors most affected would be meat and oilseeds and -products (M'barek et al. 2017).

Before the abolition of coupled subsidies, the CAP had a proven effect on the production volumes of European farmers and explicitly encouraged the export of surplus production. The effect of this earlier EU policy on global food prices was substantial (e.g. 10-15% for cereal prices (von Cramon-Taubadel et al. 1996)). Borrell and Hubbard (2000) estimated that the subsidies led to an increase in the production volume of cereals and dairy products by about 50% and distorted trade flows to a large extent, weakening the domestic agricultural sectors of African countries and preventing competitive agricultural production (Rakotoarisoa et al. 2011). This is seen as the direct cause of increased food imports by African countries and the

<sup>&</sup>lt;sup>20</sup> The European Development Fund is not part of the Multiannual Financial Plan. In this period, an average of 13.5 billion euros per year was added through bilateral development aid from the EU Member States. The importance of development payments for agricultural development has been widely recognised by donor countries and has more than doubled since 2000 (ZEF and FAO 2020).

resulting import dependency (Figure 3). At the same time, urban consumers in Africa benefited from lower food prices (Bureau et al. 2006).



**Figure 3: Africa's agricultural trade flows and trade deficit (billion USD) since 1995** Source: UNCTAD (2020).

In addition - according to the critique - there were no incentives to invest in local production structures and supply chains. However, it would be wrong to blame past and present EU policies, or those of other international agricultural exporters, alone for the increasing import dependence and low agricultural competitiveness of African countries. Rather, this undesirable development is due to a combination of several factors. First, agricultural policy in Africa did not focus on the competitive advantages of local farmers for a long time, but rather pursued the goal of providing sufficient food for the urban population through imports, if necessary supported by an overvalued currency, which restricted agricultural incomes and made agricultural exports more difficult. Existing structural problems have also been caused by the general conditions, which have been influenced by subsidized EU exports. These conditions include poor rural infrastructure, underinvestment in food production and processing as well as limited functioning of markets and supply chains (Task Force Rural Africa 2019). Nevertheless, a number of African countries continue to implicitly and explicitly tax their agricultural sector to the detriment of growth in the rural economy and long-term productivity in agriculture, although to a lesser extent than in the past (Anderson and Masters 2009, Pernechele et al. 2018)

In the context of the CAP reforms (see above), subsidies linked to production volumes were gradually abolished, whereupon EU producer prices increasingly adjusted to global prices (Blanco 2018; Matthews 2018; Rudloff and Brüntrup 2018). The impact of the currently existing direct payments on European production and trade is assessed as rather small

(Boysen et al. 2016; Philippidis et al. 2016). Matthews and Soldi (2019) show that CAP subsidy payments do have an impact on EU export volumes and global market prices (e.g. for milk powder and tomato paste), but they argue without affecting African countries' local prices or dependence on imports. One reason for this is competition in global agricultural markets, where the EU is only one player among several. Blanco (2018) concludes in her assessment of the external effects of the CAP that the reforms of the CAP (i.e. the abandonment of coupled payments and export subsidies) have led to a reduction in negative externalities. Higher agricultural exports favor import-dependent countries and consumers. Therefore, it is primarily African exporters that benefit from lower agricultural subsidies. Nevertheless, the market distortions established far in the past may continue to have a long-term effect. No quantitative research is available on these long-term effects. Notwithstanding the empirical evidence from macro-economic models, there is still a suspicion that decoupled direct payments provide incentives to increase production levels and by this means distort global agricultural prices and trade flows. The focus of this criticism is on exports of poultry meat and milk, which will be examined in detail below.

Direct payments, decoupled from the level of production, are lump sum payments, and thus, will not create direct market distortions. On the other hand, a lump sum support could still alter behavior and market outcomes (Bhaskar and Beghin 2009; Chambers and Voica 2017) and in this way indirectly affect EU production levels and exports. The corresponding literature documents two main channels. First, decoupled payments could induce risky investments into productivity-enhancing technologies. This is because decoupled payments represent a revenue flow free of uncertainty which increases farmers' wealth and thereby reduces their level of risk aversion. Second, decoupled payments can overcome credit constraints by increasing the available collateral, and thus, positively affect investment and output (Kazukaskas et al. 2013). The importance of the investment channel increases with the capital-intensity of the agriculture sector. In conclusion, Rizov et al. (2014) argue that decoupled subsidies will increase production because they reduce the allocative inefficiency, as compared to coupled payments, and through "*investment-induced productivity gains*".

#### Demand for raw materials and consequences for sustainable resource use

The other channel concerns the EU's demand for agricultural commodities for processing and its impact on producers and the environment in developing countries. The evolution of global value chains contributes in part to the use of agricultural land in tropical countries linked to export demand. On the one hand, land use is shifting from the production of staple foods to the cultivation of so-called cash crops, such as palm oil, soya, cocoa, tea, coffee or tobacco. However, this development is not explicitly attributable to the CAP. At the same time, producers in developing countries also benefit from these changes through higher incomes. Fairtrade certification, for example, can improve local living conditions significantly (Meemken et al. 2019).

Indirect effects are also attributable to the CO<sub>2</sub> footprint of European agriculture, and thus, to the EU agricultural sector as a contributor to global climate change. Greenhouse gas emissions, in particular methane, are dominantly caused by intensive livestock farming and meat production in the EU (Coordination SUD 2019). In addition to that, increased imports of soy as animal feed are leading to an expansion of cultivated areas, among other things, through deforestation of tropical rainforests. The EU Commission has recognized this, and the European "Green Deal" explicitly mentions the importance of reforms in the agricultural sector to achieve the goal of making Europe CO<sub>2</sub>-neutral by 2050. Also, the implicit trade in water from areas with water scarcity should be mentioned. Europe is a major actor in this respect, as much as the EU imports account for a very high share of local water consumption, although this observation is not limited to the production of agricultural products (Wiedmann et al. 2015).

# 3 Importance and impact of EU food exports for Africa

## 3.1 Trade flows between the EU and Africa

As Figure 4 shows the EU has developed a net trade deficit with Africa over the last few years, now amounting to almost 5 billion euros.<sup>21</sup> Trade agreements between the continents are extremely important to enable African agricultural producers to access the European market, which can generate foreign exchange and create jobs and income in Africa. While trade with Africa accounts for only a small proportion of agricultural extra-EU trade (most of it takes place with Asia and other industrialized countries), around one-third of Africa's agricultural exports are destined for the European Union, with a combined worth of around 20 billion euros.<sup>22</sup>

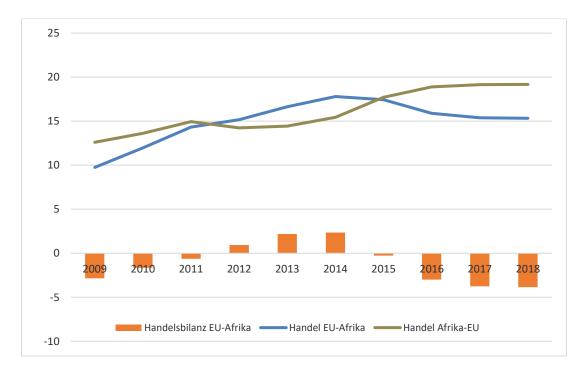


Figure 4: Agricultural trade flows (in billions of euros) between the EU and Africa

Source: EurostatComex (2020).

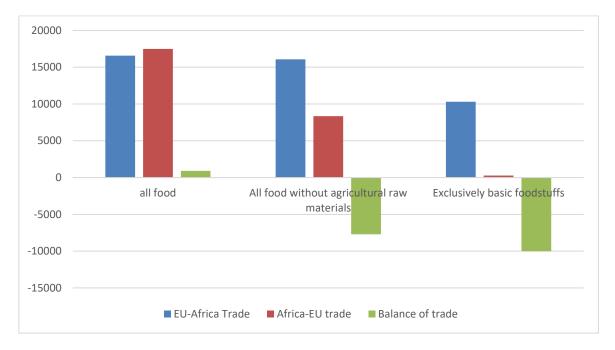
However, a closer look at the agricultural products traded shows that African agricultural exports to Europe are largely raw agricultural commodities such as cocoa, coffee, tea, and tobacco, which find their way to the EU for further processing (Bouët and Odjo 2019). For this reason, Figure 5 shows the trade flows and balance of trade for all agri-food products (average of the years 2016-2018) without the raw agricultural commodities mentioned above as well as the trade flows for the basic foodstuffs meat, milk, and cereals separately. It shows that

<sup>&</sup>lt;sup>21</sup> The trade surplus for the EU in 2012-2014 resulted from low global cocoa prices.

