The European Commission's *Renewable Energy Progress and Biofuels Sustainability Reports 2013*: A Critical Analysis of the Coverage of Land Rights and Socio Economic Impacts.

Briefing for ActionAid International

03.05.2013

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I. Background and Introduction

The European Commission (EC) is obliged to report to the European Union's Parliament and Council on the progress made towards implementation of its 2009 Renewable Energy Directive[i] (RED) including on the sustainability of its biofuel consumption and its socio-economic and developmental impacts. The report should be issued every two years and assess the progress made by EU Member States in the promotion and use of renewable energy (such as wind, solar, hydro-electric, tidal, geothermal and biomass which includes biofuels and bioliquids). Article 17 of the RED outlines environmental sustainability criteria that biofuels need to meet to count towards the 10 % renewable energy in transport energy. However, at the moment, there are no binding social criteria under RED which could ensure that the EU biofuels market does not generate negative socio-economic impacts. Nevertheless, the EU has a legal obligation to ensure that its policies do not have negative effects on development in countries outside of the EU contained in Article 208 of the Lisbon Treaty[1] otherwise known as Policy Coherence for Development. In addition, the EU is bound to respect, protect and promote human rights including economic, social and cultural rights.[2]

This is the first Renewable Energy Progress Report issued by the European Commission which in addition to environmental sustainability is also required to report on:

> "the impact **on social sustainability** in the Union *and in third countries of increased demand for biofuel, on the impact of EU biofuel policy on the availability of foodstuffs at affordable prices, in particular for people living in developing countries, and wider development issues*. Reports shall address the respect of land-use rights. They shall state, both for third countries and Member States that are a significant source of raw material for biofuel consumed within the Union, whether the country has ratified and

[1] Article 208, Treaty of Lisbon, states that "Union development co-operation policy shall have as its primary objective the reduction and, in the long term, the eradication of poverty. The Union shall take account of the objectives of development co-operation in the policies that it implements which are likely to affect developing countries" See: http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2007:306:SOM:EN:HTML

[2] For a summary of the EU human rights obligations in relation to the social and developmental effects of its biofuel policies see ActionAid (2012) "Fuel for Thought: Addressing the social impacts of the EU biofuels policies."

implemented each of the following Conventions of the International Labour Organisation (..)" (Article 17(7) of RED – emphasis added)[3]

It is important to mention that the EC Renewable Energy Progress Report limits itself to the analysis of the **impacts of the EU consumption of 1st and 2nd generation of biofuels up to the end of 2010 and not to the general impact of the EU policy targets of 10% renewable energy in transport fuels by 2020**. The Report can be seen as divided into two parts: an analysis of environmental impacts of biofuels based on Member States reports up to 2010 and an analysis of socio-economic impacts based on the wider literature. Given that the reporting requirements on social implications require looking at impacts of "increased demand" it is not clear why the Renewable Energy Progress Report limits its analysis of this section only up to the year 2010.

It is equally important to note that due to the problems faced with accounting for CO2 emission reductions in the use of biofuel crops as a result of the Indirect Land Use Change (ILUC)[4], the Commission proposed in October 2012 to reduce the use of food crops based biofuels, i.e. cereals, other starch rich crops, sugar and oil crops, to no more than 5% of total transport fuel consumption by energy content across the European Union. This means that the European Commission has implicitly acknowledged that the EU's growing biofuel demand creates increasing pressures on availability of arable land globally.

The first Renewable Energy Progress Report was released by the EC with a few months delay on March 27th 2013[5] and it consists of three key parts:

1) ***Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Renewable Energy Progress Report."*** {**SWD(2013) 102 Final}.**[6] This is the key report which will be submitted to the European Parliament and Council and its role is to summarize the key findings of the background study by Ecofys as interpreted by the Commission.

2**) *The Commission Staff Working Document Accompanying the Report from the Commission to the European Parliament and the Council "Renewable Energy Progress Report"*{COM(2013)175 final}.**[7] This is a more in-depth version analysis of the conclusions arrived at by the Commission on the basis of the Ecofys background study.

[3] For thorough brief on EU reporting obligations see: http://www.clientearth.org/reports/clientearth-briefing-reporting-obligations-renewable-energy-fuel-quality-directives-social-sustainability-requirements.pdf

[4] ILUC -What is indirect land use change (ILUC)? "When biofuels are produced on existing agricultural land, the demand for food and feed crops remains, and may lead to someone producing more food and feed somewhere else. This can imply land use change (by changing e.g. forest into agricultural land), which implies that a substantial amount of CO2 emissions are released into the atmosphere." See: http://europa.eu/rapid/press-release_MEMO-12-787_en.htm

[5] See: http://ec.europa.eu/energy/renewables/reports/reports_en.htm
[6] See: http://ec.europa.eu/energy/renewables/reports/doc/com_2013_0175_res_en.pdf
[7] http://ec.europa.eu/energy/renewables/reports/doc/swd_2013_0102_res_en.pdf

3) The study prepared for the European Commission by Ecofys led consultancy consortium in 2012 **"Renewable Energy Progress and Biofuels Sustainability"[8].**

The purpose of this brief is to analyse this **first EC Renewable Energy Progress Reports' treatment of social impacts of the EU biofuel demand on developing countries with special focus on respect of land rights.**

II. Land Rights. Investigation and analysis of the assumptions behind the Ecofys report's methodology.

The land-use rights section of the background study by Ecofys neglects to look at the connection between the promise of biofuel demand offered by the EU market through the RED policy (and related development finance incentives) and the spur of land and water investments in countries with serious land policy and governance challenges, including on-going land reforms and land titling processes. The Report simply doesn't address the contribution of the increasing EU biofuel demand to the pressures on global arable and non-arable land, land concentration or land speculation nor how it impacts land tenure security in third countries. The Report also fails to address how RED's impact on land resources in third countries could be impacting other EU's developmental policies such as the EU's own **Land Policy Guidelines)[9]** It offers no mention of gender impacts in relation to land-use rights and doesn't address the issue of the social effects of conversion of land for biofuels projects in low-income developing countries on water resources and local biodiversity[10].

