

Policy pointers

Measures to slow or stop deforestation must address both supply and demand for commodities that drive it, like cocoa. This is critical to long-term success.

A mix of policy instruments is essential, from government regulation to proactive, self-imposed commitments by companies in producing and consuming countries.

Commitments require transparency and accountability. Actors along the whole supply chain should prioritise solutions such as 'insetting' (emission-reduction activity invested in by a company and its partners).

Coordinating initiatives requires coherent policies and dialogue. What are the land-use options, who is involved and what are the synergies?

Smart regulation: making chocolate more sustainable

Climate change is one of the most pressing challenges of this century. Widespread deforestation and forest degradation are two contributing factors. An estimated 80 per cent of deforestation is caused by agricultural commodities (both large and small scale) such as cocoa used to produce chocolate. Addressing emissions associated with this forest cover loss is critical. Following the legally binding global climate deal made in Paris in 2015, governments, corporations, local producers and consumers must now take action.¹ The private sector is beginning to make commitments towards zero-deforestation supply chains, but how will this work in practice? Can smart regulation — a complementary mix of government and voluntary private-sector policies — make cocoa and chocolate more sustainable?

Why focus on chocolate?

Chocolate is made from cocoa — an important global commodity, for which demand is increasing. Cocoa has a significant impact on deforestation and forest degradation. The European Union is responsible for about 36 per cent of all deforestation through consumption of commodities. An alarming 60 per cent of this is from food — and cocoa's share is 8 per cent.² Yet cocoa has great potential to be grown in agroforestry systems that balance productivity, ecosystem resilience to climate change, livelihoods, food security and the economy. But producing sustainable cocoa and chocolate and delivering it to supermarket shelves is a complex challenge. It requires a mix of policies and understanding which stakeholders are best placed to implement them.

From cocoa to chocolate, farmer to consumer

Growing greener cocoa will involve a wide range of stakeholders — not just in the countries that

produce it, but in those that consume it (see Box 1). Importantly, cocoa is not an end product but a key ingredient: blended with sugar and dairy, it becomes chocolate (see Figure 1) — so more actors are involved in chocolate supply chains than those working with cocoa. Policies to address deforestation and grow greener cocoa must encompass everyone in this supply chain, from cocoa to chocolate, farmer to consumer.

Smart regulation: finding the optimal policy mix

Sustainability is not just about supply: it is also about demand. And all processes in between have to be sustainable. We need markets for deforestation-free commodities or attempts to improve sustainability will founder. Policies must assist producers, manufacturers, intermediaries, consumers, retailers and others to choose products with less impact on the environment.

What the cocoa-chocolate supply chain needs is smart regulation, where broader policies — such as awareness raising, voluntary

Frameworks governing our world's resources must involve a diverse range of stakeholders

commitments and regulations — are designed to complement one another and not as alternative, competing or stand-alone initiatives. They should be tailored to specific

environmental goals and contexts to produce better policy outcomes that affect supply as well as demand.³

Table 1 outlines a complementary policy mix based on a smart regulation framework.^{3,4,5} It also draws on semi-structured interviews with cocoa supply-chain stakeholders and experts from NGOs, government, industry, corporations, development organisations, certification bodies and researchers in Brazil, Ghana, the Netherlands, Denmark, Belgium and the USA.

No single entity — public or private — can address the global challenges facing commodity supply chains like cocoa. Frameworks governing our world's resources must involve a diverse

range of stakeholders. Different policy instruments have different strengths and weaknesses: combining them should ensure flexibility and resilience. For example, the government of Ghana could use REDD+ (rewards for emission-reducing activities that improve conservation and sustainable forest management, and enhance forest carbon stocks)⁷ to restore cocoa plantations using agroforestry systems in mosaic landscapes where forests co-exist with agriculture. Emissions reduction programmes (ERPs) could offer performance-based payments for sustainably sourced cocoa. Another solution is to link supply-side initiatives to demand-side measures, using 'insetting' as well as offsetting along the whole supply chain (see Box 2).

Incentives for developing zero-deforestation supply chains include education and raising awareness of examples of effective voluntary commitments, certifying products and using sustainable management systems such as REDD+ and ERPs. Product labels should inform consumers about deforestation footprints for cocoa and chocolate supply chains. And offering a market premium could make sustainable commodities more attractive to producers.

Coordinating multistakeholder interventions

Interventions — from both public and private actors — should be designed with a more thorough analysis of what is already in place. How can they build on existing efforts, lessons and results? Which interventions complement each other and work in synergy?