<sup>&</sup>lt;sup>22</sup> EurostatComex (2020) and UNCTAD (2020).

there are virtually no African exports, but large imports, in basic foodstuffs to the EU. This can be relevant under conditions of trade disruptions, such as in the COVID-19 context, affecting African food security.

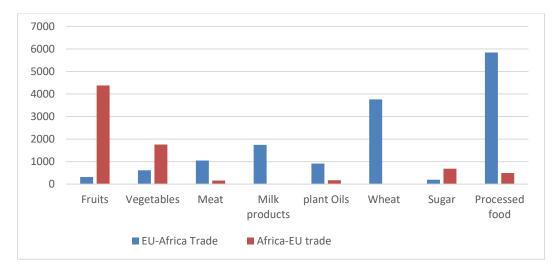
Figure 6 shows the average trade flows for selected products and product categories. From an economic point of view, trade is particularly meaningful if the trading partners have different comparative advantages. This is the case, for example, when products can be produced more cheaply by one trading partner than by the other due to climatic conditions, technological advantages or wage levels and labor productivity. This explains the unidirectional trade flows from Africa to Europe in cocoa, coffee, tea, and tropical fruits. The bulk of EU agricultural exports are processed products, some of which are produced with raw agricultural commodities (coffee and cocoa) originating from Africa.



# Figure 5: EU-Africa trade flows (in million euro) and Africa's agricultural trade balance (2016-2018 average)

Source: EurostatComex (2020).

It is to note that meat, vegetables, vegetable oils, and sugar are exported from the EU to Africa but are simultaneously also imported into the EU from Africa. This can be attributed to opposing harvest cycles or the product diversity desired by consumers. For these goods, European and African producers compete for market shares. The more Africa's economic development progresses, the more will trade in similar products increase (so-called intraindustry trade).



**Figure 6 EU-Africa trade flows (in millions of euros) for different categories of goods** Source: EurostatComex (2020).

## 3.2 EU exports to Africa in international comparison

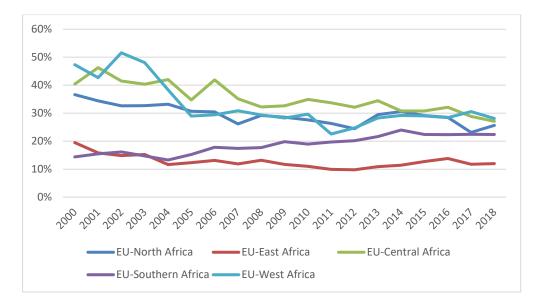
The EU is the world's largest exporter of agricultural products and the world's largest agricultural importer after the US. The EU's agricultural trade balance showed a deficit of around 15 billion euros in 2011. In 2018, EU agricultural imports and exports were roughly in balance.

When looking at global food production, it becomes clear that the production of dairy products, cereals, and meat in the EU is disproportionately high. As already discussed, these products also account for the majority of exports to Africa. As Table 1 shows, the Africa's food supply is particularly dependent on imports of cereals, meat, and dairy products.

	Import dependency
Cereals	43.1%
Milk products	20.4%
Meat	23.2%

Source: FAOSTAT (2020).

The importance of the EU in Africa's trade depends strongly on the region and the product (or product category) under consideration. Figure 7 shows the EU's share in agricultural trade of different regions in Africa. For example, the importance of the EU for food imports in Eastern Africa is significantly lower than for other regions.



**Figure 7: Share of EU exports in food imports of the different regions in Africa** Source: UNCTAD (2020).

Tables 2 and 3 show the share of the EU and other major trading partners in food imports to Africa as well as the changes over the past 10 years. The EU is the largest food exporter to Africa, although its market share has declined slightly in recent years. The EU has the largest market share in exports of meat and dairy products (EurostatComex 2020).

	Africa		World	
	2006-08	2016-18	2006-08	2016-18
Food (total)	27%	25%	15%	14%
Milk products	52%	44%	28%	30%
Oilseeds/Oil cake	6%	3%	2%	1%
Wheat	32%	37%	12%	18%
Rice	2%	0,5%	2%	1%
Meat	22%	26%	12%	14%

#### Table 2: EU share (%) of food imports for different product groups

Source: UNCTAD (2020).

The low share of intra-African trade in Africa's total agricultural trade is remarkable. It amounts to only 15% with a slightly increasing trend. There are also differences within Africa. Trade integration is most advanced in the East African Community (EAC) and regional agricultural trade is significantly higher in the Southern African Development Community (including South Africa) than in other regions. In general, however, intra-African trade and its share in total trade is systematically underestimated, as only official statistics are used. For agricultural products in particular, however, informal trade through unofficial channels distant from official border posts plays a major role (Bouët and Odjo 2019).

	Brazil		USA	
	2006-08	2016-18	2006-08	2016-18
Food (total)	7%	8%	11%	5%
Milk products	2%	0.4%	3%	1%
Wheat	0.1%	0.2%	26%	10%
Meat	40%	33%	8%	12%
	Intra-Africa			
	2006-08	2016-18		
Food (total)	15%	17%		
Milk products	7%	9%		
Wheat	1.5%	0.1%		
Meat	6%	8%		

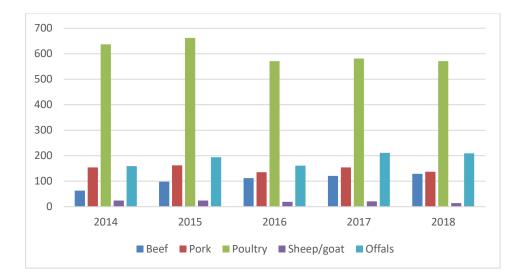
#### Table 3: Share of various trading partners in Africa's imports

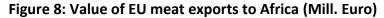
Source: UNCTAD (2020).

## 3.3 Case studies meat and milk

### 3.3.1 Meat, especially poultry

The European meat sector is often thought to particularly benefit from the CAP and to harm African meat production and small-scale producers through surplus exports. In particular, the export of poultry, which accounts for the majority of European meat exports to Africa (Figure 8), is criticized. The accusation is that EU poultry exports, mainly chicken parts, are offered in Africa at very low prices with which domestic producers cannot compete. This argumentation is supported by producers and agricultural associations in Africa, who complain that increased poultry imports since 2000 have destroyed local industries and cost a large number of jobs (Fritz 2011).





Source: EurostatComex (2020).

Consumer prices for imported poultry products in Africa are often significantly lower than those for domestic products. In Ghana, for example, domestic poultry meat is about four times more expensive than imported poultry meat (USDA 2017). The reason for this is the large amount of imports of chicken parts, for example, wings or legs, which cannot easily be compared with domestic meat. These parts are hardly demanded by consumers in Europe and can be exported cheaply as a by-product, so to speak. Table 4 shows that they currently account for around 75% of EU poultry exports to Africa and that the absolute quantity has more than doubled since 2010. Due to the low purchasing power of African consumers, these imported poultry parts are a cheap way of giving households access to the consumption of animal products. As the production costs for poultry in many African countries are significantly higher than in Europe or Brazil, it is difficult for local producers to offer products at comparable and affordable prices. It is, however, remarkable that a large part of the market in South Africa, despite having lower production costs than the EU, is supplied with EU imports. From this, it can be concluded that the low prices are largely due to different consumer preferences. As export prices hardly reflect production costs (Figure 9), it can be assumed that the European consumers of breast fillet indirectly pay for the exported chicken parts.

