

Strengthening Policy Coherence for Development in Switzerland

The case of Food Security

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Key messages

Securing the right to food for all requires coherent action across a wide range of policies and at different, complementary levels of governance.

This study offers a critical analysis of the academic and policy discussions in a selection of policy areas with a potentially critical bearing on global food security.

The policy areas under analysis are: i) domestic support; ii) trade; iii) agricultural investment; iv) speculation in commodity markets and biofuels

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The views expressed herein are those of the authors only and should not be attributed to any other person or institution.

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The present study is part of a series on PCD issues, preceded by thematic issues on commodities and trade policy; migration; and tax policy and illicit financial flows. These earlier thematic issues are available via the following link: <http://ecdpm.org/publications/putting-policy-coherence-for-development-into-perspective/>

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Acronyms

AMIS	Agricultural Market Information System
AMS	Aggregate Measurement of Support
AoA	Agreement on Agriculture
ACP	African, Caribbean and Pacific Group of Countries
AU	African Union
BEFS	Bioenergy and Food Security Approach
BIT	Bilateral Investment Treaty
CAADP	Comprehensive African Agriculture Development Programme
CCPs	Central Counterparties
CDI	Commitment to Development Index
CFS	Committee on World Food Security
CGD	Centre for Global Development
CS	Confédération Suisse
CSOs	Civil Society Organisations
CSR	Corporate Social Responsibility
EBA	Everything but Arms
EC	European Commission
EFTA	European Free Trade Association
EIB	European Investment Bank
EMIR	European Market Infrastructure Regulation
EP	European Parliament
EPA	Economic Partnership Agreement
ESMA	European Securities and Markets Authorities
ETUC	European Trade Union Confederation
EU	European Union
FAO	Food and Agriculture Organisation
FASC	Federal Authorities of the Swiss Confederation
FDI	Foreign Direct Investments
FMIA	Financial Market Infrastructure Act
FSB	Financial Stability Board
FTA	Free Trade Agreement
FTT	Financial Transaction Tax
FQD	Fuel Quality Directive
G8	Group of 8
G20	Group of 20
GBEP	Global Bioenergy Partnership
GHG	Greenhouse Gas
GSP	Generalised System of Preferences
HLPE	High Level Panel of Experts on Food and Nutrition Security
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICSID	International Centre for the Settlement of Investment Disputes
ICTSD	International Centre for Trade and Sustainable Development
IFAD	International Fund for Agricultural Development
ILO	International Labour Organisation
ILUC	Indirect Land Use Change
IOSCO	International Organisation of Securities Commissions

ISDS	Investor-State Dispute Settlement
LDC	Least Developed Country
MFN	Most Favoured Nation
MiFID	Markets in Financial Instruments Directive
MS	Member State
NEPAD	New Partnership for Africa's Development
NFIC	Net Food Importing Countries
NGOs	Non-governmental organisations
OECD	Organisation for Economic Cooperation and Development
ÖFSE	Österreichische Forschungstiftung für Internationale Entwicklung
OTC	Over-the-Counter
OTF	Organised Trading Facility
PCD	Policy Coherence for Development
PRAI	Principles for Responsible Agricultural Investment that Respect Rights, Livelihoods and Resources
PSE	Producer Support Estimate
RED	Renewable Energy Directive
RoO	Rules of Origin
RSB	Roundtable of Sustainable Biofuels
SACU	Southern African Customs Union
SDC	Swiss Agency for Development and Cooperation
SDT	Special and Differential Treatment
SPS	Sanitary and Phytosanitary
TFEU	Treaty on the Functioning of the EU
TR	Trade Repositories
TRIMs	Trade-Related Investment Measures
TRQ	Tariff Rates Quotas
UN	United Nations
UNCITRAL	United Nations Conference on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environmental Programme
WDM	World Development Movement
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security
WB	World Bank
WHO	World Health Organization
WTI	World Trade Institute
WTO	World Trade Organization

Executive summary

About this paper

The present study is part of a series on Policy Coherence for Development (PCD) commissioned by the Swiss Agency for Development and Cooperation (SDC) over the last two years. As part of Switzerland's increased efforts to strengthen its PCD strategy and tools, SDC commissioned the European Centre for Development Policy Management (ECDPM) to conduct a study on the Swiss PCD system, its structure and procedures, as well as to do a series of thematic PCD dossiers aimed at mapping ongoing policy discussions and trade-offs within a selection of global development areas. This paper on PCD for food security is part of that latter series, while preceding thematic dossiers focused on commodities and trade, tax policy and illicit financial flows, and migration (Knoll et al., 2013).¹

This report focuses on PCD for Food Security and, although tailored to the Swiss domestic policy context, it offers an overview of the status quo in scientific and policy discussions mainly at the EU and international level. It covers a selection of non-development policy areas with a potentially critical impact on global food prices and/or the food security situation in developing countries. Looking at food security from a PCD perspective, the objective of this literature review is to:

1. identify and discuss the PCD issues associated with the identified policy domains;
2. outline both the scientific and policy discourse on their respective impact on food security; and
3. map the European and international policy responses aimed at addressing the incoherencies and/or their impact. Given the data collection period, policy initiatives up to June 2014 are included in the report.

Building on the PCD agenda's of the EU, the OECD and other relevant actors, the paper is structured around the following selection of policy areas identified in consultation with the SDC:

1. Domestic support in agriculture (Section 2);
2. Trade policies (Section 3);
3. Land grabbing and responsible investment in agriculture (Section 4); and
4. Food price volatility, biofuels and speculation in commodity markets (Section 5)

This is not a comprehensive selection and other policy areas such as fisheries and research are likely to have some type of impact on global food security as well. The selection has been informed by EU and international agenda's related to policy coherence for food security and their relevance for the Swiss context. The policy areas covered play a key role when seeking to improve global food security beyond development cooperation.

Domestic support in agriculture

Agricultural policies in OECD countries can have complex and different effects across developing countries. Even within these countries, effects can be expected to be different between segments of the population. Generally, two channels are widely cited. First, support schemes that maintain high prices on domestic markets and lead to surpluses, which are subsequently dumped on international markets through the use of export subsidies. A second category encompasses policies such as price support and input subsidies that depress world markets, again lowering world prices (Brooks, 2012).

The most harmful types of domestic support include market price support, production quotas and seasonal quotas and coupled subsidy payments. In short they rely on some kind of insulation from world

¹ Additional information on SDC's stance and efforts to promote PCD is available at <http://www.sdc-devpol.ch/>

market prices (through the use of Tariff Rate Quota for example) and/or direct support in the form of subsidies or administered prices. Brooks (2012) suggests that trade distorting support policies often miss their own targets domestically, and could be replaced by social safety nets or tools that help farmers manage risks.

Trade-distorting support has gradually reduced in OECD countries. This is a welcome trend from a PCD perspective, although it is worth noting that these changes are driven by world market tendencies rather than explicit policy changes (OECD, 2013b). This means that should world prices decrease, this trend could be reversed, suggesting a continuing rationale for monitoring developments domestically. Switzerland retains a high level of producer support, three times above the OECD average (OECD, 2013b). The “potentially most distorting support” category of the Producer Support Estimate (PSE) stands at 43% of total Swiss support to its agricultural sector – a high figure that has been gradually declining.² Aerni et al (2011) argue that Switzerland could move to a less trade distorting agricultural policy while still supporting its farming sector by replacing financial support to farmers with support in the form of research and “coaching” by the federal government. They argue that the high level of support from the Swiss government is a function of social preferences towards a multifunctional view of agriculture, but note that current instruments are a reflection of sectoral interest groups.

At the multilateral level, agricultural subsidies have been a contentious issue ever since the inception of the world trading system. They are currently regulated under the WTO’s Agreement on Agriculture (AoA), which has the long-term objective of ‘securing substantial progressive reductions in support and protection’. From a PCD perspective, the AoA is in essence the only binding tool that governments use to manage, monitor and gradually reduce the negative externalities that their policies have on each other.

A distinction between developed and developing countries is made under the AoA, in line with the Special and Differential Treatment (SDT) principle. Contention continues to exist on the level to which SDT should be applied and to which countries. Under the current rules, few developing countries are near their limit on permitted trade-distorting domestic support, but there are cases of particular countries and particular commodities where the boundaries are hit (e.g. in the case of India). Many developing countries therefore argue that the existing flexibility in the AoA does not go far enough, for example when it comes to clarifying the extent to which green box policies, which are allowed without limits because they are considered to not or only minimally distort trade, are indeed “least trade distorting” (see ICTSD, 2009). De Schutter (2011) also contends that Green Box-compatible policies are not reflective of the needs of developing countries and calls for further reflection as to what type of policies of potential use to developing countries’ food security efforts might need to be included in the Green Box.

Trade Policies

- **Market Access for developing country agricultural exports.** The Generalised System of Preferences (GSPs) is the main way many developing countries access developed countries’ markets. Preference giving countries are however largely free to decide what products are included in their GSP schemes and how they are treated. From a PCD perspective, it is therefore important to monitor the nature of the agricultural goods excluded under these schemes, and advocate for their inclusion under the GSP.

² Potentially most trade distorting support is defined by the OECD as “payments based on output and variable inputs use without input constraints”.

Private and public standards are amongst the greatest barriers faced by developing countries' agricultural exporters.³ Goodison (2014) identifies, inter alia, the minimum standards applied, the frequency and duration of inspections and the costs of those inspections as a major constraint for ACP agricultural exports to the EU. Unlike under recent bilateral Free Trade Agreements (FTAs), GSP schemes do not include provisions for dialogue on these standards and countries are largely free to set the level of standards they deem fit, provided they do not constitute "hidden" forms of protections and that they are based on scientific principles. The FAO's and WHO's Codex Alimentarius indirectly sets the global norms and standards when it comes to Sanitary and Phytosanitary (SPS) standards. Further, in order to promote transparency and reduce trade disruption, new standards are to be notified to the WTO's SPS committee. Finally, private standards, such as the ones used by retail chains in the EU, have come to the fore in recent discussion at the WTO. Members have tried to address the topic by coming up with a definition of what these standards entail, yet according to the WTO, these have so far been largely unsuccessful.⁴

- **Developing country protection from agricultural imports.** Using agricultural protection measures as a development tool is controversial in the sense that protection can prove ineffective and counterproductive since there is no guarantee that supply will pick up in response to an increase in demand for local produce resulting from increased protection. However, provided that protective measures are used as part of an overall agricultural development strategy it can prove to be a powerful tool for agricultural development. Introducing time-bound protection measures combined with supply side interventions can therefore be a legitimate policy choice (Alpha et al, 2006). The issue from a PCD perspective is therefore to ensure that during multilateral and bilateral trade negotiations, developing countries retain some leeway in setting their tariff levels. This includes special agricultural safeguards, import licensing arrangements, Tariff Rate Quotas, variable and seasonal tariffs. This would require an analysis of potential competitive threats to the productive agricultural sectors of negotiating developing countries. Such an assessment for bilateral agreements would have to be done on a case-by-case basis, taking the negotiating partner's concerns and domestic priorities into account.
- **Multilateral disciplines on agricultural export restrictions.** Poor, net-importing developing countries are particularly at risk of suffering disproportionately from the effects of export restrictions. From a short-term national point of view, export restrictions can make sense as a temporary emergency measure, to be lifted once international prices return to their "normal levels" (Anania, 2013). In an international context however, they drive up international prices and increase volatility (see FAO et al, 2011). Moreover, once a large exporter implements export restrictions, there are strong incentives for others to follow suit. There currently is an apparent lack of strong multilateral discipline in this regard. Switzerland proposed at the WTO the elimination of all export restrictions on agricultural products and the binding at zero of all export tariffs (with a flexibility clause for LDCs). This is praiseworthy, as current disciplines on export restrictions do not cover export taxes and the language permitting the use of other kinds of restriction can be interpreted very widely. Anania (2013) concludes that an agreement outside of the WTO framework would lack enforceability, though Bureau and Jean (2013) point out the lack of political will to come to such an agreement on the use of export restrictions. At the level of the G20, the strongest commitments

³ Rules of origin, in the case of processed products can be an issue as well but they are generally regarded as less detrimental to agricultural exports since agricultural products are almost by definition originating from the exporting territory.

⁴ http://www.wto.org/english/news_e/news14_e/sps_25mar14_e.htm

were taken in 2011 when the Summit in Cannes announced that G20 governments would work towards the exemption of goods destined to the World Food Programme (WFP) from export restrictions.

Land grabbing and responsible investment in agriculture

There is conflicting evidence about how FDI affects food security. Studies like Wimberley (1991) and Mihalache-O’Keef & Li (2011) show a negative impact of FDI in the agricultural sector on food security through increase in food prices and decline in domestic food supply as it crowds out domestic farms/firms and many foreign investors focus on production for exports, while an FAO simulation for Sub Saharan Africa (Rakotoarisoa, 2011) shows that this will be compensated by increases in factor returns and employment, thus effectively increasing net income and food consumption.⁵

The issue of ‘land grabbing’ has become one of the most contentious aspects of agricultural FDI. Lack of reliable, detailed information and the variety and complexity of FDI-related land acquisitions means however that impact assessments have so far mainly relied on case studies. FAO (2013b) case studies found evidence that FDI in specific cases contributes to increases in agricultural production and yields, diversification of crops and the adoption of higher standards. World Bank (2010) case studies however have demonstrated that in many instances foreign investments involving large-scale land acquisitions have contributed to loss of livelihoods. Problems have included displacement of local people without proper compensation and, similar to the FAO case studies, generation of negative environmental externalities. While evidence is inconclusive, case studies show that impacts are diverse and depended on a range of factors related to the policy context and business models used.

Land management and the role of host and source governments is critical in this regard. Governments can design and implement policy measures to promote sustainable business conduct (supply side), inform and incentivize citizens to adhere to sustainable consumption patterns (demand side, indirectly informing investment decisions) and monitor progress. How FDI works for global food security roughly hinges on the following three issues:

- **Compliance with social and environmental standards.** This includes general international efforts and initiatives to encourage multinationals to adhere to CSR principles such as the UN Global Compact, launched in 2000 to advance sustainable business models and markets, the UN Guiding Principles on Business and Human Rights endorsed in 2011 and the OECD Guidelines for Multinational Enterprises first adopted in 1976 and last updated in 2011. More specific regulatory frameworks seek to guide investments particularly along agricultural value chains. A UN Inter-Agency Working Group composed of FAO, UNCTAD, IFAD and the World Bank have jointly developed the Principles for Responsible Agricultural Investment that Respect Rights, Livelihoods and Resources (PRAI) in 2010 and 2011. The United Nations Committee on World Food Security adopted in 2012 the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT). Building on the PRAI and VGGT, the Committee on World Food Security is currently in the process of developing Principles for Responsible Agricultural Investment in the Context of Food Security and Nutrition. Underlying contentious issues in the negotiations are divergent views on i) the impact of different types of agricultural investments (large-scale investments versus smallholders) and ii) the role of the state (limited to creating an enabling environment or a more interventionist approach to support smallholder investments). Ways for Switzerland and others to promote the application of the

⁵ The FAO study makes no differentiation among household groups.

principles and CSR more broadly are to (i) raise awareness among companies and other stakeholders; (ii) strengthen monitoring and complaints mechanisms by assessing the (aggregate) impact of foreign agricultural investments on third countries and imposing stricter reporting requirements for transnational companies on non-financial indicators); and (iii) lead by example by ensuring that public procurement procedures require respect for human rights and certain environmental, social and fiscal standards, and asking the same of state companies and companies receiving state support when venturing abroad (e.g. state guarantees).

- **Host countries' policy space versus foreign investor protection.** Investment provisions under Free Trade Agreements (FTA) and Bilateral Investment Treaties (BIT) generally guarantee certain standards of treatment for foreign investors. If not designed with appropriate safeguards, this can constrain the host countries' policy space to regulate investments and to impose measures that it deems necessary to pursue food security objectives. As a result of the failure of the multilateral system under the WTO Agreement on Trade-Related Investment Measures (TRIMS Agreement) to address these issues it is primarily left to bilateral FTAs and BITs. According to Concord, many bilateral investment agreements are biased in favour of investors' rights (e.g. CONCORD, 2012) while others have made claims that international investment protection standards often constrain host states' regulatory powers (see for example ETUC 2013; Heri et al 2011). The 2012 EC Communication on Trade, Growth and Development reveals in this sense the EU's intention to improve FDI-related instruments in EU FTAs to help build an enabling environment for business, while preserving 'the right of countries to regulate and to enter limitations and restrictions' (EC, 2012b). There is a window of opportunity here to strengthen the development dimensions (incl. food security), increase attention for policy space and ISDS procedures in new investment agreements in Switzerland and beyond. Between 2014 and 2018, at least 350 BITs worldwide will reach the end of their initial duration (UNCTAD, 2013b).
- **Public-private collaboration for food security.** Governments increasingly engage with international business directly to leverage private sector activity for development objectives. In line with this trend, the Busan Partnership for Effective Development Cooperation in 2011 called for more public-private collaboration. In the same vein, the 2012 EU 'Agenda for Change' stresses the need to develop new ways of engaging with the private sector to increase the impact of EU development cooperation (Council of the European Union, 2012). The European Commission has issued a communication in May 2014 that further clarifies how this will be operationalized. One example of private-public collaboration for food security is the New Alliance for Food Security and Nutrition, which emanated from the G8 Camp David Summit in May 2012. A question that is heavily debated however, is the extent to which the New Alliance effectively contributes to sustainable development and food security. The NGO Alliance of Food Sovereignty in Africa, among many other African and European critics, has scrutinized the New Alliance in this regard and concluded that governmental pledges under the cooperation frameworks are skewed towards the interests of international and large-scale businesses, including land-law revisions to facilitate long-term land leases for commercial investors and easing of tax laws.⁶

⁶ For an overview of host country reform commitments under the G8 New Alliance framework, please see: <http://www.theguardian.com/global-development/interactive/2014/feb/18/g8-fight-future-african-farming-interactive>

Food price volatility: speculation in commodity markets and biofuels

Price volatility is to some extent natural to agricultural markets, due to climatic shocks and market fluctuations. Over the past decade however, food prices started to increase dramatically, and have become increasingly volatile. This persistence of high and volatile prices shows that different driving factors are at work simultaneously though the relative weight of these factors remains subject to discussion. The UN's High Level Panel of Experts on Food and Nutrition Security (HLPE) identified in 2011 three causes for international food price volatility, notably trade policies (see Section 3), speculation and demand elasticity, the latter mainly induced by increased worldwide demand for agro-fuel crops.

