

# DIRECTORATE-GENERAL FOR EXTERNAL POLICIES POLICY DEPARTMENT



The impact of the Common Agricultural Policy on developing countries

**DEVE** 



# DIRECTORATE-GENERAL FOR EXTERNAL POLICIES

### POLICY DEPARTMENT



# **STUDY**

# The impact of the Common Agricultural Policy on developing countries

#### **ABSTRACT**

Being the biggest world agri-food importer and exporter, the European Union plays an important role in international agricultural markets. The Common Agricultural Policy (CAP) has considerable influence on international agri-food market. With the CAP 2014-2020, the distortive effect of the policy have been dramatically reduced. However, voluntary coupled support are a matter of concern. Following the 2014-2020 CAP, Member States may grant voluntary coupled support (VCS) to specific sectors undergoing difficulties. All Member States expects Germany have opted to apply VCs in some sectors and this generated market distortions both in the internal and in the international marketplace.

Another feature of the 2014-2020 CAP is its competitive - oriented approach. Increased competition can boost agricultural development of non -EU countries but can also imply risks for sustainable development and food security. Growing demand supported by the CAP can also have a negative environmental impact. Therefore there are concerns about the coherence of the CAP support with environmental and climate objectives. Although the 2014-2020 CAP made progress towards ensuring policy coherence, more has to be made in the future CAP reform, particularly with reference to international commitment on climate change. Market distorting effects of some CAP instruments shall also be reconsidered.

Policy Department, Directorate-General for External Policies

This paper was requested by the European Parliament's Committee on Development.

English-language manuscript was completed on 22 February 2018.

Printed in Belgium.

Author: Maria BLANCO, Professor Agricultural Economics, Universidad Politécnica de Madrid, Spain

Coordinator: Trans European Policy Studies Association (TEPSA), Belgium

Official Responsible: Flavia BERNARDINI Editorial Assistant: Gregory DEFOSSEZ

 $Feedback\ of\ all\ kind\ is\ welcome.\ Please\ write\ to: \underline{flavia.bernardini@europarl.europa.eu}.$ 

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This paper will be published on the European Parliament's online database, 'Think tank'.

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ISBN: 978-92-846-2615-1 (pdf) ISBN: 978-92-846-2614-4 (paper)

doi:10.2861/953397 (pdf) doi:10.2861/02854 (paper)

Catalogue number: QA-02-18-131-EN-N Catalogue number: QA-02-18-131-EN-C (paper)

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# **Abbreviations and Acronyms**

ACP African, Caribbean and Pacific countries

CAP Common Agricultural Policy
CMO Common Market Organisation

COMAGRI Agriculture and Rural Development Committee

COP Conference of the Parties

DCFTA Deep and Comprehensive Free Trade Agreements

DG AGRI Directorate-general for Agriculture and Rural Development

DG DEVCO Directorate-general for Development Cooperation
EAFRD European Agricultural Fund for Rural Development

EAGF European Agricultural Guarantee Fund

EBA Everything But Arms Initiative

EC European Commission

EIP-AGRI European Innovation Partnership for Agricultural productivity and Sustainability

EPA Economic Partnership Agreement

EU European Union

FAO Food and Agriculture Organization of the United Nations

FTA Free Trade Agreement
FQD Fuel Quality Directive
GDP Gross Domestic Product

GHG Greenhouse Gas

GSP Generalised Scheme of Preferences

GTAP Global Trade Analysis Project

IPCC Intergovernmental Panel on Climate Change (WMO/UNEP)

LDC Least Developed Countries

LULUCF Land use, land-use change and forestry

MFF Multi-annual Financial Framework

MFN Most Favoured Nations

MS Member States

NGO Non-governmental Organisation

OECD Organisation for Economic Co-operation and Development

PCD Policy Coherence for Development

PSE Producer Support Estimate
RED Renewable Energy Directive

RDP Rural Development Programmes
SDG Sustainable Development Goal
SIA Sustainability Impact Assessment

UNFCCC United Nations Framework Convention on Climate Change

VCS Voluntary Coupled Support WTO World Trade Organization

# **Executive summary**

This report reviews the impact of the Common Agricultural Policy (CAP) on developing countries, it recommends a range of options for future CAP reforms and it suggests some alternatives for monitoring and evaluation of progress towards Policy Coherence for Development (PCD).

As the CAP 2014–2020 began to be implemented only in 2015 (2016 for Pillar 2), there is little evidence to date of the impact of the new measures, not only for developing countries but also for the European Union (EU). This review is then based on impact studies since 2011, when proposals were first formulated and some previous studies published (these are relevant to understand the effects of the current CAP because they analyse the implications of those policy instruments that have not been substantially modified).

The new European Consensus on Development provides the framework for the EU's development policy and guides the efforts in applying PCD across all policies and all areas covered by the 2030 Agenda for Sustainable Development. PCD is considered a fundamental part of the EU's contribution to achieving the Sustainable Development Goals (SDGs) and requires taking into account the objectives of development cooperation in all external and internal policies which are likely to affect developing countries. The Consensus calls for addressing the interlinkages between the different SDGs and **adopting a comprehensive and strategic approach to implement the 2030 Agenda across all policies**, seeking synergies, notably on the five strategic challenges (trade and finance, environment and climate change, food security, migration and security) and in close close coordination with the implementation of the Paris Agreement on Climate Change.

Agriculture is essential to global food security and development and, therefore, **the coherence of the CAP** with the SDGs is crucial. In recent decades, the CAP has evolved towards stronger market orientation and less trade distorting instruments targeted to agricultural sustainability. The CAP 2014-2020 delivers support to EU farmers and rural communities in a manner that is essentially non-market and non-trade distorting. Amongst the elements that make the CAP more compatible and coherent with the EU's development objectives there are the consolidation of decoupled payments, the end of production constraints and export subsidies together with the reinforcement of instruments to address environmental concerns.

Impact assessment of policy proposals ensures that potential implications for developing countries are taken into account from the early stages of the CAP reform process. Moreover, it provides decision-makers with evidence on the advantages and disadvantages of the different policy options. For the first time, **the impact assessment of the CAP 2014–2020 included an evaluation of effects on third countries**. However, while CAP's effects on EU agriculture were assessed in a systematic way, the impact on third countries consisted on a review of previous evidence. Therefore, it was concluded that the form and extent to which the CAP would affect developing countries could not be clearly established.

**Identifying the causal links between CAP instruments and their impact on developing countries is a complex task**. The main difficulty consists of isolating CAP's effects from those of other drivers (local institutional framework, socioeconomic developments, other external and internal policies, etc.), that is, establishing a counterfactual scenario mirroring what would have happened without the CAP. Simulation models are commonly used to analyse counterfactual scenarios. However, while there is an extensive literature on the development implications of agricultural support and trade barriers, few studies focus on the net impacts of the CAP.

Keeping this in mind, we hereafter summarise the main findings of this study.

#### 1) Food security impacts

Being a big trader of agri-food products, **the EU plays an important role in international agricultural markets and global food security**. Thanks to close trade relations with developing countries, based on preferential access, the EU is the major importer of agricultural products from African, Caribbean and Pacific (ACP) countries. In 2016, trade with ACP countries represented 12 % of EU agri-food imports and 6 % of exports.

Accordingly, any change in the CAP may have considerable influence not only on domestic markets but also on international agri-food markets. With the CAP 2014-2020, the negative effects of EU agricultural support on international agri-food markets – mainly caused by coupled support and trade barriers – have been significantly reduced. Agricultural prices in the EU are aligned with world market prices. Greater trade openness has strengthened competition and facilitated market access. However, some concerns remain, mainly related to voluntary coupled support (VCS) and high protection levels for some products (i.e. animal products and sugar).

Impacts of the CAP 2014–2020 on international agri-food prices and trade are likely to be small. Nevertheless, the reintroduction of coupled payments for some products under the VCS scheme is of concern. All Member States, except Germany, have opted to apply coupled support, which can reach 15 % of direct payments in some countries. Overall, coupled support exceeds 10 % of direct payments, providing direct incentives in some sectors (mainly beef and veal, dairy products, sheep and goat meat, protein crops, fruits and vegetables and sugar beet). Coupled support creates distortions both in the internal EU market and externally, displacing production to some member states (MS) either from other MS or from third countries.

Greater EU trade openness may imply mixed effects for food security in developing countries: (1) consequences for net importing and net exporting countries are not uniform and may differ in the short and long term; (2) the `preference erosion' phenomenon may jeopardise some positive effects; and (3) trade alone will not guarantee food security in developing countries.

The EU's abolition of export subsidies and reduction of market-distorting measures have different implications in the short and long term. In the short term, the end of export subsidies will drive up world market prices, increasing the competitiveness of exporters in developing countries, while negatively affecting vulnerable consumers. On the long term, competitiveness of the agri-food sector will be enhanced in both exporting and importing countries. As export subsidies have been discontinued for years, the effects on world market prices will most likely be minimal.

More openness in EU agri-food markets benefits exporting countries. Or, as developing countries already benefit from preferential trade access, a less trade-distorting CAP may reduce the benefits for low income countries in favour of other countries. Moreover, the implications of the global trend towards bilateral trade agreements are highly debated. As bilateral agreements mainly facilitate market access for tropical products, while in many cases excluding EU products from preferential schemes, some authors find that the transition from multilateralism to bilateralism will negatively affect food security in developing countries.

High protection levels for animal products stimulate livestock production in the EU. As this sector is highly dependent on feed imports, this results in increased competition for land in developing countries. Although increased feed demand can create conditions to enhanced agricultural development in these countries, it can also imply risks for sustainable development and future food security.

The CAP effects on food security in developing countries are mainly related to changes in agri-food trade patterns. However, while trade is essential to ensure a stable food supply, better trade opportunities for developing countries do not guarantee improvements in food security. Rather trade is one of the

necessary elements of a complex package of policies and institutional arrangements required to achieve food security. Least Developed Countries (LDCs) often have difficulties to profit from preferential access to EU markets due to poor price transmission between the international and the domestic markets. Improving export competitiveness in these countries faces mayor challenges, including lack of competition in the transport and processing sectors and limited support to the development of supply chains.