#### Table 4: EU poultry exports to Africa by product category

	Average	Average	
HS Code	2009-2011	2016-2018	Growth rate
020711 Poultry, not cut into pieces, fresh			
or chilled (excl. turkeys and guinea fowls)	899	1,586	76%
020712 Poultry, not cut into pieces, frozen			
(excl. turkeys and guinea fowls)	74,771	98,199	31%
020713 Cuts and edible offal of fowls of			
the species Gallus domesticus, fresh or			
chilled (excl. turkeys and guinea fowls)	13,182	11,718	-11%
020714 Cuts and edible offal of fowls of			
the species Gallus domesticus, frozen (excl.			
turkeys and guinea fowls)	150,309	372,881	148%
,	-	-	

Value of EU exports (1000 Euro)

Since the poultry sector in many African countries is divided into high-quality domestic poultry and cheap imported goods, poultry production in countries such as Ghana can nevertheless be profitable. It is expected that the demand for domestic goods will also increase as the income of the population rises. For example, the share of domestic production in total supply has been rising since 2011 (RVO 2019). Poultry farms are of different sizes. In Ghana, for instance, about 30% of total poultry production comes from smaller farms with less than 2000 birds (Amanor-Boadu et al. 2016).

The question that arises is what influence the CAP has on European poultry production and consequently on export levels of poultry parts to Africa. Voluntary coupled subsidies and market intervention, as is the case of dairy and cattle farming, are not permitted for poultry under the CAP. However, producers can apply for area-based direct payments. Direct payments, as discussed in the previous section, play a minor role for poultry producers and only account for about 20% of their income. Model calculations show that abolishing CAP direct payments would have little impact on poultry production (Brady et al. 2017). Another possible mechanism would be that subsidies for cereal production provide cheap feed, as feed accounts for the bulk of the variable costs of poultry production. This presumption cannot be easily refuted.

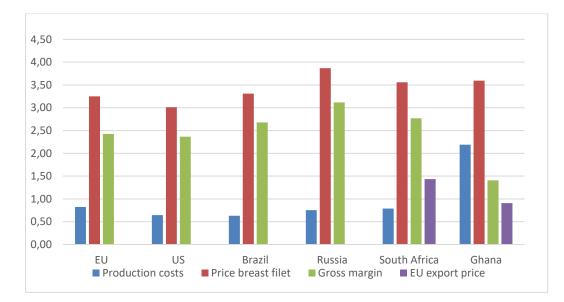


Figure 9: Production costs and gross margins (€/kg) for poultry

Source: Horne (2018) and Amanor-Boadu and others (2016).

Moreover, the EU is only one of several countries exporting chicken parts. The prices of chicken parts (cuts) are significantly lower than those of broilers in many African countries but in international comparison, the production costs of European producers are higher than production costs in the US, Brazil, and Russia and comparable to those in South Africa (Horne 2018). Similarly, the example of the avian flu outbreak in Europe in 2017, when poultry exports from the EU reduced due to food regulations, shows that other exporters take the place of the EU in such a case (Figure 10). Thus, a change in European trade policy would have little impact on the level of poultry imports to Africa, and thus on local production. Instead, it would lead to trade diversion instead of trade reduction.

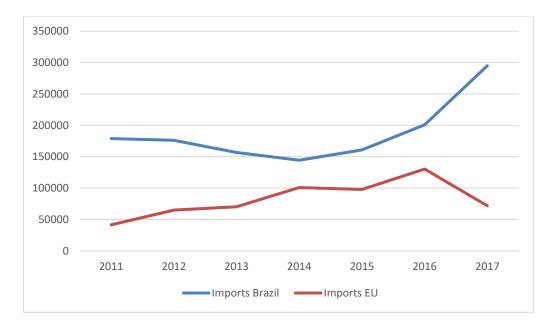


Figure 10: South Africa's poultry imports (tonnes)

Source: FAOSTAT (2020).

Although the CAP seems to have little impact on poultry export prices, the question remains whether European exports threaten the livelihoods of farmers in Africa and affect local poultry production, which would stand in harsh contradiction to European development policy. Possible evidence on this becomes apparent when examining consumption data of some West African countries that have adopted different approaches to supplying their populations with poultry products. Cote d'Ivoire, Nigeria, Senegal, and Cameroon decided to stop importing poultry products in 2005.<sup>23</sup> Ghana, on the other hand, complies with current trade laws and continued to allow the import of poultry products, albeit with import duties, and despite strong criticism from domestic producers. As shown in Figure 11, poultry consumption in all countries was relatively similar until the beginning of the 2000s. Subsequently, Ghana experienced a sharp increase in poultry consumption, while the other countries remained at about the same level as in 2005.

<sup>&</sup>lt;sup>23</sup> These figures, in particular the ones for Nigeria, may be subject to inaccurate measurement due to high levels of cross-border smuggling.

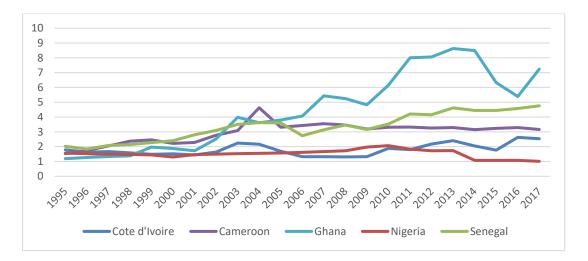


Figure 11: Per capita poultry consumption (kg/year)

Source: FAOSTAT (2020).

Focusing on domestic production can set the course for competitive domestic poultry production. For example, the poultry sectors in Cote d'Ivoire and Cameroon have been able to develop since the trade restrictions, and new jobs have been created (GIZ 2018) as the entry barriers to small-structured poultry production are relatively low due to low investment costs and rapid turnover. In consequence, supply reacts quickly to price changes in a relatively short time. Government investment in the poultry value chain and more favorable feed prices further encouraged these developments. Nevertheless, consumer prices for local poultry meat are significantly higher than the prices of EU imports. This means that import restrictions are always at the expense of consumers. This example shows that a restrictive trade policy does not necessarily lead to an improved food supply, but rather that there is a need to develop a comprehensive sector strategy to ensure that domestic production is not promoted at the expense of food security (Rudloff and Schmieg 2016).

Three conclusions can be drawn from the discussion and analysis above:

- First, African poultry producers are currently not competitive with European producers and poultry exports. The large price difference is partly due to different consumer preferences and the European surplus of poultry cuts (e.g. wings), which are in high demand in Africa. This is one of the reasons why the importance of the CAP for the price difference should be considered very small.
- Second, the absence of poultry imports to Africa is not a sufficient condition for strong domestic poultry production. Instead, inadequate infrastructure and institutional deficiencies are the main obstacles to the development of a strong poultry sector.
- Third, the consumer perspective must be taken into account. Stopping poultry exports to Africa would lead to a supply shortage, especially in those countries that are heavily dependent on European exports. As a result, meat prices would rise significantly and

consumers' purchasing power would decline, which would also pose a threat to food security in these countries.

Several simulation models (Bureau and Gohin 2009; Offermann et al. 2018; M'barek et al. 2017) show that the effects of the CAP are strongest on beef production. It is estimated that European beef production could fall by 5% to 20% if CAP subsidies were removed. This is partly due to the relatively high level of support for beef farmers compared to other farms and the competitive advantage of other countries, most notably the Mercosur states. The beef sector is not explicitly dealt with here as EU beef exports to Africa play hardly any role. On the other hand, the reduction of CAP payments could provide African exporters with export opportunities to Europe if exporters can meet food safety and hygiene standards.

## 3.3.2 Milk products (especially milk powder)

The European dairy sector remains one of the sectors most significantly influenced by European agricultural policy. The European dairy industry produces a very high export surplus. This was further exacerbated by the termination of the milk quota, which regulated the maximum production volume of farmers until 2015. Exports of milk powder and fresh milk increased at the same rate as total production did which rose to 155 million tonnes in 2018 (Figure 12).

