

Q & A: What are the impacts of agrofuels on the right to food?

Background

Olivier De Schutter is the UN Special Rapporteur on the right to food. He has examined a wide range of reports concerning the development of agroenergy over the past five years. He has also commissioned a study focused specifically on the relationship between agroenergy and the human right to adequate food. On 24-25 November 2011, he convened a multi-stakeholder meeting in Brussels to discuss agrofuels. The majority of studies and views brought to the attention of the Special Rapporteur concern EU agrofuel policy; this q & a likewise refers extensively to EU policy, while identifying concerns and drawing conclusions with implications for all regions as they design agrofuel policies and orientations now and in the future.

Do agrofuels affect food prices?

Agrofuels inject significant additional demand into commodity markets, and therefore impact prices significantly, both on international markets, and on the domestic markets of net-food-importing countries, particularly for low-income countries with few means to shield their populations against price volatility.

Since 2001, 70 per cent of the incremental demand for maize, 13 per cent for wheat, 90 per cent for rapeseed, 47 per cent for soybean oil, and 22 per cent for palm oil, has been accounted for by feedstocks for agrofuels. Globally, 15 per cent of maize production (and 40 per cent of maize produced in the US) and 16 per cent of the production of rapeseed, soybean, sunflower and palm oil, go to biodiesel. The diversion of maize to ethanol production by the US alone has been estimated to cost poor food-deficit countries in excess of 9 billion USD since 2006, in the shape of higher food bills.

High food prices on international and domestic markets can place food out of reach of the poorest consumers, and are therefore a major threat to the right to food. The consequences on food prices and food price volatility of agrofuel policies led a dozen international institutions, including the OECD and the FAO, to come together in 2011 to issue a joint report that called for the elimination of distortive agrofuel policies.

Does energy demand affect commodity prices in the same way as food demand?

Demand for energy crops is of a different nature to demand for food crops. Demand for food increases in proportion to population growth and as a result of changing diets, particularly since, as incomes rise, people tend to turn to more animal protein-rich diets entailing larger amounts of cereals per calorie consumed. Nevertheless, this demand for food remains within limits, and has hitherto been matched by improvements in agricultural productivity.

But the demand for energy does not follow that logic: **the demand is practically infinite, and rises in proportion both to demographic growth and to income growth**. The 2007-8 sudden increase in the prices of agricultural commodities was a

harbinger of what may lie ahead in this regard: a World Bank report estimated in July 2008 that about 75 per cent of these increases could be attributed to the EU and US policies on agrofuels, concluding that "the most important factor was the large increase in biofuels production in the U.S. and the EU. Without these increases, global wheat and maize stocks would not have declined appreciably, oilseed prices would not have tripled, and price increases due to other factors, such as droughts, would have been more moderate".

Do agrofuels undermine food security locally?

Major concerns exist in regard to local food security in the countries dedicating an increasing portion of their farmland to the production of energy crops. As more land and water are allocated to such crops, **competition increases for access to resources, with potentially detrimental consequences for the production of food crops that feed the local communities.** This may lead to local food prices rising, and to local food insecurity increasing as a result, concentrated within the groups of the local population that do not benefit, through increased incomes, from the production of agrofuels. Indeed, it was the fear that local grain prices would steadily increase if more cereals were converted to agrofuel production that led China to suspend the expansion of agrofuel production in 2006.

What type of farms win and lose from agrofuels?

Due to weather conditions and lower wages, developing countries in principle have a strong comparative advantage in the production of agrofuels. As a rule however, crops for fuel are produced by large agricultural producers, or by multinational companies owning or renting land in developing countries. **Only rarely are small-scale farmers involved in such production, and neither are they able to benefit from price increases** stemming from the increased demand for agrofuel feedstocks. First, although they may gain some income from selling their surplus crops on the market, the poorest farmers are often net food buyers, and they only manage to feed themselves through the lean season by combining different sources of income; second, small-scale farmers are often in a weak bargaining position and sell their crops at low prices even when prices on international markets rise, in part because of a lack of information and a lack of storage facilities, and in part because they face a limited number of commodity buyers who only offer a relatively low price to the producers.

Simply encouraging the development of monocultures for exports, when this will benefit primarily large-scale producers who already reap most of the benefits from improved access to the high-value markets of industrialized countries, may in fact increase inequalities within developing countries, rather than reducing them. Supporting small-scale farming, meanwhile, delivers the inherent win-win of putting income in the hands of farmers who are themselves among the poorest and most food insecure, while supporting those who have a long-term interest in maintaining – and not merely exploiting - the natural resource base. **Family farms require positive discrimination,** as was noted by the outcome documents of the 17-21 November 2008 International Conference on Biofuels in São Paulo. The EU Policy Coherence for Development strategy and EU Policy Framework to Assist Developing Countries in Addressing Food Security Challenges also pledge to support smallholders. This is the context in which all agricultural development – for food *or* for fuel – should be conceived.