Many studies from a range of actors including the World Bank, IMF, High Level Panel of Experts on Biofuels and the Land Matrix[11], have pointed out that most large-scale land investment is taking place in countries with weak land tenure governance structures and that expansion of crops suitable for 1st generation biofuels has been a significant driver behind such deals. These deals contribute to increasing pressure on land and associated natural resources, especially water, and often result in loss of land by local communities without proper free, prior, informed consent. Most of them are surrounded by secrecy and lack of transparency on behalf of the investors and target country governments.

In addition, the general increase of pressure on land and associated natural resources often results in weakening of land rights for women. Research has found that changes in land tenure systems and the related changes in land use have often resulted in weakening women's

[8] http://ec.europa.eu/energy/renewables/reports/doc/2013_renewable_energy_progress.pdf
[9] http://ec.europa.eu/development/icenter/repository/EU_Land_Guidelines_Final_12_2004_en.pdf
[10] The Ecofys report covers issues of water and biodiversity in its environmental section and only in relation to countries importing biofuels into Europe by 2010. It doesn't mention the issue of socio-economic impacts of biodiversity and water access of land based biofuel investments in its land rights section covering also lower income countries with emerging biofuel production.
[11] See: K. Deininger, D.Byerlee et al "Rising Global Interest in Farmland. Can it Yield Sustainable and Equitable Benefits?" World Bank (2012), HLPE FSN "Land tenure and international investments in agriculture. A report by the High Level Panel of Experts on Food Security and Nutrition to the Committee on World Food Security." CFS (July 2011), and R. Arzeki et al "What drives the global land rush?" IMF Working Paper WP/11/251 (2011)

land entitlements, particularly where women are poor and their access to land is dependent on male relatives, as is the case in most customary land systems in Africa.[12] In fact, a 2008 FAO study on gender and liquid biofuels has noted the particular importance of marginal land to women: "If biofuel production competes, either directly or indirectly, for water and firewood supplies, it could make such resources less readily available for household use and hence force women to travel longer distances and reducing their time available to participate in decision making processes or other income generating activities."[13]

The Ecofys study limits itself to the analysis of only one major source, i.e. the Land Matrix Project database[14], without any attempt to look at any other studies (for example by CIFOR)[15] or most importantly, at the steadily growing body of case studies documenting serious social and environmental impacts of biofuel driven investments in developing countries. The logic behind the dissection of the Land Matrix Data – which is still an ongoing initiative and the only global attempt to gather data on large land deals and as such is subject to limitations clearly defined by its authors- seems to reward the very secrecy and lack of transparency surrounding such deals (See Annex I). The challenges with regard to gathering global data on large scale land acquisitions have been noted by the World Bank[16] and others who - as per the Land Matrix - are forced to consult media reports and reports by civil society organisations in the absence of readily available information on global large scale land acquisitions. In order to properly analyse the role of biofuels and flex crops in the new land investments in developing countries, it would have been advisable for Ecofys to include at least some country level case studies from the countries most targeted by large scale land acquisitions for biofuels where land rights abuses have been reported. For example, Mozambique which has been listed by Land Matrix among top 20 most targeted countries according to size of total reported acquisitions, has also experienced well documented land rights conflicts in connection with biofuel investments.[17]

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[12] Kachingwe, Nancy. "From Under Their Feet: A think piece on gender dimensions of land grab in Africa." ActionAid (2012).

[13] A. Rossi and Y. Lambrou. "Gender and equity issues in liquid biofuel production." FAO (2008).

[14] Note of warning. Ecofys study as well as author of this briefing has accessed the Land Matrix Database in 2012 and before May 2013 respectively. A new dataset has been uploaded and updated onto the Land Matrix by 15th May 2013 and hence it is not the same as the one consulted by Ecofys and by the author of this brief. This fact is not affecting the list of methodological problems identifying in Ecofys analysis of Land Matrix.

[15] Schoneveld, G. "The Anatomy of Large-scale Farmland Acquisitions in sub-Saharan Africa". CIFOR(2011). As well as country studies:: http://www.cifor.org/online-library/browse/view-publication/publication/3597.html

[16] K. Deininger, D.Byerlee et al "Rising Global Interest in Farmland. Can it Yield Sustainable and Equitable Benefits?" World Bank (2012) base their analysis of the trends in global land rush on reports gathered by an NGO Grain which was the first organization to begin regular collection of global media report on land investments.