- **Speculation in commodity markets.** There is no academic consensus regarding the correlation between increased speculation and food price volatility. On the one hand, there are analytical studies and literature surveys that find little scientific evidence that increased speculative capital in commodity futures markets impact on spot prices in the mid to long term (Ederer et al. 2013; Heumesser and Staritz, 2013; Meijerink et al., 2011; Shutes and Meijerink, 2012). On the other end of the academic spectrum, researchers argue the increasing domination of financial, rather than commercial, actors in agricultural commodity markets increases the likelihood of excessive short-term price fluctuations, which increasingly diverge from the actual spot market price (Cordier and Gohin, 2012; Henn, 2013; Lagi et al, 2011; UNCTAD, 2012).

At international level, the G20 has so far been the most active body for discussion on commodity market regulation. In 2008, the International Organisation of Securities Commissions (IOSCO) set up a Special Task Force on Commodity Futures Markets following the public debate on price surges in commodity markets. In September 2011, the IOSCO Task Force presented a report with Principles for Commodity Derivatives Regulation and Supervision, responding to the G20's 2010 request at the Seoul summit to provide it with insights on what a global regulatory framework for commodity derivative markets could look like. The G20 summit in Cannes then endorsed the recommendations from both the IOSCO report as well as from a G20 Study Group on Commodities.⁷ Also, the 2011 summit led to the establishment of an Agricultural Market Information System (AMIS), an inter-agency platform to contribute to enhanced food market transparency and encourage better coordination of responsive measures to market uncertainty. It is the mandate of the Financial Stability Board (FSB) to oversee and coordinate the translation of the G20's agreed commitments into national regulations. In its 2013 report on the overall implementation record, the FSB notes mixed progress in the overall implementation of the proposed reforms on OTC derivative trading with most progress in the area of improving reporting and transparency (FSB, 2013b).

Reform initiatives in the EU and the US have focused on improving transparency and reporting, regulating Over The Counter (OTC) trade, establishing position limits and, to a lesser extent, the strengthening of regulatory bodies' intervention powers. Staritz and Küblböck (2013) however suggest that despite significant steps in the right direction, the G20 commitments and regulatory efforts by the EU and the US, or Switzerland for that matter, still lack important provisions to effectively address the impact of commodity speculation on global food security.

- **Biofuels and food prices.** There is little to no doubt that demand for biofuel feedstock drives up food prices in international agricultural markets (Zilberman et al. 2012). Although monitoring the net overall effect of biofuels production on world food prices is complex and blurred by the use of

⁷ <http://www.cmegroup.com/education/files/G20Nakaso-November202011.pdf>

different statistical models, it is widely recognised that the rising demand for biofuels drives up food prices and price volatility because:

- i) crops used for biofuels reduce the availability of these crops as food or feed;
- ii) mandate induced demand is inelastic and adds to price volatility;
- iii) rising oil prices constitute an opportunity gain for key food- or flex crops;
- iv) financial investments in basket funds with both agricultural commodities and fuel shares enhance the correlation between food and energy markets.

Policy discussions on biofuels have primarily focused on concerns related to environmental sustainability, rather than on food security or food prices. Yet tentative steps have been taken, to curb the impact of biofuel mandates on food prices. In 2011, ten intergovernmental organisations, including the OECD, FAO, WB and the WTO, issued a landmark report on Price Volatility in Food and Agricultural Markets. Regarding the role of biofuels, the report concludes that 'biofuel production will exert considerable upward pressure on prices in the future' and recommends G20 governments to remove any provisions that subsidize or mandate biofuels production or consumption.

The EU and the US, respectively the world's largest consumer and producer of biofuels, have both set in motion a reform process to **cap the use of food-based biofuels** at their current levels. In the US, this has to do with an approaching ceiling, the 'blending wall', on corn ethanol within the current rules and the current inability of second-generation biofuels to replace their projected share in the energy market. In the EU, the European Parliament was deeply divided in its voting on the proposed revision of the Renewable Energy Directive (RED) in September 2013. The result was a tentative victory for environmentalists on binding Indirect Land Use Change (ILUC) factors yet the proposed 5% cap on first generation biofuels was raised to 6 %. At EU Council level, European ministers for energy however failed to agree on a compromise deal, and have not pinned down a new timing to discuss the proposal once again, effectively pushing any decision on a revision of the EU's biofuels policy into the indefinite.

In conclusion, this paper shows how abrupt rises and increasing volatility of food prices and the subsequent deterioration in food security conditions in many parts of the world have triggered a better understanding of the structural principles and mechanisms underpinning the functioning of global food markets. The fragility of the global food system points in this sense to a deepening integration of agricultural, financial and energy markets. It is against this context that the idea of the 'right to adequate food' has gained ground as a conceptual tool to rethink our understanding of food security and what it entails for the different actors involved. Realizing the right to adequate food for everyone demands a crosscutting, holistic approach to address multiple challenges across the different dimensions of food security. This entails coherent action by all actors involved, across a wide range of policies and at different complementary levels of governance. Moreover, improving the right to food in developing countries may require policy reforms in middle- and high income countries since food security challenges in the global south can be directly connected to (the implications) of (a lack of) policy measures in developed countries. While many actors in the developed world have committed themselves to improve policy coherence for development, much remains unclear as to what this implies in the case of specific policy dossiers. Scientific considerations, as well as a wide range of economic and political interests all weigh in on the policy debates that ultimately contribute to the state of food security in developing countries.

1. Introduction

The State of Food Insecurity flagship report by the FAO estimates that over the period 2011- 2013 around 842 million people, or one out of eight worldwide, suffer from chronic hunger. This number is gradually decreasing, and developing regions overall have witnessed significant progress toward the Millennium Development Goal 1 of halving the world's hungry between 1990 and 2015. Despite overall progress however, food security remains a major global challenge and progress is mixed and subject to marked differences across regions. Such different progress rates have translated in changes in the distribution of food insecurity in the world, with the majority of undernourished people living respectively in Southern Asia, Sub-Saharan Africa and Eastern Asia. Regarding malnutrition, 2.6 million children per year still die from an inadequate intake of nutrients, causing stunting and wasted growth. This is particularly the case in Sub-Saharan Africa where an estimated one out of five people is malnourished (FAO, 2013a).

The abrupt rise and volatility of food prices between 2007 and 2008, and the deterioration in food security conditions in many parts of the world showed the vulnerability of the world food system. A second wave of food price surges only deepened this sense of acknowledgement that the principles and mechanisms underpinning the functioning of global food markets are flawed. The fragility of the global food system, particularly in the face of sudden shocks, also pointed to the deepening integration of agricultural, financial and energy markets while more structural challenges like climate change and population growth add to the vulnerability and raise questions about the overall sustainability of the food system (Wise and Murphy, 2012). It is in this context that the idea of the 'right to adequate food' has gained ground as a conceptual tool to rethink our understanding of food security and what it entails for the different actors involved.⁸ Considering food security as a human right implies a shift to the proposition that 'each individual must be granted a remedy if his or her right to food is violated'. For policy makers, this entails a duty against which they can be held accountable (De Schutter, 2009).

The paradigm shift and renewed attention for food security and agricultural development includes a growing awareness that realizing the right to adequate food for everyone **demands a crosscutting, holistic approach** to address multiple challenges across the four dimensions of food security: availability, access, utilisation and stability. This entails coherent action by all actors involved, across a wide range of policies and at different complementary levels of governance. Moreover, improving the right to food in developing countries may require policy reforms in middle- and high income countries since food security challenges in the global south can be directly connected to (the implications) of (a lack of) policy measures in developed countries (De Schutter, 2014).

From a donor-perspective, the concept of Policy Coherence for Development (PCD) is aimed at addressing this interdependence. It is about ensuring that no policies – be it for agriculture, trade, energy or tax etc. – should hamper the achievement of its international development goals, including, in this particular context, the fulfillment of peoples' right to adequate food. Ideally, donors' development and other policies should support one-another and in case the latter impedes the first, then the non-development policy is to be altered. A 2013 OECD report on PCD and Global Food Security highlighted the pivotal importance of PCD

⁸ The right to food has been recognized as a human right in many binding and non-binding legal instruments since it was first established in 1948 as part of Article 25(1) of the Universal Declaration of Human Rights. Of all these documents, Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) of 1966 presents the most important specification of the right to food: "The States Parties [...] recognize the right of every one to an adequate standard of living [...] including adequate food." As regards its definition, the Committee on Economic, Social and Cultural Rights (CESCR) in its General Comment No. 12 defines the right to food as being "realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement". Source: Heri, S. et al. 2011.

in combatting world hunger. It identifies ways in which developed countries can address policy incoherencies, avoid negative spillovers and make optimal use of potential synergies to make PCD work better for development in the area of food security. Trade, investment, biofuel mandates and agricultural support are among the identified areas of concern for policy coherence for food security (OECD, 2013a).

At the EU level, the PCD Work Programme 2010 – 2013 (EC, 2010a) and related conclusions of the Foreign Affairs Council in 2009 (EC, 2009), 2012 (EC, 2012a) and 2013 (EC, 2013a) have identified food security as one of the key development objectives for proactive PCD action. The relevant EU policy areas for food security as identified in the PCD Work Programme are i) agricultural policy; ii) trade; iii) research and development and innovation; iv) biodiversity; v) land use and the impact of bioenergy production; and vi) fisheries policy. Despite such targeted prioritisation and the many institutional mechanisms in place, many challenges remain for the EU to better align its different interests with the declared food and nutrition security objectives (Engel et al., 2013). UN Special Rapporteur on the Right to Food Olivier De Schutter has been a vocal advocate for PCD in the area of food security. He has been calling on the EU, as well as other international actors, to ensure that their policies contribute to, rather than hamper, food security and smallholder interests in developing countries. In this regard, De Schutter engaged particularly in discussions on price volatility, commodity market regulation and agricultural support and protection mechanisms.⁹

Building on the policy areas identified by the actors mentioned above, and in deliberation with the Swiss Agency for Development and Cooperation (SDC), it was agreed to focus this study on the following policy areas for analysis:

- Domestic support in agriculture (Section 2);
- Trade policies (Section 3);
- Land grabbing and responsible investment in agriculture (Section 4); and
- Food price volatility, biofuels and speculation in commodity markets (Section 5).

An overview table summarizing the relevant PCD issues and related European and international initiatives in these policy areas is included in Annex 2.

This report presents the results of a literature review of key state-of-the-art studies and policy documents on how these non-development policy areas can affect global food prices and the food security situation of a partner country. Looking at food security from a Policy Coherence for Development (PCD) perspective, the aim of the overview is to i) identify and discuss the PCD issues associated with these policy domains; ii) outline the scientific and policy discourse on their respective impact on food security; and iii) map the European and international policy responses aimed at addressing the incoherencies and/or their impact. Given the data collection period, policy initiatives up to June 2014 are included in the report.

The paper focuses predominantly on policy discussions at EU and international level, and not on specific issues of the Swiss policy debate. Efforts were made however to use a Swiss perspective in identifying relevant discussions and policy alternatives. This should allow the analysis to inform internal SDC discussions and enrich the Swiss political debate on the coherency issues associated with global food security.

Please note that the selection of policy areas is not comprehensive. Policy initiatives in other policy areas such as fisheries and research can also impact on global food security. The authors, in collaboration with SDC, had to make choices in terms of breadth and depth, to fit the time and resources available for this study. The choices have been informed by EU and international agenda's related to policy coherence for food security and their relevance for the Swiss context.

⁹ <http://www.srfood.org/en>

2. Domestic support in agriculture

Agricultural policies concern the policy measures used by governments to modify the economic, environmental and social framework in which agricultural production takes place. Agricultural policies in **OECD countries** have long been a topic of concern because of the negative impact they can have on developing countries' agricultural producers (see for example Matthews, 2005). Not all agricultural policies in OECD countries have negative spill over effects, but those that do have complex and differentiated effects on different developing countries. Even within these countries, effects can be expected to be different between segments of the population. Generally, two channels are widely cited: first, support schemes that maintain high prices on domestic markets and lead to surpluses which are subsequently dumped on international markets through the use of export subsidies. A second category encompasses policies such as price support and input subsidies that depress world markets, again lowering world prices (Brooks, 2012).

It is important to note that developed countries and developing countries support their agricultural sectors with different tools, with varying and differentiated levels of negative spillovers to the outside world (see OECD 2013b for an overview). The most harmful types of interventions include market price support, production quotas and seasonal quotas and coupled subsidy payments (see Box 1 for illustrations). In short they rely on some kind of insulation from world market prices (through the use of Tariff Rate Quota for example) and/or direct support in the form of subsidies or administered prices. Switzerland maintains an exceptionally high usage of these tools, including one of the most trade distorting ones (OECD, 2013b)

Box 1: Agricultural support instruments in OECD countries.

Coupled payments are granted to farmers if they produce a specific commodity associated to the payment. As such, their aim is to promote the production of particular commodities by making the profitability of their production dependent not only on their market price, but also on the associated amount of payment. Coupled payments thus encourage production, and may lead to overproduction, bringing down world food prices. Reducing them could benefit exports and farmers' income in many developing countries.

Decoupled or direct payments remove the link between a payment and the production figures of a specific commodity and are therefore believed not to influence production decisions. Generally, countries move from coupled to direct payments in order to give farmers the freedom to produce according to market demand and reduce distortions. Whereas decoupled payments are indeed less trade distorting, they still form an incentive for non competitive farmers to stay in the industry, thus maintaining artificial levels of production and land use for farming,

Export subsidies are calculated to make up the difference between domestic prices and lower world market prices. They depress world markets, and engender unfair competition for other agricultural producers on their own or on third markets.

Production quotas are limitations on the amount of a product that can be placed on the market. They are used in conjunction with import quotas, which restrict the access that third countries enjoy to the Swiss market. Swiss quotas on meat and meat products for example are auctioned off on a yearly basis and are prohibitive even for the most competitive African meat exporters (Hoffman, 2014).

Support to the agricultural sector in OECD countries has been the focus of intense attention and negotiations over the last decades. These most trade distorting policy tools are subject to limits at the multilateral level (or reduction commitments). Generally speaking, support to the agricultural sector is also subjected to regular monitoring by the OECD and the WTO.¹⁰

¹⁰ Through, for example, WTO trade policy reviews or Switzerland's own notifications to the WTO.

Since different types of domestic support to agriculture are characterized by strong externalities in the way they impact trading partners, they are subject to disciplines at the multilateral level through the **WTO's Agreement on Agriculture (AoA)** (WTO, 1995). One of the objectives of this multilateral agreement is to limit the policy space of its various members to apply such tools, in order to minimize these externalities, while at the same time being conscious of the legitimate objectives these policy tools serve domestically. Generally, the end goal of these agreements and negotiations is to move towards types of support that have less of an impact on third countries.

Various policy discussions are relevant from a PCD perspective, ranging from the domestic level, such as the reform leading to Switzerland's *Politique agricole 2014-2017*,¹¹ to the multilateral level, e.g. the WTO Doha round's agriculture negotiations. The aim of monitoring domestic level discussion would be to advocate for forms of support that are least trade distorting. Monitoring multilateral level discussions should ensure that the governance framework limiting the use of harmful types of domestic support (such as those listed in the Amber and Blue boxes¹²) is strengthened, while allowing developing countries to take measures in support of their own agricultural producers through so-called Special and Differential Treatment (SDT) provisions.

2.1. Advocating for development-friendly domestic support

OECD domestic support policies can negatively impact the food security situation in developing countries, inasmuch as they have an impact on international markets (Brooks, 2012). Not all types of domestic support fit this category, but those that do are widely considered to have negative effects on the relative competitiveness of developing countries' producers. The direction of impact depends, among other factors, on the trade profile of the country and its relationship with the OECD Market in question. Net Food Importing Countries (NFICs), for example, generally benefit from lower international prices because their food security situation is highly sensitive to price fluctuations at international level. Naturally these effects differ in extent depending on the commodity and target group at hand.

There are several ways of gauging the overall amount of domestic support countries provide to their producers: WTO members' submissions to the WTO's Committee on Agriculture, and the OECD's Producer Support Estimate (PSE) are considered the main ones. The PSE has the advantage of aggregating various support tools and measures in a single indicator.¹³ The information provided to the WTO on the other hand, mainly monitors the compliance with multilateral commitments, and is as such less suited to gauge the overall scope and extent of an external effect of domestic support.