The change in the political framework of the EU, combined with Russia's trade restrictions, has affected global export prices for milk powder. This is hardly surprising given the EU's large market share in global dairy trade, especially milk powder. Over the last few years, particularly exports of fat-filled milk powder (FFMP), a new type of milk powder that can be produced cheaper than conventional products, have increased (Figure 13).<sup>24</sup> In fat-filled milk powder, animal fats are replaced by vegetable fats. This technological innovation was the main reason for the increase in exports since 2010 (Matthews and Soldi 2019).

<sup>&</sup>lt;sup>24</sup> SMP: skimmed milk powder, WMP: whole milk powder.

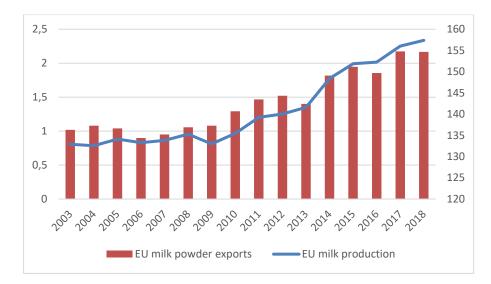
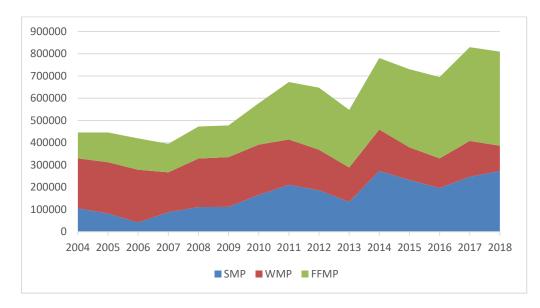


Figure 12: EU milk production and EU milk powder exports (million tonnes)



Source: EUROSTAT (2020) and EurostatComex (2020).<sup>25</sup>

Figure 13: Trend in EU milk powder exports (tonnes) to Africa

Source: EurostatComex (2020).

The importance of EU milk imports for national supply in some African countries is very high (Table 5).

<sup>&</sup>lt;sup>25</sup> Export volume for milk powder and fresh milk.

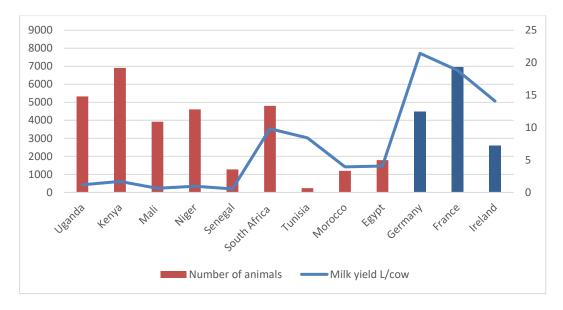
#### Table 5: Ratio of milk imports from EU to domestic production

·	
Total Africa	15
West Africa	81
Ghana	375
Mali	64
Burkina Faso	30
Senegal	426
Ethiopia	5
Egypt	16
Morocco	2
Nigeria	168
Ivory Coast	565
Niger	10

Imports from EU / production 2016-2018 (in %)

Source: EurostatComex (2020) and FAOSTAT (2020).

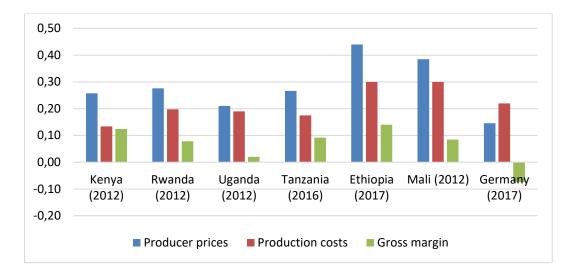
In contrast to commercial poultry production, Africa has a long tradition of commercial cattle and dairy farming. For example, Kenya has roughly as many cattle as France, and the number of cattle in Uganda, Niger, and South Africa exceeds the number of cattle kept in Germany. However, there are notable differences in average milk yield per cow between African and European countries, due to the husbandry of specific dairy/meat breeds, feed used and the prevailing husbandry systems (Figure 14).



**Figure 14: Number of dairy cows (in millions) and milk yield worldwide** Source: FAOSAT (2020).

Producer prices for European dairy farms hardly differ from those for African livestock farmers (Figure 15). Some East African countries such as Kenya, Rwanda, and Uganda have even lower production costs than producers in the EU. The current international price of milk powder, converted to fresh milk using a conversion factor of 14%, corresponds to about 38 Eurocents per liter of milk (FAO GIEWS 2020). Due to the low transport costs of milk powder, the import parity (CIF price) of milk in many countries is only slightly higher and thus in some cases just below the producer prices in Africa (Mali and Ethiopia). However, this does not mean that Mali or other African countries could quickly become self-sufficient in milk. Domestic production would not be able to meet the demand for milk. A short-term reduction in the export of European milk powder would, therefore, lead to considerable supply problems and thus also to a threat to food security in Africa.

However, Figure 15 also shows that German dairy farms on average did not achieve positive gross margins in 2017. We note, however, that it is not averages but marginal costs that determine competitiveness in the market. Actually, a sector under structural change may reveal such divergence between average and marginal costs. Market structure and market power of dairies and supermarkets may also play some role. These cost figures raise the question whether the CAP provides for a significant stimulus to farm production of large quantities of milk, which are then exported worldwide, including to Africa.



# Figure 15: Average production costs and gross margins (€/kg) for dairy farming in Africa and Germany

Source: Baltsweck et al. (2012), FAO (2014), Baltazary et al. (2016), Ndambi et al. (2017) Mas Aparisi et al. (2012), and BAL and European Milkboard (2017).

Dairy farms benefit significantly from CAP subsidies and over-proportionately from voluntary coupled payments. Brady et al. (2017) estimate that European milk production would fall by about 1.4% if direct payments and coupled support were abolished. This would also reduce export surpluses. The analysis of farm-level data shows that decoupling direct payments is correlated with greater productivity (Rizov et al. 2013). For livestock farming, Kazukauskas et al. (2014) find that decoupling direct payments was positively associated with milk production in Ireland, Denmark, and the Netherlands. Productivity gains could be partly explained by the shift of dairy farms towards capital-intensive free-stall housing technology and other investments that are usually associated with an increase in the herd size (Pietola and Heikkilä 2005). By encouraging these investments, direct payments could promote EU milk production in the long-run, and thus, affect export quantities to Africa.

In addition to subsidies, European agricultural policy also intervenes in the milk market through the purchase of milk powder. This means that if market prices are too low, demand is artificially increased to stabilize market prices. The intervention can affect dairy trade with Africa in two ways. First, support prices, albeit at low levels, provide a safeguarding mechanism to EU dairy farms against international price shocks and reduce disincentives for investments.<sup>26</sup> Second, when public stocks are sold at relatively low prices to trading companies, these can then be exported at lower prices than the world market price. In recent years these sales prices have in some cases been up to 25% below export prices (FAO GIEWS 2020; EU Commission MMO 2020). At peak times, public stocks had risen to just over 350,000

<sup>&</sup>lt;sup>26</sup> Hess (2018) https://www.dialog-milch.de/reizthema-exporte-von-milch-und-milcherzeugnissen/

tonnes of milk powder. It can be assumed that the sale of these quantities towards the end of 2018 had a downward effect on world market prices.

In the assessment of European milk exports, little attention is paid to the possible trade diversion effects of subsidizes European milk exports. In contrast to poultry meat, there are net exporters of dairy products in Africa, such as Uganda. Production costs in Uganda are comparable with those of European producers. This implies that, in third countries, European milk powder exports compete with exports from African countries.



#### Figure 16: EU tender price and export price (€/tonne)

Source: FAO GIEWS (2020) and EU Commission MMO (2020).

The following conclusions can be drawn from this case study.