[17] Aabø and Kring "The Political Economy of Large Scale Land Acquisitions: Implictions for Food Security, Livelihoods and Employment in Rural Mozambique." (UNDP 2012): http://web.undp.org/africa/knowledge/WP-2012-004-Aabo-Kring-Mozambique.pdf; Nhantumbo and Salomão . "Biofuels, Land Access and Rural Livelihoods in Mozambique." (IIED 2010): http://dev.natureandpoverty.net/uploads/media/12563iied.pdf
FIAN (2010)http://www.fian.at/assets/StudieLandgrabbinginKeniaMozambiqueFIAN2010.pdf;
FOE (2010) "The Jatropha Trap. Realities of Farming Jatropha in Mozambique.": http://www.unece.lsu.edu/biofuels/documents/2010Aug/bf10_02.pdf

Disappointingly, **, the Ecofys study puts a series of requirements that limit as much as possible the potential to link any cases of land rights abuses reported in sensitive regions to biofuels market potential in Europe:**

- Ecofys analyses only those deals contained in the Land Matrix which have been conducted in 2009-2010 as it demands a clear linkage with EU biofuels demand in 2010. "Our focus is on the developments in 2009 and 2010, the focus of this report. In the next report, it should be analysed if, why and how land grabbing as a consequence of EU biofuels demand changes in the 2011/2012."[18] Given that the lead time from the moment of land acquisition to the actual production of biofuels is at least 3-5 years, the projects which have not yet resulted in biofuel production for exports to the EU market are largely dismissed[19]. Reporting on the issue of land rights impacts linked to EU biofuel policies is thereby postponed to 2014. Furthermore, this allows the EC to dismiss any linkages between its biofuel policies and biofuel projects initiated by the EU and non EU based companies if they have failed and never resulted in comprehensive biofuel exports to the EC, such as the case of the failed jatropha and other biofuel projects in, for example, Tanzania.[20] Such failed projects demonstrate that serious environmental and social damages can take place in response to the EU market potential even without actual exports into the EU ever taking place. Most importantly, this means that there is no space for reaction or recognition of land rights violations which take place at the initiation of the projects.

- The Ecofys study and the EC report claim that "At present there is insufficient information to link biofuels-oriented projects to the demand in the EU market, even if projects often use the EU Renewable Energy Directive as its argumentation."[21] The mention of RED or EU market potential opportunities[22] in project proposals can often lead to favourable credit and financing conditions from Regional Development Banks and other financial institutions. Although mentioning of the RED does not mean that the project will successfully develop production and export capacity into the EU market, it should be enough of a basis to establish responsibility requirements vis-à-vis land rights in developing countries.

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[18] P. 297 http://ec.europa.eu/energy/renewables/reports/doc/2013_renewable_energy_progress.pdf

[19] As the Commission explains in its background Staff Working paper, in order to make a linkage with EU demand, projects must reach production stage: "The lead time from the moment of land acquisition to the actual production of biofuels is at least 3-5 years, therefore assumptions about the link between the land acquisitions occurring in 2010 with the possible future EU biofuel demand can only be verified within the coming years if and when the biofuel production on newly acquired land would occur." 22 http://ec.europa.eu/energy/renewables/reports/doc/swd_2013_0102_res_en.pdf

[20] Several cases have been recently reported of failed jatropha and other large biofuel investments in Tanzania including by Sun Biofuels, Bioshape, Prokon and Sekab. See: http://www.cornell-landproject.org/download/landgrab2012papers/nelson.pdf

[21] P. 22. Staff Working Document. Accompanying the document Report from the Commission to the European Parliament and the Council Renewable Energy Progress Report. {COM(2013) 175 final} at: http://ec.europa.eu/energy/renewables/reports/doc/swd_2013_0102_res_en.pdf

[22] For instance Andrew and Vlaenderen, Land Deals Politics Initiative, University of Sussex (2011): http://r4d.dfid.gov.uk/pdf/outputs/futureagriculture/ldpi-wp-01.pdf

- The study doesn't consider large, multi-stakeholder governmental programmes, even if these could also be perceived as having started in response to the EU RED and even as promoted by multilateral and regional institutions or development cooperation support by the EU or EU countries.[23]

- The Land Matrix admits in its comprehensive study that it does not classify deals as for "biofuels" but puts such deals in the "agriculture" section of its database. Yet, a significant number of land deals listed in the Land Matrix contain information about the intended or planted crop. For example, projects which have "jatropha" as their main crop are clearly aiming at development of biofuel production. The growing importance of "flex crops", that is crops which can be used either for food or fuel, underline the importance of the biofuel markets in land-based investments. In addition, for a large number of sugar cane investments the production of bioethanol is often clearly stated as the primary objective. Yet, Ecofys looks only at the top five largest deals per region in "agriculture" and then *corrects* the acreage based on how much of the agricultural deals "can be assumed" to be linked to biofuels and based on what deals "can be assumed to be deals". It would have been more straightforward to consult only those deals which are clearly aimed at production of biofuels by pre-selecting them based on identification of crops. This would have avoided the difficult and often subjective exercise of "correcting for acreages" of the agricultural deals that "can be assumed to be linked to biofuels". Such an approach would have allowed for a more thorough analysis of land rights situation linked to biofuels deals and would have resulted in much higher numbers of hectares of "concerns." Instead, Ecofys mixes both land rights concerns and estimations of how much land can be linked to projects aimed at producing biofuels in its explanatory footnotes and resulting estimates. (See Annex I).
- Linking land rights' violations to the number of hectares affected is a very questionable approach. Smaller size projects located in more populated areas[24] or affecting water access of large number of communities can result in serious land rights disputes and violations. Simply said, it is not the number of hectares affected that captures the true magnitude of the situation on the ground. Hence, it would have been advisable if Ecofys has also consulted some of the case studies linked to land rights violations that have been highly publicized by a growing number of academic and NGO sources