Generally speaking, trade-distorting support has gradually reduced in OECD countries (Brooks, 2012). This is a welcome trend from a PCD perspective, although the OECD report notes that these changes are driven by world market tendencies rather than explicit policy changes (OECD, 2013b). This means that should world prices decrease, this trend could be reversed. This suggests a continuing rationale for monitoring developments domestically.

¹¹ <http://www.blw.admin.ch/themen/00005/00044/01178/index.html?lang=fr>

¹² http://www.wto.org/english/tratop_e/agric_e/negs_bkgnd13_boxes_e.htm

¹³ Note however that the PSE includes indicators on border protection measures. It therefore includes elements of trade policy and market access described in the section below. <http://www.oecd.org/tad/agricultural-policies/producerandconsumersupportestimatesdatabase.htm>

Switzerland retains a high level of producer support, three times above the OECD average (OECD, 2013b). The “potentially most distorting support” category of the PSE stands at 43% of total Swiss support to its agricultural sector – a high figure that has been gradually declining.¹⁴ Switzerland ranks as one of the worst performers in the Centre for Global Development’s (CGD) Commitment to Development Index (CDI) when it comes to trade-distorting farm subsidies. Switzerland’s move from market price support - generally considered as trade distorting because of the associated market access implications - to direct payments, decoupled from production, is seen as positive. The new agricultural policy adopted in 2014 reinforces the trend towards direct general payments – although it stops short of overhauling many negative aspects of Swiss agricultural policy such as remaining production related direct payments and price support (see WTO, 2013).

Currently, Switzerland supports 19 agricultural commodities through coupled or decoupled payments or administered prices.¹⁵ And although Switzerland has discontinued the use of export subsidies in 2010, export refunds are still provided for in the Swiss legal framework. While Switzerland is currently in the process of drafting and introducing a new agricultural policy, the WTO concludes that it “does not signal a change towards more market-orientation of Swiss agricultural policy” and that “most of the direct payments will continue to have a close link to production and livestock rearing” (WTO, 2013).

Aerni et al (2011) argue that Switzerland could move to a less trade distortive agricultural policy while still supporting its farming sector by replacing financial support to farmers with support in the form of research and “coaching” by the federal government. They argue that the high level of support from the Swiss government is a function of social preferences towards a multifunctional view of agriculture, but note that current instruments are a reflection of sectoral interest groups. Taking the example of New Zealand’s agricultural policy reform in the 1980s, sectoral support for such reforms can come from a wish to put the farmers back at the center of economic decision making, and by having the government providing them with the tools to optimize their business choices. Brooks (2012) suggests that trade distorting support policies often miss their own targets domestically, and could be replaced by social safety nets or tools that help farmers manage risks.

2.2. Multilateral disciplines on domestic support

Agricultural subsidies have been a contentious issue at the international level ever since the inception of the world trading system. It is currently regulated under the WTO’s Agreement on Agriculture (AoA), which has the long-term objective of ‘securing substantial progressive reductions in support and protection’. From a PCD perspective, the AoA is in essence the only binding tool that governments use to manage, monitor and gradually reduce the negative externalities that their policies have on each other.

For this purpose, the AoA contains domestic support reduction commitments. It determines that the ‘Total Aggregate Measurement of Support’ (AMS)¹⁶ is to be reduced by 20% by developed countries and by 13.3% by developing countries, while no reduction is required for LDCs. Domestic support measures that have little to no impact on trade, labelled ‘green box policies’, are excluded from the AMS calculation, and

¹⁴ Potentially most trade distorting support is defined by the OECD as “payments based on output and variable inputs use without input constraints”.

¹⁵ These are: milk and milk products, wheat, maize, barley, oats, sugar beet, oil seeds, bovine meat, meat of swine, poultry, eggs, potatoes, cider apples, tobacco, grapes, wool, rape seeds and soya beans. See WTO Document G/AG/N/CHE/47, 49 and 55/ Rev. 1.

¹⁶ The AMS is calculated by multiplying the difference between market price and support price by the quantity procured.

thus from reduction commitments. This concerns policies in areas such as research, disease control and food security. In addition to the green box policies, other criteria for exemption have been determined, such as support that makes up only maximum 5% (developed countries) or 10% (developing countries) of the value of production of individual products or, in the case of non-product-specific support, the value of total agricultural production.¹⁷

The AoA indeed makes a distinction between developed and developing countries in line with the Special and Differential Treatment principle. Developing countries are required lower reduction percentages and allowed longer implementation periods for domestic support reduction commitments. Within the group of developing countries, LDCs are fully exempted from domestic support reduction commitments. However, contention exists on the level to which SDT should be applied and to which countries. Under the current rules, few developing countries are near their limit on permitted trade-distorting domestic support, but there are cases of particular countries and particular commodities where the boundaries are hit (such as India). Therefore, many developing countries argue that the existing flexibility in the AoA does not go far enough.

There has been controversy for example on the extent to which green box policies are indeed “least trade distorting”, and it appears important to clarify and address these concerns (see ICTSD, 2009). De Schutter (2011) also contends that Green Box-compatible policies are not reflective of the needs of developing countries insofar as “policies and services related to farmer settlement, land reform programmes, rural development and rural livelihood security in developing country Members, such as provision of infrastructural services, land rehabilitation, soil conservation and resource management, drought management and flood control, rural employment programmes, nutritional food security, issuance of property titles and settlement programmes, to promote rural development and poverty alleviation” might not be eligible for Green Box treatment. He calls for further reflection as to what type of policies of potential use to developing countries’ food security efforts might need to be included in the Green Box.

De Schutter (2011a) also advocates for making more space for tools such as food reserves and marketing boards in order to allow the state to intervene in agricultural markets. These recommendations are far from consensual and came to the fore during the Bali ministerial meeting in 2013 where India sought to relax WTO rules in order to be able to run its domestic food stockholding program. It is to be noted that from a food security perspective, there is no easy answer to this case. On one side of the debate De Schutter (2011) and others contend that such schemes are crucial in order for national governments to achieve the “right to food” while other WTO members argue that relaxing rules on potentially trade distorting support could have the effect of allowing larger developing countries to destabilise world markets, at significant cost to other vulnerable countries.

Such views and negotiating positions are indeed apparent in the longstanding Doha Development Round of WTO negotiations, which will alter the AoA provisions on domestic support. As indicated above, in the most recent WTO ministerial conference in Bali in December 2013, agriculture and more specifically agricultural subsidies proved once again to be a very contentious subject. The negotiators managed to cover agriculture in the ‘Bali package’ that was agreed, but only after India was allowed a waiver for its agricultural subsidy programme for food security considerations. Post Bali, it remains to be seen what permanent solution will be found for India’s waiver and, more broadly, what steps will be taken to curb agricultural subsidies detrimental to international development, while keeping some flexibility for food security considerations when needed.

¹⁷ The 5% limit applies to developed countries, developing countries face a 10% limit.

3. Trade Policies

Trade policy has a strong bearing on the agricultural sector. From a PCD and food security perspective, three aspects are particularly important: i) the extent to which developed country markets are open to agricultural exports from developing countries, ii) the extent to which developing countries have enough policy space to tackle the specific challenges faced by their respective agro-food sectors and iii) the extent to which export restrictions are regulated at the multilateral level.

Access by developing countries to developed countries' markets should be the focus of a PCD analysis/monitoring, because the easier the access to foreign markets, the more producers and exporters in developing countries will be able to expand production, attract investment in the agricultural sector and generate employment and income. Access issues include tariff, and, importantly, non-tariff barriers such as standards or, to a lesser extent, rules of origin (for processed agricultural products). Private standards are also becoming an increasingly important factor in de facto determining access to developed country markets, but since they are privately run there is less leeway for governments to influence them.

Secondly, providing a measure of protection to the agricultural sector can – under specific circumstances and provided other measures to address supply side constraints are taken – prove to be a useful policy tool for agricultural development and food security. Developing country governments should therefore be able to impose a reasonable measure of protection on some sectors should they wish to do so, as part of a broader effort to boost domestic agricultural production. The general aim of these efforts is to boost local demand for locally produced products – shifting rents from consumers to producers. These efforts are likely to fail and have negative consequences on food security if not accompanied by broader efforts to tackle supply side constraints and improve the business environment (see Alpha, 2006). Specific policy processes to follow in this regard are bilateral trade agreements and multilateral liberalization efforts. De Schutter (2011b) also calls for human rights impact assessments of trade (and investment) agreements to ensure states will not make demands or concessions that will make it more difficult for them, or for other party or parties, to comply with their human rights obligations. Burgi (2014), for her part, concludes that current EU impact assessments do not adequately address human rights dimensions.

Thirdly, export restrictions put in place by major agricultural exporters in the form of taxes, bans or quotas have been criticized as particularly harmful policy measures in times of food price hikes. Developing countries dependent on food imports are particularly affected by the use of these measures. Current disciplines on the use of export restrictions are widely considered as being insufficient (Anania, 2013).

3.1. Market Access for developing country agricultural exports

Developed countries still maintain a high level of protection on their agricultural sectors. For Switzerland, the average Most Favoured Nation (MFN) tariff stands at 31.9% in the agricultural sector, which is, significantly higher than protection in other sectors (WTO, 2013). Commitments to reduce these rates have been made at various occasions, most notably at the start of the Doha round, where WTO members committed themselves to “comprehensive negotiations aimed at substantial improvements in market access”.¹⁸

¹⁸ Doha WTO Ministerial 2001: Ministerial Declaration.

Most developed countries grant special preference schemes for developing countries: **Generalised Systems of Preferences** (GSPs). These schemes are, de facto, the way many developing countries access developed countries' markets. Notwithstanding the result of WTO negotiations, GSP tariff rates on agricultural products are an important tool as developed economies have to provide improved market access to agricultural exports from the developing world.

It follows that from a policy coherence for food security perspective, an important factor to take into consideration is whether or not these schemes cover agricultural products of importance to developing countries' agricultural exports, and the extent of the preference margin they provide (calculated as the difference between the Most Favoured Nation (MFN) rate and the preferential GSP rate). Preference giving countries, such as Switzerland, are largely free to decide what products are included in their GSP schemes and how they are treated. The more products covered, and the larger the margin provided, the greater the opportunities for exporters from developing countries to penetrate the Swiss market.¹⁹

The EU has three GSP schemes: the Standard GSP, available to developing countries that are not Upper-Middle Income Countries or High Income Countries; the GSP +, available to "vulnerable" developing countries; and the Everything but Arms (EBA) available to all Least Developed Countries (LDC). The GSP excludes some agricultural goods from its coverage, and provides only partial reduction on some of the other agricultural goods covered. The GSP+ has essentially the same coverage but provides for complete reduction on the goods covered. EBA provides full tariff reduction on all goods. The average tariff on agricultural goods under the EU GSP is 12.9%, 9.3% for the GSP+, and 0% for EBA (WTO, 2013).

Switzerland, like the EU, differentiates its scheme according to the level of development of specific developing countries. LDCs and countries going under debt relief benefit from complete elimination of all duties on imports into the Swiss market. With regards to the "standard" GSP, available to non-LDCs, Switzerland only offers very little reductions from the MFN rate on agricultural products: from a 31.9% average MFN protection rate to 30% under the GSP (WTO, 2013).²⁰ Only 36.6% of agricultural tariff lines are duty free under the Swiss GSP (ibid). 63.6% of these lines have non-ad valorem tariff rates, meaning that they use a quota system.

From a PCD perspective, it would be important to monitor the nature of agricultural goods excluded under these schemes, and advocate for their inclusion under the Swiss GSP. Evidence exist that some of the quota systems used by Switzerland act as powerful barriers to developing countries agricultural exports. For example, Hoffman (2014) notes that, when it comes to exports of beef to Switzerland "quotas (...) auction price is so high that it acts as an internal non-tariff barrier that is in many cases as high or even higher than the tariff that the EU market imposes". At first sight, there is an opportunity to expand this coverage and its depth without compromising exports from LDCs.

Standards, private and public, are one of the greatest barriers for developing countries' agricultural exports.²¹ Developing country exporters are often unable to meet those standards and are thus denied export opportunities. This includes the minimum standards applied, the frequency and duration of inspections and the costs of inspections, which Goodison (2014) has identified as a major constraint for ACP agricultural exports to the EU for example. Unlike under recent bilateral FTAs, GSP schemes do not

¹⁹ Note however that competition on the Swiss market might have more to do with quality of the product rather than price (UNCTAD, 2013a).

²⁰ Using the WTO definition of agricultural goods.

²¹ Rules of origin, in the case of processed products can be an issue as well but they are generally regarded of lesser significance to agricultural exports since agricultural products are almost by definition originating from the exporting territory.

include provisions for dialogue on these standards – which often results in the impositions of standards that are costly for exporters, or incompatible with domestic production methods. The way these standards are developed could pay more attention to the specific challenges that developing country exporters face.

Countries are largely free to set the level of standards they deem fit, provided they do not constitute “hidden” forms of protections and that they are based on scientific principles. The FAO’s and WHO’s Codex Alimentarius indirectly sets the global norms and standards when it comes to Sanitary and Phytosanitary (SPS) standards. Further, in order to promote transparency and reduce trade disruption, new standards are to be notified to the WTO’s SPS committee.

Finally, private standards, such as the ones used by retail chains in the EU, have come to the fore in recent discussion at the WTO. Members have tried to address the topic by coming up with a definition of what these standards entail, yet according to the WTO, these have so far been largely unsuccessful.²²

3.2. Developing country protection from agricultural imports

The issue of using agricultural protection as a development tool is controversial because it can lead to higher consumer prices and deteriorate the overall food security situation of the home country. However, provided that it is used as part of an overall agricultural development strategy it can prove to be a powerful tool for agricultural development. Trade negotiations, bilateral and multilateral, can limit the ability of developing countries to use trade policy to insulate producers from competition or price fluctuations. Typically, trade negotiations such as the WTO round or the EPA negotiations with the EU introduce some kind of flexibility for developing countries.

The Doha Ministerial declaration of 2001 for example recognized that “ *special and differential treatment for developing countries shall be an integral part of all elements of the negotiations and shall be embodied in the schedules of concessions and commitments (...) to enable developing countries to effectively take account of their development needs, including food security and rural development.*”²³

Protection can prove an ineffective and counterproductive policy tool: there is no guarantee that supply will pick up in response to an increase in demand resulting from increased protection. Focusing on supply-side constraints (marketing, infrastructure, inputs, etc.), can be a much more effective strategy. In cases where production does not pick up after an increase in protection, the result could be an increase in price levels and thus result in increased food insecurity. There are further political economy issues that can arise from a protectionist policy – namely that it becomes a permanent feature of a country’s policy arsenal because of political dynamics.

Introducing time-bound protection measures combined with supply side intervention however can be a legitimate policy choice (Alpha et al, 2006). The issue from a PCD perspective is therefore to ensure that during multilateral and bilateral trade negotiations, developing countries retain some leeway in setting their tariff levels. This includes special agricultural safeguards, import licensing arrangements, Tariff Rate Quotas, variable and seasonal tariffs – which are also used by the EU and Switzerland.

For Switzerland, this would include an analysis of potential competitive threats to the productive agricultural sectors of countries it negotiates bilateral agreements with. Such an assessment would have to

²² http://www.wto.org/english/news_e/news14_e/sps_25mar14_e.htm

²³ http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm

be done on a case-by-case basis, taking the negotiating partner's concerns and domestic priorities into account, and in consideration of other instruments such as bilateral safeguards that the agreement would most likely contain. In the case of the EU, for example, this was done to some extent by introducing the principle of asymmetry in EPA negotiations – ACP countries were free to exclude 20 to 25% of goods from liberalization. In some countries of the Southern Africa EPA group however, the issue of special safeguards for agricultural products is a controversial one. Switzerland, in its only FTA with a region comprising several LDC (the European Free Trade Area – South African Customs Union FTA) has a broad-based safeguard clause allowing for the temporary restriction of imports or exports for food security purposes.²⁴

3.3. Strengthening multilateral disciplines on agricultural export restrictions

Several countries have taken steps to restrict export of agricultural products during the agricultural price spikes of 2007 and 2008. These restrictions aim to insulate the domestic market from high international prices. From a purely national standpoint, restrictions can be understood as rational, temporary emergency measures to be lifted once international prices return to their “normal levels” (Anania, 2013). From an international point of view however, export restrictions have the effect of further driving up international prices and of increasing volatility (see FAO et al, 2011). Moreover, once a large exporter implements export restrictions, there are strong incentives for others to follow suit. Poorer developing countries dependent on food imports are particularly at risk of suffering disproportionately from the effect of these restrictions.

The 2007-08 food price crises made it clear that there currently is an apparent lack of strong multilateral discipline at the WTO on these matters. Switzerland proposed at the WTO the elimination of all export restrictions on agricultural products and the binding at zero of all export tariffs (with a flexibility clause for LDCs). This is praiseworthy, as current disciplines on export restrictions do not cover export taxes and the language permitting the use of other kinds of restriction can be interpreted very widely. Anania (2013) discusses various ways of addressing these regulatory shortcoming, and concludes that an agreement outside of the WTO framework would lack enforceability. Bureau and Jean (2013) however note the lack of political will to come to such an agreement on the use of export restrictions. The European Commission, in its Trade, Growth and Development communication (EC, 2012b) also mentions export restrictions as something in need of more action at the multilateral level. Several G20 summits have also addressed the issue of export restriction, and have included commitments on their reductions. The strongest commitments were taken in 2011 when the G20 Summit in Cannes announced it would work towards exemption of goods destined to the World Food Programme (WFP) from export restrictions.