#### 2) Environmental impacts

The CAP has been criticised for its adverse impact on the environment, landscape and biodiversity, both in Europe and the rest of the world. Indeed, the growing demand for food, feed and bioenergy in the EU may have a significant environmental impact on third countries, leading to land use change, biodiversity loss and environmental damage. The CAP 2014-2020 establishes instruments to reconcile agricultural production with environmental and biodiversity protection, notably the Green payment under Pillar I and agri-environmental measures under Pillar II. In a context of increasing agri-food demand and decreasing resource availability, the achievement of such reconciliation is becoming increasingly challenging. Moreover, concerns exist on the coherence of CAP support with environmental and climate objectives.

Support to livestock production in the EU has increased the demand for protein rich products, which in turn has increased the competition for land in third countries, mainly in South America, with associated negative environmental and social impacts. Promotion of grain legume production under the current CAP may help to reduce the EU's dependency on feed imports from the Americas and, therefore, alleviate such negative effects. Still, this is an example of lack of coherence and conflicting incentives between the agricultural policy (high levels of support for animal products) and the environmental and climate policy (measures to protect the environment and reduce GHG emissions).

#### 3) Social and demographic impacts

Few studies analyse the CAP's effects on employment in developing countries. Without explicit mention to the CAP, some studies find that non-distorting agricultural support can improve the development of global value chains, which can increase opportunities for economic activity and job creation, due to greater opportunities to access new markets and gains in competitiveness through the use of more efficiently produced inputs.

While there is some evidence that EU border protection might contribute to migration pressure in some developing countries, more research is needed to find out if the CAP's impact is in any way significant.

Beyond the influence on trade, preferential market access for developing countries and resulting increased exports may also hide undesirable effects with notable implications for food security. For instance, the Everything But Arms Initiative (EBA) scheme, which grants duty free access to the EU market for LDCs, has stimulated trade exports to the EU but in some cases has also resulted in displacements of local population and adverse impacts on rural livelihoods and the environment. Given the many factors involved, identifying to what extent the CAP has contributed to those negative effects remains challenging.

Some steps to account for social impacts have already been taken. The new GSP+, the special arrangement for sustainable development and good governance, provides preferential access for developing countries but conditional on their implementation of international conventions relevant to sustainable development, human rights, labour rights and environmental protection. **Eligibility criteria under GSP+ may be an efficient instrument to promote sustainable development avoiding adverse effects for vulnerable population**. However, since the GSP+ started only recently and many factors influence trade patterns in developing countries, it is soon to make any meaningful judgement about the effectiveness of this scheme to promote sustainable development.

#### 4) Implications for future CAP reforms

Main findings from this study suggest that, despite strong progress towards PCD, we face great challenges to enhance coherence across EU policies. In particular, the future CAP should be aligned with international EU commitments, including the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change.

The CAP must not be considered in isolation but should seek coherence with trade, climate, energy and development policies. Only by a cross-sector policy approach will it be possible to respond to the challenge of developing a more sustainable and climate-resilient agriculture.

Particular areas of concern identified in this study are:

- The market-distorting effects (both internally and for developing countries) of the reintroduction of coupled support in the CAP 2014-2020.
- The difficult reconciliation of ensuring a common EU market and providing more flexibility to farmers to implement practices beneficial both for the environment and the climate.
- The conflicting incentives of some CAP instruments vis-à-vis climate objectives (i.e. high support to animal products).
- The degree of effectiveness of the new GSP scheme to promote food security and contribute to the SDGs.

Progress towards PCD requires being able to measure cross-sectoral impacts of policies. To gain insight into the complex interlinkages between sectoral policies (both at the domestic and global levels), a more systemic approach to monitoring and evaluation of agricultural policies is needed. Monitoring and assessment frameworks should be internationally discussed and coordinated. Specific PCDs indicators are needed to measure the CAP contribution to food security and SDGs in developing countries.

# 1 Introduction

The 2017 European Consensus on Development has reaffirmed the importance of Policy Coherence for Development (PCD) in the EU's contribution to the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development. The requirement for taking into account cooperation objectives in policies likely to affect developing countries is reflected in Article 208 of the Lisbon Treaty.

With approximately 40 % of the EU's total budgetary expenditure going into the Common Agriculture Policy (CAP), it is essential to maintain coherence with global food security objectives – one of the five priority challenges for PCD identified by the EU – and development issues in general. The CAP will be subject to important reforms after 2020, for which work has already started. Public consultation on the CAP<sup>2</sup> concluded that recent reforms considered PCD only 'to some extent'. Proposed options for reform will take into account recent changes in European and global contexts including: volatile agricultural prices, trade negotiation dynamics and the EU's new international commitments, notably those concerning the 2015 Paris Climate Agreement (COP 21) and the SDGs.

This paper provides an overview of the main CAP instruments and their potential effects on developing countries, specifically with regard to the current CAP and future reforms. The aim is to provide an accessible overview of how the CAP 2014–2020 works as well as its effects on agriculture in developing countries, with an emphasis on key areas of concern: food security, environment and job creation.

This evaluation is based on an analysis of secondary literature. As the CAP 2014–2020 began to be implemented only in 2015 (2016 for Pillar 2), there is little evidence to date of the new measures' real impact, not only for developing countries but also for the EU. Consequently our review is based on impact studies since 2011, when proposals were first formulated. Some previous studies are also relevant to understand the effects of the current CAP because they analyse the implications of those policy instruments that have not been substantially modified. This review is not intended to be exhaustive, but nevertheless does focus on those studies that provide some insight into the difficult task of isolating the CAP's effects on agricultural development.

The document is organised as follows. Section 2 summarises the CAP's influence on international markets and food security worldwide; it also explains how this role has been changing over time. Section 3 looks at the effects of CAP 2014–2020 on international markets together with its related impact on commodity prices and food security. Section 4 focuses on environmental concerns related to the CAP in developing countries. Section 5 identifies the main pressures on socioeconomic development, looking particularly at issues relevant to developing countries. Finally, in Section 6 some concluding remarks and recommendations are presented.

<sup>&</sup>lt;sup>1</sup> See <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:C:2017:210:TOC">http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:C:2017:210:TOC</a> (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>2</sup> See <a href="https://ec.europa.eu/agriculture/events/cap-have-your-say">https://ec.europa.eu/agriculture/events/cap-have-your-say</a> en for details (last accessed: 03.11.2017).

# 2 CAP and development

# 2.1 The CAP from an international perspective

The EU is a major partner in the international trade of agricultural products. Accordingly, the CAP can have a significant influence not only on domestic markets but also on international agri-food development.

Early CAP measures were based mostly on price and market support (domestic support, export subsidies, market access restrictions), policy instruments which have been criticised for being very 'trade distorting'. Since 1995, the CAP has been subject to the WTO Agreement on Agriculture (AoA), which establishes binding commitments aimed at reducing trade distorting public support for agriculture (improve market access, reduce domestic support linked to production and reduce export subsidies).

Both to comply with WTO agreements and in response to constantly changing societal demands, since the 1990s there has been a gradual reform of the CAP towards stronger market orientation and enhanced agricultural sustainability. With this evolution from market intervention towards non-market measures that directly target farmers and sustainability, the CAP's trade distorting effects have been progressively reduced.

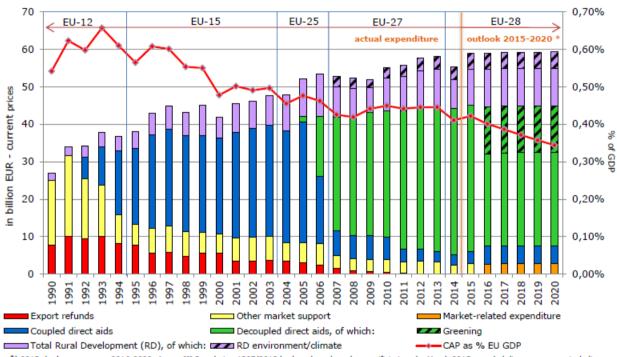


Figure 1: CAP instruments and CAP budget, 1990–2020.

\*) 2015: budget amounts; 2016-2020: Annex III Regulation 1307/2013 broken down based on notificiations by March 2015, coupled direct payments including POSEI and SAI direct payment component and Annex I Regulation 1305/2013

**Source:** CAP expenditure and CAP reform path post-2013, European Commission, DG Agri.

Figure 1 above shows the decreasing share of export subsidies and market-related support since the 1990s. While in 1993 the CAP provided more than EUR 10 billion for export subsidies, by 2012 the figure had dropped to EUR 147 million, partly because the gap between EU and world market prices declined as a consequence of both higher world prices and lower price support in the EU. Since January 2014, export subsidies can be used only as an exceptional measure in periods of market crisis (EC, 2015b). Moreover, in line with the 'Nairobi Package' – adopted at the WTO's Tenth Ministerial Conference in December 2015 – the EU agreed to eliminate agricultural export subsidies, a decision that was formally implemented in 2017.

The CAP 2014–2020 still represents a large, albeit declining, portion of the EU budget (37.7 % of the total EU expenditure planned for 2014–2020) and has been designed to address the main food challenges, identified as economic (food security, price volatility, higher input prices and the deteriorating position of farmers in the food supply chain), environmental (resource efficiency, soil and water quality as well as threats to habitats and biodiversity) and territorial (demographic, economic and social developments in rural areas).<sup>3</sup>

These challenges translate into three long-term CAP objectives: 1) viable food production; 2) sustainable management of natural resources together with climate action; and 3) balanced territorial development. To attain these objectives, new CAP instruments, which for the first time have been adopted by co-decision between the European Parliament and the Council, are defined under 4 Regulations, covering:

- Rural Development (Regulation (EU) No 1305/2013)<sup>4</sup>
- Horizontal issues such as financing, management and monitoring (Regulation (EU) No 1306 /2013)<sup>5</sup>
- Direct Payments for farmers (Regulation (EU) No 1307/2013)<sup>6</sup>
- Market measures (Regulation (EU) No 1308/2013)<sup>7</sup>

The CAP 2014–2020 remains structured in two pillars:

- 1. Pillar 1 including income and market support financed through the European Agricultural Guarantee Fund (EAGF):
  - Income support for farmers and promotion of sustainable agricultural practices: direct payments, accounting for approximately 70 % of the CAP budget. Direct payments include three common schemes: (1) the basic payment scheme; (2) the greening payment, linked to compliance with sustainable agricultural practices (crop diversification, the maintenance of permanent grassland or the preservation of ecological areas); and (3) the payment for young farmers. In addition, Member States have the option to apply several voluntary schemes: redistributive payments, support in areas with natural constraints and voluntary coupled support (VCS).
  - Market-support measures: sector-specific support to improve the functioning of agricultural markets. Payments for these measures account for approximately 5 % of the CAP budget.
- 2. Pillar 2 rural development policy financed through the European Agricultural Fund for Rural Development (EAFRD):
  - Rural development programmes (RDPs): policy measures designed to help the rural EU areas to
    meet their specific economic, environmental and social objectives. They are multiannual, partly
    financed by the Member States and account for nearly 25 % of the CAP budget.