[23] For example see role of the EU donors in promotion of development of biofuels in Tanzania and Mozambique. i.e. Van Teeffelen, Jesper. "Fuelling Progress or Poverty? The EU and Biofuels in Tanzania. Policy Coherence in Practice." Evert Vermeer Foundation, 2013 as well as Ecoenergy (2008), http://www.globalbioenergy.org/fileadmin/user_upload/gbep/docs/BIOENERGY_INFO/0805_WB_Italy_-_Mozambique_biofuels_assessment.pdf

[24] For instance In Mozambique in clear violation of the national policy guidelines most investments occurred in the populated corridors. See Schut,(2010): www.open.ac.uk/technology/mozambique/sites/www.open.ac.uk.technology.mozambique/files/pics/d128234.pdf and Schut et al., 2010, "Biofuel developments in Mozambique. Update and analysis of policy, potential and reality." *Energy Policy* 38:15; 5151–5165 (2010)

- The analysis of Land Matrix database by Ecofys shows a range of problems with regard to clarity of its methodology and presentation as well as flaws in its calculations or misrepresentation of geographical weight and scope. For further detailed explanation please consult Annex I.

III. Analysis of the key messages in the EC Report to the EU Parliament, Council and the European Economic and Social Committee and the Committee of the Regions "Renewable Energy Progress Report" with regard to socio-economic impacts.

The European Parliament and Council will be presented with the EC Report {**SWD(2013) 102 Final}** which summarises the key findings and conclusions of the Ecofys background study as interpreted by the Commission. **The key message of the Commission's Report is: "At present the possible negative impacts of the EU biofuels consumption do not require further specific policy intervention."**

The following is a short analysis of the main conclusions of this report with regard to the key areas of socio-economic impacts vis-à-vis EC's more in-depth "Staff Working Document" and the findings of the ECOFYS background study.

Land Rights

"Given the time lags between land acquisition and biofuels production and flaws in the ILC Land Matrix database, it is not yet clear if EU biofuels demand contributes any abuse of land use rights. The Commission and Member States' monitoring of this issue must, however, continue."[25] This conclusion does not seem to be based on considerations of the Background Report's own conclusions which this summary Report is supposed to reflect. Despite serious concerns with the methodology used by Ecofys in its analysis of the Land Matrix Data (as explained in the previous section) the Summary Report provided to the Council and Parliament should at least reflect the findings of its study[26]. The background study states that "as a rough guess, possibly 10% of the biofuels production and new projects in regions with concerns in land-use rights could have eyed the EU market."[27] Furthermore, the background study claims that "0.05-0.16 Mha of land deals with concerns about socio-economic impacts and land-use rights can be linked to the EU market"[28]. While previous section of this brief as well as analysis of the problems listed in Annex I proves that both the percentage as well as the total amount of hectares is likely to be grossly underestimated, the

[25] See p.11-12 http://ec.europa.eu/energy/renewables/reports/doc/com_2013_0175_res_en.pdf

[26] The full text of the 450 pages background Report by ECOFYS et al, 2012 "Renewable Energy Progress and Biofuels Sustainability" can be found at:
http://ec.europa.eu/energy/renewables/reports/doc/2013_renewable_energy_progress.pdf
[27] See page 301 http://ec.europa.eu/energy/renewables/reports/doc/2013_renewable_energy_progress.pdf.
[28] Ibid. p.239

background study itself comes up with the conclusion that "it is not yet clear if EU biofuels demand contributes any abuse of land use rights."

Food Prices

"Commission analysis has found that grain use for bioethanol production constituted 3% of total cereal use in 2010/2011 and is estimated to have minor (1-2%) price effect on the global cereals market. EU biodiesel consumption is greater, and the estimated price effect on food oil crops (rapeseed, soybean, palm oil) for 2008 and 2010 was 4%. It also appears that biofuel demand is more price sensitive than the food market and so demand declines more in response to rising prices."[29]

While the estimate seems to be on a very conservative side, the summary report does not report on how these price increases have translated into food price fluctuations in the poorest, food importing countries or how they might affect poorest households, and especially women[30]. No attempt has been made to look at how increased prices (especially of cooking oils) could have impacted food aid programmes in terms of increased prices for food aid rations and increased procurement costs often resulting in limited reach of emergency aid programmes[31]. The report also fails to look at projected increases of food prices which have been demonstrated via variety of modelling exercises in cases of either current or increasing EU biofuels consumption in the future years up to 2020[32]. In addition, rising prices of basic foodstuffs also affects nutritional choices and often have most detrimental impact on female members of the households. Higher prices of vegetable oils translate to increased burden for women in preparation of food and restoring to health-threatening coping mechanisms such as reusing the same oil several times.

Labour conditions.