4. Land grabbing and responsible investment in agriculture

There is an increasing trend of Foreign Direct Investment (FDI) in the agricultural sector in developing countries. Particularly many resource abundant low-income countries have recently witnessed a growing foreign agricultural investment inflow. Even though agricultural investment generally represents less than 5 percent of total FDI (FAO, 2013b), it is part of an upward trend in FDI. In the most recent World Investment

²⁴ See <http://www.efta.int/media/documents/legal-texts/free-trade-relations/southern-african-customs-union-SACU/EFTA-SACU%20Free%20Trade%20Agreement.pdf>

Report of UNCTAD, the agricultural sector was identified with prospects for a further increasing share of FDI, particularly in Africa and Asia.²⁵

Switzerland is an important player in this respect, ranking in the top 10 of the world's investor economies, measured by the value of outward FDI (UNCTAD, 2013b). Swiss transnational corporations in 2009 employed about 2.6 million people outside of Switzerland, of which 750.000 in developing countries. A quarter of total Swiss outward FDI stocks was located in developing countries (UNCTAD 2011b).

While FDI cannot be expected to become the main source of capital, it can potentially generate various types of benefits for the agricultural sector of the host country and its food security situation. Foreign investments in agricultural value chains in developing countries can significantly contribute to the reduction of poverty, hunger and malnutrition by improving livelihoods and employment opportunities, leading to increased purchasing power and higher tax revenues for the state to improve public service provision. Host countries may also benefit through enhanced skills and technology transfer (Gerlach & Liu, 2010). However, the benefits of agricultural investments do not come about automatically and foreign investments can also lead to undesirable outcomes such as rising inequality, erosion of labour standards and land degradation (Te Velde, 2001; Wimberley, 1991; Cotula et al, 2009).

The issue of 'land grabbing' is one of the most contentious aspects of agricultural FDI. Land grabbing refers to the issue of large-scale transnational land acquisitions by multinationals, investment funds and sovereign wealth funds. While the question of agricultural investment is much broader than land acquisition and many investment projects do not involve the transfer of control over land, this increasing international flow of funds directed towards large-scale land acquisitions has received most attention. (FAO, 2012b). De Schutter has indicated in this regard that preventing land grabbing is crucial for food security (De Schutter, 2010a). There is **little empirical data about the actual magnitude of this phenomenon**. The Land Matrix indicates that the scale of foreign investments in agricultural land is smaller than what the media headlines suggest and they are dwarfed by local land investments (World Bank, 2010)²⁶, but it is important in size nevertheless and has increased over the past decade (FAO, 2013b).²⁷ The surge can be attributed partly to the 2007-2008 boom in food prices, which prompted investors to seek opportunities to secure food supplies. Biofuel initiatives have also been identified as a significant driver, as it encouraged large-scale land acquisitions for biofuels production (Matondi et al 2012).

There is conflicting evidence about how FDI really affects food security. Studies like Wimberley (1991) and Mihalache-O'Keef & Li (2011) show a negative impact of FDI in the agricultural sector on food security through increase in food prices and decline in domestic food supply as it crowds out domestic farms/firms and many foreign investors focus on production for exports, while an FAO simulation for Sub Saharan

²⁵ Developing countries increasingly act not only as countries of destination but also as source countries. This particularly holds true for Asian emerging economies (UNCTAD, 2013).

²⁶ An agricultural land acquisition survey of the World Bank (2010) estimated that domestic investors were responsible for 80% of the land transactions in the surveyed developing countries. Although the average area covered by the transactions was smaller than that of foreign investments, domestic investors still accounted for 60% of the total acquired area.

²⁷ The Land Matrix is a partnership that systematically collates information on large-scale land acquisitions from media reports, international NGOs and academics. See www.landmatrix.org. It identified 1217 agricultural land deals in developing countries, accounting for in total over 83 million hectares of land over the period 2000-2012. However, it is estimated that the area concerned by transactions that it judged as reliable (i.e. cross-checked with other sources) accounts for only 39.3 percent of this area. This is a total area as large as 2.2% of all land used for crop production worldwide, as that totals over 1.5 billion hectares (FAO, 2013c). In terms of destination of FDI, the Land Matrix indicates that Africa is the most targeted region, with land deals covering 56.2 million hectares, compared with 17.7 million hectares in Asia, and 7 million hectares in Latin America. See www.landmatrix.org.

Africa (Rakotoarisoa, 2011) shows that this will be compensated by increases in factor returns and employment, thus increasing net income and food consumption.²⁸

Lack of reliable, detailed information and the complexity of the matter, has meant that impact assessments have mainly relied on case studies. FAO (2013b) case studies found evidence that FDI in specific cases contributed to increases in agricultural production and yields, diversification of crops and the adoption of higher standards. The country studies show that transfer of technology takes place, but is generally lower than the level announced by investors. There was evidence of negative environmental impacts, mainly due to the intensification of production generated by the investment, which puts higher pressure on natural resources. World Bank (2010) case studies illustrate that in many instances foreign investments involving large-scale land acquisitions have contributed to loss of livelihoods. Problems have included displacement of local people without proper compensation and, similar to the FAO case studies, generation of negative environmental externalities.

While evidence is inconclusive, case studies do show that impacts are diverse and depended on a range of factors related to the policy context and business models used. The studies suggest for example that land management is crucial. The disadvantages of investments involving large-scale land acquisitions often outweigh the few benefits to the local communities in countries where land rights are unclear and insecure. The negative impacts then include the displacement of local smallholders with inadequate or no compensation, the loss of grazing land for pastoralists, the loss of income for local communities, and in general, negative impacts on livelihoods due to reduced access to resources (FAO, 2013b).

This shows that **the role of governments** is important as they can create a favourable environment for inclusive and sustainable agricultural investments. Host and source countries can seek to maximize the benefits of foreign investments for food security while minimizing negative effects. Governments can design and implement policy measures to promote sustainable business conduct (supply side), inform and incentivize citizens to adhere to sustainable consumption patterns (demand side, indirectly informing investment decisions) and monitor progress.

What policy initiatives and discussions at EU and international level can shape how FDI works for global food and nutrition security? Three broad issues of importance are examined in the following sections:

- i) compliance with social and environmental standards;
- ii) host countries' policy space versus foreign investor protection;
- iii) public-private collaboration for food security.

Initiatives related to tax and financial transparency are also relevant, as effective taxation holds the potential of capitalizing on inflows of FDI. However, this policy area is not discussed in this section, as an earlier PCD dossier in this series has been dedicated to that topic (Knoll et al, 2013). Transparency issues also feature in the next chapter, in particular in Section 5.1, which highlights efforts to enhance transparency of commodity trading.

²⁸ The FAO study makes no differentiation among household groups.

4.1. Compliance with social and environmental standards

Although many multinational companies have developed Corporate Social Responsibility (CSR) policies, accusations of **human rights violations remain commonplace**. Research has shown that the extractive industry has been most accused by human rights organisations of violations, followed by the food and beverage industry (United Nations, 2006). Key accusations in the latter sector relate to issues regarding land tenure, labour rights and access to water. Most reported violations take place in countries in the South with weak institutions.

International efforts and initiatives to encourage multinationals to adhere to CSR principles have intensified over the past few years. Examples of general frameworks include the UN Global Compact launched in 2000 to advance sustainable business models and markets, the UN Guiding Principles on Business and Human Rights endorsed in 2011 and the OECD Guidelines for Multinational Enterprises first adopted in 1976 and last updated in 2011.

A number of more specific frameworks seek to guide investments particularly along agricultural value chains. A United Nations Inter-Agency Working Group composed of FAO, UNCTAD, IFAD and the World Bank have jointly developed the **Principles for Responsible Agricultural Investment that Respect Rights, Livelihoods and Resources** (PRAI) in 2010 and 2011. The United Nations Committee on World Food Security adopted in 2012 the **Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security** (VGGT). Switzerland, together with EU Member States, participated actively in the negotiations of these guidelines. While the guidelines recognize that investments are essential, they recommend safeguards to be put in place to protect customary tenure rights, strengthen food security and take environmental considerations into account.

Building on the PRAI and VGGT, the Committee on World Food Security is currently in the process of developing **Principles for Responsible Agricultural Investment in the Context of Food Security and Nutrition** for which regional consultations have been held in the period November 2013 - February 2014 and that are expected to be adopted in the course of this year. Substantive issues discussed in this process, and which therefore emerge as core elements of the framework to ensure responsible agricultural investments, are the following:

- respect for tenure of land, fisheries and water;
- conservation of natural resource and contributions to climate change adaptation and mitigation;
- gender equality and women's empowerment;
- engagement and empowerment of youth;
- respect for cultural heritage and traditional knowledge;
- promotion of safe and healthy productive systems;
- establishment of systems to review impacts and ensure accountability and transparency.

Policy coherence as such is also a topic of discussion and its importance is explicitly stressed in the draft of the principles under negotiation (Committee on World Food Security, 2014). Underlying contentious issues in the negotiations are divergent views on the importance of different types of agricultural investments (large-scale investments versus smallholders) and the role of the state (limited to creating an enabling environment versus a more interventionist approach to support smallholder investments).²⁹

²⁹ See for example the Civil Society Position on the first draft of the CFS responsible agricultural investment principles, http://www.csm4cfs.org/files/SottoPagine/118/csm_position_rai_first_draft_12_may_2014_en.pdf

The EC Communication on Corporate Social Responsibility presents an EU agenda for 2011 – 2014, to promote CSR and includes measures to ensure policies to promote CSR are fully consistent with international standards as well as to address CSR in established dialogues with partner countries and regions (EC, 2011). The Commission has committed to work with EU Member States, the private sector and other stakeholders to jointly prepare a progress report and organize a review meeting by mid 2014 on the implementation of this agenda. The level of ambition and degree of traction of the communication is however very low, following a lobbying efforts by the private sector, particularly on the issue of labour standards – as such, no binding commitments are in place for EU countries or companies on CSR.

This renewed CSR policy gives greater attention to human rights, which include, even though not explicitly mentioned in the Communication, the right to adequate food. This has been informed by the UN ‘Protect, Respect and Remedy’ Framework for better managing business and human rights challenges, developed by Professor and UN Special Representative John Ruggie. It builds on three pillars: (i) the State duty to protect human rights against abuses by third parties, including corporations, through appropriate policies, regulation, adjudication and enforcement measures; (ii) the corporate responsibility to respect human rights, meaning to act with due diligence to avoid infringing on the rights of others; and (iii) greater accessibility of victims to effective remedies, both judicial and non-judicial.

A study in 2009 and 2010 (Augenstein, 2010) revealed that the existing European legal framework already contributed in some respects to the implementation of the UN framework on business and human rights. For instance, a number of alleged human rights violations committed by European corporations outside the European Union have been brought to European courts. At the same time, it pointed out legal gaps and policy incoherencies to tackle. It noted for example that third-country victims of corporate human rights violations could encounter significant obstacles in obtaining effective redress both in the third country and in the EU. Beyond recommending the EU to tackle legal issues, the study argued for enhanced political dialogue with third countries and regions to discuss business and human rights issues. The study’s recommendations could inform the response of the Swiss Federal Council to the request of the parliament to develop a strategy to apply the Ruggie framework in Switzerland.

A mix of ways to promote the Ruggie Framework and, more generally, corporate social responsibility and sustainable agricultural investments, as applied by the EU and its Member States (Steurer et al, 2008), for possible inspiration of Switzerland, is to:

- **Raise awareness** among companies and other stakeholders. This includes information provision, training and giving out awards. The Knowledge and Information Centre on CSR in the Netherlands, called “MVO Nederland” is an example of an institutional structure created to specifically take on this task;
- **Strengthen monitoring and complaints mechanisms.** This includes support to assess the (aggregate) impact of foreign agricultural investments on third countries, stricter reporting requirements for transnational companies on non-financial indicators and putting in place accessible complaint mechanisms.
- **Lead by example.** This includes public procurement procedures that require respect for human rights and certain environmental, social and fiscal standards. Companies receiving state support when venturing abroad (e.g. state guarantees) could be asked for the same, as announced in the European Commission’s communication on the role of the private sector in achieving inclusive and sustainable growth in developing countries (EC, 2014). Furthermore, state enterprises could be required to be consistent with those standards when investing or promoting investments abroad.

Civil Society Organisations generally consider internationally accepted investment principles and guidelines welcome tools to seek to make policies that impact on agricultural investment more coherent with global food and nutrition security objectives.³⁰ However, what curbs their influence is that they are largely voluntary and that few tools exist to enforce abidance.³¹

4.2. Host countries' policy space versus foreign investor protection

Investment conditions are agreed between (groups of) countries to facilitate FDI. This is done at international level in the context of the WTO and bilaterally between (groups of) countries through bilateral Free Trade Agreements (FTA) and Investment Treaties (BIT). FTAs can contain an investment chapter that lies down the terms of market access of investments and BITs entirely focus on the promotion and protection of foreign investment. The investment provisions generally guarantee certain standards of treatment for foreign investors. If not designed with appropriate safeguards, this can constrain the host countries' policy space to regulate investments and to impose measures that it deems necessary to pursue food security objectives.

At international level the WTO Agreement on Trade-Related Investment Measures (TRIMS Agreement) contains limitations to the measures a country can take to restrict foreign investments, some of which can be relevant to food security. It bans the use of local content requirements, manufacturing requirements, trade balancing requirements, domestic sales requirements, technology transfer requirements, export performance requirements, local equity restrictions, foreign exchange restrictions, remittance restrictions, licensing requirements, and employment restrictions. Exceptions are however permitted for developing countries by virtue of their economic development needs.

WTO members have not been able to address investment policy in a comprehensive manner, following the failure to obtain an agreement at the Ministerial Meeting in Singapore in 1996 and failed efforts to address it in the Doha Development Round.³² As a result of the failure of the multilateral system to address the issue it is primarily left to bilateral FTAs and BITs to cover it.³³

Concord claims that many bilateral investment agreements are biased in favour of investors' rights. It argues that without rebalancing rights and duties of investors, there is a risk that important measures taken by governments for example to ensure public service provision, to protect the environment, and to strengthen food security, could be subject to litigation through the investor-to-state dispute settlement clauses (e.g. CONCORD, 2012). Others have also claimed that international investment protection standards can constrain host states' regulatory powers (see for example ETUC 2013; Heri et al 2011).

The 2012 EC Communication on Trade, Growth and Development reveals in this sense the EU's intention to improve FDI-related instruments in EU FTAs to help build an enabling environment for

³⁰ See for example Concord. 2013; and FIAN. 2012.

³¹ To enforce abidance, states and groups of states can decide to transcribe voluntary standards into national legislation. For example, many of the voluntary guidelines and principles discussed seek to promote transparency of private sector activities and the Markets in Financial Instruments Directive (MiFID) of the EU contains actual mandatory transparency requirements for certain companies, see also Section 5.1.

³² The relationship between trade and investment was initially part of the Doha Development Agenda as one of the four "Singapore Issues"— it was dropped from the Doha Agenda in the July 2004 package.

³³ The Lisbon Treaty that entered into force in 2009 has shifted the power to negotiate bilateral investment provisions with non-EU states, from the EU member states to the Union. EU Member States still have a large network of pre-Lisbon Bilateral Investment Treaties that remain in force, but new EU- wide investment treaties will eventually replace BITs between the EU Member States and third parties.

business, while preserving *'the right of countries to regulate and to enter limitations and restrictions'* (EC, 2012b). Literature indicates that possible ways to do so include **furthering the reduction of asymmetries in negotiation capacities**. Furthermore, preambles to investment agreements often focus on investment promotion and protection as the main aim of the agreement, so efforts could be undertaken to **ensure that the preamble of investment treaties reflects human rights and developmental policy objectives** like sustainable development, environmental protection or raising living standards.³⁴ Uncertainty about provision interpretations carries the risk of governments refraining from taking policy measures for fear of triggering international arbitration, so **vague language that creates uncertainty about the breadth of investors' protection is to be avoided** (Peterson, 2004).

The UNCTAD World Investment Report 2013 notes a trend in recent years in this direction. An assessment of recently concluded investment agreements revealed an increased use of sustainable-development-oriented features. In total 12 out of 17 analysed agreements concluded in 2012 refer to the protection of health and safety, labour rights, environment or sustainable development in their preamble; 10 specify the possibility of exceptions on agreement provisions for issues like the protection of human, animal or plant life or the conservation of natural resources and 7 contain clauses that explicitly state that parties should not relax health, safety or environmental standards to attract foreign investments. The analysed agreements also show increased attention for preserving regulatory space for public policies or minimize exposure to investment litigation. They include provisions that define a narrow scope of the agreement (e.g. by excluding certain assets from the definition of investment); that provide details on fair and equitable treatment or indirect expropriation; that carefully regulate access to Investor-State Dispute Settlement (ISDS)³⁵ or leave ISDS out altogether.