With the CAP 2014-2020, the Member States have gained flexibility to implement the policy instruments under both Pillar 1 and Pillar 2. First, Member States have the flexibility to transfer 15 % of their direct payment envelope from Pillar 1 to Pillar 2 or from Pillar 2 to Pillar 1. In the case of the transfer from Pillar 2 to Pillar 1, an additional 10 % is allowed to 12 Member States, increasing the maximum up to 25 % in this case (Art. 14 of Reg. (EU) No. 1307/2013). Second, under Pillar 1, Member States have flexibility to apply several voluntary schemes (redistributive payments, support in areas with natural constraints and voluntary coupled support). Finally, under Pillar 2, Member States can choose the focus of the measures

<sup>&</sup>lt;sup>3</sup> See <a href="https://ec.europa.eu/agriculture/policy-perspectives/policy-briefs">https://ec.europa.eu/agriculture/policy-perspectives/policy-briefs</a> en (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>4</sup> See <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R1305">http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R1305</a> (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>5</sup> See <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R1306">http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R1306</a> (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>6</sup> See <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32013R1307">http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32013R1307</a> (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>7</sup> See <a href="http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013R1308">http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013R1308</a> (last accessed: 03.11.2017).

for the six priorities. The wide range of implementation options chosen by the Member States could have a significant influence on the achievement of the objectives of the CAP as well as on its development effects.

# 2.2 Development dimension of the CAP 2014–2020

The CAP's external dimension is not made explicit in the Regulations apart from references to WTO obligations (market measures) and some rural development actions (cooperation in the framework of LEADER<sup>8</sup> and the Agricultural European Innovation Partnership (EIP-AGRI)<sup>9</sup>). However, in 2012 the Directorate-General for Agriculture and Rural Development (DG AGRI) created a specific advisory group to deal with the CAP's international aspects, which as from July 2012 has been replaced by the new civil dialogue group on International Aspects of Agriculture.<sup>10</sup>

Policy Coherence for Development (PCD) is an EU priority, as reflected in the Treaty on the Functioning of the European Union (TFEU), in which Article 208 requires that the Union takes account of development cooperation objectives in the policies that it implements which are likely to affect developing countries. Progress vis-à-vis PCD is reported every two years. The EU is, moreover, strongly committed to the international agenda on sustainable development, in particular to the Sustainable Development Goals (SDGs) and the Paris Climate Agreement (COP 21). Policy coherence for development (PCD) is embodied in SDG 17 (Strengthen the means of implementation and revitalise the global partnership for sustainable development). In the first year of the SDGs implementation, with a view to their achievement much work is being done to align national strategies and adapt institutional frameworks.

The last PCD report (EC, 2015b) recognises the importance of agriculture to global food security and development. It reports significant progress through the last CAP reform in ensuring that food security is assured for EU citizens, with an approach that seeks to benefit developing countries actively and avoid adverse economic impacts. The CAP 2014-2020 delivers support to EU farmers and rural communities in a manner that is essentially non-market and non-trade distorting. Among the elements that make the CAP more compatible and coherent with the EU's development objectives are the consolidation of decoupled payments, the end of production constraints and export subsidies together with the reinforcement of instruments to address environmental concerns.

The EU plays an important role in international agricultural markets and contributes to food security. For some time, the EU has maintained close trade relations with developing countries, based on preferential access, with the result that it is now the main trading partner in agricultural products exported from developing countries. Trade agreements will be discussed in later sections of this document. Trade with African, Caribbean and Pacific (ACP) countries represents 12 % of EU agri-food imports and 6 % of exports.

<sup>&</sup>lt;sup>8</sup> See <a href="https://enrd.ec.europa.eu/leader-clld/leader-cooperation\_en">https://enrd.ec.europa.eu/leader-clld/leader-cooperation\_en</a> (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>9</sup> See <a href="https://ec.europa.eu/eip/agriculture/">https://ec.europa.eu/eip/agriculture/</a> (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>10</sup> See <a href="https://ec.europa.eu/agriculture/civil-dialogue-groups/international-aspects">https://ec.europa.eu/agriculture/civil-dialogue-groups/international-aspects</a> es (last accessed: 03.11.2017).

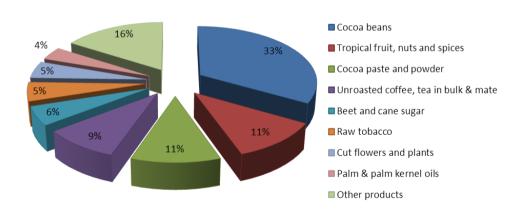
Table 1. EU agri-food trade (2016)

Exports by destination (2016)			Imports by origin (2016)		
Destination	Value Mio	% Share	Origin	Value Mio	% Share
	€			€	
USA	20743	15.8	Brazil	11940	10.6
China	11385	8.7	USA	11216	10.0
Switzerland	7897	6.0	Argentina	5888	5.2
Japan	5774	4.4	China	5076	4.5
Russia	5626	4.3	Switzerland	4670	4.2
Saudi Arabia	4580	3.5	Turkey	4640	4.1
Norway	4305	3.3	Indonesia	4148	3.7
Hong Kong	3712	2.8	Ukraine	4067	3.6
Canada	3446	2.6	Ivory Coast	3615	3.2
Turkey	3232	2.5	India	2781	2.5
ACP countries	7953	6.1	ACP countries	13309	11.9
Rest of the World	52486	40.0	Rest of the World	44510	39.7
Total agri-food	131139	100.0	Total agri-food	112245	100.0
exports			imports		

**Source:** Factsheets on EU28 agri-food trade, European Commission, DG Agri. <a href="https://ec.europa.eu/agriculture/trade-analysis/statistics\_en">https://ec.europa.eu/agriculture/trade-analysis/statistics\_en</a> (last accessed: 30/11/2017)

Figure 2 here shows the top agri-food products imported from ACP countries.

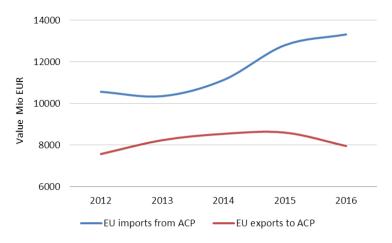
Figure 2: Top EU agri-food imports from ACP countries (product share, 2016)



**Source:** Factsheets on EU28 agri-food trade, European Commission, DG Agri. <a href="https://ec.europa.eu/agriculture/trade-analysis/statistics\_en">https://ec.europa.eu/agriculture/trade-analysis/statistics\_en</a> (last accessed: 30/11/2017)

Recent trends in EU agri-food trade with ACP countries (Figure 3) show an increase in imports from ACP countries, resulting in an increasingly positive trade balance for these countries.

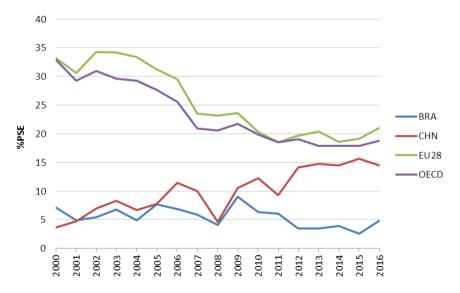
Figure 3: Recent evolution of EU agri-food trade with ACP countries



**Source:** Factsheets on EU28 agri-food trade, European Commission, DG Agri. <a href="https://ec.europa.eu/agriculture/trade-analysis/statistics\_en">https://ec.europa.eu/agriculture/trade-analysis/statistics\_en</a> (last accessed: 30/11/2017)

Although the contribution of the CAP to these trends is difficult to prove (to our knowledge, no empirical study has proven this link), it is likely that the change in the type of public support to agriculture in the EU has had an influence in these changing trade patterns. Recent estimates of global support to agriculture show that average levels of support to agricultural producers in OECD countries and in emerging economies are converging (OECD 2017a).

Figure 4: Producer Support Estimates (% PSE) in selected regions



**Source:** Producer and Consumer Support Estimates database, OECD. <a href="http://www.oecd.org/tad/agricultural-policies/producerandconsumersupportestimatesdatabase.htm">http://www.oecd.org/tad/agricultural-policies/producerandconsumersupportestimatesdatabase.htm</a> (last accessed: 30/11/2017)

The CAP's stronger market orientation is reflected in the agricultural support indicators measured by the OECD. According to the last available data (2016<sup>11</sup>), the Percentage Producer Support Estimate<sup>12</sup> (% PSE) for EU agriculture shows a decreasing trend, dropping from 34.5 % in 2003 to 18.6 % in 2014; however, it slightly increased again in 2016 reaching 21.0 %. As illustrated in Figure 4, overall the PSE shows a decreasing trend in OECD countries while it is increasing in some emerging countries. The Nominal Protection Coefficient<sup>13</sup> for EU agriculture, which reflects the level of price distortions, has declined from 1.29 in 2003 to 1.06 in 2016 (Figure 5).