- As the world's largest milk exporter, the EU has an influence on international prices for milk powder. This means that a European agricultural policy that makes greater use of direct payments and other market intervention instruments has a weakening effect on global market prices.
- The sharp rise in milk powder exports to Africa is mainly due to the technological innovation of fat-filled milk, which led to a reduction in the price of milk powder. For the import-dependent countries in North and West Africa, this means an improvement in the situation for urban consumers.
- At present, milk producers in many African countries are unable to meet the growing demand for dairy products. Import restrictions would result in higher consumer prices and adversely affect consumers.
- Some East African countries are already competitive with European milk producers and could become exporters in Africa in the medium term. Cheap EU milk powder

exports could hamper or delay this development.<sup>27</sup> Regional trade integration through AfCFTA can lead to a significant increase in intra-African agricultural trade, and the dairy sector, in particular, can benefit from this.<sup>28</sup>

<sup>&</sup>lt;sup>27</sup> The studies of the Monitoring and Analysing Food and Agricultural Policies (MAFAP) program also show that there are still high barriers to marketing dairy products in countries such as Mali and Uganda, mainly due to high transport costs caused by poor infrastructure. Mas Aparisi and others (2012) and FAO (2014). <sup>28</sup> https://www.uneca.org/stories/african-trade-agreement-catalyst-growth

# 4 Reform considerations for the European Common Agricultural Policy after 2021 and their consequences

This chapter examines how a modified CAP will affect food production in Europe, trade with the African continent as well as production and markets there. The CAP reform proposals that are currently being discussed are taken up in the following, and the consequences of the respective proposed reforms are discussed. For this purpose, the analysis was carried out in the following manner:

- A systematic evaluation of the proposals of the Commission and the political groups represented in the EU Parliament.
- A multi-stage consultation with some leading experts in European and African agricultural and trade policy in a simplified Delphi procedure.
- Policy adjustments analysis in terms of their impact on Africa using modeling. These models were developed especially for this study by Latka et al. (2020) at the Institute for Food and Resource Economics (ILR) at the University of Bonn.

# 4.1 Proposals from political bodies

### EU Commission proposals

Within the framework of the EU budget negotiations, the right to propose the post-2020 CAP agenda lies with the EU Commission. Under the then-Commissioner for Agriculture Hogan, the Commission presented the position paper "Food and Agriculture of the Future" in November 2017. Following the first draft of the Multiannual Financial Framework, the first legislative draft for the CAP 2021-2027 was presented on June 1, 2018. However, due to the end of the European Parliament's term of office in 2019, the subsequent change of the EU Commission, as well as the change of context due to COVID-19, a new and complex situation has arisen. The Commission's proposal of the European Green Deal and the Agriculture Commissioner's Farm to Fork Strategy set new strategic directions, but in the COVID-19's challenging trade and finance contexts more adjustments are probably to be expected for both, the CAP and the European policy in relation to Africa. The Multiannual Financial Framework and the reform of the post-2020 CAP are currently discussed in the meetings of the Council of the European Union and the Council of Ministers of the European Union.<sup>29</sup>

The current reform proposal essentially provides for amendments to the Regulation on CAP Strategic Plans, the Regulation on the Financing, Management, and Monitoring of the CAP and

<sup>&</sup>lt;sup>29</sup> The reform proposals go beyond the measures described here. In view of the report's objective and the large number of amendments, most of them technical, we shall limit ourselves here to those proposals which, from our perspective, have the greatest impact on production volumes and trade flows.

the Regulation on the Common Organisation of the market. The regulation on the CAP Strategic Plans includes the New Delivery Model, the main amendment of the post-2020 CAP. According to this, the cross-compliance obligations of the direct payments in Pillar 1 are to be replaced by a performance-based system, which allows the individual Member States extensive freedom in achieving the environmental and climate-related objectives of the CAP. This should contribute to the simplification of the CAP and take into account the structural conditions of the agricultural sector in the Member States. As part of the monitoring process, the Member States are obliged to document the respective measures they plan to use for achieving the targets in their National Strategy Plans, which in turn must be approved by the EU Commission (EU Commission 2018). Isermeyer (2020) explains the conditions under which national "real strategies" could be operable.

The national strategies have so far only been necessary for co-financed payments under Pillar 2. The extension of these strategies to Pillar 1 would possibly also allow Member States to exempt smaller farms from individual regulations and increasingly shift payments between Pillar 1 and Pillar 2 instruments. However, it cannot be ruled out that national governments would use this flexibility to make domestic farmers more competitive within the EU. This could lead to some form of dumping with regard to ecological standards in the EU, as a result of which farmers from Member States with ambitious environmental and animal welfare objectives would compete with farmers from countries with lower requirements for receiving direct payments (Heinemann and Weiss 2017). In order to prevent this quasi-suspension of the subsidiarity principle, the CAP should contain appropriate protection mechanisms. In addition, national strategies may offer the Member States the possibility of make increasing use of voluntary coupled subsidies.

One part of this regulation is the simplification of the distribution of direct payments, which can, in principle, now take the form of single area payments. In order to guarantee a fairer distribution of direct payments, income support above a certain farm size is to be reduced or suspended in the future. This is intended to respond to one of the main criticisms of the CAP payments under Pillar 1, according to which a few large farms receive the bulk of the subsidies. The EU Commission's draft stipulates that this reduction will take effect from the sum of 60,000 euros upwards to 100,000 euros and that no further direct payments will be made above a sum of 100,000 euros (EU Commission 2018). Due to the option of offsetting paid salaries and the farms' own labor against this sum, there are fears that few farms will actually be affected by this upper limit (Matthews 2018c). In addition, the smallest farms are to benefit from mandatory top-up payments in the future.

Overall, the EU's Multiannual Financial Plan provides for a slight reduction in the total amount of direct payments (at current prices). It also provides for a shift from payments from Pillar 2 to Pillar 1 (Massot 2019). It remains to be seen to what extent the Pillar 1 programs for climate and the environment as well as the mandatory measures of Pillar 2 will hinder or promote a stronger ecological focus of European agriculture, as there are still uncertainties regarding the requirements for the National Strategy Plans. The EU Commission's announcement that the EU will become CO<sub>2</sub>-neutral by 2050 could change the orientation of the CAP once again, thus possibly taking ecological and climate policy aspects into account more strongly, and these would certainly also have an impact on third parties, including Africa (von Braun 2020).

#### **Proposals from the EU Parliament**

The pro-European political groups in the European Parliament have in some cases drawn up position papers containing additional proposals for reforming the CAP. All these party groups, EPP, S&D, ALDE, and The Greens, support the European "Green Deal" and a stronger environmental and climate focus of the CAP. There are also proposals for a fundamental reform that links subsidies to environmentally friendly technologies and supports research and development.<sup>30</sup> The EPP Group calls for a simplification of subsidy payments and flexibility for national governments in achieving environmental and climate targets.<sup>31</sup> Some MEPs are critical of the re-nationalization of the CAP and call for a European agricultural policy that explicitly takes into account the Paris Climate Agreement. For example, the Green/European Free Alliance Group calls for European agriculture to become more ecological and reduce greenhouse gas emissions.<sup>32</sup> This is to be achieved by linking CAP payments more closely to requirements concerning nature, environment, and climate protection. A further proposal is to limit the number of animals on the farms if the capacity of the local environment is exceeded. The group also calls for a re-examination of animal husbandry and production to improve animal welfare, create more sustainable production systems and lower meat consumption. The CAP reform proposal from the Group of the Progressive Alliance of Socialists and Democrats (S&D) in the European Parliament differs from the Commission's draft and those of the other parties in essential elements. While the S&D Group's position paper calls for payments to be linked to environmental and animal welfare requirements, it also suggests a return to greater market intervention. For example, it calls for the reintroduction of support prices to regulate value chains and support farmers. The party is also critical of free trade agreements and calls for strict compliance with environmental and health standards for imports from developing countries.<sup>33</sup>

#### 4.2 Expert assessments of policy changes

As part of this research project, a panel of experts was interviewed and asked to give their views on the possible reform of the CAP and its impact on European agriculture and trade with Africa. All consulted experts (Table 6) have been researching European agricultural and trade policy for many years and have expertise in assessing its effects on third countries. In addition

<sup>&</sup>lt;sup>30</sup> ALDE (2014).

<sup>&</sup>lt;sup>31</sup> EPP (2017).