As regards ISDS, investment agreements indeed increasingly specify particular aspects of arbitral proceedings, for example **the requirement for investors to first pursue local remedies** (judicial or administrative) in the host state for a certain period of time, before being granted access to international arbitration rules and forums, such as the International Centre for the Settlement of Investment Disputes (ICSID) and the United Nations Conference on International Trade Law (UNCITRAL).³⁶ ISDS provisions related to **greater transparency of the arbitration process**, e.g. specifying the extent and timing of disclosure of information on ISDS cases, are also increasingly included.³⁷ Other ISDS provisions concern matter like **the selection of arbitrators** to ensure their independence, **the distribution of arbitration costs and legal fees and early dismissal of frivolous claims** (UNCTAD, 2014).

³⁴ The stated objectives in the preamble have an important impact on the interpretation of treaty provisions and the treaty's application in case of disputes between foreign investors and host states.

³⁵ Examples are clauses that limit provisions or policy areas that are subject to ISDS or that restrict the allotted time period within which claims can be submitted to the ISDS mechanism.

³⁶ The ICSID Convention and the UNCITRAL Arbitration Rules are the two sets of rules that are most often mentioned as possible forums for ISDS in investment agreements. The majority of known investor-State disputes have been arbitrated under these two set of rules, which also feature in investment agreements concluded by Switzerland. ICSID by July 2012 had launched 390 investment dispute cases, of which 6% in area of water sanitation and food protection and 5% in area of agriculture, fishing and forestry. Source: <https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&reqFrom=Main&actionVal=ViewAllCases>

³⁷ Efforts have also been made in recent years to enhance transparency of investor-State disputes under the standard ICSID and UNCITRAL arbitration rules. A set of improved transparency rules under UNCITRAL was agreed in 2013, which for example now allow for non-parties to attend oral hearings and publication of key arbitration documents. These rules apply only to disputes under investment agreements concluded on or after 1 April 2014, unless parties to specific older agreements separately agree to their application to these existing agreements. Civil society organisations flag that transparency issues remain, e.g. consent is needed of the parties to publish awards and there is no explicit mechanism for *amicus curiae* submissions (meaning that a court may hear non-parties informally in order to seek to facilitate its data collection (UNCTAD, 2014). Elements of standard arbitral rules like ICSID and UNCITRAL can be overruled by specific provisions in investment agreements.

This seems to correspond with the state-of-affairs and trend of bilateral investment agreements concluded by Switzerland. **Switzerland** has bilateral investment agreements with a large number of countries, including over 20 LDCs. Most are silent on human rights and sustainable development objectives and food security. However, the recent agreement with Egypt that entered into force in 2012 does mention in its preamble the aim of “sustainable development of both states”. It also provides space for safeguard measures with regard to capital movement in case of difficulties in relation to the countries’ monetary or exchange rate policy. It still contains nothing specific on human rights and food security concerns. It is more elaborate on investor-State dispute settlement procedures than earlier concluded Swiss investment agreements as it contains the requirement for investors to submit the dispute to domestic administrative procedures of the host country for 6 months before allowing submission to an international arbitral tribunal such as ICSID and specifies procedures for the appointment of arbitrators.³⁸

There is a window of opportunity to strengthen the development dimensions (incl. food security), attention for policy space and ISDS procedures in new investment agreements in Switzerland and beyond. Between 2014 and 2018, at least 350 BITs worldwide will reach the end of their initial duration (UNCTAD, 2013b).

4.3. Public – private collaboration for food security

In addition to government-to-government BIT and FTAs, **governments increasingly engage with international business directly to leverage private sector activity for development objectives**. In this spirit, the signatories of the Busan Partnership for Effective Development Cooperation in 2011 called for more public-private collaboration.³⁹ In the same vein, the EU ‘Agenda for Change’ adopted in 2012 stressed the need to develop new ways of engaging with the private sector to increase the impact of EU development cooperation (Council of the European Union, 2012). The European Commission has issued a communication in May 2014 that further clarifies how this will be operationalized. The Communication refers to the (European and local) private sector as a partner in development cooperation. It specifies that “European companies can contribute to enterprise development in partner countries by integrating local micro-, small- and medium-sized enterprises into their supply chains, especially in the agriculture and agro-food sectors, as well as through transfer of technology including eco-innovations or renewable energy solutions” (EC, 2014).

Such private-public collaboration can take the form of multi-stakeholder alliances for coordinated action and structured dialogue. An existing example in the agricultural sector is the New Alliance for Food Security and Nutrition, which emanated from the G8 Camp David Summit in May 2012. The New Alliance is designed to build on the African-owned Comprehensive African Agriculture Development Programme (CAADP), which was established in 2002 as the agricultural component of the New Partnership for Africa’s Development (NEPAD) and joined forces with the Grow Africa partnership platform initiated by the World Economic Forum. It takes the shape of Cooperation Framework Agreements, which cover pro-poor policy reform commitments by African governments, intended investments by private companies for inclusive and sustainable agricultural value chain development and development partners’ engagement to align support to country-led CAADP plans. The New Alliance has been rolled out in ten African countries, notably Benin, Ghana, Ethiopia, Tanzania, Cote d’Ivoire, Burkina Faso, Nigeria, Senegal, Malawi and Mozambique.

³⁸ Most investment agreements concluded by Switzerland with third countries are available at <http://www.seco.admin.ch/themen/00513/00594/04638/index.html?lang=en>

³⁹ <http://www.oecd.org/dac/effectiveness/fourthhighlevelforumnaideffectiveness.htm>

A question that is heavily debated is to what extent the New Alliance effectively contribute to sustainable development and food security. Does it benefit vulnerable groups, like the smallholder farmers, or does it primarily serve the interests of large international agri-businesses, such as the Swiss company Syngenta that is affiliated? Former UN Special Rapporteur on the Right to Food De Schutter has indeed noted that smallholders form a vulnerable group amongst other things because of the increased competition for the resources on which they depend and the pressures of industrial agriculture (De Schutter, 2014). The NGO Alliance of Food Sovereignty in Africa criticises the New Alliance in this regard, pointing out that the governments' pledges under the cooperation frameworks are skewed towards the interests of international and large-scale businesses. Commitments include land-law revisions to facilitate long-term land leases for commercial investors and easing of tax laws.⁴⁰ An analysis by ONE, of the companies' investment intentions under the cooperation frameworks shows a different picture. It indicates that, contrary to the common perceptions, many African firms are involved, including a considerable number of Small and Medium Enterprises. It also states that most investors *intend* to include smallholder farmers in sourcing and production. The organisation does point to the key challenge to transform intentions into results and monitor those in a transparent way (Hong, 2013).

Moving beyond structured dialogue between the public and private sector such as provided by the New Alliance, public-private collaboration can also involve **co-funding to promote sustainable FDI in agriculture**. In this spirit, the recent European Commission Communication on the private sector and development highlights the importance of blending loans and grants and indicates that a considerable share of EU support to private sector development could be allocated to financial instruments such as loans, guarantees, risk-sharing instruments and equity or quasi-equity instruments, which can also be considered by Switzerland (EC, 2014).⁴¹

5. Food price volatility: speculation in commodity markets and biofuels

Whereas many governments and institutions continue to see food security as a matter of supply and demand, the 2007-08 food price crisis evoked an emerging narrative that increasingly interprets hunger as a matter of access, rather than availability. Global food insecurity is in this sense as much an issue of physical scarcity as it is an issue of pricing mechanisms and power imbalances in the food and agricultural market system.

Higher and more volatile food prices can lead to reduced, more variable and more uncertain real income levels. Food price volatility is therefore likely to lead to food insecurity and malnutrition of vulnerable groups, as well as pushing people into (deeper) poverty, often with permanent results as cuts are to be made in expenditure on healthcare and education. Whereas the impact of volatility is clearly negative for consumers, food producers and other stakeholders along the agro-food value chain also face risks in case price drops occur. Only producers operating on a sufficiently large scale can in these cases carry the losses. As such, price volatility, different from simply rising food prices, affects net consumers and many net producers (mostly smallholders) negatively (FAO et al., 2011).

⁴⁰ For an overview of host country reform commitments under the G8 New Alliance framework, please see: <http://www.theguardian.com/global-development/interactive/2014/feb/18/g8-fight-future-african-farming-interactive>

⁴¹ <http://www.cgdev.org/initiative/commitment-development-index/index>.

The 2013 FAO flagship report on The State of Food Insecurity in the World offers a more nuanced assessment of **the actual impact of food price volatility on food security**. Based on newly available data, the report finds that large swings in primary food prices translate only to a limited extent and with a time lag of a couple of months into higher consumer prices. Surges in food prices were therefore much more muted at consumer level than those experienced by agricultural producers or at the level of international trade. Secondly, there seem to be surprisingly little differences in regional price transmission, with the one exception of Eastern Africa where price transmission is high. Consumers in that region have been more exposed to price swings in primary food goods than consumers elsewhere. In these countries, price volatility at global and regional level can reduce citizens' purchasing power considerably and thus their ability to meet their basic food needs (FAO, 2013a: 13-14).

Price volatility is to some extent natural to agricultural markets, due to climatic shocks and market fluctuations. Over the past decade however, food prices started to increase dramatically, and have become increasingly volatile. A critical peak was reached in 2007-2008 when food prices reached their highest level in thirty years. Afterwards, in 2009 they fell sharply, only to peak again in 2010-2011 (HLPE, 2011). The OECD-FAO Agricultural Outlook projects that future agricultural prices will remain historically high and continuously volatile, particularly if food stocks and reserves in major producing and consuming countries remain low (OECD-FAO, 2013). The persistence of high and volatile prices shows that different driving factors are at work simultaneously. The relative weight of different factors remains subject to discussion. The UN's High Level Panel of Experts on Food and Nutrition Security (HLPE) identified in 2011 three possible causes for international food price volatility, notably trade policies (see Section 3), speculation and demand elasticity⁴², the latter mainly induced by increased worldwide demand for agro-fuel crops.

5.1. Speculation in commodity markets⁴³

From a PCD perspective, more transparent and better-regulated commodity markets can help constrain extreme price volatility. The debate on food price volatility in the EU and globally has focused on whether a perceived lack of regulation in financial markets causes more volatility, and if so, what type of legislation should be introduced to address this. Current approaches revolve predominantly on the principles and guidelines outlined by the G20 and focus on improving transparency and reporting, regulating OTC trade, establishing position limits and, though to a lesser extent, strengthening the powers of regulatory authorities and improving international cooperation.⁴⁴

5.1.1. Food Price Volatility and commodity market speculation

Financial speculation on food commodity markets is the most controversial factor underpinning increasingly volatile food prices. While macroeconomic factors - including high oil prices, increasing demand from the biofuel industry, decreasing food reserves and fluctuations in demand and supply - certainly play a role, they alone do not offer a sufficient explanation for the recent increase and volatility of food prices. Some therefore believe that only speculative behavior on global commodity markets can

⁴² The elasticity of demand measures the extent to which demand responds to an increase in prices while other determinants of demand remain constant.

⁴³ This subsection complements and further elaborates the part on 'Finance and Competition' of the Commodities chapter in Knoll et al., 2013, albeit with a targeted focus on food security and agricultural commodities.

⁴⁴ For an explanatory summary on the functioning of commodity markets and how they affect world food prices, please consult Annex 1.

explain such price spikes and point to financial actors increasingly moving into agricultural commodity markets to bet on future (estimate) prices of these commodities (Lagi et al., 2011).⁴⁵

A sharp increase of financial speculation for agricultural commodities was indeed noted around the time of the 2007-08 crises, yet there is considerable disagreement among analysts about the role of **financial speculation as a driver for food price volatility** (FAO, 2012). This absence of academic consensus is largely due to a lack of definite proof in the one or the other direction caused by a lack of adequate definitions and reliable information (Ulysses, 2013).

On the one hand, there are analytical studies and literature surveys that find little scientific evidence that increased speculative capital in commodity futures markets impact on spot prices in the mid to long term. In their view, speculators simply respond to basic fundamentals in terms of changes in supply and demand conditions and in fact provide greater liquidity to markets. As such, there is a tendency to argue that index funds trading have a stabilizing effect on price volatility, particularly for cereal prices. Additionally, some commodities that are not traded on futures markets have also witnessed increased volatility. Finally, it is recognized that increased speculation may lead to more short-term volatility, yet this does not affect food prices at household level. (Ederer et al. 2013; Heumesser and Staritz, 2013; Meijerink et al., 2011; Shutes and Meijerink, 2012).

On the other side of the academic spectrum, analysts point to the correlation between increased speculation and food price volatility. These researchers argue that the financial deregulation in derivatives markets has allowed for an increase in cash flows in commodity markets from institutional investors (e.g. pension funds) through commodity indexes as a strategy for portfolio diversification. The increasing domination of financial, rather than commercial, actors in agricultural commodity markets would therefore increase the likelihood of excessive short-term price fluctuations and increasingly diverge from the actual spot market price (Cordier and Gohin, 2012; Henn, 2013; Lagi et al, 2011; UNCTAD, 2012). Also, recent research at the Österreichische Forschungstiftung für Internationale Entwicklung (ÖFSE) questions in how far commodity futures markets still play their fundamental roles of hedging and price discovery tools (Ederer et al., 2013; Heumesser and Staritz, 2013).

The absence of academic consensus is further complicated by i) inadequate analysis of the advantages of increased speculation on futures markets (UNCTAD, 2011a) and ii) the different actors involved. The latter point is particularly relevant since the traditional divide between 'typical speculators' such as financial investors on the one hand and commercial operators or 'hedgers', has become increasingly blurred. Big commodity traders for example, such as Archer Daniels Midland, Bunge, Cargill and Louis Dreyfus (the so-called ABCD companies), have seized an increasingly important role in the overall financialisation of commodity markets, yet actively seek exemption from regulations that would limit the level of their investments in commodity futures (Oxfam, 2013). In spite of the difficulties in pinpointing the exact causes of increased volatility, there is an increasing body of literature demanding for better regulation of commodity markets (Clapp and Helleiner, 2012; Mugglin, 2014).

5.1.2. G20 initiatives to regulate agricultural commodity markets

On the policy side of the discussion, there is a growing recognition, at national as well as at international level, that excessive financial speculation has affected the volatility of food prices on futures markets, as

well as in spot markets.⁴⁶ In view of the debates presented above, most international organisations have advocated the adoption of a **precautionary approach** (HLPE –CFS, 2011: 38).

At international level, **the G20** has so far been the most active body for discussion on commodity market regulation. In 2008, the International Organisation of Securities Commissions (IOSCO) set up a Special Task Force on Commodity Futures Markets following public and media debate on the price surges in commodity markets. The IOSCO Task Force presented its report in 2009, highlighting the need for greater transparency, particularly on Over-The-Counter (OTC) trading.⁴⁷ Following these recommendations, the G20 Summit in Pittsburgh that year agreed on stronger regulation of the largely unregulated OTC trade. In order to improve transparency, mitigate systemic risks and prevent market abuse, the following commitments were agreed upon to reform OTC derivatives markets by end- 2012 (FSB, 2013a):

- all OTC derivatives contracts should be reported to trade repositories (TRs)⁴⁸;
- all standardised contracts would be traded on exchanges or electronic trading platforms and cleared through central counterparties (CCPs);
- non-centrally cleared contracts are to be subjected to higher capital requirements and minimum margining requirements.

In 2011, the French presidency took on a broader approach and made ‘combatting commodity price volatility’ one of its five priority areas for action. The aim was to find collective solutions in order to reduce excessive commodity price volatility – particularly in energy and agriculture - and exploring new ways to allow developing countries to benefit from new financial instruments.⁴⁹ The eventual outcome declaration however, the **G20 Action Plan on Food Price Volatility and Agriculture**, issued by the Agricultural ministers in June 2011, failed to constitute a strong policy response. Focus of the Action Plan was on improving (investment in) agricultural productivity while food speculation was largely left to the Finance Ministers (G20, 2011).⁵⁰

In September 2011, the IOSCO Task Force presented a report with **Principles for Commodity Derivatives Regulation and Supervision**, responding to the G20’s 2010 request at the Seoul summit to provide it with insights on what a global regulatory framework for commodity derivative markets could look like. The report has a particular focus on transparent price setting and outlines principles across the board of market organisation, ranging from design to monitoring and enforcement, to enhancing price discovery mechanisms (IOSCO, 2011).

The **G20 summit in Cannes** endorsed the recommendations from both the IOSCO report as well as from a G20 Study Group on Commodities.⁵¹ As such, it was agreed that market regulators should be granted effective intervention powers to prevent market abuse, e.g. through the establishment of (ex-ante) position limits. Also, the 2011 summit led to the establishment of an Agricultural Market Information System (AMIS),

⁴⁶ Olivier De Schutter, the UN Special Rapporteur on the Right to Food has been a particularly active voice in the debate on re-regulation of commodity markets, calling for a greater regulatory distinction between financial and specialist commercial speculators on futures markets (De Schutter, 2010b). Also, the UN has warned repeatedly about the negative impact of speculation on food commodities, see for example: <http://www.un.org/apps/news/story.asp?NewsID=42412&Cr=Food&Cr1=FAO-.UzB4zVFdXBp>

⁴⁷ Over-The-Counter trading concerns a contract directly between two parties. This is different from exchange traded derivatives, which are traded on a regulated market place with standardized rules and procedures for buyers and sellers.

⁴⁸ Trade repositories are electronic platforms that act as an authoritative registry to collect and maintain records of trade in OTC derivatives. Their main function is to provide an effective tool for mitigating the inherent opacity of OTC derivatives markets.