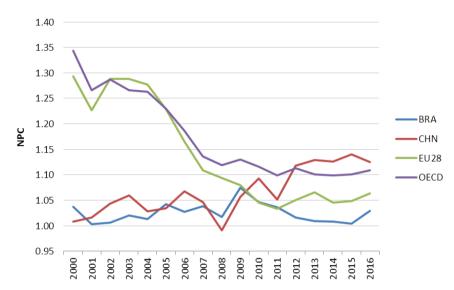


Figure 5: Producer Nominal Protection Coefficient (NPC) in selected regions

**Source:** Producer and Consumer Support Estimates database, OECD. <a href="http://www.oecd.org/tad/agricultural-policies/producerandconsumersupportestimatesdatabase.htm">http://www.oecd.org/tad/agricultural-policies/producerandconsumersupportestimatesdatabase.htm</a> (last accessed: 30/11/2017)

# 2.3 How the CAP affects agriculture in third countries

There are several ways in which EU policy interventions could influence third countries' agricultural development. These include: (1) domestic agricultural support; (2) agricultural trade policies; (3) regulations affecting trade; and (4) development cooperation policies. This study will not analyse the relative contribution of these policy interventions to the development pathways followed by developing countries. Instead, our focus will be on the effects of the CAP 2014–2020, covering domestic agricultural support and related market measures. Hereafter, we comment on the potential effects of the main instruments from the CAP 2014–2020 on agricultural development in developing countries.

As highlighted in previous studies (EC 2011, Matthews, 2017), the impact of CAP instruments varies across developing countries depending on: (1) whether they are net exporters or importers of commodities protected by the CAP; (2) whether or not they enjoy preferential access to the EU market; (3) whether poverty affects mainly its rural or urban population; and (4) their internal agricultural and market structures. Accordingly, because of differing characteristics the same policy measure may have diverging effects in different countries, which makes it difficult to draw general conclusions.

<sup>&</sup>lt;sup>11</sup> Producer and Consumer Support Estimates Database (OECD): <a href="http://www.oecd.org/tad/agricultural-policies/producerandconsumersupportestimatesdatabase.htm">http://www.oecd.org/tad/agricultural-policies/producerandconsumersupportestimatesdatabase.htm</a> (last accessed: 30.11.2017).

<sup>&</sup>lt;sup>12</sup> The Percentage Producer Support Estimate (% PSE) represents policy transfers to agricultural producers, measured at the farm gate and expressed as a share of gross farm receipts.

<sup>&</sup>lt;sup>13</sup> Producer Nominal Protection Coefficient (NPC) is an indicator of the nominal rate of protection for producers, measured by the ratio between the average price received by producers (at farm gate and including payments per unit of current output) and the border price (measured at farm gate level). For instance, a NPC of 1.05 suggests that farmers, overall, received prices that were 5 % above international market levels.

#### 2.3.1 Income support

With the change from price support to direct payments, the CAP's distorting effects have been reduced. Direct payments, initially introduced in the CAP's 1992 reform, have mostly been decoupled from production since the 2003 reform. While it is widely recognised that commodity-coupled support created market distortions, decoupled support is not in principle supposed to have an impact on production. Reviewing a selection of partial and general equilibrium studies, Balkhausen found that under decoupling production decisions are more determined by market signals rather than CAP payments (Balkhausen et al., 2008). However, even fully decoupled payments can affect production decisions. Although there is little consensus on the indirect effects of decoupled payments, there is a large body of literature on potential impacts through: (1) the income effect, which influences farm labour allocation (Gohin, 2006); (2) the risk-related effect, including wealth and insurance considerations (Sckokai and Moro, 2006); and (3) the dynamic effects, since the payments can influence farmers' investment behaviour (Conforti, 2005).

In addition, farmers' eligibility for direct payments under the CAP 2014-2020 is subject to levels of cross-compliance, meaning that production effects are further reduced. However, while significant progress has been made to reduce the distorting effects of CAP payments, direct payments might still impact agricultural performance and markets outside the EU. First, as mentioned above, this is because of decoupled payments' indirect effects, which may enhance the competitiveness of EU farmers on global markets. Second, this could also result from some coupled support still existing under the Voluntary Coupled Support (VCS) scheme.

Compared with the former CAP, the CAP 2014–2020 changes the overall position in the EU very little. The evaluation of green direct payments carried out after the first year of implementation (EC, 2016c) shows limited effects on land allocation, production levels and market evolution in the short term. On balance, the effects of greening on land use and agricultural production are expected to remain very low in the medium term, with the notable exception of a slight increase in the share of permanent grassland, fallow land and protein crops (EC, 2016c; OECD, 2017b). These studies signal the difficulty of isolating the effect of greening from other factors. Analysis from the Organisation for Economic Co-operation and Development (OECD) also reveals inconsistent signals between measures that encourage production (commodity coupled support) and those aimed at reducing negative environmental impacts (greening payment) (OECD, 2017b).

The impact of the CAP 2014–2020 on trade is likely to be small, with the only noticeable change probably resulting from the reintroduction of coupled payments for some products under the VCS scheme. In practice, all Member States, except Germany, have opted to apply coupled support, where payments are linked to specific production. In general terms, VCS is limited to 8 % of the national ceiling for direct payments, although this can reach 13 % in certain cases, plus an additional 2 % for protein crops. The most supported sectors are beef and veal, dairy products, sheep and goat meat, protein crops, fruits and vegetables as well as sugar beet. In 2015, 10 % of direct payments went to coupled support, which provides a direct incentive to maintain production and is, thus, trade-distorting. Cross-compliance (mandatory for all direct payments) as well as greening measures imply additional costs for farmers so as to comply with requirements and, therefore, partially offset the production effect of direct payments, both coupled and decoupled.

Changes in agricultural practices and land use as a consequence of greening requirements will lead to impacts on global agricultural markets. Several studies based on economic simulation models show that greening can lead to a modest reduction in the EU's supply of agricultural products, resulting in a slight increase in prices (Pelikan et al., 2015, Was et al., 2014).

#### 2.3.2 Market measures

The Common Market Organisation (CMO) is a set of rules which regulates agricultural markets in the European Union. It covers:

- Internal market aspects: market intervention (i.e. public intervention, aid for public storage, sectorspecific support) and rules concerning marketing as well as producer organisations (i.e. marketing standards, geographical indications, labelling)
- External market aspects: trade with third countries (i.e. licenses, import duties, administration of tariff quotas, export refunds)
- Competition rules
- General provisions on exceptional measures (measures against market disturbance, measures related to animal diseases, etc.) and the reserve fund for crises in the agricultural sector

Market intervention tools are now viewed as 'safety nets', i.e. they are used only in the event of crises linked to serious market disruption. The degree of intervention in domestic agricultural markets has been low in recent years. Consequently, the effects of these instruments on developing countries are likely to be minor. Storage policies play a role in stabilising internal markets in periods of low prices and could also be beneficial in reducing international markets' instability.

Regarding external market measures, with the 'end of export subsidies' there has been a significant movement towards less market and trade distorting measures. Despite this noticeable advance, some market support remains. The EU retains a number of protectionist features, in particular high external tariffs, which can still harm developing countries. Still, while tariff protection remains high, many developing countries can enjoy preferential access to the EU market for agricultural products:

- Least Developed Countries (LDCs) under the Everything but Arms Initiative (EBA). The EBA initiative
  grants duty-free and quota-free access to the EU for all products except arms and ammunition for
  LDCs (currently 47 countries benefit from this scheme).
- African Caribbean and Pacific countries (ACP) under Economic Partnership Agreements (EPAs). The
  ACP-EC Partnership Agreement (the Cotonou Agreement) was signed by 77 ACP countries and
  current trade arrangements are agreed or under negotiation under EPAs with seven ACP groups:
  the Cariforum (Caribbean) region, West Africa, Central Africa, Eastern and Southern Africa (ESA), the
  East African Community, the Southern African Development Community EPA Group, and the Pacific
  region.

According to some NGOs, market measures aiming at boosting EU competitiveness on global markets lead to an unsustainable approach that is not in line with the principle of PCD.<sup>14</sup>

Some recent studies that analyse the CAP's effects on developing countries and international trade corroborate that decoupled support together with border measures protect EU markets and make imports from third countries less competitive. The study from Boysen focuses on Uganda, a country within which agriculture contributes not only a large contribution to GDP, but also a sizeable share of agri-food exports within total exports, showing that the elimination of EU agricultural market support would have a small but positive impact on the local economy (Boysen et al., 2016). Kirsten Urban applies the Global Trade Analysis Project (GTAP) model generating a set of 21 databases that captures a comprehensive representation of domestic support to analyse the trade effects of decoupled support (Urban et al., 2016).

<sup>&</sup>lt;sup>14</sup> See https://concordeurope.org/2017/04/26/common-agricultural-policy-consultation-reply-2017/ (last accessed: 03.11.2017).

Results suggest not only that the elimination of EU domestic support could have a beneficial effect in many developing countries but also that LDCs in particular are likely to benefit.

#### 2.3.3 Rural development measures

Policy measures under Pillar 2 might also have effects on global agricultural markets. Of the six main thematic areas in the 2014–2020 RDPs, half of the Pillar 2 expenditure is dedicated to agri-environmental measures. All Pillar 2 expenditure is notified as 'Green Box' in the EU's WTO notifications.

Rural development projects are diverse and so are their potential effects. While agri-environmental measures are likely to reduce production of relevant crops, investment could be expected to increase productivity. These insights are confirmed by Schroeder, who compares simulated results with the evaluation reports from RDPs in Germany (Schroeder et al., 2015).

The EU's dependence on imports of protein-rich grains has increased in recent years mainly due to the greater demand for high-protein feed being used in livestock production, coupled with reduced levels of protein crops at the expense of cereals. Current CAP measures (both under Pillar 1 and Pillar 2) that promote legume production in the EU could help reduce the heavy dependence on vegetable protein imports for livestock feed.

# 2.4 Anticipating the CAP's impact on developing countries

The European Union is committed to following formal impact assessment procedures to improve the quality and coherence of the policy development process (EC, 2002). Impact assessment evaluates the likely positive and negative effects of proposed policy actions, not only enabling informed political judgements to be made about a proposal, but also identifying trade-offs in achieving competing objectives (Blanco, 2016). Since their initial publication in 2002, the impact assessment guidelines have been regularly updated, most recently in 2015 (EC, 2015a). Impact assessment is now compulsory for major EU policies, including the CAP. Since 2003, the EU has conducted ex-ante impact assessment prior to the CAP's reform, in order to inform the policy design process about the economic, social and environmental consequences of changes in policy instruments.