<sup>&</sup>lt;sup>32</sup> The Greens (2017).

<sup>&</sup>lt;sup>33</sup> S&D (2017).

to their scientific expertise, they also exhibit profound insight into the current policy debate. The following procedure was followed in the expert consultation:

- The expert survey took place between January 8 and February 5, 2020.
- Chatham House rules of individual confidentiality of the comments were the principle of consultation.
- A consensus-based approach using the Delphi technique was applied.
- The original questions were derived from an analysis of the literature and the current discussion. The questions of the first round of consultation were based on the question of post-2020 CAP design, what possible reform projects might look like and how these might affect trade with Africa.
- After the first round of questioning, all answers of the participants were shared with the expert panel and aggregated assessments were formed from these answers.
- In the second round of interviews, the experts were asked to comment on the aggregated majority opinions or to confirm or reject them. The complete list of questions from the second consultation round is given in Annex 1.
- For a second round of interviews, the modeling results were also shared with the experts.

Dr. Tom Arnold	Former chairman of the Task Force Rural Africa
Dr. Ousmane Badiane	Executive Director of AKADEMIYA2063, former Director Africa, International Food Policy Research Institute (IFPRI)
Prof. Jean Christoph Bureau	Professor of Economics, AgroParisTech, Paris Institute of Technology
Prof. Stephan von Cramon-Taubadel	Professor for Agricultural Policy, University of Göttingen
Prof. Thomas Heckelei	Professor of Economic and Agricultural Policy, University of Bonn
Prof. Alan Matthews	Professor (Emeritus) of European Agricultural Policy, Trinity College Dublin.
Dr. Bettina Rudloff	German Institute for International and Security Affairs (SWP), Berlin
Prof. Christine Wieck	Professor for Agricultural and Food Policy, University of Hohenheim

#### Table 6: List of participants of the expert survey in the Delphi procedure

Table 7 shows the experts' assessment of the CAP's further development. The majority of the experts do not believe that the structure of the CAP budget will change significantly in the next Multiannual Financial Plan, although it is not clear whether, in the event of cuts, there will be a reduction in payments for the Pillar 2, as proposed by the Commission, or whether both pillars will be affected equally.

In regard to the specific elements of the CAP or its instruments, according to the experts, much depends on national strategies. There is no doubt among the experts that national governments will be more flexible in implementing the CAP and that this entails its renationalization. The possibility of direct payments being distributed more in favor of smaller farms in the future, for example through an increased premium for the first few hectares or a capping of payments above a certain threshold, is considered quite likely. However, it is doubted that this would have a significant impact on trade with Africa (Table 7, Q1).

There is no consensus among experts as to whether stronger conditionality, for example by strengthening the link between payments and the fulfillment of environmental and climate policy objectives, will be part of the CAP reform (Table 7, Q1). On the one hand, it is expected that stricter environmental conditions will have to be met, while on the other hand, national strategies allow governments greater leeway to not require more far-reaching environmental measures from farmers in their own country. The experts do not consider it likely that animal welfare will be taken more into account or that payments will be linked to compliance with such standards in the distribution of CAP subsidies (Table 7, Q2).

There is a consensus among experts that the post-2020 CAP, within the framework of the National Strategy Plans, will give the Member States greater flexibility to use voluntary coupled support, and that this can no longer be used exclusively to maintain production levels and for a limited period (Table 7, Q3). The consequence of this would be that, depending on the extent of use, increases in production and export surpluses would be encouraged. This could possibly have consequences for global agricultural prices and thus for Africa. This trend requires attention from a development policy perspective.

		Tendency of the experts' assessments
Q1: Do you expect a change in the level or distribution mechanism (e.g.	Level of payments	0
national strategy plans) of Pillar 1 (direct payments) payments to	Capping/redistribution of subsidies	(+)
farmers (e.g. capping and/or conditionality) and/or Pillar 2 payments (rural development)?	Conditionality on environmental and climate benefits of agriculture	+
Q2: How do you assess the likelihood and impacts of possible changes in	Environment	+
the CAP towards stronger environmental objectives and animal welfare objectives?	Animal welfare	-
Q3: Do you expect the CAP to return to some extent to coupled payments? E.g., under the framework of the National Strategy Plans (in important countries)?		+

#### Table 7: Results of the expert consultation on the further development of the CAP

Note: 0 = no change expected; + Direction of change: yes or likely; - Direction of change: no or unlikely; (+) Change yes but not impacting external effects .

Source: Expert consultation.

# 4.3 Consequences of a changed agricultural policy - model results and interpretations

The Common Agricultural Policy Regionalised Impact (CAPRI) model is used to model the effects of changes in EU agricultural policy.<sup>34</sup> The policy adjustment analysis was developed especially for this study by Latka et al. (2020) at the Institute for Food and Resource Economics (ILR) at the University of Bonn. To calculate the effects of a changed European agricultural policy, the modeling requires a reference scenario that describes the situation of agriculture without changes to the CAP. This "Business-as-usual" (BAU) scenario is based on the European Commission's "Agricultural Outlook" of 2016 (EU Commission 2016). The results of the

<sup>&</sup>lt;sup>34</sup> Details about CAPRI (Britz and Witzke 2014) can be found on https://www.capri-model.org/.

reference scenario for 2030 are simulated and compared with those of alternative scenarios,<sup>35</sup> paying special attention to the changing trade flows between the EU and Africa.

#### Model 1: Reduction and transfer of direct payments

The economic modeling for this study simulated a 50% reduction in direct payments, assuming that the funds thus released would no longer be allocated to agricultural policy. This reduction was applied to all instruments and measures of Pillar 1 of the CAP; thus, no shift between the individual measures was assumed.

**1.1** In the model simulation, **reductions in direct payments** only lead to minimal changes in land use, EU food production and agricultural trade outside the EU (Table 8).<sup>36</sup> The change is slightly more pronounced for cereal and oilseeds, but here too the proportional decrease is only slightly above 1% of total production. The production effect of the policy change leaves EU consumption largely unchanged and mainly affects trade. The decline in EU cereal exports and, to a lesser extent, EU exports of oilseeds and meat also affect trade with Africa. African imports from the EU would decline by 5% for wheat and around 2% for meat and oilseeds. This decline in imports from the EU in Africa is largely offset by imports from other regions of the world. A smaller share is compensated for by increased African production. However, compared with the respective total volumes, the change in African production and the effects on consumption in Africa are small (Table 8).

Total	Change compared to BAU			
		uction of ayments		fer of direct (green model)
African imports from the EU	1,000 t	%	1,000 t	%
Meat	-23	-2.1	+4	+0.3
Cereals	-1,042	-5.3	-639	-3.3
Milk products	0	0	+1	+0
Oilseeds	-13	-2.7	-13	-2.7
Vegetables and fruits	-9	-0.3	-10	-0.1

#### Table 8: African imports from the EU (change compared to BAU 2030).

Source: CAPRI model results.

In the event of a complete abolition of direct payments, the changes would be more pronounced, with the most significant reductions to be expected in cattle farming and the

<sup>&</sup>lt;sup>35</sup> The applied reference scenario has 2012 as the base year, from which the current CAP is projected to the simulation year 2030. Technological progress, population and economic growth are extrapolated under trend assumptions. Since this scenario takes into account the currently implemented agricultural policy (2014 to 2020), it can be interpreted as a "Business-as-usual" (BAU) scenario. The trade flows between the EU and Africa in the BAU scenario reflect the extrapolated current trend for the year 2030.

<sup>&</sup>lt;sup>36</sup> This is due to the extensive decoupling of payments, which limits the effects on marginal areas. The decoupled payments are mainly coupled to land. For details refer to Latka et al. (2020)

production of sugar beet, soya, and pulses (Brady et al. 2017). The results of the Scenar 2030 study suggest that this would hardly affect trade with Africa; rather, the trade flows with the Mercosur region in particular, which can produce these products more cheaply, would change (M'barek et al. 2017). The reasons for the low impact of direct payments on production are obvious. On the one hand, the negative effect on agricultural production, which results in rising food prices when supply is scarce, is partly offset by the increasing prices. On the other hand, without the direct payments, extensive agriculture and thus the cultivation of less productive land would decline.

