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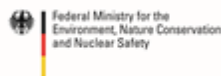


# Europe's Land Footprint trampling the world

## Why the EU needs to reduce its land consumption

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## Europe's Land Footprint Trampling the World

### *Why the EU needs to reduce its land consumption*

#### Introduction

There is a finite amount of land in the world, yet demand for it is growing. Europe has one of the highest resource consumption rates in the world, and our demand for land – our Land Footprint – is much higher than what the continent can supply.

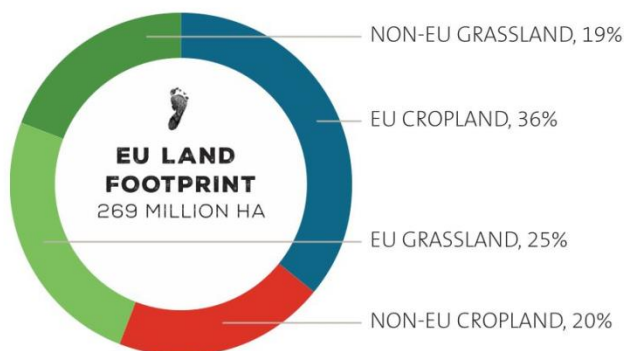
Friends of the Earth Europe have published a new report ([The True Cost of Consumption: The EU Land Footprint, July 2016](#)) showing the scale and impact of the EU's high agricultural land demand. Average EU per capita cropland consumption is 1.5 times higher than the global average, and 40% of cropland and grassland used lies outside of Europe, highlighting an inequitable distribution of global land resources and an overstepping of planetary boundaries. Furthermore, the EU's Land Footprint poses growing environmental and social impacts outside of the EU – cropland expansion into natural land areas, land degradation, deforestation, biodiversity loss, land grabbing, unequal appropriation of land resources and more.

It is a matter of justice that the EU takes responsibility for its overconsumption of land and acts to reduce the scale and intensity of its global land use.

#### What is the Land Footprint?

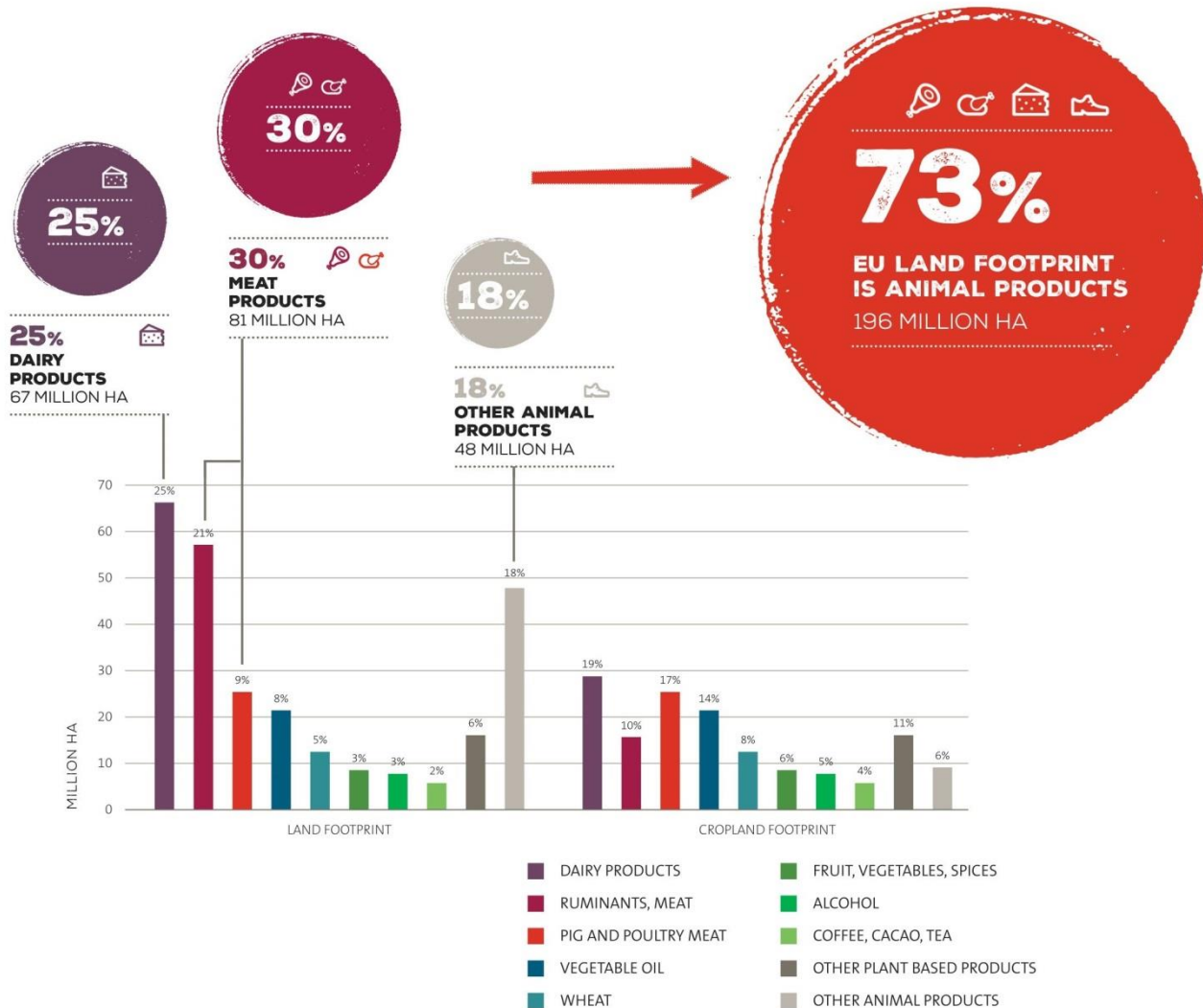
The Land Footprint is an indicator used to measure the amount of land used both domestically and overseas to produce the goods and services consumed by a country/region<sup>i</sup>. It is calculated by tracking land use through supply chains from the original point of raw material production, through to final consumption. With current data limitations, it is possible to calculate the Land Footprint for agricultural land only (i.e. cropland and grassland). The Land Footprint is a powerful method of illustrating the dependency of countries or world regions on overseas land, which is embodied in imports and exports. The Land Footprint is one of [four footprints](#) that Europe needs to measure to manage and reduce resource use, along with the water, material and carbon footprints.