In addition, as indicated in Section 2.2, the coherence of non-development policies with development objectives remains a priority for the European Commission (EC) and progress on PCD continues to improve in a number of areas, including agriculture (EC, 2015b). Furthermore, the EU is committed to the United Nations' Sustainable Development Goals, embodied in the UN's 2030 Agenda for Sustainable Development (EC, 2015c). In this context, while pursuing the development of EU agriculture, CAP instruments also aim to minimise negative impacts on developing countries. For the first time, the impact assessment of the CAP 2014–2020 (published in 2011) included an evaluation of effects on third countries (EC, 2011). However, while the CAP's effects on EU agriculture were assessed in a systematic way, the Annex 12 on third countries impact had been brought forward under review from previous studies; it was concluded, therefore, that the form and extent to which the CAP would affect developing countries could not be clearly established (EC, 2011).

Hence, while acknowledging how important it is to consider the CAP's external effects, the 2013 reform process failed to anticipate the proposed scenarios' consequences for developing countries. The impact assessment merely highlighted that 'greater market orientation will ensure that impacts are generally minimised and in any case not exacerbated'. However, no systematic appraisal was undertaken. Instead, it was pointed out that the impact should be assessed on a case by case basis to take into account the diversity of developing countries as well as the many drivers affecting food security. Other authors also argue that more effort is needed to evaluate the effects of EU policies in developing countries (Carbone and Keijzer, 2016).

The Better Regulation Guidelines (EC, 2015a) include specific and operational guidelines on how to systematically assess the effects of new policies on developing countries.

The CAP 2014–2020, as finally adopted, reinforces the monitoring and evaluation framework, extending it to all measures (Regulation (EU) No 1306/2013). A set of indicators will be defined to assess the performance of CAP measures in relation to the objectives of viable food production, the sustainable management of natural resources and climate action together with balanced territorial development. As Pillar 1 measures started to be implemented in 2015 and Pillar 2 measures only in 2016, there is little evidence to date on achievement of objectives.

Regarding domestic impacts of the CAP 2014–2020, a preliminary assessment of the greening measures one year after implementation (EC, 2016c) concludes that 'the introduction of agricultural practices beneficial for environment and climate appears to have had limited effects on production levels and market developments in the short term'. As shown in Section 2.3.1, a more comprehensive analysis (OECD, 2017b) finds that the CAP's effects on production, prices, trade, welfare and the environment are likely to be small at the aggregated level; however, some redistribution occurs between sectors and member states due to a combination of the reduced budget for direct payments (basic payment scheme), the larger share of coupled support and the convergence of per hectare payment rates (both within and between member states).

Identifying the causal links between CAP instruments and their impact on developing countries is a complex task. The main difficulty is in isolating the CAP's effects from those of other drivers, establishing counterfactually what would have happened without the CAP. Simulation models are commonly used to analyse counterfactual scenarios. However, while the internal effects of CAP instruments have been widely evaluated, few studies focus on the impact of the CAP in developing countries. From the perspective of developing countries, we also find an extensive literature on the development implications of changes in market access and external agricultural policies, but rarely focused on EU policies in particular. The work by Boysen et al. (2016) discussed in Section 2.3.2 is one exception. These authors have examined the effects of the CAP 2014–2020 on Uganda, a least developed country with a high dependence on agriculture, a high share of agri-food exports in total exports and free access to the EU market under EBA agreement. Using the GTAP model, it is concluded that removing remaining border protection and direct payments in the EU will have a positive albeit marginal impact on Uganda. However, it should be noted that model results are driven largely by the assumption that direct payments in the EU are only partially decoupled. This study also demonstrates the need for case by case impact analysis, as the effects of the CAP will largely depend on specific features of the agricultural sector in each developing country.

# Impact of the CAP 2014-2020 on global agricultural markets and food security

# 3.1 The CAP's role on global agriculture

In this section, we try to shed some light on the effects of the current CAP on agricultural markets and food security worldwide. Given that there is little empirical evidence to date of such effects, the analysis will be based on studies focusing on particular aspects that could help to understand the potential implications of current CAP instruments for developing countries.

The EU is a major partner in the international trade of agricultural products, being both top exporter and top importer in recent years. Accordingly, any change in the CAP may have considerable influence not only on domestic markets but also on international agri-food markets.

However, at the same time the CAP has long been criticised in regard to its negative effects on food security in developing countries (Koning and Pinstrup-Andersen, 2007). In particular, EU export refunds can lead to significant distortions of competition, pushing down agricultural prices (Elbehri and Sarris, 2009). The effects of falling food prices depend on whether the country is a net exporter or a net importer of a specific product as well as price transmission mechanisms. Consequently, price changes can have divergent effects on rural and urban households. Thus, while low world food prices have tended to benefit urban consumers, they could also be detrimental to rural households (Hertel et al., 2007; Caracciolo et al., 2014) and for this reason the CAP has been accused of discouraging investment in developing countries' agriculture.

The CAP has been substantially reformed in recent years, in part to diminish its impact on world markets. Caracciolo investigated the linkages between world and national prices of some important staple crops, namely maize, rice and wheat in selected developing countries. According to his findings, during the evaluation period (2000–2010) no direct link was found between EU wheat and rice subsidies and the world price of these products. Conversely, in the case of maize EU subsidies do seem to influence world prices (Caracciolo et al., 2014). It is important to note that these findings need to be interpreted with caution given the large number of factors that influence the price transmission mechanism.

Compared with its predecessor, the CAP 2014–2020 is likely to have minimal effects on global markets and hence, on developing countries. EU commitment to the PCD has influenced the latest CAP reforms' design. Food security is one of the main global challenges and hence a key CAP objective, making it one of the five PCD priority areas. Past CAP reforms have significantly improved policy coherence and the CAP 2014–2020 provides further consolidation in this regard. For example, since January 2014 export refunds remain as an exceptional measure only in the event of a serious market crisis.

As the EU has played an important role in shaping the 2030 Agenda for Sustainable Development and remains committed to contributing to the achievement of SDGs, future CAP reforms will most likely consolidate this sustainable development orientation.

Furthermore, in addressing the issue of agricultural domestic support, the EU and Brazil have launched a proposal to 'level the playing field' between WTO members by limiting trade-distorting farm subsidies in proportion to the size of each country's agricultural sector. In December 2017 this proposal will be presented to the 11th WTO Ministerial Conference being held in Buenos Aires.

The EU's abolition of export subsidies and reduction of market-distorting measures have led to greater market orientation, albeit with mixed effects: higher commodity prices in international markets increase the competitiveness of net producers in developing countries, while simultaneously increasing the vulnerability of net consumers, at least in the short-term. Whilst trade-distorting measures are being countered, CAP support remains high ant its impact on agricultural markets is less direct and, therefore,

more difficult to assess. More openness in EU agri-food markets benefits exporting countries. Or, as ACP countries already benefit from preferential access, more openness might imply that they lose part of the advantage they had to access European markets compared with other middle-income countries, which will now derive more benefit. Emphasis on trade negotiations has moved from multilateral to bilateral agreements, with implications for developing countries. These issues will be developed further in the next sections, focusing at effects on food prices and global food security.

# 3.2 Effects on international food prices

As the EU is a large importer and exporter of agricultural products, changes in the CAP impact both on the level and volatility of world prices. The price spike in 2007–08 and subsequent years indicated a trend change after a long period of declining food prices. During the period 2004–2010, the average level of world agricultural prices increased by 50 % from its corresponding level in 1986–2003; by comparison, energy prices jumped by 220 % and fertiliser prices by 150 %, while at the same time exhibiting the highest degree of volatility of the past three decades (EC, 2011).

Whilst more recently prices have declined again, they are still above former levels. Moreover, recent market projections suggest that food prices will for a time remain at somewhat higher levels than those seen in the early 2000s (OECD-FAO, 2017).

Besides EU agricultural support, other drivers will influence price trends. In the next decade prices are still expected to remain at lower levels than before. The implications for developing countries will depend on their specific trade profiles and market structures, which will in turn determine the price transmission mechanisms from international to national markets. While higher prices in the past decade have stimulated agricultural investments in many countries, it remains to be seen whether or not decreasing prices will have a negative effect on investment.

According to Tangermann, while major developed countries have shifted toward more market-oriented approaches, trade-distorting measures in a number of emerging and developing countries have tended to rise (Tangermann, 2016). As Figure 6 shows, EU agri-food prices are more and more aligned with international prices.

3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0

Beef (US)

Beef (BR)

Sugar

Figure 6: Ratio between EU and world prices

Source: DG Agriculture and Rural Development

**Source:** Risk management schemes in EU agriculture. Dealing with risk and volatility, European Commission, DG Agri. <a href="https://ec.europa.eu/agriculture/sites/agriculture/files/markets-and-prices/market-briefs/pdf/12">https://ec.europa.eu/agriculture/sites/agriculture/files/markets-and-prices/market-briefs/pdf/12</a> en.pdf (last accessed: 15/12/2017).

With its greater market-orientation since 2014, the impact of CAP 2014–2020 on international food prices is now much more limited than those of previous CAP regimes. Nevertheless, in overall terms, the CAP will most likely drive up international food prices.

A recent OECD study (OECD, 2017b) corroborates these findings. Compared with its predecessor, in the CAP 2014–2020, the area cultivated decreases slightly for cereals, while it increases for legumes, set aside and grazing. Simulating a scenario without greening, the decrease in cereal area will now be higher and the area under set-aside will decrease. Likewise, simulating a scenario without VCP, the area increase will be smaller for pulses and greater for set-aside. On balance, those area changes translate into less marked changes in production, suggesting that they occur mainly in less productive areas, as expected. In turn, prices react to these modest changes in production and global agricultural prices could, therefore, be affected.

However, it is important to note that price movements in developing countries are country-specific, demonstrating that global food prices do not create the main driver of local prices in all cases. Price transmission from international markets to the national and local markets in developing countries depends on many factors, including market integration, exposure to the world market, etc. Dawe shows that across 103 case studies for rice, wheat and maize, around 28 % had lower prices in 2013 compared with 2007 (Dawe et al., 2013). In a case study of Tanzania, Baffes finds that the external influences on domestic prices originate from regional rather than global markets (Baffes et al., 2017). He also shows that domestic rather than external factors have a greater influence on Tanzanian maize markets.

Besides the impact on price levels, price volatility also deserves attention. Agro-food markets have always been characterised by a degree of volatility and most of them are 'thin' markets, with trade representing a small share of global output. As a result, production shocks are buffered by low trade flows, leading to large variations in agricultural commodity prices. Furthermore, price volatility is aggravated when governments apply export restrictions to insulate the domestic market from international price fluctuations.

