

REPORT

Shifting finance towards sustainable land use:

Aligning public incentives with the goals of the Paris Agreement





On behalf of:



of the Federal Republic of Germany

Shifting finance towards sustainable land use: Aligning public incentives with the goals of the Paris Agreement

For Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)

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About the project

This report was developed in the context of a broader project on the practical policy challenges for 'Shifting finance towards sustainable land use' with five parallel workstreams. All project outputs are available on the web platform of the Food, Environment, Land and Development (FELD) Action Tracker, at www.feldactiontracker.org. The website also includes a dedicated section on "Shifting Finance" with a direct link through www.greytogreenfinance.org and an opportunity for individual download of the following five project reports:

- A: Shifting finance towards sustainable land use: Aligning public incentives with the goals of the Paris Agreement
- B: Climate-consistent finance flows in the agriculture, forest and other land use sector: A framework for reporting on Article 2.1(c) of the Paris Agreement
- C: Shifting finance towards sustainable land use: Repurposing public support to agriculture

The focused analysis undertaken under this project and towards a proposed reporting framework were supported and complemented by two case studies for a closer look at the policy instruments employed in the land sector. These also include specific examples to illustrate the opportunities for policymakers to redirect existing finance flows to become more consistent and supportive of the Paris Goals.

- D: Shifting finance towards sustainable land use: A case study from Colombia
- E: Shifting finance towards sustainable land use: A case study on the European Union

Project partners

Climate Focus is a pioneering international advisory company and think tank that provides advice to governments and multilateral organizations, non-governmental and philanthropic organizations, and to companies across the globe. We support our clients in shaping and navigating through international and domestic climate policies, accessing climate finance and evaluating climate policy and investments.

ODI is an independent, global think tank working to inspire people to act on injustice and inequality. Through research, convening and influencing, ODI generates ideas that matter for people and planet.

The United Nations Sustainable Development Solutions Network (SDSN) mobilizes global scientific and technological expertise to promote practical solutions for sustainable development, including the implementation of the Sustainable Development Goals (SDGs) and the Paris Climate Agreement, working closely with United Nations agencies, multilateral financing institutions, the private sector and civil society.

The Food, Environment, Land and Development (FELD) Action Tracker is a strategic initiative under the Food and Land Use Coalition (FOLU), led by SDSN in cooperation with other partners, to support countries in their transformation toward sustainable food systems and land use.

Executive summary



Parties to the Paris Agreement are committed to work towards aligning public and private finance with the goals of the Paris Agreement. Article 2.1(c) of the Paris Agreement formulates the long-term goal of making ‘finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development’.¹ Making finance flows compliant with the Paris Agreement demands not only new climate finance but, more importantly, the redirecting of existing grey financial flows, that is, money with no stated objective to reduce GHG emissions, towards climate-aligned action. If we are to address the climate crisis and stay well below the warming threshold of 2°C, failure to redirect national budgets and align policy frameworks with this commitment is not an option.

The financial incentives that governments put in place in the land sector have the capacity to greatly influence greenhouse gas (GHG) emissions. The land sector is driving about one-quarter of GHG emissions each year. At the same time, the sector is an indispensable part of the climate solution and can provide up to 15 GtCO₂e in annual emission reductions or removals by 2050.² To tap into this mitigation potential, public policy needs to ensure that finance is directed to activities that avoid or sequester GHG emissions while improving resilience of rural livelihoods. Agriculture is the most relevant land-based sector as both a direct source of emissions and the most important driver of deforestation.

Governments steer agricultural activities by providing public financial support, the delivery of which rarely takes climate objectives into account.³ Almost all countries provide some form of preferential treatment for their agricultural sector. Between 2017-19, public support for agriculture provided by member countries of the Organisation for Economic Co-operation and Development (OECD) and 11 major developing economies amounted to approximately USD 619 billion per year. That is almost double the value received by the sector a decade ago, and 56 times the USD 11 billion in climate finance support aimed at land use.⁴ Nearly one-third of this support is tied to the production of specific commodities. Around 75 percent of these commodity transfers go to rice, pork, beef and veal, maize and milk – many of which are top GHG emitters.⁵ Only approximately 5 percent of the USD 619 billion delivered annually was explicitly linked to environmental goals.⁶

However, reforming public finance alone will not be enough to enable a shift to sustainable land use and revert ecosystem losses already incurred.⁷ Private finance

flowing to the land sector far outweighs that of public finance, and most of this private money supports activities that deplete natural assets. Business-as-usual private finance for agriculture, forestry and fishing totaled USD 191.6 trillion between 2010–16, or USD 27 trillion per year on average.ⁱ And global investments in meat and dairy activities – the top GHG emitters in agriculture along with rice production – topped USD 478 billion between 2015–20.⁸

This study seeks to support governments in their efforts to achieve Art. 2.1(c) by recommending how countries can reorient finance flowing to the land sector. As long as grey finance flowing to the land sector dwarfs climate-aligned green finance, efforts to lower the land-sector’s emissions trajectory will not succeed. Governments must therefore (i) create a conducive environment for sustainable land use and prosperous rural economies; and (ii) create incentives for climate-aligned private investments. To do so, we explore opportunities for redirecting public support to agriculture and financial markets.