#### Overconsumption of limited land resources



The EU uses more than its fair share of global agricultural land. Its Land Footprint totals 269 million hectares<sup>ii</sup> – with 40% of this used outside of Europe (an area almost the size of France and Italy combined). The average per capita Cropland Footprint is 0.31 hectares – that's 1.5 times larger than the global average<sup>iii</sup> (the report shows that this needs to be decreased to 0.2 hectares per capita to ensure the sustainable quantitative use of land).

Why does the EU have such a large Land Footprint and why is this a concern? High consumption of animal products makes a considerable contribution; 73% of the EU Land Footprint is related to the consumption of animal products, with the largest portions for meat (30% of the total) and dairy (25% of the total, mostly cheese). The second biggest grouping is vegetable oils, followed by other plant-based products; wheat; fruit, vegetables and spices; alcohol; and coffee, tea and cacao.



The EU's large Land Footprint is concerning on three main fronts:

1. The quantity of land used per capita is much greater than the world average – this is unjust and must decrease to remain within planetary boundaries and to ensure equitable distribution of land resources among all global citizens.
2. The amount of imported land Europe relies on – the use of land area the size of France and Italy overseas results in problem-shifting of land use impacts, including taking land from local communities, and a higher use of natural resources and other risks due to longer supply chains.
3. The environmental and social impacts linked to EU land use.

### High reliance on imported land

Europe is highly dependent on land beyond its borders, in particular cropland. The EU's use of overseas cropland increased by 34% between 1990 and 2009<sup>iv</sup>. Extensive use of land overseas is partly due to European demand for a year-round supply of seasonal goods and for products mostly grown overseas such as tropical fruits, cacao, coffee and spices. However, imported animal feed and vegetable oils play a bigger part. Europe's meat and dairy industries are highly dependent on imported animal feed, largely due to increases in factory farming in Europe, and there is surging demand for vegetable oils.