With a more market oriented CAP, there is a risk of increasing volatility on international markets. However, there is no empirical evidence on this effect to date. On the one hand, price support and production quotas in the EU drive up prices and stabilise internal markets but may accentuate price volatility at world level. Therefore, the abolishment of production quotas will potentially reduce world price volatility. On the other hand, more decoupled support in the EU may increase domestic market instability and, given that the EU is a major agri-food trader, could lead to greater volatility in international markets.

# 3.3 Effects on food security

The Food and Agriculture Organisation of the United Nations (FAO)'s approach to food security is based on four pillars: food availability, access, utilisation and stability. According to the last report on the State of Food Security (FAO et al., 2017), despite the significant population growth, the share of undernourished people in the world decreased from 14.7 % in 2000 to 10.6 % in 2015. However, the reduction rate has slowed down in recent years and, most worryingly, the global share of undernourishment has risen to 11 % in 2016, suggesting a possible reversal of the downward trend of recent decades. In absolute terms, the number of people of chronically undernourished people in the world began to rise in 2014, going from 775 million people to 815 million in 2016. Worsening food security conditions are observed in particular in parts of sub-Saharan Africa, South-Eastern Asia and Western Asia. Conflicts seriously affect food security and are one of the main drivers of the recent increase in food insecurity, in some cases combined with climate-related shocks.

The CAP plays an important role in EU agriculture and its coherence with global food security objectives and development issues is, therefore, essential. Several studies argue that the CAP has created distortions

on food price levels and price volatility, which has negatively impacted on food security in developing countries. However, few of those studies isolate the effects of the CAP from those of other external factors.

Following successive reforms, the current CAP is very different from the original policy. Significant progress has been made to reduce its impact on food security for third countries (EC, 2015b). Support is provided mostly via non trade-distorting instruments. One recent study analyses the CAP's effects in Uganda, concluding that further reductions in EU agricultural support will have a positive albeit marginal impact (Boysen et al., 2016).

Effects on food security come not only from price movements but also from market access. As international trade is essential for sustainable development, the EU has given preferential access to the products of developing countries under the Everything But Arms (EBA) initiative (for LDCs) and EPAs (for ACP countries).

The EU is one of the world's most open markets to imports of agricultural products and it is the top importer of agri-food products from developing countries. On average, over the years 2011 to 2013 2.8 % of EU imports came from LDCs (EUR 2.8 billion per year). The value of this trade is four times higher than the corresponding value of agricultural imports from Canada, the United States, Australia, New Zealand and Japan taken together, for which imports from LDCs account on average for 0.4 % of their total imports.<sup>15</sup>

Trade dynamics have experienced notable changes in recent years. With the lack of progress in the Doha Round, many countries have instead already signed or are negotiating bilateral agreements. The EU has embarked on a number of Deep and Comprehensive Free Trade Agreements (DCFTA), a new generation of such agreements. Furthermore, by providing preferential access to the EU market, the Generalised Scheme of Preferences (GSP) helps developing countries generate additional revenue through international trade. The current GSP (Regulation (EU) 978/2012)<sup>16</sup>, applied since 1 January 2014, embraces three different schemes:

- Standard GSP for low and lower-middle income countries (duty reductions for about 66 % of all product tariff lines). Beneficiaries are low and lower-middle income countries according to the World Bank classification (currently 27 countries).
- GSP+ for vulnerable low and lower-middle income countries, (zero duties on over 66 % of EU tariff lines for countries fulfilling vulnerability criteria and sustainable development criteria). Current beneficiary countries are: The first 10 GSP+ countries are: Armenia, Bolivia, Cape Verde, Kyrgyzstan, Mongolia, Paraguay, Pakistan, Philippines and Sri Lanka.
- EBA (Everything But Arms) for Least Developed Countries (full duty free and quota free access to the EU Single Market for all products, except arms and armaments). Currently, 49 LDCs benefit from the EBA scheme.

In 2014 the general utilisation rate of the GSP<sup>17</sup> was around 75 % (EC, 2016a).

<sup>&</sup>lt;sup>15</sup> See <a href="http://ec.europa.eu/agriculture/trade-analysis/map/2014-1\_en.pdf">http://ec.europa.eu/agriculture/trade-analysis/map/2014-1\_en.pdf</a> (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>16</sup> See http://trade.ec.europa.eu/doclib/docs/2012/october/tradoc 150025.pdf (last accessed: 15.12.2017).

<sup>&</sup>lt;sup>17</sup> Ratio of preferential imports to eligible imports under the regime.

Table 2. EU agri-food imports by trade regime (2014)

Trade Regime	Duties	Trade share (%)
MFN Regime	Full Duty	20
	TRQ, reduced duty	4
	TRQ, duty-free	2
	Duty-free	43
GSP	Reduced duty	2
	Duty-free	3
FTAs	TRQs	1
	Reduced duty	3
	Duty-free	19

Source: Compiled from EC (2015e).

Focusing on the agricultural sector, the EU is the world's top importer of agri-food products and, as shown in Table 2 above, about 71 % of all such imports entered the EU at zero duty in 2014, valued at EUR 72 billion (EC, 2015e).

Greater EU trade openness may imply mixed effects for food security in developing countries: (1) consequences for net importing and net exporting countries are not uniform and may differ in the short and long term; (2) the `preference erosion' phenomenon may jeopardise some positive effects; and (3) trade alone will not guarantee food security in developing countries.

To distinguish between short and long term development effects, let us take the example of export subsidies. Export subsidies in the EU increase the market share of EU exporters and drive down world market prices, effects that are accentuated over time due to the high domestic prices that stimulate production. In the short term, consumers in importing developing countries benefit from low food prices. In the long term, a pointed out by ActionAid, this system undermines the competitiveness of the agri-food sector in both exporting and importing countries (ActionAid, 2011). The end of export subsidies will likely result in opposite effects. In the short term, exporting countries are the main beneficiaries while consumers in importing countries may face higher food prices. As export subsidies have been discontinued for years, the effects on world market prices will most likely be minimal.

Preference erosion refers to the fact that trade liberalisation reduces the benefits of preferential trade conditions for developing countries. Preferential trade access (such as GSP, GSP+ and EBA) acts as an indirect development aid for the countries involved. In this context, a less trade-distorting CAP implies reduction of advantageous access to EU markets for Least Developed Countries in favour of other middle-income countries excluded from preferential access (i.e. Brazil, Thailand, China).

The implications of the global trend towards bilateral trade agreements for developing countries are also debated. Whereas the EPAs may play a role to facilitate access to EU markets for ACP countries, in some cases EU products are excluded from preferential schemes and market access is mainly facilitated for tropical products. In this context, Desta argues that the transition from multilateralism to bilateralism will leave developing countries as the primary losers, as only a multi-sectoral and multilateral agreement will allow all countries to make progress on market access ( Desta, 2016).

Non-tariff barriers (i.e. sanitary and phyto-sanitary measures, technical barriers to trade, private standards and certification) deserve special attention because they may be very challenging for smallholders in developing countries. CAP market orientation alone does not guarantee improved market access and

benefits to developing countries; market access is hindered by inadequate market infrastructures but also by non-tariff measures (NTMs). Hence, addressing non-tariff measures in trade negotiations becomes essential. In their study on the effects of NTMs in Africa, Cadot and Gourdon find that in spite of widespread tariff reductions intra-African borders remain 'thick'. Their results based on panel regressions from 1,260 country-product pairs suggest that sanitary and phytosanitary measures contribute to an increase of 14 % in the consumer price of African foodstuffs (Cadot and Gourdon, 2014).

The CAP effects on food security in developing countries are mainly related to changes in agri-food trade patterns. However, while trade is essential to ensure a stable food supply, better trade opportunities for developing countries do not guarantee improvements in food security. Rather trade is a necessary element of the complex package of policies and institutional arrangements required to achieve food security. Several authors find that LDCs often have difficulties to profit from preferential access to EU markets due to poor price transmission between the international and the domestic markets. In a recent study on Malawi, Gourichon et al. (2017) identify the main policy and market constraints that limit competitiveness of agri-food exports, which constitute more than three quarters of Malawian export revenues. They find that, despite significant investments in trade and market infrastructure, improving export competitiveness faces mayor challenges, including lack of competition in the transport and processing sectors and limited support to the development of supply chains.

Preferential market access for developing countries and resulting increased exports may also hide undesirable effects with notable implications for food security. For instance, the EBA scheme, which grants duty free access to the EU market for LDCs, has stimulated trade exports to the EU but in some cases has also resulted in adverse impacts on rural livelihoods and the environment. This topic will be further discussed in Section 4 and Section 5, when analysing environmental and social impacts.

## 3.4 Specific case studies

As the CAP's external effects are country and sector specific, some case studies for specific products are presented hereafter. Box 2 illustrates how the EU has taken into account third country effects in the implementation of sugar reform.

**Box 1**. EU sugar quotas and sugar imports from developing countries

Regarding sugar, the CAP 2014–2020 stipulates that quotas will expire in 2017.

EU sugar imports come mostly from ACP and LDC countries under preferential EPA-EBA agreements (representing more than 60 % of total EU sugar imports). To ease transition for the 18 countries that traditionally supplied raw sugar to the EU into the new market conditions, the EU provided financial assistance amounting to EUR 1.25 billion over the period 2006–13. EU assistance was aimed at strengthening the sugar sector's competitiveness, where this was a sustainable process, supporting the development of alternative activities (diversification) and mitigating broader impacts. In addition, the EU ensures duty free and quota-free access for all goods, including sugar, under the EPAs.

Sugar imports from EPA-EBA countries have increased from an average of 1.5 million tonnes before 2006 (average 2001-2005) to a level of 2.2 million tonnes in 2013. In the same period, total sugar imports increased from around 2 million tonnes (average 2001-2005) to 3.3 million tonnes in 2013.

However, preferential sugar imports under EPA-EBA agreements, as well as total EU sugar imports, show a decreasing trend in recent years because of lower EU prices. Figure 3 above shows the decreasing gap between EU sugar prices and world prices, which is projected to persist over the coming decade (EC, 2016d).