Facilitating a sustainable and just land-use transition

The land sector lies at the intersection of many policy priorities; achieving these diverse and potentially competing policy objectives demands effective leadership. The various policy objectives – ranging from food and nutritional security, to economic development and poverty alleviation, to sustainability and climate change – are complex. Addressing them requires coordinated and well-informed policy-making that integrates various policy objectives. Good policy-making includes establishing clear policy goals and long-term regulatory predictability to give private investors the securities needed for investment; promoting policy coherence and complementarity to minimise trade-offs and maximise synergies; building strong public-private coalitions; establishing robust land governance and land tenure regimes to enable and encourage investment; strengthening the rights of and engagement with indigenous peoples and local communities; and addressing gender inequalities in the allocation of land and access to finance and resources.

ⁱ The value refers to gross fixed capital formation as a proxy for investment in activities in the land sector. Data from FAOSTAT *Country Investment Statistics Profile*.

Any transition to using land resources more sustainably must be done in an equitable manner that protects and enhances the resilience of rural livelihoods.

The land sector is of vital importance to many millions of farmers and rural and indigenous communities who depend on it for their livelihoods. Achieving a just rural transition involves supporting farmers and rural communities to adopt sustainable practices and adapt to the impacts of climate change. It involves creating employment in the rural economy that benefits the natural environment and ensures that all – especially the poor – have access to affordable, healthy and sustainable food.⁹

Policymakers who are serious about tackling the climate crisis need to ensure that existing policy frameworks do not harm the future of the people they represent.

Governments and markets continue to offer farmers and corporations more incentives to exploit natural assets than they do to use them sustainably. This jeopardizes the ability of land to continue to provide the food, water and resources we need to sustain a growing global population.

Opportunities for redirecting public support to agriculture

Public support to the agricultural sector influences agricultural decision-making through providing incentives to bring land into production, determining which commodities to produce and influencing farming practices. Examples of these decisions include whether to deforest or drain peatland for agriculture; choose to farm produce that generates high or low GHG emissions; and adopt farming practices that deplete or regenerate soils.

Agricultural production accounts for 14 percent of global emissions. Of this, by far the greatest source of emissions is livestock farming. The digestive processes of livestock – ruminants in particular – and the practices used to manage animal manure generate significant methane and nitrous oxide emissions. In addition, approximately 83 percent of all farmland (equivalent to the combined area of the entire North and South American continents) is used to grow and feed animals.¹⁰ Agricultural energy

TABLE 1. Summary of green redesign recommendations for public support to agriculture

RECOMMENDATION	REDESIGN CONSIDERATIONS
Make support conditional upon achieving environmental objectives	• Make compliance with all relevant legislation a condition to qualify for support, and/or require farmers to adhere to standards and regulations in order to qualify for support. • Offer graduated payments awarded for emission reductions or removals with increasingly ambitious performance targets, which are either practice- or performance-based. • Build environmental considerations into land and property tax valuations.
Rechannel production support to public goods and services	• Provide funding to drive agricultural innovation and improve productivity. • Provide agricultural training and extension services to farmers. • Invest in collective infrastructure for storage, processing and transportation to reduce food loss. • Provide environmental information services.
Avoid using public support to promote the consumption of ruminant meat	• Adjust value-added tax rates applied to ruminant meat. • Eliminate or reduce ruminant meat provided through public catering and encourage healthier diets. • Implement conditionality for public funds used for marketing, including restricting the use of public funds for meat marketing and allocating funds to promote low-carbon protein alternatives.
Remove or redirect government support provided for agricultural inputs	• Remove fertiliser subsidies, redirect support to income support or channel support to goods and services in high-income countries. • Provide extension services alongside fertiliser subsidies in middle- and low-income countries or redirect support to income support. • Remove fossil fuel subsidies. • Remove or redirect subsidies for animal feed.

consumption is the next-most important source of GHG emissions, followed by rice cultivation and soil fertilisation. Less than half of the nitrogen applied to soils is absorbed by crops, with the remainder leaching from fields to create local nitrogen pollution and being released into the atmosphere as nitrous oxide.

There are a number of opportunities for redirecting public support to agriculture or to the design of the instruments through which support is delivered (Table 1).