The increase in demand for vegetable oils has been largely driven by EU policies related to non-food biomass, particularly the demand for biofuels' feedstock (such as palm oil or soy), which have a considerable impact in third countries. For example, over half of Europe's imports of palm oil come from Indonesia, a figure which has increased rapidly in the past decade due to EU biofuels targets<sup>v</sup>. In 2014, palm oil plantations covered 13 million hectares of land in Indonesia – an area bigger than Denmark, Belgium and the Netherlands combined, contributing to increased pressure on ecosystems and local communities.

There is also concern regarding other sectors of the fast-growing and increasingly-industrialised bioeconomy. For example, the displacement of fossil-based materials and products, such as plastic packaging, with bio-based alternatives, such as bio-plastic packaging, is being promoted as a 'green' solution. However, there has been no serious research into the impacts on land and other resources that would be caused by entirely replacing fossil-based materials with bio-based<sup>vi</sup>. Alternative options, such as reducing consumption and using more reusable materials are not being seriously examined.

### Environmental impacts:

The EU's overconsumption of land negatively affects the environment mainly through expanding agriculture into areas of nature or previously unfarmed land. This pressurises global ecosystems, drives forest conversions into plantations, lessens forests' carbon storage capacity, and causes land degradation and biodiversity loss. By combining regional Land Footprint data with environmental impact data to form an "impact matrix" (see below), we can see the impacts in different regions alongside the quantity of land the EU uses in that region, e.g. the level of deforestation in Sub-Saharan Africa and the EU Land Footprint in that region. Of particular note are the high impacts from land use change / land management in Tropical Asia, Tropical South America and Sub-Saharan Africa – the same regions which account for 60% of overseas cropland used by the EU and areas with large forests, rich in biodiversity.



The EU’s use of land also affects climate change and raises questions of climate justice. When taking into account land-related carbon and methane emissions overseas as a result of EU consumption, emissions are one-third higher than land-related emissions from within the EU alone<sup>vii</sup>. These emissions are strongly linked to deforestation embodied both in imported agricultural and forestry products. It is clear that the effects of Europe’s disproportionate consumption are felt nearly universally outside the continent itself.

### Social impacts

60% of land used overseas by the EU is in the Global South, where landowners and traders can exploit less stringent labour and environmental protections. We are increasingly seeing the impacts of unfair land distribution, with more and more land disputes, community displacements and the dispossessing of small-scale and subsistence farmers, with land becoming concentrated in the hands of fewer, larger landowners<sup>viii</sup>.

Worryingly, the EU plays a major part in this trend, as it was estimated to account for 40% of all land acquisitions in Sub-Saharan Africa in 2011<sup>ix</sup>. In East Africa, subsistence farmers have been affected by a growing number of disputes over land for food, fuel, minerals and nature conservation, while in Indonesia vast swathes of the country which were once virgin forest or community-farmed land, are now given over to huge plantations (legally and illegally). 700 ongoing land conflicts have been identified in Indonesia by the NGO Sawit Watch<sup>x</sup>.

EU biofuels policy also has huge impacts on communities including provoking land grabs, depriving local communities of their access to land and the right to define their own food systems, all exacerbating the unequal distribution of land resources. Fundamentally, EU policies threaten the food sovereignty of those who rely on their land the most. More widely, using land to grow crops for fuel, and for the wider bioeconomy, rather than food increases the level and volatility of food prices internationally, meaning more people struggle to afford to eat.

## Solutions and Recommendations

As a matter of global justice and responsibility, it is vital that the EU acts to reduce its overconsumption of global land and the destructive impacts caused to ecosystems and communities worldwide as a result. This means adopting demand-specific measures at the macro level, including EU policies addressing its land consumption, support of citizens' initiatives like urban farming, repair cafes or libraries of things, which can help change European consumption patterns and reduce pressure on virgin land resources, and supporting a radical transition to an alternative agricultural system that works for all people and the environment.

## Key Recommendations

Friends of the Earth Europe urges the EU and member states to:

1. Implement Land Footprint measurement, monitoring and reduction targets at EU and member state level as part of impact assessments in all land-related policies and initiatives, including bioeconomy, circular economy and sustainability policies.
2. Develop policies and incentives that encourage a reduction in the consumption of land intensive products or products that embody relatively high environmental impacts, in particular animal products<sup>xi</sup>.
3. Reduce the use of land outside of Europe for non-food purposes, in particular phasing out the first-generation feedstock for EU biofuels.
4. Promote a reduction of industrialised livestock farming in the EU.
5. Implement land management measures within the EU, such as investment in the restoration of degraded land and soils.
6. Support citizen initiatives that encourage changes in consumption and resource use patterns, such as repair cafes, and clothing and tool libraries.
7. Support the transition to an agricultural system that focuses on shorter (local) supply chains, community ownership of production and agroecological farming<sup>xii</sup>.