## 200 ##

Figure 7: Sugar price (recent evolution and projections)

Source: Data from EC (2016d).

As a consequence of the EU's increase in sugar production together with the slight decrease in consumption, the EU has changed from a net importer to a net exporter in the sugar market (see Figure 8).

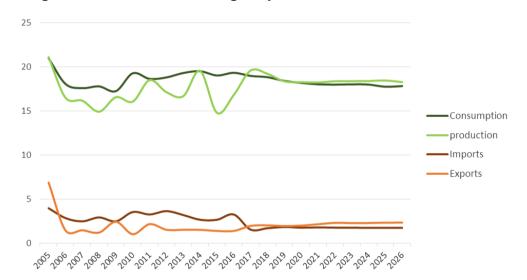


Figure 8: EU sugar market balance (white sugar equivalent)

Source: Data from EC (2016d).

It is likely that sugar imports will continue to decline following the end of quotas (in 2017), as domestic prices will further align with world prices. In addition, signals indicate a strong increase in internal EU production. A significant rise in sugar beet area occurred in 2017. This is most likely due to the end of quotas and the new VCS scheme under the CAP 2014-2020. Ten Member States have adopted sugar beet coupled payments under VCS (these payments reach between 100 and 600 euros per ha). These coupled payments imply a direct incentive to increase production. It is too early to anticipate the evolution of EU trade relations with sugar exporting countries, but the VCS is likely to imply a boom in EU sugar production. The implications of coupled support for sugar should be carefully analysed. The objectives of this policy may be conflicting not only with PCD but also with health concerns. In a context where several EU countries are taxing sugar consumption, does it make any sense to stimulate sugar production? This case study shows that much remains to be done to enhance policy coherence in the EU.

Another interesting case study refers to feed markets. Imports of protein-rich products by the EU have steadily increased in recent years, raising concerns about the potential negative impacts on developing countries, as illustrated in Box 3.

#### Box 2. The CAP and the EU dependence on protein-rich imports

The EU livestock sector depends heavily on soybean imports from South America. Increased demand for high-protein feed, together with a decline in the EU's legume production, has led to an increase in protein-rich grain imports.

In some developing export countries such as Argentina, Bolivia, Paraguay and Uruguay, increased soybean production has led to negative environmental and social impacts, including biodiversity loss, displacement of small farmers, loss of employment and increased food insecurity.

In such a context, CAP measures (both under Pillar 1 and Pillar 2) that promote legume production in the EU could help reduce the heavy dependence on vegetable protein imports for livestock feed and, therefore, attenuate the negative effects on third countries.

EU biofuel policies have also been blamed for jeopardising food security in third countries (see Box 4). The policy-driven expansion of biofuels has raised the demand for feedstocks over the last decade (OECD-FAO, 2017). However, as growth in biofuels production is highly sensitive to policy changes, it has slowed down in recent years because of changes in public policies. Between 2000 and 2010, annual production of ethanol grew at 17 %, a level which has fallen back to 4 % in recent years (OECD-FAO, 2017).

#### Box 3. Mixed development effects of biofuel policies

The EU started promoting biofuels in 2003, when a premium for energy crops in idle land was implemented under the CAP. In 2009, the Renewable Energy Directive (EU, 2009) set national targets for the share of renewable energy in the transport sector, while the Fuel Quality Directive (FQD) set targets to reduce the fuel carbon intensity. This resulted in a rapid development of the EU's biofuel sector, driving up the demand for biofuel feedstocks.

Biofuel policies created a new demand for biofuel feedstock, in particular vegetable oils, and boosted exports of agricultural products from developing countries. RED and FQD were amended in 2015 (Directive (EU) 2015/1513) to reduce the risk of indirect land use change, promoting the transition towards advanced biofuels.

Many studies have analysed the impact of EU biofuel policies on developing countries (Diop et al., 2013). It is generally accepted that bioenergy has the potential for either increasing or reducing food security (especially in the case of smallholder farmers) depending on the policy behind its development and the characteristics of the local agricultural sector. The effects of biofuels' development on national food security can be significantly different for net exporters and net importers of food and agricultural commodities. Diop analysed EU biofuel policies from a PCD view, concluding that the risks of land-grabbing and environmental damage are mainly due to the institutional framework as well as market infrastructures in developing countries (Diop et al., 2013).

The debate on biofuels (food versus fuel) illustrates some of the difficulties in interpreting the effects of European policies on the development of third countries. The main criticism of the 1980s CAP was that market support in the EU led to overproduction and decreasing world prices, hindering the development of agriculture in developing countries. Although biofuels policy in the 2000s has had the opposite effect, in that it has reduced the supply of food products, leading to higher world prices and theoretically benefiting agricultural producers from third countries, this policy has also been blamed for having negative

development effects. Recent agricultural changes in many developing countries – within a scenario of high agricultural prices – show that, apart from external agricultural policies, some internal factors also strongly influence development pathways. Consequently, in order for these countries to take advantage of a more market neutral CAP, changes are needed in their institutional frameworks and market infrastructures. Other EU policies will be needed to promote the structural development of the agri-food sector in developing countries.

The case studies presented here demonstrate the complexity of interrelations between EU and developing countries agricultural markets. They also illustrate that assessing CAP instruments' development implications requires the analysis of differential effects not just across countries, but also across country groups (rural areas, urban population, input industry...).

# 4 Environmental impact of the CAP 2014-2020 and its effect on developing countries

#### 4.1 Overview

The CAP has been criticised for its adverse impact on the environment, landscape and biodiversity, both in Europe and the rest of the world. Indeed, the growing demand for food, feed and bioenergy in the EU may have a significant environmental impact on third countries, leading to changes in land use, loss of biodiversity, reduction of carbon sinks, etc. In recent decades, the CAP has evolved to reconcile agricultural production with environmental and biodiversity protection. However, in a context of increasing agri-food demand and decreasing resource availability, the achievement of such reconciliation is becoming increasingly challenging.

The EU is leading international efforts to combat global warming, being strongly committed to action on the COP21 Paris Agreement<sup>18</sup> and now taking steps to implement its target to reduce emissions. In October 2014, the EU adopted the 2030 climate and energy framework, which sets three key targets for the year 2030:

- At least 40 % cuts in greenhouse gas emissions (from 1990 levels),
- At least 27 % share of renewable energy,
- At least 27 % improvement in **energy efficiency**.

This framework is also in line with other longer-term perspectives set out in the Roadmap for moving to a competitive low carbon economy by 2050<sup>19</sup> and the Energy Roadmap 2050.<sup>20</sup>

The EU uses a number of trade-related provisions to promote sustainable production, such as GSP+. Responding to society's demands on biodiversity, climate change and the quality of natural resources (mainly water and soil), the EU has adopted production regulations and rural development measures.

# 4.2 Land use patterns

Agriculture intensification in Europe has contributed to land use changes in other countries. For instance, livestock intensification in Europe has increased the demand for protein rich products, which in turn has led to increased soybean production in South America, with associated negative environmental and social impacts. Promotion of grain legume production under the current CAP may help to reduce the EU's dependency on soybean imports from the Americas and, therefore, alleviate such negative effects.

In the last decade, energy markets have formed a significant driver in the overall trend of large-scale land acquisition in some developing countries. A clear link can be established between the EU bioenergy policy and European companies' keenness to acquire agricultural land in developing countries, especially those in Africa. This also entails that the development of conventional biofuel production has an impact on access to natural resources, such as land and water, and often leads to an increase in land concentration to the detriment of smallholder farming practices (Diop et al., 2013).

<sup>&</sup>lt;sup>18</sup> See <a href="https://ec.europa.eu/clima/policies/international/negotiations/paris\_en">https://ec.europa.eu/clima/policies/international/negotiations/paris\_en</a> (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>19</sup> See <a href="https://ec.europa.eu/clima/policies/strategies/2050">https://ec.europa.eu/clima/policies/strategies/2050</a> en (last accessed: 03.11.2017).

<sup>&</sup>lt;sup>20</sup> See <a href="https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2050-energy-strategy">https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2050-energy-strategy</a> (last accessed: 03.11.2017).

# 4.3 Biodiversity

The CAP, through changes in agricultural commodity markets, may induce effects from biodiversity on developing countries. Further intensification and expansion of the agricultural sector will occur in certain developing countries, resulting in higher input use and loss of natural habitats. According to Prins, 'abolishment of CAP subsidies only at the European scale can show a positive effect for European biodiversity due to abandonment or less intensive management. However, the impact on biodiversity globally can be negative due to changing agricultural trade patterns, expansion of agricultural land towards natural areas, and intensification of management systems' (Prins et al., 2011).

Expansion of agricultural land may be achieved at the expense of tropical forests, with the resultant loss of carbon stocks and impact on high natural value landscapes. Particularly in Brazil and some Asian countries, the EU biofuel policy has resulted in diminishing natural habitats because of more agricultural production and intensification (Prins et al., 2011).

# 4.4 Climate change

Climate change is one of the most important challenges for agriculture and rural areas in the EU as well as other countries. On the one hand, agriculture is one of the sectors most sensitive to climate variations since production relies largely on climatic conditions (Adams et al., 1998; Gornall et al., 2010; Araujo-Enciso et al., 2016). On the other hand, agriculture is one of the sectors responsible for generating non-CO<sub>2</sub> GHG emissions, contributing between 10 and 12% of global anthropogenic emissions (Smith et al., 2014).

Conversely, climate change is also recognised as one of the long-term drivers of agricultural market uncertainty (Blanco et al., 2017). Because the impact of climate change on crop yields varies widely across regions and sectors, international trade adjustments play an important role in counteracting the effects of climate change on agricultural production and, therefore, in alleviating the impact on food security (Baldos and Hertel, 2015; Martinez et al., 2017). Trade openness may allow countries to secure food supplies when facing climate risks. In addition, since distorting support slows down the adaptation efforts, reducing distorting support creates additional incentives for farmers to look for more resilient agricultural systems. Agriculture can also contribute to climate change mitigation by reducing greenhouse gas emissions and increasing soil carbon sequestration while at the same time maintaining food production (Fellmann et al., 2017; Frank et al., 2017).