Assessment of labour conditions is based on the status of ratification of international conventions (on labour conditions and biodiversity) of countries exporting biofuels for EU consumption and is summarized with one sentence: **"Whilst most non EU countries have ratified the fundamental conventions, enforcement is lower than in the EU or in the US which has not ratified many such conventions."**[33] The issue of labour conditions in terms of wages, health risks (i.e. exposure to chemicals), type of contractual agreements (seasonal or short term), dishonouring of contracts or gender specific impacts are not assessed by this summary and have received very minimal coverage in the background report. The latter is mostly restricted to child labour and a brief, matter of fact mention of abuses of indigenous

[29] Page 12 http://ec.europa.eu/energy/renewables/reports/doc/com_2013_0175_res_en.pdf
[30] For example, Cororatum and Timilisina have demonstrated that increasing biofuel demand may increase poverty levels in poorest countries. See World Bank (2012): http://elibrary.worldbank.org/content/workingpaper/10.1596/1813-9450-6078

[31] See paper analysing the role of food price increases of 2008 and 2010 on international food aid: http://www.economia.esalq.usp.br/intranet/uploadfiles/2606.pdf
[32] "EU biofuel use and agricultural commodity prices: a review of the evidence base". Institute for European Environmental Policy. June 2012.
[33] Page 12 http://ec.europa.eu/energy/renewables/reports/doc/com_2013_0175_res_en.pdf

rights and gender concerns in Indonesia and Malaysia – the main source of EU palm oil imports.

Employment Benefits

"Turning to the social benefits of EU biofuels consumption, is estimated to have generated 220,000 jobs in the EU and 1.4m jobs globally, in 2010." [34] However, upon closer examination of the EU background report[35] we find that the 1.4 jobs refer to those that are not only related to direct biofuel production but also "employment in agriculture, other supplying industries, and other sectors such as retail and wholesale trade that benefit from economic activity generated by the biofuels"[36]. Most importantly, **this is a global figure**, not only attributable to the EU's consumption of biofuels. The **European Commission links the generation of 1.4 million jobs to the EU's consumption in its Summary Report and thereby misrepresents the benefits of EU's biofuels consumption**. This misrepresentation stands in stark contrast to the influence of the EU policies on global land rights where no such causal relation seems to be possible to establish to any significant degree. Clearly some of the employment generated is not linked to EU biofuels consumption but to national biofuel policies such as in the case of Brazil and the United States, which both have a large domestic biofuel industry. The Background Report by Ecofys specifies that "global ethanol and biodiesel production supports 1.4 million job in all sectors of the global economy in 2010" citing a report from the Global Renewable Fuels Association. In addition, there is no analysis of job and livelihood losses due to expanded biofuel crops in developing countries and resulting loss of land access by communities which could likely reduce the sum of the claims of jobs generated. There is nothing on the exact type of jobs being generated given the seasonal and often unstable migrant labour found at many biofuel plantations or the recently emerging data regarding the failure of a number of EU companies' jatropha investments in Eastern Africa[37]. The Background Study by Ecofys limits itself here to just one precautionary quote from the UNEP World Watch: "Biofuels growth could come at a steep human and environmental price – the number of jobs may grow by the millions but then need to be interpreted carefully, wages, rights and environmental impacts need to be considered" (UNEP World Watch 2008)[38].

Furthermore no attempt is made in the Ecofys background study to qualify or quantify the role of **smallholder farmers** in the global biofuel employment claims, despite the EU's own promotion of the role of smallholder farmers in its global food security policy. The importance of the different types of contractual arrangements (i.e. contract farming) vis-à-vis

[34] Ibid page 12
[35] Staff Working Document. Accompanying the document Report from the Commission to the European Parliament and the Council Renewable Energy Progress Report. {COM(2013) 175 final} at: http://ec.europa.eu/energy/renewables/reports/doc/swd_2013_0102_res_en.pdf
[36] Ibid page 26.
[37] For example, in the case of Tanzania, at least three large biofuel plantations driven by EU based subsidiary companies with the aim to produce for the EU market, have recently failed. They include Sun Biofuels, Bioshape and Prokon. In all of these cases while people have lost access to land they have also lost their potential jobs resulting in loss of livelihood support in a number of communities. Such cases are overlooked by the analysed EC reports.
[38] See footnote 4 page 306

plantation labour is also overlooked. For example, increased mechanisation - which the Ecofys relates to the potential of decreasing child labour in the case of Brazil - can also translate to a limitation of employment opportunities. Finally, there is no data or qualitative analysis provided of gendered impacts of the claimed job creation.

IV. Conclusions.

Overall, the analysis of the socio-economic impacts by the Renewable Energy Report(s) is disappointing. The analysis of environmental impacts of first generation biofuels far outweighs the effort to cover wider socio-economic impacts in developing countries. Most of the background study analysis is limited to a few selected general literature sources and fails to offer a proper overview of the intensification of the land and water investments and natural resources pressures in developing countries. There is no mention of the socio-economic importance of water access and water rights in the section covering land rights. There are serious gaps in the coverage of wider developmental concerns, such as for example the effect of increasing food prices on international food aid programmes. There are also serious problems with the assumptions used in the methodologies to generate quantitative data. For example, failing to assign proper weight to the regions where the greatest number of large scale acquisitions have taken place (i.e. Eastern Africa) can be misrepresentative of the analysis of Land Matrix data.

In addition, the Ecofys background study suffers from its unclear presentation: applied calculations and methodologies are often insufficiently explained, confusing and, in the case of land rights, misleading. A number of questions requiring further clarification abound with regard to the Study's generation of quantitative data on land rights, biofuels imports or claims with regard to employment generation in non EU countries. One could be forgiven to ask if the objective of the Report and accompanying Study was to offer an independent, well informed investigation into the social sustainability of EC's demand for first generation biofuels, or to simply justify its own position that "the possible negative impacts of EU biofuels consumption do not require further specific policy intervention."