Scientific studies largely agree that EU direct payments in their current form provide limited and only indirect incentives to increase agricultural production and exports, namely, they influence the world market through risk reduction effects (Bureau and Swinnen 2018). Since direct payments are primarily based on the area size of the agricultural holding, it is to be expected that they will primarily lead to an increase in the utilized agricultural area and affect particularly land-intensive agricultural activities, including livestock farming. Direct payments allow some of these farms to remain in production and tend to increase overall production (e.g. milk) and EU exports (Brady et al. 2017), whereas risk reduction effects are not even considered. A transfer of direct payments to small and medium-sized farms would reduce EU agricultural production and thus reduce EU agricultural exports and increase imports, consequently creating more opportunities for trade with low-income countries (Matthews 2018).

**1.2** In **the transfer scenario (green model)**, instead of direct payments, subsidies are paid to agricultural holdings as quasi-compensatory payments for public goods provided by farmers. In this way, the subsidies create an economic incentive for the farms to cultivate land whose actual value to society, e.g. due to the conservation of biodiversity, is higher than its agricultural value.

The "new green architecture" of the CAP, even if not yet tangible, opens up the possibility of creating incentives through agri-environmental and climate commitments (Matthews 2018, European Commission 2019). One option is the promotion of low productivity extensive farming on so-called marginal land, which can be considered a public good. On the other hand, there is the possibility of setting direct agri-environmental requirements, for example limiting the number of animals or setting limits on the use of fertilizers.

In this scenario, 50% of Pillar 1 payments are not canceled but instead allocated to measures for the support of mainly extensive agricultural production of Pillar 2. The scenario is based on the European Commission's proposal to use 30% of Pillar 1 payments for organic farming, permanent grassland or marginal land (European Commission 2018), which is also frequently referenced (Matthews 2018; Peer et al. 2017). The expert group considers a reduction of direct payments in favor of Pillar 2 payments to be possible in some cases but doubts that the Member States will link this to far-reaching ecological and climate policy-relevant targets.

In this scenario, the production reduction in the EU would be less strong than if direct payments were reduced, as the production of agricultural holdings is partly supported under agri-environmental and climate measures. The transfer of the original direct payments shifts production slightly towards more extensive and less profitable agricultural production. Specifically, wheat exports from the EU to Africa would fall by 3.3%, oilseeds by 2.7% and all other products by less than 1%. With these model results, it should be noted that the CAPRI model approach may underestimate the long-term effects of direct payments on production.<sup>37</sup>

#### Model 2: Nitrate and limitation of animal numbers.

In line with the commitments made in international agreements such as the Paris Climate Change Convention, agri-environmental and climate change measures are receiving increased attention in the discussion on the further development of the CAP. Pollution of the soil and nearby water bodies is mainly caused by the application of nitrate above the respective nutrient requirements in the soil and contributes to the pollution of groundwater (Sutton et al. 2011). Animal production is the main source of agricultural environmental and climate pollution in the EU and therefore has the greatest potential for reducing agricultural greenhouse gas emissions (see Leip et al. 2015; Herrero et al. 2016). Nitrate surpluses are consequently mainly observed in regions with high animal densities (Svanbäck et al. 2019). Limiting livestock density and locally restricting the application of nitrate could, therefore, be a sensible measure within the framework of future agricultural policy, not only for animal welfare but also from an environmental and health perspective. Furthermore, it would meet the demand for more efficient nutrient management proposed by the EU Commission. From the perspective of farmers who have made long-term investments in this sector, this is however understandably controversial.

In order to take into account the regional heterogeneity of the soil nutrient balance, the restriction of animal density in the animal number restriction scenario varies according to respective local nutrient requirements.<sup>38</sup> In the model scenario "Nitrate Directive", a reduction of the limit values for soil nutrient surpluses to 50 kg/ha is simulated. In addition, the joint enforcement of the Nitrate Directive and animal number limitation is simulated.

In the model, the implementation of measures restricting nitrate and animal density results in a significant reduction in meat production (by up to 11%) as well as minor changes for

<sup>&</sup>lt;sup>37</sup> Direct payments also influence investment decisions, which have a positive impact on the productivity of variable factors such as labour and capital, thus creating additional incentives to produce. Decoupled direct payments also have a welfare effect, which supports more risk-taking production and investment decisions by farms and reduces credit constraints. Boysen et al. (2016) examine how the assumption that direct payments have no impact on variable production costs affects the model results. The study comes to the conclusion that full decoupling in some cases greatly underestimates the effects of reducing or abolishing direct payments. <sup>38</sup> To ensure the solvability of the model, a safety limit of 0.6 livestock units/ha is introduced.

vegetable products and diary. This production effect also has an impact on trade: African imports of meat and dairy products from the EU decrease significantly. These effects are strongest when both scenarios are combined. In this case, African meat imports fall by 52% and imports of dairy products by 5.4% (Table 9). In contrast, imports of cereals and oil cake increase by between 4-7% or 3.5-11% depending on the scenario.

The increase in EU exports of cereals and oilcake can be attributed to their use as animal feed. The decline in EU meat and milk production reduces the prices of European animal feed, making it more competitive internationally. As in the scenarios for the reduction and transfer (green model) of direct payments, the lower meat and milk product imports from the EU in Africa are mainly compensated by imports from other regions of the world and only a small share is compensated by increased African production.

Total						
	Limitation of the number of animals (1)		Nitrates Directive (2)		Combination of (1) and (2)	
	1,000 t	%	1,000 t	%	1,000 t	%
African imports from						
the EU						
Meat	-466	-42	-364	-33	-571	-52
Cereals	+1,576	+8	+781	+4	+1,375	+7
Milk products	-31	-5	-32	-5.4	-44	-7
Oil Cake	+170	+10	+60	+3.5	191	+11
Vegetables and fruits	-13	-0.3	-19	-0.5	-33	-1

#### Table 9: African imports from the EU (change compared to BAU 2030).

Source: CAPRI model results (2020).

Table 10 lists African meat imports from the EU by model region in Africa. The regional effects vary considerably, with North Africa showing the strongest proportional decline in meat imports of up to 94% but coming from a low starting level. The reduction in EU meat imports is strongest in absolute terms for the group of African LDCs.

	Total	Change					
	Reference	Limitati	on of	Nitrat	es	Combinat	ion of
	scenario	the num	ber of	Directiv	e (2)	(1) and	(2)
		animal	s (1)				
	1,000 t	1,000 t	%	1,000 t	%	1,000 t	%
LDC Africa	468	-277	-49	-168	-36	-266	-57
North Africa	25	-23	-93	-17	-70	-23	-94
Morocco	19	-4	-23	-7	-38	-8	-42
Ethiopia	1	0	-36	0	-36	-1	-50
Nigeria	10	-8	-80	-4	-43	-8	-82
South Africa	206	-75	-36	-63	-30	-100	-49
Rest of	378	-128	-34	-104	-27	-165	-44
Africa							

Table 10: African meat imports from the EU (change compared to BAU 2030).

Source: CAPRI model results (2020).

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Table 11: Meat imports to African LDCs from the EU (change compared to BAU 2030).	Table 11: Meat imports to Africa	n LDCs from the EU (	(change compared to BAU 2	030).
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	Change					
	Limitatio numb anima	er of	Nitrates [ (2		Combina of (1) an	
	1,000 t	%	1,000 t	%	1,000 t	%
Meat	-227	-49	-168	-36	-266	-57
- Pork	-195	-89	-98	-45	-196	-89
- Poultry	-5	-2	-52	-24	-43	-20
- Beef	-20	-93	-15	-71	-20	-94
- Goat/sheep	-7	-60	-3	-29	-7	-62

Source: CAPRI model results (2020).

Meat exports are mainly poultry and pork, with the decline in exports mainly concerning pork exports (Table 11). The decline in meat imports from the EU is largely offset by imports from other world regions and an increase in domestic production. The ratio of import growth to local production growth is about 4:1 and 3:1 respectively, with African meat production rising by less than 1%.