Full report available at <http://www.foeeurope.org/true-cost-consumption-land-footprint-report>



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**Friends of the Earth Europe** campaigns for sustainable and just societies and for the protection of the environment, unites more than 30 national organisations with thousands of local groups and is part of the world's largest grassroots environmental network, Friends of the Earth International.

## References

- <sup>i</sup> Bio Intelligence Service at Deloitte, Paris; Bruckner M., G. Fischer, S. Tramberend, S. Giljum. (2015). Measuring telecouplings in the global land system: A review and comparative evaluation of land footprinting accounting methods
- <sup>ii</sup> Fischer G., Tramberend S., Bruckner M. and Lieber M. (2016, forthcoming). Quantifying the land footprint of Germany and the EU using a hybrid accounting model. UBA-FB-00xxx. German Federal Environment Agency, Dessau
- <sup>iii</sup> Rockström, J., W. Steffen, K. Noone, Å. Persson, F. S. Chapin, III, E. Lambin, T. M. Lenton, M. Scheffer, C. Folke, H. Schellnhuber, B. Nykvist, C. A. De Wit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sörlin, P. K. Snyder, R. Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R. W. Corell, V. J. Fabry, J. Hansen, B. Walker, D. Liverman, K. Richardson, P. Crutzen, and J. Foley, (2009). Planetary boundaries: exploring the safe operating space for humanity. *Ecology and Society* 14(2): 32.
- <sup>iv</sup> Kastner, T., M. J. I. Rivas, W. Koch, and S. Nonhebel (2012) Global changes in diets and the consequences for land requirements for food. *Proceedings of the National Academy of Sciences* 109(18): 6868-6872.
- <sup>v</sup> International Institute for Sustainable Development (IISD), for Friends of the Earth Europe (2013): The EU Biofuel Policy and Palm Oil: Cutting subsidies or cutting rainforest?  
[http://www.foeeurope.org/sites/default/files/press\\_releases/iisd\\_eu\\_biofuel\\_policy\\_palm\\_oil\\_september2013.pdf](http://www.foeeurope.org/sites/default/files/press_releases/iisd_eu_biofuel_policy_palm_oil_september2013.pdf)
- <sup>vi</sup> United Nations Environment Programme 2013: Assessing Global Land Use  
<http://www.unep.org/resourcepanel/Portals/24102/PDFs/Summary-English.pdf>
- <sup>vii</sup> Bruckner, M., de Schutter, L., Martinez, A., Giljum, S., (2014). Consumption-based accounts of land use related greenhouse gas emissions for the European Union.
- <sup>viii</sup> Hall, D. (2013). Primitive Accumulation, Accumulation by Dispossession and the Global Land Grab. *Third World Quarterly* 34 (9): 1582–1604; van der Ploeg, J., J. C. Franco & S. M. Borras Jr (2015). Land concentration and land grabbing in Europe: a preliminary analysis, *Canadian Journal of Development Studies / Revue canadienne d'études du développement*, 36:2, 147-162, DOI:10.1080/02255189.2015.1027673
- <sup>ix</sup> Schoneveld, G.C. (2011). The anatomy of large-scale farmland acquisitions in sub-Saharan Africa. Working paper 85. Center for International Forestry Research (CIFOR), Bogor, Indonesia.  
[http://www.cifor.org/publications/pdf\\_files/wpapers/wp85schoneveld.pdf](http://www.cifor.org/publications/pdf_files/wpapers/wp85schoneveld.pdf)
- <sup>x</sup> [http://foeeurope.org/sites/default/files/publications/briefing-indonesia-on-the-front-line\\_0.pdf](http://foeeurope.org/sites/default/files/publications/briefing-indonesia-on-the-front-line_0.pdf)
- <sup>xi</sup> <https://www.foeeurope.org/meat-atlas>
- <sup>xii</sup> <http://www.foeeurope.org/eating-from-the-farm-130415>