ANNEX I: Land Rights: flaws and questions regarding methodology and calculations in the ECOFYS analysis of the Land Matrix database.

1. **The Study fails to consult and list among its references the key analytical report accompanying the Land Matrix Database[39] i.e. "Transnational Land Deals for Agriculture in the Global South. Analytical Report base on the Land Matrix Database " (April 2012)[40].** An analysis of the information contained in the Land Matrix database consulted in 2012 should have been informed by this background reading. This report answers a lot of questions regarding the limits of the information contained on land deals meant for agriculture. Most importantly, it offers a very useful general overview of the trends taken from the information in the database. For example, that Africa is the most targeted region, that the majority of acquisitions are concentrated in few countries that tend to be characterised by weak land institutions and high incidences of hunger, the strategic importance of "flex crops" due to the growing influence of the emerging biofuels market[41], that investors are competing for land with local farming communities and that forested areas are highly affected by land acquisitions. Instead, Ecofys consults the ILC "Land Rights and the Rush for Land" (Anseeuw et al., 2011)[42] which used a less selective range of data (covering sectors such as forestry or mining, for example) as its reference. The Ecofys analysis of the Land Matrix database needed to at least include a summary of this key analytical report prior to undertaking the econometric exercise analysing the database. **Even if Ecofys limited its analysis to the land deals reported in 2009/2010, it has accessed the Land Matrix database in 2012 and should have provided the general overview of the database's information at the time of its study which is contained in the accompanying analytical report featured at the introductory page of the website.**

2. The accompanying analytical report from 2012 to the Land Matrix Database states clearly: "the gap between reported deals, reliable cases, and implemented projects, should not cause complacency. Indeed, announcements, negotiations and certainly contracts signed but not implemented may still exacerbate pressure on land and lead to displacements or a weakening of land rights for the local population. Potential benefits of long term investments, such as irrigation and other infrastructure, access to markets and

[39] Note of warning. Ecofys study as well as author of this briefing has accessed the Land Matrix Database in 2012 and before May 2013 respectively. A new dataset has been uploaded and updated onto the Land Matrix by 15th May 2013 and hence it is not the same as the one consulted by Ecofys and by the author of this brief. This fact is not affecting the list of methodological problems identifying in Ecofys analysis of the Land Matrix database.

[40] "Transnational Land Deals for Agriculture in the Global South: Analytical Report based on the Land Matrix Database." April 2012. http://landportal.info/landmatrix/media/img/analytical-report.pdf

[41] For example, the report highlights the importance of "flex crops" by stating that both food and non-food crops are important, but investors are seeking flexibility to switch between them. The "flex crops" (soybean, sugarcane and palm oil) are so called because these crops can either be used for food or non-food (i.e. biofuels) purposes underlining the importance of consideration of the emerging biofuels markets.

[42] http://www.landcoalition.org/cpl/CPL-synthesis-report

jobs will not materialize either."[43] **Ecofys study limits the analysis to only these top five deals in each region which "can be judged as signed deals." The study fails to provide any clear qualitative explanation of what methodology is used to establish the timeframe within which deals have been deemed as signed or how it establishes the stage of implementation of the deals vis-à-vis such timeframe**. In addition, given that a number of the largest deals reported in the Land Matrix do not have a specific date, Ecofys provides no explanation of the fact that such deals have not been analysed even if closer examination might have been necessary to establish their implementation status[44]. For example, the majority of deals intended for jatropha, castor oil or sugar cane production recorded in Ethiopia lack specific reference dates, although it is safe to assume that many of them have taken place while also considering that Ethiopia is among the top ten target countries of large scale land deals recorded in the Land Matrix database[45]. **Omitting all deals with unspecified dates could lead to under-accounting in the percentage of deals listed in the Land Matrix which can be linked to biofuels.**

3. **The study fails to explain the geographical scope of the Land Matrix database and to account for dramatically higher concentration of deals in certain regions (i.e. Eastern Africa and South East Asia), or the lack of coverage of other sensitive areas (i.e. ex Soviet Republics and East Asia).** Subsequently, **the study fails to assign proper weight to the regions where the majority of deals reported in the Land Matrix are concentrated (especially Eastern Africa) which puts in question the representativeness of using the five largest deals per region in the Ecofys study.** The problem of misrepresentation of data is most evident in the case of "Southern Africa" where only three deals are deemed to be linked to agriculture and no concerns are noted (Table 71 and Appendix IX[46]). **At no point does the Ecofys study explain that its regional analysis of "Southern Africa" is limited to the deals reported by the Land Matrix in only two countries i.e. the Republic of South Africa and Swaziland**. In fact, countries referred to as located in the "Southern African region", most importantly Mozambique, have been listed by the Land Matrix in the "Eastern Africa" region. Mozambique is considered by the Land Matrix as one of the top ten most targeted countries in large scale land acquisitions. The Ecofys Study does not analyse any land deals reported in Mozambique among the top five deals in agriculture in Eastern Africa. **This omission points out to the under-representativeness of the analysis of top five**

[43] See p. 4: "Transnational Land Deals for Agriculture in the Global South: Analytical Report based on the Land Matrix Database." Anseeuw W. et al. April 2012

[44] In the absence of clearly defined explanation of the methodology behind analysing the top 5 largest deals per region in the text of the study, one has to scrutinize the footnotes in the Appendix IX . No information is provided why some deals and not others have been listed and questions abound with how the actual data in terms of land acreage determined to be linked to biofuels or with "concerns" has been arrived at. See page 394-396: http://ec.europa.eu/energy/renewables/reports/doc/2013_renewable_energy_progress.pdf.