Several initiatives that promote sustainable cocoa-chocolate supply chains and zero-deforestation already combine policies like those described in Table 1. But the interviews revealed that these policies either work in isolation or are fragmented. Better coordination and information sharing is essential:

- development assistance initiatives should influence government policies by supporting new or existing platforms to engage multiple actors such as businesses and NGOs, plus

Box 1. Cocoa production worldwide

Africa produces 73 per cent of the world's cocoa. The European Union imports nearly 54 per cent for processing and manufacturing: the Netherlands manufactures roughly a quarter of all global chocolate. The main chocolate-consuming regions are Europe, North America, Asia and Oceania, while Africa's consumption — the main producing region — is a mere 4 per cent.⁶

Box 2. Can carbon insetting offer a solution?

'Insetting' is an emission-reduction activity invested in by a company and its partners. Insetting activities should reduce socio-environmental footprints while tackling risks, procurement costs and strengthening links with suppliers. Unlike carbon offsetting transactions, insetting takes place within supply chain activities (hence the 'in' in insetting).^{7,8}

Nespresso is a global coffee supplier that uses insetting:

Unlike traditional carbon offsetting in a different location with unrelated workers, 'insetting' compensates carbon within the company's own business supply chain [...] Trees not only provide carbon capture, but also promote soil nutrients, biodiversity, water conservation, shade for coffee trees, and long-term wood provision — which can itself secure longer-term futures for farmers.⁹

Figure 1. Chocolate supply-chain actors

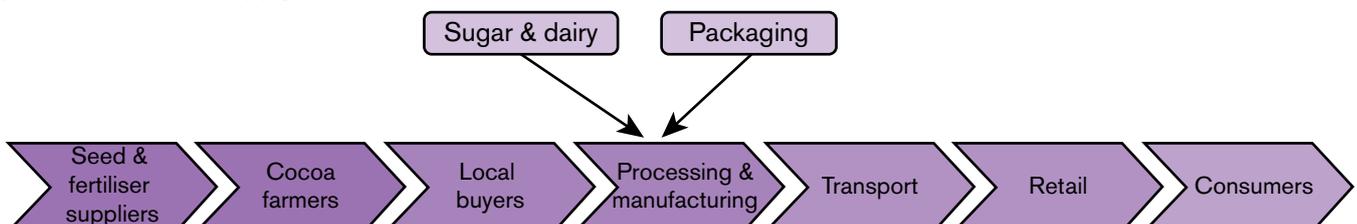


Table 1. Examples of policy instruments to address the sustainability of the cocoa and chocolate supply chain

Instrument	Implementing actors	Target group	Description	Strengths/weaknesses
1. Educational				
Marketing and education campaigns	NGOs Private sector Government agencies	Consumer goods companies General public Producers and supply chain actors Youth (as consumers and future policymakers)	Supply-chain actors and government should provide information on specific environmental problems (eg deforestation) and solutions to increase sustainability	Can inspire and put pressure on stakeholders to pursue more sustainable paths — should be done regularly for long-lasting impact Can inform consumers about the impact of their purchasing choices in driving deforestation Behaviour changes cannot be enforced An increased supply of sustainable cocoa and chocolate will ultimately increase consumption of sustainable products
Research	Academia	General public Policymakers Private sector	Evidence-based policy and practice	Information should be accessible to both the general public and policy makers (eg policy briefs and proactive engagement with policy makers, companies and other actors about options)
Media articles	Media	General public	Information that is engaging, accessible and easy to understand	Information should inform the general public and influence consumer choices
2. Voluntary				
Private-sector voluntary commitments	Private corporations	Consumer-goods companies Retailers	Zero-deforestation pledges Corporate social responsibility	Commitments should demonstrate willingness of corporate action — but need transparency and accountability complemented with monitoring instruments to assess effectiveness. Could inspire regulatory action to address larger problems
Lender-liability clauses (environmental, social and governance criteria)	Investors (financial institutions including banks and impact investors)	Private actors including non-consumer companies (eg fertiliser suppliers, transport)	Provide an incentive for close scrutiny of environmental credentials of clients before lending	Incentive for companies to improve performance if non-compliance leads to foreclosure No behaviour change if alternative sources of finance are available — collective buy-in and commitment from investors is critical
Development assistance and aid	Governments	Various, mostly small-scale producers in the supply chain	Support projects in cocoa-producing countries	Potential to build cooperation with private-sector actions Potential to inform consuming-country policies
3. Regulatory (command and control)				
Emissions cap	Governments in both producing and consuming countries	Businesses Consumers	Reduce emissions both at landscape level and throughout supply chain (eg manufacturing and transport)	Enforcement must be combined with monitoring to demonstrate impact on curbing emissions
Information disclosure	Consuming-country governments	Businesses	Businesses should disclose information on eg GHG emissions along their supply chain	Financial markets, insurers and environmental groups can use the information to put pressure on poor environmental performers
Zoning/land-use restrictions/environmental impact assessments	Producing-country government	Farmers/producers	Producers should demonstrate social and environmental commitments	Dependability and predictability requires effective enforcement monitoring/mechanisms
Product labelling	Government	Businesses	Businesses should disclose sustainability-related information eg socio-environmental footprint	Labelling should inform consumer choice and push companies to offer sustainable products
Standards and bans	Consuming-country governments	Businesses	Businesses should comply with pre-defined sustainability criteria	Standards should encourage sustainable sourcing and address international trade barriers
Fiscal incentives	Governments	Businesses	Governments should offer tax breaks for sustainable products and avoid tax breaks for investments contributing to forest conversion	Fiscal incentives should encourage private companies to source sustainable commodities Monitoring systems are needed
Consumption taxes	Governments	Businesses	Taxes should apply to products with a high socio-environmental footprint	Taxes should encourage consumers to choose 'greener' products