What are the impacts of agrofuels on land concentration?

Globally 25 per cent of land is already degraded, and remaining productive areas are subject to ever-greater competition from industrial and urban uses. **The development of agrofuel production has an impact on access to natural resources such as land and water, and may increase land concentration.**

In April 2010, the World Bank presented an inventory showing that, of 389 large-scale investment acquisitions studied, thirty-five per cent focused upon the development of agrofuels compared to thirty-seven per cent on conventional uses (crops and livestock). These findings were further strengthened by the widest study ever performed on large-scale land acquisitions, by the Land Matrix project, which came to the conclusion that in the period 2000-2010, large-scale transnational deals (above 200 hectares) concerning farmland amounted to about 58 million hectares of land – more than half the surface of Western Europe. 625 of these deals -- covering 43 million hectares -- could be cross-referenced by the authors: from this total, 34 per cent only were for food crops, the rest was for "flex crops" such as soybean, sugar cane, or palm oil which have both food and non-food uses (23 per cent), or for non-food crops (26 per cent), with a remaining 17 per cent for "multiple uses".

Energy crops, then, represent a **significant driver in the overall trend of large-scale acquisition** or lease of farmland, representing probably between one quarter and one third of total acquisitions of farmland.

How are the land rights of vulnerable communities affected?

In many Sub-Saharan African countries, land users in rural areas have no legally recognized title to the land that they depend on, which is considered to be State-owned. They have no recourse against evictions, if land is ceded to an investor offering to "develop" it. **Massive social disruptions could result from this situation.** Strong commercial pressures on land, aggravated by the demand for agrofuels, are therefore a threat to smallholders where their security of tenure is weak, while any extra pressures on land, water and natural resources are likely to exacerbate the difficulties of vulnerable communities in producing or procuring food.

What are the current sustainability approaches?

Regulators have been made aware of some of the concerns linked to agrofuel production, and have therefore inserted sustainability criteria in legislation mandating or encouraging increases in production. In the United States, the Environmental Protection Agency is tasked with enforcing section 211 of the Clean Air Act, as amended by the 2005 Energy Policy Act. That provision lists a number of sustainability criteria. In the EU, Article 17 of the 2009 Renewable Energy Directive (RED) provides that biofuels shall only count towards the targets set at national level and for compliance with renewable energy obligations, as well as for financial support, if (i) the savings in greenhouse gas emissions amount to at least 35 per cent (and 50 per cent after 2017); (ii) the biofuels shall not be made from raw material obtained from land with high biodiversity value (primary forests and other wooded land, areas designated for nature protection purposes or designated as rare, threatened or endangered ecosystems, of highly biodiverse grassland) or from land with a high carbon stock (such as wetlands or

continuously forested areas); (iii) where the raw materials are cultivated in the EU, if this is in compliance with the EU environmental standards.

In addition, the RED provides that the Commission shall report, every two years, and for the first time in 2012, on the national measures taken with regard to the sustainability criteria set out above and on the measures taken for soil, air and water protection, both in the third countries and in the EU Member States which provide a significant source of agrofuels or of raw materials for agrofuels to be consumed within the EU. The Commission shall also report on the social sustainability of the increased demand for biofuels; on the impact of this demand on the availability of foodstuffs at affordable prices; and on respect of land-use rights. It may propose corrective action, in particular if increased demand for biofuels is found to have a significant impact on food prices.

An area in which the EU has delayed adding sustainability criteria is indirect land use change (ILUC), which refers to the fact that as land is used to produce energy crops, the cultures that were formerly grown on that land are shifted to be grown elsewhere, sometimes at the expense of forests or areas rich in biodiversity. On 22 December 2010, the Commission adopted a report on ILUC related to agrofuels and bioliquids. The report recognized the difficulty of such an assessment: "Estimating the greenhouse gas impact due to indirect land-use change requires projecting impacts into the future, which is inherently uncertain, since future developments will not necessarily follow trends of the past. Moreover, the estimated land-use change can never be validated, as indirect land-use change is a phenomenon that is impossible to directly observe or measure." It nevertheless acknowledged that "indirect land-use change can have an impact on greenhouse gas emissions savings associated with biofuels, which could reduce their contribution to the policy goals, under certain circumstances in the absence of intervention". The European Commission's decision to revisit its renewable energy targets in October 2012 is tied to remaining concerns about ILUC, and is accompanied by measures to introduce reporting for ILUC.

How well do these sustainability approaches respond to the main concerns about agrofuels?