The EU's progress report shows that advances have been made in decoupling economic growth from emissions (EC, 2016b). During the 1990–2015 period, while greenhouse gas (GHG) emissions (excluding Land use, land-use change and forestry (LULUCF) but including international aviation) decreased by 22 %, GDP grew by 50 %. As a result, the EU's GHG emission intensity<sup>21</sup> declined by almost half between 1990 and 2015. CAP support for climate-friendly agriculture contributed to reducing the EU's emissions, so that by 2015, agriculture-related non-CO2 emissions were 24 % below the 1990 level (EC 2016b).

The CAP 2014–2020 introduced various ways of reducing GHG emissions, such as the greening component of the first Pillar. The CAP's second Pillar also includes measures to reduce emissions, such as supporting farm modernisation to reduce energy consumption and improve input efficiency. However, the impact of greening on GHG emission reductions seems to be minor (OECD, 2017b) and how these CAP measures are influencing environmental quality in developing countries is still uncertain.

<sup>&</sup>lt;sup>21</sup> Defined as the ratio between emissions and GDP.

# 5 Other social and economic effects

#### 5.1 Job creation

Few studies analyse the CAP's effects on employment in developing countries. Cirera evaluates evidence about the impact of tariff reductions on employment in developing countries, concluding that those effects are country and trade policy specific (Cirera et al., 2014). In the medium term, CGE studies suggest non-negative effects of trade liberalisation on aggregate employment and moderate inter-sectoral labour reallocation effects.

Without explicit mention to the CAP, some studies find that domestic support will also negatively influence the development of global agri-food value chains, which can increase opportunities for economic activity due to greater opportunities to access new markets and gains in competitiveness through the use of more efficiently produced inputs. With the increase in economic activity, participation in global value chains may have positive effects on job creation. In a recent study, Greenville finds that non-distorting agricultural support can improve the development of global value chains (Greenville et al., 2017).

# 5.2 Demographic and social change

By using data on irregular migration, Mathews evaluates the CAP's likely contribution to migration pressure on the EU. According to this study, there is evidence of EU border protection limiting export earnings potential for some developing countries, thereby contributing to migration pressure (Mathews (2015). However, more research is needed to find out if the CAP's effects are in any way significant.

Guariso argues that agricultural policies have an urban bias in developing countries, which explains why so much attention has been given to recent price spikes. Higher food prices have induced a shift in (demographic or social) location of poverty effects, leading in turn to changes in development policies (Guariso et al., 2014). Although these authors do not analyse the CAP's impact, their findings are also relevant in understanding how policy instruments that influence global prices will result in divergent effects for the poor amongst urban and rural populations.

Beyond the influence on trade, preferential access may also generate adverse effects in some developing countries. In particular, the EBA initiative that stimulate trade exports to the EU may also result in displacements of local population and negative impacts on livelihood. The report by Equitable Cambodia and Inclusive Development International shows how the EBA initiative promoted a rapid expansion of the sugar sector in Cambodia (Equitable Cambodia, 2013). The government decision to grant large-scale land concessions to private investors for agro-industrial development lead to land evictions and severe impacts on livelihood, affecting hundreds of thousands of people. This report underscores the urgent need for assessment and reform of the EBA scheme.

This is a clear example of insufficient progress towards PCD. While the last PCD report (EC 2015b) recognises the elements that make the CAP more compatible and coherent with the EU's development objectives (i.e. the consolidation of decoupled payments or the end of export subsidies), no critical assessment of the social and food security implications of the EBA scheme is provided.

In principle, the new GSP+, the special arrangement for sustainable development and good governance, provides preferential access for developing countries but conditional on their implementation of international conventions relevant to sustainable development, human rights, labour rights and environmental protection. Eligibility criteria under GSP+ may be an efficient instrument to promote sustainable development avoiding adverse effects for vulnerable population. Several NGOs recommend extending the eligibility criteria also to the EBA initiative.

However, the debate about the convenience of extending conditionality to preferential trade schemes is complex. The mid-term evaluation of the EU's GSP (EC 2017), based on four country case studies, suggest that all four have made progress on a number of social and human rights indicators and conclude that there is no empirical evidence to support the proposition that GSP+ beneficiaries have performed better than EBA beneficiaries.

Since the GSP+ started only recently and many factors influence trade patterns in developing countries, it is soon to make any meaningful judgement about the effectiveness of this scheme to promote sustainable development.

# 6 Implications for the current debate on CAP reform

Debate on the CAP's future after 2020 has already started. This final section gives some general recommendations on how CAP instruments could be further aligned with development goals.

#### (1) Alignment with the global development agenda:

The 2030 Agenda for Sustainable Development establishes the framework to sustainable development by 2030. The EU is committed to contributing to the achievement of the SDGs through its internal and external policies. Regarding external action, the European Consensus on Development – signed in July 2017 – frames the implementation of the 2030 Agenda in partnership with developing countries and in coordination with the implementation of the Paris Agreement on Climate Change.

Future CAP reforms should be aligned with EU commitments to the global agenda on sustainable development, including the SDGs and the Paris Climate Agreement. The future CAP should focus on the agricultural sector's sustainability and pay special attention to efforts made in contributing to the attainment of SDGs. The CAP must not be considered in isolation but coordinated with trade, environmental and development policies. Only by a cross-sector policy approach will it be possible to respond to the challenge of developing a more sustainable and climate-resilient agriculture. In addition, continuous innovation in the agricultural sector is crucial to address the challenges of agriculture in areas such as climate change, resource scarcity and long-term sustainability.

#### (2) Progress in market neutral CAP instruments:

The CAP influences food security in developing countries mainly through its effects on international markets, in regard both to price levels and price volatility. Price level changes will influence the terms of trade in developing countries, with diverging effects for net food producers and net food consumers. Moving towards more market neutral policy instruments, the CAP's impact on developing countries will be attenuated.

Compared with trade policy, the CAP 2014-2020 generates minor impacts on developing countries. Direct payments under Pillar 1 still constitute the bulk of CAP expenditure and make a significant contribution to EU agricultural income. However, these payments are subject to cross-compliance and mainly affect agricultural production's structure in the EU. Any remaining trade-distorting effect from these payments should be kept to a minimum. In particular, the increasing degree of coupled support is of concern. In the future CAP, the VCS scheme should be abandoned or restricted to the most vulnerable sectors. In the latter case, it must be ensured that this system does not create distortions either between the Member States or between the EU and third countries.

On the one hand, it is important that the CAP remains common, ensuring a 'level playing field' for agricultural production at European level. On the other hand, it is important that the CAP allows for more flexibility to implement practices beneficial both for the environment and the climate. The CAP's environmental performance could be enhanced just by giving farmers more flexibility to choose what measures to apply. Reconciling these two objectives may be challenging.

Support instruments addressing price volatility should also look at third-country effects. Proposals to do with the introduction of counter-cyclical payments should be avoided. These risk management instruments have the potential to decrease risk effects within the EU, but at the expense of increasing price volatility on world markets. Instead, instruments stabilising both internal and external markets should be preferred. In this sense, the supply management schemes under the CAP 2014-2020, which help to reduce EU supply during periods of particularly low market prices, in principle attenuate the fall in prices and, therefore, can help to stabilise not only the EU but also international agricultural markets.

Trade plays an increasingly important role in ensuring global food security. In a context of climate change and increased resource scarcity, agri-food trade can play an important role as at least a short-term adaptation strategy. However, agriculture trade rules need to be compatible with the development of climate-resilient agriculture in developing countries. In particular, future CAP proposals should look at the effects of non-tariff barriers on smallholder agriculture in developing countries and the effectiveness of the new GSP scheme to promote food security and contribute to the SDGs.

#### (3) Progress in PCD should be enhanced:

Despite strong progress towards PCD in the last two decades, critical gaps remain. Specific PCD indicators are needed to measure progress. It is evident that the CAP needs to be aligned with SDGs. But we should take into account that other drivers may have even greater influence on the agricultural development pathways followed by Least Developed Countries (i.e. institutional arrangements, agriculture structures, market development). To date, most effort has been made to avoid negative effects of CAP instruments on developing countries, neglecting the search for synergetic policy measures. A more systemic approach to policy design will be desirable, accounting for the complex interactions between sectoral policies as well as EU and third country policies.

The CAP is just one piece of the puzzle; we need to put all the pieces together in order to advance in the achievement of SDGs. This implies an enormous challenge for policy evaluation and monitoring; big data and ICTs could facilitate the transition to result-oriented and coordinated EU policies.

#### (4) Agricultural policy monitoring and evaluation:

A more systematic impact assessment of the CAP's external effects is needed, both ex ante and ex post.

The CAP is continually evaluated for its policy impact. However, while impact assessment of the CAP on EU agriculture is based on a consistent methodology and conducted in a systematic way, the CAP's external effects are just approximated through a review of related studies.

Measuring the CAP's effects on third countries is particularly complex. Advanced assessment tools need to be developed to capture in a better way the complex economic, social and environmental interactions associated with changes in CAP policy instruments. The assessment methodology should involve qualitative and quantitative tools as well as stakeholder analysis. Monitoring the CAP's effects on developing countries is essential in current debate on the CAP post-2020; impact assessment of the proposals should consider the effects on developing countries.

As suggested by the OECD (2017c), SDG indicators could be used to monitor the CAP's external effects. Observing such impact on developing countries is essential in current debate on the CAP post-2020. Proposals to establish a monitoring mechanism have already been made during the last CAP reform by DEVE (2011): 'The implementation of the CAP should be subject to regular monitoring and assessment as regards its impact on food production capacity and long term food security of developing countries, in particular of LDCs'.

To gain insight into the complex interlinkages between sectoral policies (both at the domestic and global levels), a more systemic approach to monitoring and evaluation of agricultural policies is needed. Monitoring and assessment frameworks should be internationally discussed and coordinated. We need to develop initiatives like the FAO's MAFAP programme, which has been working in several developing countries to create sustainable policy monitoring systems. And coordination between the different monitoring efforts should be further promoted. Using SDGs indicators can facilitate the assessment of synergetic and conflicting effects of policy instruments.

Stepping forward in impact assessment of the future CAP will be challenging. Despite notable recent advances on impact assessment tools, most evaluation methods focus at particular sectors or topics.

The big task ahead is to develop a methodological framework capable of evaluating internal and external effects of the CAP in an integrated way, taking into account cross-sectoral feedback and the wide diversity of institutional frameworks of third countries.

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