[45] The footnotes of the Appendix IX list only one deal in Ethiopia by an Indian company failing to provide any insight why other deals, including by European investors such as Sun Biofuels, have not been listed. At the same time, in this case the footnote states that "Karuturi Global from India secured about 300 kha in **Ethiopia in the past decade**, for the production of palm oil, rice and sugar cane. ILC (2011) signals a lack of consultation with the community with the most recent acreage extension". See p. 394: http://ec.europa.eu/energy/renewables/reports/doc/2013_renewable_energy_progress.pdf.

[46] See Ibid page 298 and 396

deals in agriculture without assigning proper weight to the number of deals registered by the Land Matrix in each region. The case of the "Southern Africa" category is clearly misleading as it should be noted upfront that only two countries, South Africa and Swaziland, are covered in this sub-region.

4. T**he Ecofys Study lacks a clearly defined methodology.** In order to understand how the study established those land deals contained in the Land Matrix judged as with "concerns" (Table 71) and those which are "possibly linked to biofuels" and hence corrected for acreage effected (Table 72), one is forced to scrutinise the footnotes in the Appendix IX. **It is not clear at all what criteria or assessment method has been used to determine deals with "serious concerns" although it is clear that Ecofys does not consider broader negative socio-economic impacts, environmental impacts or impacts of projects that have not yet been fully established**. **It is not clear at all what methodology Ecofys is using to determine what it classifies as a "proper land deal". Closer study of information in the footnotes of Appendix IX reveals a lot of guesswork leading to many questions and need for further clarification. The following are some examples of questions related to the land deals analysed**:
   A.) Why has the entry for North Africa based on a deal in Sudan been first reported as 'with possible land rights concerns' in Table 71, then as 'possibly linked to biofuels' in Table 72 and subsequently disqualified from the "corrected acreage" column in Table 72? The explanation in footnote 2 under table 72[47] begs explanation: "Since jatropha is mentioned as primary crop, the entire deal 600 kha could be linked to biofuels, which is the result in the table, although we deem this highly unlikely."[48] Why is this highly unlikely?
   B.) Footnote 4 in Appendix IX fails to specify the target country of investment in Western Africa by an Italian company 'Green Waves' in 200 kha of jatropha plantations. Potential to double check the conclusion that "no irregularities were reported" is hence close to impossible while 200,000 ha is a significant portion of land for any nation.
   C.) Footnote 13-17 in Appendix IX[49] relating to Central Africa shows no concerns being reported at all for the deals in this region. It seems that Ecofys dismisses outright deals which are linked to the production of "food" without investigation of the type of crop concerned or the land rights situation (i.e. footnote 13 regarding South African farmers investment in Congo) or dismisses deals that are only at a stage of signing a protocol agreement (i.e. footnote 15 – ENI signed MoU with Congo about developing 70 kha of palm oil. "According to ENI website so far only a protocol agreement was signed"). This approach points out again the problem with representativeness of analysing top five largest deals as it seems highly unlikely that no land rights concerns regarding large scale land deals have been reported in Central Africa.

[47] Ibid p.300
[48] Ibid page 300 and page 394-396.
[49] Ibid p. 394-395

D.) Ecofys dismisses in footnote 21[50] a deal in North Sudan by Eyat Oil Services concerning 162 kha of agriculture despite reports of a lack of community compensations by Norwegian People's Aid. "It seems that a project is not yet a deal, as there is only a MoU between the government and investor." Isn't lack of community consultation and an existing MoU not enough to conclude that weakening of community's land rights is taking place?

E.) No target country of investment is provided for the deal cited in footnote 22[51]. "Citadel Capital (Sudanese, Egyptian and Australian company) acquired 105 kha for agriculture. No concerns known."

F.) As above, scrutiny of only three deals linked to agriculture located in South Africa and Swaziland being classified as the "Southern African region" is misrepresentative. Ecofys obtains information from the company's website stating that no concerns are found[52] and concludes that "as Illovo is a sugar producer, it is highly unlikely that the feedstock will end up in biofuel." Why is it unlikely given that sugar production can easily be turned into bioethanol?

G.) Closer scrutiny of footnotes relative to deals in South America, South Asia and South-East Asia need further clarification since it is **not clear what methodology Ecofys is using to determine what it classifies as a "land deal with concerns".** The Ecofys study seems quick to dismiss projects that are not yet fully established, projects leading to land concentration if there is no long term transfer of ownership (i.e. Chinese investment in Argentina where China is buying the product of these land for 20 years), and projects with "only" environmental concerns or government led projects. It is also difficult to establish why only 496 kha of the analysed land deals in footnotes 38-42[53] in South East Asia have been classified as having "concerns." Ecofys provides little information which particular parts of the different deals mentioned in the footnotes have been deemed as worrisome and why others have not. For example, footnote 41[54] dismisses a 1Mha deal for jatropha production in the Philippines because "the company NRG Chemical Engineering Ltd. was dissolved in 2009, so it is unlikely that this project was fully realized." It is premature to dismiss deals only because a company dissolves, and without further investigation. Such investments can simply change hands and impacts on land access for communities could have already taken place. Similar questions and needs for clarifications abound with remaining footnotes.