Food prices: Current efforts to measure and curb impacts on food prices are insufficient: monitoring of the macro-economic impacts of the increased demand for agrofuels as provided for in the RED is particularly weak and may prove ineffective. Given the potential magnitude of the problem, the impact on food prices may not be addressable at all through technical solutions such as revised subsidy structures or mandate targets.

Local food security: Current sustainability criteria are inadequate or non-existent in regard to the interests of smallholder farming and local food security. It is crucial to monitor the impact of agrofuel production on the structure of revenues in the agricultural sector of developing countries, but current approaches do not encompass this. Meanwhile, the ratification of particular ILO conventions is a weak indicator of effective compliance with labour standards, and further efforts are needed. Remaining on the current trajectory would run counter to the objectives the EU has set for itself in the area of food security; it would run counter to the "Policy Coherence for Development" Agenda of the EU; and it would run counter to the EU Treaty itself,

which includes human rights as an objective of all external EU policies, including in the areas of trade and investment.

Land concentration and natural resources: Current agrofuel sustainability approaches designate specific areas of natural importance off-limits, but these approaches insufficiently address the socio-environmental impacts of aggregate land concentration – a trend to which agrofuel developments appear to be contributing in many parts of the world.

Meanwhile, the difficulties in measuring and factoring in ILUC signify a major deficit in any attempt at rigorous environmental sustainability for agrofuels. Future sustainability approaches must address all potential impacts on third countries, given the significant reliance on imports both at present and most likely in the future to satisfy agrofuel mandates.

It has now become clear that once we adopt a life-cycle perspective on the production of agrofuels, and particularly if we take into account both direct and indirect shifts in land-use, the environmental balance is often negative - though strong differences exist between the energy crops with the best environmental balance, such as ethanol from sugar cane, and those with the worst balance, such as ethanol from corn. In addition, importing agrofuels or the raw materials for agrofuels, or importing commodities that the EU shall not produce itself because of the increased production of biofuels in Europe (the increased production of rapeseed for biodiesel especially in Germany, for instance, has led the EU to import more vegetable oils), is a way for the EU to comply with its obligations under the Kyoto Protocol simply by outsourcing production without questioning the impacts of its consumption modes on greenhouse gases emissions.

Governments should therefore manage scant resources in a way that puts first food production – both domestically and where imported fuels are concerned.

What future for agrofuel mandates?

Most experts predict that the production of agrofuels will rise substantially by 2020. Under most scenarios ethanol is likely to remain the main liquid biofuel produced (chiefly from corn in the United States, and from sugar cane in Brazil), although biodiesel shall increase in proportion (mainly produced in the United States, but also in Europe and Argentina). By 2050, following current trends, one quarter of transport energy could be supplied by agrofuels. This increase is in part attributable to mandates set by regulators.

Mandates on use present the same problem as mandates on production: the consumption of ethanol by US cars alone has been estimated to represent 13 per cent of the global production of maize, or about 4.6 per cent of all global grain production -- and only to produce a quantity of ethanol that is estimated to represent the energy equivalent of about 0.7 per cent of global oil needs.

It is imprudent to support, let only to mandate, extra agrofuel production when food prices are high and volatile and, by the latest global count, 870 million people are hungry, and when the impacts on smallholders and land patterns are likely to be negative, and the environmental benefits highly questionable.

The European Commission's decision to review its agrofuel mandates is a welcome step, but is alone insufficient to avert unsustainable trends, given that the same insufficient sustainability criteria would still govern remaining mandated production. **The gradual removal of all agrofuel mandates and subsidies is therefore necessary.**

How can agrofuels be sustainably regulated in the future?

Governments should fully **integrate agrofuel policy into national strategies for food security and the right to food**, in order to ensure that all new agricultural developments – for food or for fuel – aid the progressive realization of the right to food by increasing, and not hindering, the ability of vulnerable populations to produce or to procure food.

Given that agrofuel developments are still likely to take place, even without public support, States should carry out **robust case-by-case impact assessments** – both for domestic and imported fuel – in order to ensure the most sustainable production patterns.

What questions should impact assessments ask?

Impact assessments should ensure that States put **local food security first** and that no development exacerbates existing pressures on local resources, or on the ability of communities – particularly small-scale and subsistence farms - to produce or procure food. Impact assessments could cover, for instance, the following areas:

- Who are the current users of this land, and are their rights fully respected in the process of development of agrofuels?
- What is the current state of local food insecurity and how dependent is the community/region/country on food imports, particularly for staple foods? Shall the expansion of energy crops increase dependence on imports, and potentially worsen local food insecurity?
- Can the local resources in question (land, water) be better used to service local food needs?
- What modes of agriculture will be favored in the production of agrofuels and what will the impacts be for local smallholders?
- Can smallholders benefit from the expansion of energy crops and can opportunities be found to increase the incomes of smallholders and their position in local value chains?
- What is the state of local energy provision, and will the energy yielded be used for local electrification?