⁴⁹ <https://s3.amazonaws.com/PDS3/allegati/The priorities of G20.pdf>

⁵⁰ <http://www.theguardian.com/global-development/2011/jun/23/g20-action-plan-to-curb-food-prices>

⁵¹ <http://www.cmegroup.com/education/files/G20Nakaso-November202011.pdf>

an inter-agency platform to contribute to enhanced food market transparency and encourage better coordination of responsive measures to market uncertainty.⁵²

The subsequent **Mexican G20 presidency** took food security as one of its five priorities, and reaffirmed the G20 commitments to “enhance transparency and avoid abuse in financial commodity markets, including OTC, with effective intervention powers for market regulators and authorities and an appropriate regulation and supervisory framework”. The final declaration further states that G20 member countries should “rapidly finalise their decision-making and put in place the needed legislation and regulations to meet the G20 commitment for central clearing” (G20, 2012).

The 2013 Russian and 2014 Australian presidencies have retained financial regulation high on the agenda. While such G20 initiatives can potentially be quite influential, the G20 has no legislative enforcement tools; its commitments are to be implemented through legislation by its member countries. It is the mandate of the Financial Stability Board (FSB) to oversee and coordinate the translation of the G20’s agreed commitments into national regulations. In its 2013 report on the overall implementation record, the FSB notes **mixed progress in the overall implementation of the proposed reforms on OTC derivative trading** with most progress in the area of improving reporting and transparency (FSB, 2013b).⁵³

5.1.3. Towards more stringent regulatory frameworks in the US, the EU and Switzerland

The US and the EU, both home to the world’s largest agricultural commodity markets, have taken a broad range of measures in strengthening the regulatory framework for their respective commodity markets, including the OTC markets.

- **In the US**, the Wall Street Reform and Consumer Protection, or Dodd-Frank Act, was signed into law by president Obama in July 2010. The new law aims to i) reform the institutional regulation and oversight framework; ii) regulate the distinction between banks and other financial traders and institutions; and iii) regulate both consumer and investor protection (Kern, 2010). With regard to commodity derivative markets, it sets out more stringent position limits and several provisions to ensure greater control and transparency in OTC-, swap- and proprietary-trading. However, the new act does not include the much-discussed ‘Volcker rule’, intended to prevent banks from using taxpayer-backed funds to speculate on financial markets. As such, there is still a long way to go in terms of introducing structural changes to the financial markets.⁵⁴ Also worth noting is that, over three years after entering into legislation, many of the provisions under the ‘Dodd-Frank Act’ are still to be implemented due to grandfathering clauses⁵⁵, lengthy consultation procedures and lobby work from the financial sector (Dodd-Frank Resource Center, 2014).
- **In the European Union**, a compromise was reached in January 2014, after four years of debate, on a review of the Markets in Financial Instrument Directive (MiFID). MiFID I was implemented in November 2007 and constituted the cornerstone of capital market regulation in the EU. In the wake

⁵² <http://www.amis-outlook.org/home/en/>

⁵³ A Working Group of the FSB has published reports on the implementation of OTC derivatives market reforms. The latest report, from 2013, is available here: https://www.g20.org/sites/default/files/g20_resources/library/FSB_Secretariat_Traffic_Lights_Scoreboard.pdf

⁵⁴ http://www.huffingtonpost.com/2010/06/25/financial-reform-bill-pas_n_625191.html

For more information on the Dodd-Frank Act, see: <http://www.davispolk.com/dodd-frank/>

⁵⁵ Meaning provisions will only enter into force after a certain transition period.

of the financial crisis however, a review was launched to put in place a more transparent and stable financial system. As such, the 2011 EC proposal for a MiFID II did not explicitly refer to speculation on agricultural commodities yet focused on stricter monitoring and regulation and increased transparency in general.⁵⁶ The Impact Assessment accompanying the Communication however, identified agricultural markets as one of the key benchmark commodity derivative markets where an increased presence of financial investors has led to excessive price increases and volatility

In October 2012, the European Parliament adopted its report on MiFID II, introducing mandatory limits on harmful speculation that fuels price volatility on global agricultural commodity markets: “as commodity derivative markets have an effect on global food prices, strengthening the regulatory framework is also necessary in order to ensure Policy Coherence for Development as enshrined in Article 208 TFEU”(EP, 2012).

The final text, agreed by the EP and the Council of ministers for Economic and Financial Affairs in January 2014, is generally perceived as a good, yet timid step in the right direction. Among the most relevant provisions are measures to limit trading, rules on high frequency trading, increased transparency and limits on the positions held in commodity futures markets.⁵⁷ As a result of the strong opposition from the UK government and financial lobby groups, some loopholes remain, most notably the possibility to set limits on positioning at the national level, instead of EU-wide – a measure which according to the World Development Movement (WDM) could lead to a regulatory race to the bottom.⁵⁸ Currently, the European Securities and Markets Authorities (ESMA) is tasked with drafting so-called level-2 implementation measures, including delegated acts (e.g. on positioning limits) and technical standards, essentially drafting out the technical details of the legislative agreement for the European Commission to endorse before the absolute implementation deadline of 30 January 2017, when MiFID I expires.⁵⁹

- **Switzerland**, the world’s leading commodities trading hub, has witnessed an increasingly vibrant public and political debate on the issue of speculation on food commodities. Here as well, a lack of conclusive empirical evidence fueled discussions whether speculation has a destabilising rather than a stabilising effect on commodity markets (Mugglin, 2014: 10-14). Home to the FSB Secretariat in Basel and a member to IOSCO since 1996, Switzerland is significantly behind in the overall implementation process of the G20 reform agenda, compared to other jurisdictions.⁶⁰ The existing legislation does not cover the entire scope of the G20 commitments as stipulated under the OTC derivatives market reform agenda, yet full compliance with these requirements is expected in 2015.

A background report on commodities by the Swiss Federal Council adopted 17 recommendations to improve Switzerland’s attractiveness as a business environment while increasing the transparency of finance and production flows. This includes recommendations related to G20 initiatives to increase transparency in price setting and the monitoring of physical markets at multilateral fora, as well as the recommendation for Switzerland to advocate internationally for a global standard of transparency

⁵⁶ For an overview of the MiFID reform process, see: http://ec.europa.eu/internal_market/securities/isd/mifid/index_en.htm

⁵⁷ http://europa.eu/rapid/press-release_MEMO-14-15_en.htm

⁵⁸ <http://www.wdm.org.uk/food-and-hunger/eu-takes-historic-step-stop-banks-betting-hunger>

⁵⁹ For an overview of implementation challenges ahead for MiFID II, see: <http://blogs.cfainstitute.org/marketintegrity/2014/01/22/mifid-ii-agreement-finally-reached-implementation-challenges-ahead/>

⁶⁰ For a review of Progress in Implementing Derivatives Market Reforms in Switzerland, we refer to <https://www.fas.org/sgp/crs/misc/R42961.pdf> (pg. 49).

requirements (FASC, 2013). The overall implementation of these recommendations is believed to be well on track and a progress report released in March 2014 concludes that Switzerland i) fulfills the majority of IOSCO Principles for the Regulation and Supervision of Commodity Derivatives Markets and ii) that the requirements it does not meet yet (e.g. on data collection and OTC regulation) will be met once a new law is in place (FASC, 2014: 6).

Indeed, in December 2013, Swiss authorities launched consultations on a Financial Market Infrastructure Act (FMIA), aimed at reforming the country's important commodity markets (FSB, 2013B: 9). For OTC derivatives, mandatory clearing obligations are part of this proposed reform package, as well as transparency and reporting, though this would not imply regulatory supervision or registration requirements.

A recent study by the Austrian Foundation for Development Research (ÖFSE) offers a comprehensive overview of EU and US initiatives to re-regulate commodity derivative markets. The study identifies the following **shortcomings in the current regulatory framework** (Staritz and Küblböck, 2013: 24):

1. **Transparency and reporting** is incomplete for all commodity derivative transactions, hampering the implementation and monitoring of position limits.
2. There is a need for **mandatory exchange trading for commercial traders** with genuine hedging intentions.
3. Individual and aggregate **position limits** for commodity futures trading, at the national as well as the EU level, are necessary to prevent market abuse by dominant (groups of) traders.
4. In order to **restrict high frequency trading or very short-term trading**, a Financial Transaction Tax (FTT) could be introduced for both exchange and OTC trading.
5. Further action is needed to **address harmful trading strategies**, e.g. high frequency trading, index-replication, technical/algorithmic trading, and/or certain actors (e.g. pension funds).
6. **Proprietary trading by financial and commercial traders** involved in hedging for themselves or their clients should be prohibited.
7. Market regulators require **effective intervention powers and sufficient resources**.
8. **A global regulatory authority embedded in the UN System** should be established to develop globally recognized and harmonised regulations.

Reform initiatives so far have focused on improving transparency and reporting, regulating OTC trade, establishing position limits and, to a lesser extent, the strengthening of regulatory bodies' intervention powers. The study concludes that, despite significant steps in the right direction, the G20 commitments and regulations by the EU and the US, or Switzerland for that matter, still lack important provisions to effectively address food speculation. This particularly holds true regarding **exemptions** that categorically exclude commercial traders from regulatory requirements. A problematic observation since it has become increasingly difficult to distinct between commercial, hedging and financial speculation. Finally, there is a need for better international cooperation and alignment of market regulation. Given the global nature of commodity trading, with contracts between parties from different jurisdictions, closer cooperation between national and regional (EU) regulatory authorities is necessary to prevent a 'race to the bottom' or regulatory arbitrage among jurisdictions. Ideally, a global system at UN level could propose an incremental harmonisation of national market regulation, or at least set minimum standards and position limits (Ederer et al, 2013).

5.2. Biofuels and food prices

There is little to no doubt that demand for biofuel feedstock drives up food prices in international agricultural markets (Zilberman et al. 2012).⁶¹ Although monitoring the net overall effect of biofuels production on world food prices is complex and blurred by the use of competing statistical models, it is widely recognised that the rising demand for biofuels drives up food prices and price volatility because:

- crops used for biofuels reduce the availability of these crops as food or feed;
- mandate induced demand is inelastic and adds to price volatility;
- rising oil prices constitute an opportunity gain for key food- or flex crops;
- financial investments in basket funds with both agricultural commodities and fuel shares enhance the correlation between food and energy markets.

Many other factors influence global food prices. In view of policy-relevance, discussions on price-transmission focus on the isolated effect of biofuels on food prices and their volatility, *ceteris paribus*, looking exclusively at their *additional impact*. Depending on the model of analysis and the type of biofuel considered, economic modeling has so far estimated biofuel induced food price increases varying from a few percent to a several dozen percent. While there is general consensus that a rise in biofuels consumption triggers a rise in food commodity prices, the extent of this impact and in how far it drives food price volatility however, is subject to scientific dispute. The biofuels debate thus remains a controversial one, subject to vivid discussion within the scientific community and opposed (vested) interests.

On the one hand, more and more scientists claim that the high volatility witnessed over the past few years is not an exceptional phenomenon. They see the development of commodity prices above all as a result of basic fundamentals of supply and demand and biofuels are in this regard only accountable for higher and more volatile prices in conjunction with other, more influential factors such as changes in weather, income, population, dietary habits and the macroeconomic environment (Baffes and Hanjotis, 2010; Gilbert, 2010). Even assuming that biofuels do have some impact on agricultural commodity prices on the world market does not imply that they also have an effect on market prices in developing countries. While some acknowledge that additional demand for food and feedstock increases agricultural commodity prices, it is argued that such increases merely evoke short-term impacts. Also, since biofuel mandates in fact guarantee a rather predictable demand for feedstock, they could actually reduce global food price volatility (ECOFYS, 2013; Schmitz, 2012;).

On the other side of the scientific spectrum, a significant amount of authoritative studies have been issued that suggest biofuel production contributes considerably to food price volatility (Schmidhuber, 2006; Collins, 2008; Flamini, 2008; Mitchell, 2008; Abbott, et al. 2011) and consider biofuels mandates as one of the key drivers for the 2007-08 food price crisis (Wise, 2012). Indeed, the 2013 OECD-FAO Agricultural Outlook for 2013-2022 identifies the demand for food and feed crops for the production of biofuels as a significant factor in (projected) future higher prices for agricultural commodities. Prices of biofuels are projected to rise continuously over the next ten years if biofuel mandates are maintained around the world.

Biofuels are part of the deepening integration of energy and agriculture markets and the outlook anticipates that high and volatile oil prices will contribute to higher and more volatile food prices through i) competition for land, and ii) financial investment in commodity baskets containing oil and non-oil commodities such as agricultural commodities (OECD-FAO, 2013). Finally, subsidies for first-generation,

⁶¹ Whether higher food prices are positive or negative for food security depends on a range of different factors but this discussion is beyond the scope of this paper.

'food-based', biofuels lower the costs of biofuel production and thus increase the dependence of crop prices on the price of oil (Schmidhuber, 2006).

The CFS HLPE 2013 report on "*Biofuels and food security*" builds on an exhaustive review of literature, looking at 'how', and 'to what extent' biofuels can drive food prices in different contexts. Since this is by definition based on simulations, the report cautions for firm conclusions, yet offers the following robust observations (HLPE, 2013):

- Regardless of the context, a stimulated biofuel demand affects food commodity prices.
- Biofuels played an important role in short-term food price increases (shocks) over the past few years, yet it is disputed whether they have been the most important contributor.
- Different biofuels have different impacts and impacts can translate from one crop to another as long as they can be substituted in the field or at demand level.
- Biofuels establish a link between energy and agriculture markets and volatility can go in both directions. The strength of the correlation is however disputed and short-term effects on volatility and long-term links can be different and variable among the feedstocks used.

Policy discussions on biofuels have primarily focused on concerns related to environmental sustainability, rather than on food security or food prices. Yet tentative steps have been taken, to curb the impact of biofuel mandates on food prices. The past few years have witnessed a more nuanced and technical approach to the debate since Jean Ziegler, then UN Special Rapporteur on the Right to Food, called for a freeze in biofuel production in 2007, stating it was "a crime against humanity to convert agricultural productive soil into soil which produces food stuff that will be burned into biofuel."⁶²

The position of the WB is in this regard perhaps remarkable. In 2008, WB President Robert Zoellick identified the demand for energy crops as a significant –though not the only - contributor to soaring global food prices.⁶³ Later that year, a confidential WB report was leaked just days before the G8 summit in Japan was to discuss food and fuel prices.⁶⁴ The leaked report claimed biofuels had raised food prices by 75% and evoked severe critique regarding its analytical rigor. Contrary to the findings from 2008, a 2010 study by the WB concluded that the effects of biofuels had not been as large as originally perceived (Baffes and Haniotis, 2010). Finally, in 2013 the Bank released a report concluding that biofuels had a rather insignificant impact on global food prices over the past decade, while high oil prices and exchange rate fluctuations would increasingly be the main causes for extreme food price increases (Baffes and Dennis, 2013).

In 2011, ten intergovernmental organisations, including the OECD, FAO, WB and the WTO, issued a landmark report on Price Volatility in Food and Agricultural Markets. The report was requested by leaders of the G20 and suggests a series of policy responses to address global food price volatility. Regarding the role of biofuels, the report concludes that *'projections encompass a broad range of possible effects but all suggest that biofuel production will exert considerable upward pressure on prices in the future'* and *"as long as governments impose mandates, biofuel production will aggravate the price inelasticity of demand that contributes to volatility in agricultural prices"* (FAO et al. 2011: p. 10). As such, G20 governments are recommended to remove any provisions that subsidize or mandate biofuels production or consumption. If they fail to do so, contingency plans are in order to adjust (at least temporarily) such policies when global

⁶² <http://www.un.org/apps/news/story.asp?NewsID=24434&.Ux9S1fSwLXg>

⁶³ <http://www.npr.org/templates/story/story.php?storyId=89545855>

⁶⁴ <http://www.theguardian.com/environment/2008/jul/03/biofuels.renewableenergy?guni=Article:in body link>

markets are under pressure and food supplies are endangered (FAO et al., 2011).⁶⁵ The eventual outcome of the G20 meeting in Paris in June 2011, however, recognized the vital role of biofuels in the reduction of greenhouse gases, energy security and rural development, claiming there was not enough evidence to link biofuels to food price volatility. Since 2011, bio-energy discussions in G20 fora have primarily focused on environmental objectives and climate change mitigation.

Both the EU and the US, respectively the world's largest consumer and producer of biofuels, have recently set in motion a reform process to **cap the use of food-based biofuels** at their current levels. In the US, this has to do with an approaching ceiling, the 'blending wall', on corn ethanol within the current rules and the current inability of second-generation biofuels to replace their projected share in the energy market.