support public and private partnerships and channel lessons learnt into practice

- cocoa-producing countries should develop relevant regulations (eg carbon tenure, carbon tax, equitable benefit-sharing)
- consuming countries should impose sustainability standards for importing commodities, to promote value-addition processes and stimulate sustainable cocoa production
- governments should require companies to disclose information on greenhouse gas emissions, which NGOs could use to educate both the public and investors who want to decarbonise their portfolios
- policymakers should use numerous 'soft' but effective instruments to complement 'command and control' regulations, and
- fiscal and non-fiscal incentives and clear targets should guide a sustainable cocoa-chocolate supply chain.

Policy mix for sustainable cocoa and chocolate

High-level commitments to standards and enforcement require a smart regulation approach, mixing policy instruments with government regulation (see Table 1).

Reviewing market and non-market incentives must be higher on policy agendas for companies and governments. Incentives should encourage inseting of emissions in chocolate supply chains for cocoa, sugar and dairy: integrated and complementary legislation for each commodity will be more effective in mitigating climate change.

Legislation on wider land use coupled with better land-use planning is also critical to promote synergies in sustainable investments. The private sector must take responsibility for implementing voluntary instruments and complying with legislation. Climate change-resilient cocoa will be crucial to the bottom line for future business.

Equally key is transparency and accountability. Targets and progress towards zero-deforestation supply chains for cocoa and chocolate should be made public and provide a learning opportunity for companies, local producers, consumers and governments. Civil society should be more proactive in informing practice and policy and promoting healthy dialogue across the spectrum of actors.

Supporting stronger land rights should encourage better long-term land-use options for farmers. Technical, business and financial support should ensure profitability while premium prices and carbon credits should provide further incentives to produce greener cocoa. Producing sustainable commodities should benefit cocoa farmers in Ghana, Brazil, the Ivory Coast and elsewhere — not drive them into poverty.

Taken together, these recommendations outline a smarter approach to creating greener, more sustainable supply chains for global commodities such as cocoa and chocolate.

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Notes

¹ EU (2016) Paris Agreement. See <http://tinyurl.com/eu-paris-agreement>. / ² Cuypers *et al.* (2013) The impact of EU consumption on deforestation. Report I: Comprehensive analysis of the impact of EU consumption on deforestation. European Commission technical report 2013–063. / ³ Gunningham, N and Young, MD (1997) Toward optimal environmental policy: the case of biodiversity conservation. *Ecology Law Quarterly* 24: 243. / ⁴ Gunningham, N (1998) Smart regulation: designing environmental policy. Clarendon. / ⁵ Gunningham, N and Sinclair, D (1999) Regulatory pluralism: designing policy mixes for environmental protection. *Law and Policy* 21(1): 49–76. / ⁶ ICCO (2014) The world cocoa economy: current status, challenges and prospects. <http://tinyurl.com/icco-cocoa-2014>. / ⁷ Porras, I *et al.* (2015) Payments for Ecosystem Services in smallholder agriculture: lessons from the Hivos-IIED learning trajectory. IIED and Hivos. <http://pubs.iied.org/16598IIED>. / ⁸ Henderson, C (2014) Insetting: a user guide. Plan Vivo Foundation, Edinburgh, UK. <http://tinyurl.com/insetting-plan-vivo>. / ⁹ Nespresso (2015) Agroforestry inseting: harnessing the power of trees. www.nespresso.com/positive/uk/en#!sustainability/commitments.