Three overarching recommendations can help to overcome the barriers policymakers face in reorienting finance. First, policymakers need to have a good understanding of the impact of current and planned support on climate, land-use decisions and rural incomes in order to make a strong case for change. Second, repurposing support must aim to reduce emissions without jeopardizing other important development goals; that is, reducing emissions must be part of policies that maximise synergies and minimise trade-offs with other environmental, economic and social goals in order to achieve a just rural transition.¹¹ Third, policymakers should be prepared for opposition from specific interest groups and other members of government. Ensuring that any repurposing of support goes hand-in-hand with a carefully constructed communications strategy can help to develop clear, targeted and appropriate messaging.¹²

Opportunities for redirecting private financial flows

Investors are channelling large volumes of finance to the land sector, much of which is driving GHG emissions through financing industrial agriculture and incentivizing tropical forest loss.¹³ Financial actors, such as banks, asset managers and publicly listed corporations finance rural activities through a variety of forms, including investment funds, bank loans, trade finance, revolving credit facilities, stock markets and project finance.¹⁴

Financial regulations can ensure that investors and traders consider climate and ecosystem impacts when investing, offering credit or providing other financial services. Notably, governments and supervisory authorities can induce a structural shift in private capital allocation by adapting existing financial regulations. A combination of climate-related prudential requirements and active promotion of sustainable finance can foster new and more climate-friendly agricultural practices and ensure that financial system actors involved in agricultural supply chains have an interest (and duty) to mitigate the adverse impacts of their businesses and redirect financial flows at scale. There are a number of opportunities for redirecting financial markets (Table 2).

TABLE 2. Summary of green redesign recommendations for redirecting financial markets

RECOMMENDATION	REDESIGN CONSIDERATIONS
Move from voluntary to mandatory disclosure	• Increase overall transparency, comparability and quality of disclosures. • Harmonize disclosure obligations by aligning domestic requirements with a common disclosure framework. • Directly adopt (or gradually integrate) a double materiality approach to disclosure. • Provide detailed metrics for reporting on forests, soil and biodiversity impacts.
Enhance risk management frameworks for the land sector	• Adopt (through legislation or supervisory guidance) more comprehensive risk management controls for financial system actors. • Integrate scenario analysis and climate-related stress tests into supervisory approaches (that also covers the agricultural sector). • Impose a legal duty of care and mandatory due diligence for financial system actors that addresses the risk of deforestation within global commodity supply chains.
Active promotion of climate-aligned finance to the land sector	• Introduce (through legislation or supervisory guidance) taxonomies that clearly define the different categories of green and sustainable finance, including for the land sector. • Develop green lending guidance that covers the agricultural sector. • Increase lending limits for farmers and companies that provide evidence of being climate-aligned.

The first two redesign approaches foster climate-aligned finance by addressing issues such as lack of transparency, mispricing of financial assets and misallocation of capital. The third approach moves towards regulatory measures that can be taken by countries and supervisory authorities to more actively promote sustainable (climate-aligned) finance. While certain aspects of these strategies can be implemented simultaneously, binding disclosure requirements along with a common taxonomy that clearly specifies green and climate-consistent enterprises are usually deemed a necessary first step for more informed investment decision-making and the promotion of sustainable investments.

Taking first steps towards a just landuse transition

To move towards aligning financial flows with Article 2.1(c) of the Paris Agreement, policymakers need to pursue a better understanding of the impact of the policies they have in place and identify opportunities for redesign in a manner that facilitates a just land-use transition. To do so, policymakers should:

Map out the policy framework influencing how finance is flowing to the land sector. The policies impacting the land sector go beyond those simply developed for agriculture and forestry. They also include the financial regulations that determine the economic environment through which private finance flows to the land sector and the many other legal, regulatory and other financial incentives that influence investment decisions and the ability of land users to access finance. Few policymakers have a comprehensive overview of the policies they have in place influencing when, how and where finance flows to the land sector. This is an essential first step to facilitating a transition to more sustainable practices.

Evaluate the impact and effectiveness of the policies in place. Many of the incentives that remain in place today either have already achieved their intended policy objective or have objectives that are no longer relevant.¹⁵ In other cases, the policy objectives themselves may be obscure, or the method through which support is provided fails to bring the country closer to achieving the stated objective of the support.¹⁶ There is thus a clear need to re-examine the support provided to the land sector to determine who benefits from the support, whether it is effective in achieving its intended objectives, and what the environmental and social impacts of the support are.



Identify opportunities for redirecting finance by redesigning the policy incentives in place. This includes evaluating how best to reorient policy incentives to achieve contemporary policy goals and align with low-carbon development. It also includes identifying who will benefit from the redesign, when these benefits will be delivered, and what are the associated costs if any; it also addresses trade-offs between socio-economic and environmental goals. This report identifies where such opportunities lie within public support to agriculture and financial markets. The suitability of these measures will depend on individual country contexts and capacities, and some may be more attractive and have greater potential for shifting finance than others depending on the national policy context, including where and how public support is awarded today.

Take action to reduce or remove emissions from the land sector by reorienting the policy incentives in place. Making green policy changes can be a long and politically challenging process. With only 10 years to bend the trend on our GHG emissions trajectory, there is no time for further delay. Governments – especially those most responsible for the emissions in our atmosphere today – must make climate-change mitigation a priority and embed mitigation strategies in every facet of their policy frameworks. There are significant opportunities in pursuing a green economy.¹⁷ Between 2009-18 the global green economy demonstrated an annual growth rate of 8 percent, and in 2020 it was materially larger than the oil and gas sector.¹⁸ Many governments, jurisdictions and businesses are waking up to the need to mitigate climate change and the economic opportunities that arise from doing so.

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