In the EU, the reform of the Renewable Energy Directive (RED) is not as much about food price concerns as it is about environmental considerations. In October 2012, the European Commission presented its proposals to amend the RED and the accompanying Fuel Quality Directive (FQD)⁶⁶ with the main aim to limit the impact of land use change for food-based biofuel production. Nonetheless, the EC's reform proposal suggested a 5% blending cap for food-crop based biofuels, the 2011 average consumption level for the EU in general, yet already exceeded by some of the Member States. The proposal explains the cap as a means to limit Indirect Land Use Change (ILUC) emissions. While the European Commission does not acknowledge a direct link between EU biofuel production mandates and food price increases in agricultural markets (ECOFYS et al., 2012), the Commission's 2013 Renewable Energy Progress Report notes that pressure exerted on global food markets is likely to drop in case of a decrease in consumption of food-based biofuels (EC, 2013b). The memo accompanying the new reform proposal notes in this regard that any *"increased use of land increases the competition for the resources that we get from our land areas"* and that *"under the new rules, the growth in biofuels in the EU should come from feedstock that are not in competition with food crops, thus minimising these impacts."*⁶⁷

The European Parliament was deeply divided in its voting on the proposed revision in September 2013. The result was a tentative victory for environmentalists on binding ILUC factors yet the proposed 5% cap on first generation biofuels was raised to 6%. Reflective of the strong split in opinions was the narrow vote against a negotiation-mandate with the European Council. At EU Council level, European ministers for energy failed to agree on a compromise deal in December 2013 but agreed to a 7% cap in June 2014. A second reading of the RED reform in the parliament will take place in autumn 2014.⁶⁸

By global standards, **Switzerland** is a minor biofuels producer and biofuels do not constitute a significant contribution to the Swiss climate change agenda with regard to reducing GHG-emissions. The import of biofuels is since July 2008 exempted from petroleum taxes, yet faces stringent ecological and social standards. In August 2012, the Swiss government announced it would stop paying subsidies for biofuels, given their limited contribution to the Swiss energy and climate policy objectives, as well as due to reservations regarding their ecological and social sustainability (Confédération Suisse, 2012).

⁶⁵ Annex D of the reports offers ideas on how to introduce flexibility into policy driven demand for agricultural feed stocks for biofuel production. <http://www.oecd.org/tad/agricultural-trade/48152638.pdf>

⁶⁶ The FQD introduced in 2009 the mandatory target to achieve by 2020 a 6% reduction in GHG intensity of fuels used for transport.

⁶⁷ http://europa.eu/rapid/press-release_MEMO-12-787_en.htm

⁶⁸ For a detailed analysis of the RED reform from a PCD perspective: (Engel, et al., 2013)

Bibliography

- Abbot, P., C. Hurt and W.E. Tyner. 2011. What's Driving Food Prices in 2011. Oak Brook: Farm Foundation. http://www.farmfoundation.org/news/articlefiles/1742-FoodPrices_web.pdf
- Aerni, P., B. Karapinar and C. Haberli 2011 Reframing Sustainable Agriculture, in Cottier, T. and Delimatsis, P (eds) The Prospect of International Trade Regulation. Cambridge University Press.
- Alpha, A. et al. 2006. La protection des marchés agricoles : un outil de développement. Coordination Sud. <http://www.gret.org/publication/la-protection-des-marches-agricoles-un-outil-de-developpement/>
- Anania, G. 2013. Agricultural Export Restrictions and the WTO What Options do Policy-Makers Have for Promoting Food Security? <http://www.ictsd.org/downloads/2013/11/agricultural-export-restrictions-and-the-wto-what-options-do-policy-makers.pdf>
- Augentein, D. 2010. Study of the legal framework on human rights and the environment applicable to European enterprises operating outside the European Union. Study for the European Commission ENTR/09/045 (2010). http://ec.europa.eu/enterprise/policies/sustainable-business/files/business-human-rights/101025_ec_study_final_report_en.pdf
- Baffes, J. and A., Dennis. 2013. Long-term drivers of food prices. Policy Research Working Paper 6455. Washington: World Bank. <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-6455>
- Baffes, J. and T., Haniotis. 2010. Placing the 2006-2008 commodity price boom into perspective. Policy Research Working Paper 5371. Washington: World Bank. http://www.groupepedebruges.eu/pdf/WorldBank_foodpriceboom.pdf
- Bureau, J. and S. Jean. 2013. Do yesterday's disciplines fit today's farm trade? Challenges and possible adjustments for the multilateral trading system. Issue paper for the E15 Expert Group on Agriculture and Food Security. ICTSD & IPC. http://www.ictsd.org/downloads/2013/09/ictsd_bureaujean_17june2013_2.pdf
- Burgi, E. 2014. EU Trade Agreements and their impacts on human rights. CDE Working Paper. http://www.wti.org/fileadmin/user_upload/nccr-trade.ch/other_publications_events/01_CDE_Working_Paper_Buergi_2014.pdf
- Campbell, A. and N. Doswald. 2009. The impacts of biofuel production on biodiversity: A review of the current literature. Cambridge: UNEP-WCMC. [http://www.unep-wcmc.org/medialibrary/2011/03/11/628e876f/The impacts of biofuel production on biodiversity_final_for release.pdf](http://www.unep-wcmc.org/medialibrary/2011/03/11/628e876f/The%20impacts%20of%20biofuel%20production%20on%20biodiversity_final_for%20release.pdf)
- Clapp, J. and E. Helleiner. 2012. Troubled futures? The global food crisis and the politics of agricultural derivatives regulation. In: Review of International Political Economy.

Collins, K. 2008. The role of Biofuels and Other Factors in Increasing Farm and Food Prices. Chicago: Kraft Global Foods. <http://www.thebioenergysite.com/articles/90/the-role-of-biofuels-and-other-factors-in-increasing-farm-and-food-prices>

Committee on World Food Security. 2014. CFS principles for responsible agriculture and food systems. First draft (for negotiation). http://www.fao.org/fileadmin/templates/cfs/Docs1314/rai/FirstDraft/CFS_RAI_First_Draft_for_Negotiation.pdf

Concord. 2012. REACTION to the 2011 EU report on Policy Coherence for Development. February 2012. http://www.bond.org.uk/data/files/EU_/120206_CONCORD_REACTION_to_the_2011_EU_report_on_Policy_Coherence_for_Development_-_FINAL.PDF

Concord. 2013. Spotlight on EU Policy Coherence for Development. The real life impact of EU policies on the poor. Brussels: Concord. http://www.concordeurope.org/component/k2/item/download/222_2e18837b6dc294080716aa06dcbf200c

Confédération Suisse. 2012. Incorporation de biocarburants aux carburants fossiles. Rapport du conseil fédéral en réponse au postulat "Réduction des émissions de CO2 par l'incorporation de biocarburants aux carburants fossiles. Bern: Confédération Suisse. <http://www.news.admin.ch/NSBSubscriber/message/attachments/27928.pdf>

Cotula, L., N. Dyer. and S. Vermeulen. 2008. Fueling exclusion. The biofuels boom and poor people's access to land. Rome: FAO, London: IIED. <http://pubs.iied.org/pdfs/12551IIED.pdf>

Cotula, L., S. Vermeulen, R. Leonard, and J. Keeley. 2009. "Land Grab or Development Opportunity? Agricultural Investment and International Deals in Africa." International Institute for Environment and Development, Food and Agricultural Organization of the United Nations, and International Fund for Agricultural Development, London and Rome. <http://www.fao.org/3/a-ak241e.pdf>

Cordier, J. and Gohin, A. 2012. Quel impact des nouveaux spéculateurs sur les prix agricoles? Une analyse empirique des fonds d'investissement. [file:///localhost/Users/bl/Downloads/B2 - Cordier_Gohin .pdf](file:///localhost/Users/bl/Downloads/B2%20-%20Cordier_Gohin.pdf)

Council of the European Union. 2012. Council Conclusions 'Increasing the Impact of EU Development Policy: an Agenda for Change'. 3166th Foreign Affairs Council Meeting. Brussels, 14 May 2012. http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/130243.pdf

De Schutter, O. 2009. Crisis into Opportunity: reinforcing multilateralism. Background document to the second report on the global food crisis. United Nations Human Rights Council: New York. <http://www2.ohchr.org/english/issues/food/docs/SRRTFsecondglobalfoodcrisisnote.pdf>

- De Schutter. 2010a. Large-scale land acquisitions and leases: a set of minimum principles and measures to address the human rights challenge. Report presented to the Human Rights Council [A/HRC/13/33/Add.2] http://www.srfood.org/images/stories/pdf/officialreports/20100305_a-hrc-13-33-add2_land-principles_en.pdf
- De Schutter, O. 2010b. Food Commodities Speculation and Food-price Crises: Regulation to reduce the risks of price volatility. Briefing Note. Geneva: United Nations Special Rapporteur on the Right to Food.
- De Schutter, O. 2011a. The World Trade Organization and the Post-Global Food Crisis Agenda: Putting Food Security First in the International Trading System. United Nations Special Rapporteur on the Right to Food Activity Report. http://www.wto.org/english/news_e/news11_e/deschutter_2011_e.pdf
- De Schutter, O. 2011b. Guiding principles on human rights impact assessments of trade and investment agreements. Report of the Special Rapporteur on the right to food. http://www2.ohchr.org/english/issues/food/docs/Briefing_Note_02_September_2010_EN.pdf
- De Schutter, O. 2014. Final report: the transformative potential of the right to food. United Nations Human Rights Council: New York. <http://www.futureoffood.org/wp-content/uploads/2014/02/SRRTF-HRC25finalreportMarch2014-copy.pdf>
- Dodd Frank Resource Center. 2014. <http://www.davispolk.com/dodd-frank/>
- ECOFYS et al. 2012. Renewable energy progress and biofuel sustainability. Brussels. http://ec.europa.eu/energy/renewables/reports/doc/2013_renewable_energy_progress.pdf
- ECOFYS, 2013. Biofuels and food security. Risks and opportunities. Utrecht: ECOFYS. <http://www.ecofys.com/files/files/ecofys-2013-biofuels-and-food-security.pdf>
- ECOFYS, EPFL, WWF. 2012. Low Indirect Impact Biofuel (LIIB) Methodology. Version 0. <http://www.ecofys.com/files/files/12-09-03-liib-methodology-version-0-july-2012.pdf>
- Ederer, S., C. Heumesser, C. Staritz. 2013. The role of fundamentals and financialisation in recent commodity price developments. An empirical analysis for wheat, coffee, cotton, and oil. ÖFSE Working Paper 42. Vienna: ÖFSE. http://www.oefse.at/Downloads/publikationen/WP42_price_developments.pdf
- Engel, P., B. Lein, J van Seters and B. van, Helden. 2013. EU Policy Coherence for Food Security: Aligning parallel agendas. (ECDPM Discussion Paper 153). Maastricht: ECDPM. <http://www.ecdpm.org/dp153>
- ETUC. 2013. ETUC Resolution on EU Investment Policy, Brussels, 5/6/2013. Brussels: European Trade Union Confederation. <http://www.etuc.org/documents/etuc-resolution-eu-investment-policy#.U-NfSUgUX-s>

European Commission. 2008. Commission Staff Working Document. Is there a speculative bubble in commodity markets? Task force on the role of speculation in agricultural commodities price movements. Brussels: European Commission. http://ec.europa.eu/economy_finance/publications/publication13765_en.pdf

European Commission. 2009. Council conclusions on Policy Coherence for Development (PCD). Brussels: European Commission. http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/gena/111278.pdf

European Commission. 2010a. Commission Staff Working Document. Policy Coherence for Development Work Programme 2010-2013. Brussels: European Commission. http://ec.europa.eu/development/icenter/repository/SEC_2010_0421_COM_2010_0159_EN.PDF

European Commission. 2010b. Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee Of The Regions. Towards a comprehensive European international investment policy. Brussels, 7.7.2010 COM (2010) 343 final. http://trade.ec.europa.eu/doclib/docs/2010/july/tradoc_146307.pdf

European Commission. 2011. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A renewed EU strategy 2011-14 for Corporate Social Responsibility. COM (2011) 681 final. Brussels, 25.10.2011. http://ec.europa.eu/enterprise/policies/sustainable-business/files/csr/new-csr/act_en.pdf

European Commission. 2012a. Council conclusions on Policy Coherence for Development (PCD). Brussels: European Commission. http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/130225.pdf

European Commission. 2012b. Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee. Trade, growth and development: Tailoring trade and investment policy for those countries most in need. COM (2012) 22 final. Brussels, 27.01.12. http://trade.ec.europa.eu/doclib/docs/2012/january/tradoc_148992.EN.pdf

European Commission. 2013a. Council conclusions on Policy Coherence for Development (PCD). Brussels: European Commission. Council Conclusions 2013: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/140063.pdf

European Commission. 2013b. Staff Working Document. Accompanying the Renewable Energy Progress Report. Brussels: European Commission. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2013:0102:FIN:EN:PDF>

European Commission. 2014. Issue Paper for consultations on the proposed Commission Communication “Strengthening the Role of the Private Sector in Achieving Inclusive and Sustainable Growth in Developing Countries. http://ec.europa.eu/smart-regulation/impact/planned_ia/docs/2014_devco_001_private_sector_communication_en.pdf

European Parliament. 2012. Report on the proposal for a directive of the European Parliament and of the Council on markets in financial instruments repealing Directive 2004/39/EC of the European Parliament and of the Council (recast). Brussels. European Parliament. <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2F%2FEP%2F%2FNONSGML+REPORT+A7-2012-0306+0+DOC+WORD+V0%2F%2FEN>

FAO 2010. Price Surges in Food Markets. How should organized futures markets be regulated? FAO Economic and Social Perspectives Policy Brief. Rome: FAO. http://www.fao.org/docs/up/easypol/822/price-surges_food_markets_264en.pdf

FAO. 2012a. Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Rome: FAO. <http://www.fao.org/docrep/016/i2801e/i2801e.pdf>

FAO. 2012b. The state of food and agriculture. Investing in agriculture for a better future. Rome: FAO. <http://www.fao.org/docrep/017/i3028e/i3028e.pdf>

FAO. 2012c. Price Volatility from a Global Perspective. Technical background document for the High-level event on: "Food price volatility and the role of speculation". FAO Headquarters, Rome, 6 July 2012. http://www.fao.org/fileadmin/templates/est/meetings/price_volatility/Price_volatility_TechPaper_V3_clean.pdf

FAO. 2013a. State of Food Insecurity in the World. The multiple dimensions of food security. Rome: FAO. <http://www.fao.org/publications/sofi/en/>

FAO. 2013b. Trends and impacts of foreign investment in developing country agriculture. Evidence from case studies. Rome: FAO. <http://www.fao.org/docrep/017/i3112e/i3112e.pdf>

FAO. 2013c. FAO Statistical Yearbook 2013: World food and agriculture. Rome: FAO. <http://www.fao.org/docrep/018/i3107e/i3107e.PDF>

FAO, IFAD, IMF, OECD, UNCTAD, WFP, World Bank, WTO, IFPRI and UN HLTF (2011) Price Volatility in Food and Agricultural Markets: Policy Responses. Policy Report submitted to the G20. http://www.foodsecurityportal.org/sites/default/files/g20_interagency_report_food_price_volatility.pdf

FAO, IFAD and WFP. 2013. The state of food insecurity in the world 2013. The multiple dimensions of food security. Rome: FAO. <http://www.fao.org/docrep/018/i3434e/i3434e.pdf>

Federal Authorities of the Swiss Confederation. 2014. Background report on commodities: Implementation of recommendations on track. <https://www.news.admin.ch/message/index.html?lang=en&msg-id=52429>

FIAN Suisse. 2012. Les Impacts de Genève sur le droit à l'alimentation dans les pays du Sud. <http://www.fian-ch.org/wp-content/uploads/Les-impacts-de-Geneve-sur-le-droit-a-l-alimentation-dans-les-pays-du-sud.pdf>

- Flammini, A. 2008. Biofuels and the underlying causes of high food prices. Rome: Global Bioenergy Partnership Secretariat. http://www.eac-quality.net/fileadmin/eac_quality/user_documents/3_pdf/Biofuels_and_the_underlying_causes_of_high_food_prices.pdf
- FSB. 2013a. OTC Derivatives Markets Reforms. Fifth Progress Report on Implementation. http://www.financialstabilityboard.org/publications/r_130415.pdf
- FSB. 2013b. OTC Derivatives Markets Reforms. Sixth Progress Report on Implementation. https://www.financialstabilityboard.org/publications/r_130902b.pdf
- G20. 2011. Action Plan on Food Price Volatility and Agriculture. Paris: Meeting of the G20 Agriculture Ministers, 22 and 23 June 2011. http://agriculture.gouv.fr/IMG/pdf/2011-06-23_-_Action_Plan_-_VFinale.pdf
- G20. 2012. G20 Leaders Declaration Los Cabos Mexico. http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/131069.pdf
- Gasparatos, A. P. Stromberg and K. Takeuchi. 2013. Sustainability impacts of first-generation biofuels. *Animal Frontiers*, 3(2): 12–26. <http://www.animalfrontiers.org/content/3/2/12.full.pdf+html>
- GBEP. 2011. The Global Bioenergy Partnership Sustainability Indicators for Bioenergy. Rome: FAO. http://www.cleanenergyministerial.org/Portals/2/pdfs/The_GBEP_Sustainability_Indicators_for_Bioenergy_FINAL.pdf
- Gerlach, A. and P. Liu. 2010. Resource-seeking foreign direct investments in Africa: A review of country case studies. Trade policy research working paper. Rome: FAO. http://www.fao.org/fileadmin/templates/est/PUBLICATIONS/Comm_Working_Papers/EST-WP31.pdf
- Gilbert, C.L. 2010. How to understand high food prices. In: *Journal of Agricultural Economics*, 61. <http://onlinelibrary.wiley.com/store/10.1111/j.1477-9552.2010.00248.x/asset/j.1477-9552.2010.00248.x.pdf?v=1&t=htpx1ol2&s=2b2796b2917906abf6d75bcb4e6fa6be073ca674>
- Goodison, P. 2014. Supporting structural transformation in the ACP agro-food sector: Redefining possible roles of the ACP post 2020. (ECDPM Discussion Paper 155). Maastricht: ECDPM. [http://www.ecdpm.org/Web_ECDPM/Web/Content/Download.nsf/0/77200E4AD3CC4A06C1257C8500310710/\\$FILE/DP_155_Supporting_Structural_Transformation.pdf](http://www.ecdpm.org/Web_ECDPM/Web/Content/Download.nsf/0/77200E4AD3CC4A06C1257C8500310710/$FILE/DP_155_Supporting_Structural_Transformation.pdf)
- Grow Africa Secretariat. Investing in the future of African agriculture. 1st Annual Report on private-sector investment in support of country-led transformations in African agriculture. Geneva: Grow Africa Secretariat.