[50] Ibid p. 395
[51] Ibid p.395
[52] Footnote 23 p. 395
[53] Ibid p. 396
[54] Ibid.

5. **Calculations in Table 71 and Table 72 point to potential flaws and need for clarification.**

A.

Table 71. Largest land deals in sensitive regions[1].

Region	Total deals and area	Agriculture	Top-5 [2]	Concerns [3]	
Western Africa	98 deals 3.8 Mha	84 deals 3.2 Mha	1.4 Mha→ 1.0 Mha	220 kha	16%
Eastern Africa	260 deals 8.8 Mha	199 deals 6.9 Mha	1.6 Mha→ 0.9 Mha	470 kha	29%
Central Africa	27 deals 1.1 Mha	23 deals 0.7 Mha	0.5 Mha→ 0.2 Mha	0 kha	0%
North Africa	18 deals 3.1 Mha	15 deals 1.4 Mha	1.3 Mha→ 1.1 Mha	600 kha	46%
Southern Africa	5 deals 0.04 Mha	3 deals 0.02 Mha	0.02Mha→0.02Mha	0 kha	0%
South America	132 deals 6.4 Mha	89 deals 4.8 Mha	2.2 Mha→ 0.4 Mha	76 kha	3%
South Asia	114 deals 4.7 Mha	20 deals 3.1 Mha	2.9 Mha→ 0.1 Mha	14 kha	0%
South-East Asia	216 deals 17.3 Mha	196 deals 16.7 Mha	3.9 Mha→ 0.5 Mha	496 kha	13%
Total		629 deals 36.8 Mha	13.8 Mha→4.2 Mha	1876 kha	14%

1) Full details for this table are given in Appendix IX. For each region the Top-5 of projects were assessed, starting from references provided in the Land Matrix database and through brief internet searches.
2) The total acreage of the top-5 agricultural investments as found in the database, followed by the acreage corrected for errors, as explained in footnotes per region in Appendix IX.
3) The fraction is based on the corrected acreage of the top-5 of land deals in the Land Matrix per region. Only recent concerns (2009 – present) are taken into account, to establish an understanding of the present situation. The research was limited to examination of reports referenced by the Land Matrix and additional internet searches. As explained in the text, there are no simple guidelines to qualify land grabs. Initiatives, for which significant-major concerns were ventilated in media or research reports, are marked as "concern".

- According to the information in footnote 3 in Table 71, the fraction of percentage is to be based on the **corrected acreage** of the top five deals in the Land Matrix per Region. In this case, for example, the concerned 220 kha should be divided by 1.0 Mha resulting in 22% and not 16 %. Similarly, for Eastern Africa, the percentage of concerns relative to biofuel acreages corrected should be 52% and not 29%, etc. The total percentage of 1876 kha out of 4.2 Mha is 45% and not 14%. Further down, on the p. 302 the Study reports that "For about 14 % of the acreage reported in the Land Matrix, significant to serious concerns are found, this equals 5.2 Mha, part of which will probably qualify as land grabs." T**he explanation in footnote 3 is therefore misleading as the percentage is not that of the corrected acreage but that of total land deals linked to agriculture found in the Land Matrix during time of the study. Such mistakes and lack of clarifications make reading of the Ecofys study very confusing and difficult.**

B.

Table 72. Land deals in the land matrix.

	Total agricultural	Possibly linked to biofuels[1)]		Corrected	
Western Africa	3.2 Mha	0.4 - 1.8 Mha	(13% - 56%)	0.4 - 1.8 Mha	(13% - 56%)
Eastern Africa	6.9 Mha	2.5 – 4.4 Mha	(36% - 64%)	2.5 – 4.4 Mha	(36% - 64%)
Central Africa	0.7 Mha	0 – 0.3 Mha	(0% - 43%)	0 – 0.3 Mha	(0% - 43%)
Northern Africa[2)]	1.4 Mha	0.6 – 0.6 Mha	(43%)	0 Mha	(0%)
Southern Africa[3)]	0.02 Mha	0 – 0.02 Mha	(0 - 100%)	0 Mha	(0%)
South America[4)]	4.8 Mha	0.1 – 2.5 Mha	(2% - 52%)	0.1 – 1.1 Mha	(2% - 23%)
South Asia[5)]	3.1 Mha	3.1 – 3.1 Mha	(100%)	0.1 – 0.3 Mha	(3% - 10%)
South-East Asia	16.7 Mha	0.8 – 6.7 Mha	(5% - 40%)	0.8 - 3.0 Mha	(5% - 18%)
Total	36.8 Mha			3.2 – 10.9 Mha	(9% - 30%)

1) The link to biofuels is established for all the land deals reported in the Land Matrix, on basis of the primary feedstock per entry as

- Calculation for "Corrected Acreage" in the last column adds up to 3.9Mha and not to 3.2Mha. This translates to rather 11-12 % of deals related to biofuels. Hence on p. 302 it should read "Between 11 and 30 % of deals reported in Land Matrix can be linked to current or future biofuel production." While these can be considered minor errors, again, it makes it very difficult to read the Ecofys study as one would expect that figures, however disputed or under-estimated according to the analysis in this Annex, should at least add up.