However, the CAPRI model does not take into account any of the further-reaching changes in Africa's agricultural sector that are currently emerging. For example, innovations such as the mechanization of African agriculture are expected to lead to a transformation of value chains, which will change agricultural structures and increase productivity. Comparable productivity

effects could be expected if irrigation systems in agricultural production were extended.<sup>39</sup> These changes will have an impact on the competitiveness of African producers in the medium term and could lead to increased adjustment effects. Therefore, any EU agricultural policy that impedes production incentives in Africa will in the future have a greater impact on the development potential of African agriculture than was previously the case in the context of semi-subsistence farming.

The modeling results largely coincide with the assessments of the expert survey. There is consensus among the experts that a stronger focus of the CAP on agri-environmental and climate requirements will lead to reduced production due to higher production costs and thus to lower EU exports to Africa (Table 12). The expert survey also revealed that the corresponding reform of the CAP is unlikely to have any impact on food security in Africa.

# Table 12: Results of the expert consultation on the impact of a changed CAP and other changes to the EU food system

		Tendency of the experts'
		assessments
Which of these (as discussed in Table	EU exports to Africa	-
7) would have significant external effects for Africa (on trade with Africa, African production, food security)?	Food security in Africa	0
	Reduction of pesticide use	+
Do you expect trends and upcoming changes in the EU food system that are not driven by changes of the CAP that may impact CAP?	Rising demand for organically produced food	+
	Increase in protected areas	+
	Reduced meat consumption	+

Note: 0 = no change expected; + Direction of change: yes or likely; - Direction of change: no or unlikely; (+) Change yes but not impacting external effects.

Source: Expert consultation.

The expert consultation also revealed broad agreement that the CAP will at best have very little impact on agricultural production in Africa. Some experts suggest that a trade policy with

<sup>&</sup>lt;sup>39</sup> Malabo Montpellier Panel (2018a), Malabo Montpellier Panel (2018b)

Africa that continues to allow African countries to protect key agricultural sectors by tariffs should be pursued.

The EU food system may face major changes due to new trends or changing consumer preferences. The expert consultation showed that the food system can be expected to change accordingly. This has consequences for European agriculture and the further development of the CAP. Table 12 also summarizes the experts' assessment of possible changes. According to this, there is a consensus that there will be a reduction in the use of pesticides, an increase in demand for organically produced food, an increase in protected areas and lower meat consumption in the EU. This will have corresponding impacts on the production systems in the EU and may make food production more expensive, thus affecting agricultural trade, including with Africa.

# 5 Conclusions and recommendations

This study is an assessment of the impact of the European CAP on agricultural development in Africa and the consequences of possible CAP reforms in the coming years.

Given the importance of the EU in global agricultural trade, particularly for the African continent, European agricultural and trade policy has an impact on global trade flows and food systems of major trading partners. These external effects must be taken into account in the further development of the CAP and must be aligned with the objectives of the European development policy.

Coupled subsidy payments under the CAP have in the past made a significant contribution to increasing agricultural production in the EU and thus increased export surpluses. The associated increase in food exports to Africa has weakened the agricultural sectors of African countries in the long term and hindered the development of competitive agricultural production. Although this policy has largely been overcome, the effects of the policy in the past cannot be corrected in the short term, as agricultural productivity depends on long lasting favorable framework conditions and long-term incentives for investment including in R&D.

As Africa's opportunities and problems are becoming increasingly relevant for the EU, future EU agricultural policy should not only be examined to see whether it is coherent with the EU's development objectives or even damaging to Africa but whether it benefits Africa's agricultural development. This also must include correcting the budgetary imbalance between agricultural support in the EU and the EU's development-related agricultural support in Africa as well as greatly expanding support for agricultural development in Africa.

The future European agricultural and trade policy should therefore take into account the following considerations:

- The increased return to coupled subsidy payments and support prices now being considered in some EU countries, as already begun in 2013, is inconsistent with the objectives of the EU's development policy and should, therefore, be limited. Otherwise, there is a risk of increased unfair competition with Africa.
- ii. The more targeted linking of agricultural subsidies to environmental and climate regulations increases the costs of agricultural production in the EU, especially in livestock farming, and reduces the EU's production and export surpluses. This would create incentives in Africa to invest in domestic agriculture.
- iii. Extensive opening of market access to the EU for African agricultural products, including processed food, without tariff escalation, should be considered. Concession of result-oriented, long transition periods, and trade policies allowing for the protection of African agriculture (i.e. granting further scope to protect key agricultural

industries beyond 2035) before African markets are fully opened, should be considered.

- iv. In a future strategic EU trade agreement with African economies, adapting to AfCFTA, trade preferences should be transferred to such an agreement. In addition, "Aid for Trade" programs should be maintained regardless of the FTAs.
- v. New opportunities for direct digital trade in agricultural and food products from Africa should be facilitated, promoted and increased to create value addition in processed products (cocoa, tea, coffee) in decentralized rural areas.
- vi. Appropriate quality, health, environmental and social standards of agricultural and food products traded in and with Africa should be developed further together with African partners. The EU should provide support on improving these standards in Africa, e.g. through "Aid for Trade" programs, as African export potential would otherwise not be fully exploited.
- vii. Simplification of origin rules (supported through consultation with trading partners) should provide scope for flexibility, provided the majority of the ingredients originate in the partner country or regional economic area.

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# Annex 1: Questions of the expert consultation:

### Round 1

<u>Question 1.</u> Do you expect a change in the level or distribution mechanism (e.g. national strategic plans) of Pillar 1 payments (direct payments) to farmers (e.g. capping and/or conditions) and/or Pillar 2 payments (rural development)? (On narratives: feel free to make some assumptions about Member States' national strategies)

- **If Yes**, (when commenting on question 1 and below on 2.1 and 2.2, feel encouraged to state what you expect on overall agricultural budget or budget shares between pillar 1 and 2; you may also like to comment on voluntary or more mandatory measures):

- Level and distribution may change broadly as follows (insert your narrative):

Question 2. How do you assess the likelihood and impacts of possible changes in the CAP towards stronger environmental objectives and animal welfare objectives? (feel free to refer to proposals under consideration in the EU Parliament, EU Commission, in media reports, interactions with policy makers, etc.; specifics related to certain products may be considered) – if known to you, include comments on certain products of relevance (cereals, oil seeds, sugar, beef, dairy products, etc.)

**2.1** How might the policy measures look and what is each of their likelihood (high or low) (insert your narrative):

**2.2 Which of these (you mentioned) would have significant effects on EU agricultural land use and production?** Consider competitiveness and which products are affected most (cereals, oil seeds, sugar, beef, dairy products, etc.) **(insert your narrative):** 

**2.3** If you are comfortable to address this more specific question: Which of these (you mentioned) would have significant **external effects for Africa** (on trade with Africa, African production and utilization of food and agricultural products; food security)? (**insert your narrative**):

<u>Question 3.</u> Do you expect trends and upcoming changes in the EU food system not driven by changes of the CAP that may impact CAP (change in consumer preferences toward "organic", climate change considerations, etc., and feel free to make some assumptions about Member States' national strategies)?

- If Yes:

3.1 What kind of changes do you consider likely? (insert your narrative):

# **3.2** Which of these (you mentioned) would have significant effects on EU agricultural land use and production? And which products are affected most? (insert your narrative):

**3.3** If you are comfortable to address this more specific question: Which of these (you mentioned) would have significant **external effects for Africa** (on trade with Africa, African production and utilization of food and agricultural products, food security)? **(insert your narrative):** 

## Round 2

<u>Question 1.</u> Do you expect that the CAP will return to some extent to coupled payments? E.g. under the National Strategic Plans (of significant countries)? If so, how significant do you expect the change to be? (insert your narrative):

<u>Question 2.1</u> What are key elements you would propose for a next phase of CAP reform? (insert your narrative):

<u>Question 2.2</u> How should the CAP and the related EU agriculture *trade policy* relate to Africa (and other emerging economy regions) in support of development and food security? (insert your narrative):