- Henn, H. 2013. Evidence on the Negative Impact of Commodity Speculation by Academics, Analysts and Public Institutions. Berlin: World Economy Ecology and Development (WEED). http://www2.weed-online.org/uploads/evidence_on_impact_of_commodity_speculation.pdf
- Heri, S. et al. 2011. International instruments influencing the rights of people facing investments in agricultural land. Oxfam Novib/WTI/SOMO/International Land Coalition. http://www.landcoalition.org/sites/default/files/publication/903/WTI-SOMO-ON_instruments_web_11.03.11.pdf
- HLPE –CFS. 2011. Price Volatility and Food Security. Rome: Committee on World Food Security. http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE-price-volatility-and-food-security-report-July-2011.pdf
- HLPE. 2013. Biofuels and Food Security. A report by the HLPE on Food Security and Nutrition. Rome: Committee on World Food Security. http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-5_Biofuels_and_food_security.pdfhttp://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-5_Biofuels_and_food_security.pdf
- Heumesser, C. and C. Staritz., Financialisation and the microstructure of commodity markets. A qualitative investigation of trading strategies of financial investors and commercial traders. ÖFSE Working Paper 44. Vienna: ÖFSE. http://www.oefse.at/Downloads/publikationen/WP44_financialisation.pdf
- Hoffman. 2014. The possible effect on the Namibian economy of the signing or non-signing of the Economic Partnership Agreement with the European Commission as on October 2014. Tralac Trade Brief. <http://www.tralac.org/images/docs/5768/us14tb032014-hoffmann-possible-effects-on-namibian-economy-of-signing-or-non-signing-of-epa-201403612.pdf>
- Hong, D. 2013. New Alliance for food security and nutrition. London: ONE. <http://www.one.org/us/policy/policy-brief-on-the-new-alliance/>
- ICTSD. 2009. Agricultural Subsidies in the WTO Green Box: Ensuring Coherence with Sustainable Development Goals. Information Note 16. <http://www.ictsd.org/downloads/2012/02/agricultural-subsidies-in-the-wto-green-box-ensuring-coherence-with-sustainable-development-goals.pdf>
- IOSCO. 2011. Principles for the Regulation and Supervision of Commodity Derivatives Markets Final Report. <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD358.pdf>
- Kern, S. 2010. US financial market reform - The economics of the Dodd-Frank Act, Deutsche Bank Research, September 2010. http://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD000000000262857.pdf

- Knoll, A., F. Krätke, N. Keijzer, and J. Oppewal. 2013. Putting Policy Coherence for Development into perspective: Supporting Switzerland's promotion of PCD in commodities, migration and tax policy. Bern: Swiss Agency for Development and Cooperation SDC. <http://ecdpm.org/wp-content/uploads/2013/11/Policy-Coherence-Development-Switzerlands-PCD-Commodities-Migration-Tax.pdf>
- Lagi, M., Y. Bar-Yam, K.Z. Bertrand and Y. Bar-Yam. 2011. The Food Crisis: A quantitative model of food prices including speculators and ethanol conversion. Cambridge: New England Complex Systems Institute. http://necsi.edu/research/social/food_prices.pdf
- Matthews, A. 2005. Policy Coherence for Development: Issues in Agriculture: An Overview Paper. <https://www.tcd.ie/iis/documents/discussion/pdfs/iisd63.pdf>
- Matondi, P.B., K. Havernik and A. Beene. 2011. Biofuels, land grabbing and food security in Africa. London.
- Meijerink, G., S. Berkum van., K. Shutes and G. Solano. 2011 Price and Prejudice. Why are food prices so high? LEI Report 2011-035. Wageningen: LEI. <http://edepot.wur.nl/171895>
- Mihalache-O'Keef, A. and Q. Li. 2011. Modernization vs. Dependency Revisited: effects of Foreign Direct Investment on Food Security in Less Developed Countries."International Studies Quarterly 55: 71-93. <http://onlinelibrary.wiley.com/doi/10.1111/j.1468-2478.2010.00636.x/abstract>
- Mitchell, D. 2008. A note on rising food prices. Washington: World Bank. https://papers.ssrn.com/sol3/Data_Integrity_Notice.cfm?abid=1233058
- Mugglin, M. 2014. Nahrungsmittelspekulation (K)ein Problem? Bern: Alliance Sud. http://www.alliancesud.ch/de/publikationen/downloads/Studie_Nahrungsmittel_DE_2014-02-24_Hyperlinks.pdf
- NL Agency. 2013. Combining bioenergy production and food security. The Hague: Dutch Ministry of Economic Affairs. http://www.globalbioenergy.org/uploads/media/1305_NL_Agency_-_Combining_biomass_production_and_food_security.pdf
- OECD. 2013a. Better Policies for Development. In Focus: Policy Coherence for Development and Global Food Security. Paris: OECD. http://www.oecd.org/pcd/PoliCoh_PDFforWeb_270513.pdf
- OECD. 2013b. Agricultural Policy Monitoring and Evaluation 2013: OECD Countries and Emerging Economies. Paris: OECD. http://www.oecd-ilibrary.org/agriculture-and-food/agricultural-policy-monitoring-and-evaluation-2013_agr_pol-2013-en
- OECD-FAO. 2013. Agricultural Outlook 2013-2022. Paris: OECD. <http://www.oecd.org/site/oecd-faoagriculturaloutlook/highlights-2013-EN.pdf>

- OXFAM. 2013. Cereal Secrets. The world's largest grain traders and global agriculture. Oxford: Oxfam GB.
<http://www.oxfam.org/sites/www.oxfam.org/files/rr-cereal-secrets-grain-traders-agriculture-30082012-en.pdf>
- Peterson, L. 2004. Bilateral investment treaties and development-policy making. International Institute for International Development. http://www.iisd.org/pdf/2004/trade_bits.pdf
- Pradeep S. Mehta, B. Chatterjee and F. Pasini. 2012. Comments on the EC Communication on Trade, Growth and Development. In: The next decade of EU trade policy: Confronting global challenges?. London: ODI. <http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7727.pdf>
- Rakotoarisoa, M. 2011. A contribution to the analyses of the effects of foreign agricultural investment on the food sector and trade in sub-saharan Africa. FAO Commodity and Trade Policy Research Working Paper Nr 33. Rome: FAO.
http://www.fao.org/fileadmin/templates/est/PUBLICATIONS/Comm_Working_Papers/Working_paper_33.pdf
- Searchinger, T., R. Heimlich, R. Houghton, F. Dong, A. Elobeid, J. Fabiosa, S. Tokgoz, D. Hayes and T. Yu. 2008. Use of U.S. Croplands for Biofuels Increases Greenhouse Gases Through Emissions from Land-Use Change. Science 319(5867): 1238 – 1240. <http://www.ncbi.nlm.nih.gov/pubmed/18258860>
- Schmidhuber, J. 2006. Impact of an increased biomass use on agricultural markets, prices and food security: A longer-term perspective. Paris: International symposium of Notre Europe. http://www.fao.org/fileadmin/templates/esa/Global_persepctives/Presentations/BiomassNotreEurope.pdf
- Schmitz, M. 2012. Determination basis for the level and volatility of agricultural commodity prices in International Markets. Giessen: Justus-Liebig-University, Institute for Agricultural Policy and Market Research and Institute for Agribusiness. file://localhost/Users/bl/Downloads/12-02-23-Ufop_VDB-Schmitz_Vorstudie_ENG.pdf
- Shutes, K. and G. W. Meijerink. 2012. Food prices and agricultural futures markets: a literature review. WASS Working Paper no.3. Wageningen: Wageningen School of Social Sciences. http://www.wageningenur.nl/upload_mm/b/7/3/e5e5a5ab-b977-43ef-a32c-82f6cacdd250_WWP03.pdf
- Staritz, C. and K. Küblböck. 2013. Re-regulation of commodity derivative markets. Critical assessment of current reform proposals in the EU and the US. ÖFSE Working Paper 45. Vienna: ÖFSE. http://www.oefse.at/Downloads/publikationen/WP45_re-regulation.pdf
- Steurer, R. S. Margula and G. Berger. Public policies on CSR in EU Member States: Overview of government initiatives and selected cases on awareness raising for CSR, sustainable public procurement and socially responsible investment, ESDN Quarterly Report June 208. http://www.sd-network.eu/quarterly%20reports/report%20files/pdf/2008-June-Public_policies_on_CSR_in_EU_Member_States.pdf

- Tadessa, G., B. Algieri, M. Kalkuhl and J. von Braun. 2013. Drivers and triggers of international food price spikes and volatility. *Food Policy*. http://ac.els-cdn.com/S0306919213001188/1-s2.0-S0306919213001188-main.pdf?_tid=a6d20d88-aa98-11e3-8fbf-00000aab0f6b&acdnat=1394706016_822ef03b3e786b3faa2402f9295c3db9
- te Velde, D. 2001. Policies towards foreign direct investment in developing countries: emerging best-practices and outstanding issues. London: Overseas Development Institute. <http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/5543.pdf>
- Ulysses. 2013. Food price volatility drivers in retrospect. Policy Briefing No 1. Georg-August Universität: Göttingen. http://www.fp7-ulysses.eu/publications/ULYSSES_Policy_Brief_1_Food_price_volatility_drivers_in_retrospect.pdf
- UNCTAD. 2009. Trade and Development Report Chapter II: The financialisation of commodity markets. Geneva: UNCTAD. http://unctad.org/en/docs/trd2009ch2_en.pdf
- UNCTAD. 2011a. Price Formation in Financialized Commodity Markets: The Role of Information. Geneva, UNCTAD. http://unctad.org/en/docs/gds20111_en.pdf
- UNCTAD. 2011b. Investment country profiles Switzerland. Geneva: UNCTAD. http://unctad.org/en/Docs/diaeiamic2011d11_en.pdf
- UNCTAD. 2012. Don't blame the physical markets: financialisation is the root cause of oil and commodity volatility. Policy Brief 25. Geneva: UNCTAD. http://unctad.org/en/PublicationsLibrary/presspb2012d1_en.pdf
- UNCTAD. 2013a. Generalized System of Preferences Handbook On The Scheme Of Switzerland. http://unctad.org/en/PublicationsLibrary/itcdtsbm28rev3_en.pdf
- UNCTAD. 2013b. World Investment Report 2013. Global value chains: investment and trade for development. Geneva: UNCTAD. http://unctad.org/en/publicationslibrary/wir2013_en.pdf
- UNCTAD. 2014. Investor-State Dispute Settlement. UNCTAD Series on Issues in International Vestment Agreements II. Geneva: UNCTAD. http://unctad.org/en/PublicationsLibrary/diaeia2013d2_en.pdf
- United Nations. 2006. Interim Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, U.N. Doc. E/CN.4/2006/97.
- Wahl, P. 2009. Food Speculation as the Main Factor of the Price Bubble in 2008. Briefing Paper. *World Economy, Ecology and Development*. Berlin: WEED. http://www.taxjustice-and-poverty.org/fileadmin/Dateien/Kampagnen-Seite/Unterstuetzung_Wissenschaft/WEED_Food_Speculation.pdf

- Wimberley, D. 1991. Transnational Corporate Investment and Food Consumption in the Third World: A Cross-National Analysis. *Rural Sociology* 56: 406–431. <http://onlinelibrary.wiley.com/doi/10.1111/j.1549-0831.1991.tb00441.x/abstract>
- Wise, T. and S. Murphy. 2012. *Resolving the Food Crisis. Assessing Global Policy Reforms Since 2007*. Medford: Tufts University. <http://www.ase.tufts.edu/gdae/Pubs/rp/ResolvingFoodCrisis.pdf>
- World Bank. 2010. *Rising Global Interest in Farmland*. Washington: World Bank. <http://siteresources.worldbank.org/DEC/Resources/Rising-Global-Interest-in-Farmland.pdf>
- WTO. 1995. *Agreement on agriculture. The results of the Uruguay Round of multilateral Trade Negotiations*. Geneva: WTO. http://www.wto.org/english/docs_e/legal_e/ursum_e.htm
- WTO. 2013. *Trade Policy Review Switzerland And Liechtenstein. Report By The Secretariat*. http://www.wto.org/english/tratop_e/tpr_e/tp380_e.htm
- Zilberman, D., G. Hochman, D. Rajagopal, S. Sexton, and G. Timilsina. 2012. The impact of biofuels on commodity food prices: assessment of findings. In: *American journal of Agricultural Economics*. <http://ajae.oxfordjournals.org/content/95/2/275.full.pdf+html>

Annex 1: Speculation on commodity derivatives

The particular issue of concern is speculation on derivatives of food commodities. Foodstuffs are not only sold and purchased directly, but are also subject to advance buying of future harvests. In the latter case, buyers and sellers (e.g. farmers, processors, producers or traders) agree to buy or sell a given amount of a commodity at a given time in the future, but at a price that is agreed upon in advance. Such agreements for future transaction are referred to as 'derivatives' since they derive their value from an underlying asset (e.g. stocks, bonds, interest rates and commodity indexes).

Entering the 'futures' market, seller and buyer establish a certain guarantee regarding the price of their transaction. Farmers lock in prices when they are planting in case of low prices at the time of harvest, and processors in turn insure themselves against high prices in case a bad harvest occurs. In other words, futures 'hedge' against price fluctuations. In order to facilitate trade between seller and buyer on the futures markets, 'hedgers' or 'speculators' act as intermediaries who buy and sell from respectively farmer and processor and offer, against a certain insurance fee, to carry their losses (or skim the profits) in case commodity prices drop below or rise above a certain margin. There are roughly two types of derivatives contracts:

- **Exchange traded derivatives** are traded on a regulated marketplace with standardised rules and procedures for buyers and sellers to adhere to when trading in futures contracts. Once a contract is sealed, it goes through a *clearing house* which then buys and sells all contracts. The added value of trading on exchange markets is that both parties are guaranteed that the deal will be executed and that contracts are interchangeable as long as they cover the same commodity and the same specifications in terms of delivery, quantity and delivery location.
- Contrary to exchange markets, **Over-The-Counter (OTC) trading** concerns a contract directly between two parties, they are not listed on the exchange and no third party is involved. As such, these transactions are not regulated or standardized in terms of quantity, quality and maturity dates. The absence of a third party, hedging the deal, makes OTC trading risky since there is no instance that guarantees payment. OTC's constitute the vast majority of trading in derivatives.

'Traditional', or commercial speculation' is based on market fundamentals, essentially supply and demand, making profits by anticipating price changes and taking appropriate positions. Speculation in this sense is not new, in fact it is an intrinsic part of the functioning of futures markets. It also helps with the 'price discovery' of a given commodity since traders generally know the market well and act as stock managers who buy and sell at the most opportune moment, keeping their profits or losses reasonably limited. This type of speculation also helps both producers and purchasers in providing liquidity in the short term on transactions that are done months ahead of the final transaction (FAO, 2010). For these reasons, this sort of commercial trading is often considered as 'good' or 'useful' speculation and the traders involved are referred to as 'hedgers', rather than speculators. That said, speculation or hedging always drives up food prices since the hedger's risk premium or insurance fee drives up prices on both ends. Also, speculation can have significant price effects through the hoarding of large volumes of a commodity (in anticipation of higher prices), without adding any economic value. (Wahl, 2009).

Non-commercial speculation on commodity prices is the type of speculation referred to in the price volatility debate. This is not the traditional, hedging or commercial type, but a financial form of speculation. In the latter case, traders are not interested in the commodity as such, but in a speculative gain, based on expected 'herding behaviour' when large groups of speculators join strong, usually upward, price trends

that deviate significantly from the actual value of the commodity as it would be determined through direct trade, described as the 'cash' or 'spot' market. In developed and well accessible markets such behaviour could then easily result in the emergence of speculative bubbles (EC, 2008). Speculation on commodity markets used to be dominated by a limited number of highly specialist physical trading houses⁶⁹, yet due to the deregulation of global commodity markets, the past few years (and particularly after the crash of the housing market in 2007) have seen an overwhelming influx of non-traditional, institutional investors such as pension funds, sovereign wealth funds and large commercial banks, which tend to invest in particular derivative instruments such as *Commodity Indexes*. Such funds speculate on baskets of up to twenty or more different commodity futures, including metals and oil, but also agricultural commodities.⁷⁰

Commodity Indexes not only link food prices to the prices of oil and/or minerals (the other commodities in the basket) that can have volatile prices, they also tend to spend large amounts. Such increases in speculative activities then raise the volume of trading in futures, which in turn leads to higher futures prices. This then translates into higher 'spot' prices. Moreover, Commodity indexes hold futures contracts for a long time, which makes them less likely to be sufficiently responsive to basic market fundamentals (Tadessa et al., 2013).

⁷⁰ Agricultural commodities usually account for 10% - 20 % of the index.