



CASE STUDY

CDI Sustainable and Inclusive Growth DPF1

CÔTE D'IVOIRE

1. PROJECT HIGHLIGHTS

Key Cross-Country Benefit	Key National Benefit
 <p><i>Preserving the valuable tropical forest in Côte d'Ivoire from continued deforestation.</i></p>	 <p><i>Ensuring pro-poor and sustainable growth for the Ivorian economy.</i></p>

2. QUICK FACTS

Categories	Project Details
Project Name	CDI Sustainable and Inclusive Growth DPF1
Project Description	The First Sustainable and Inclusive Growth Development Policy Financing (DPF) to the Republic of Côte d'Ivoire is supporting the government in implementing various reforms to sustain high growth while making it more inclusive and sustainable. This includes the adoption of the Forest Code, the establishment of a system of standards for sustainable cocoa production, policy reforms in the power sector, and the use of digital solutions to boost domestic resource mobilisation (DRM) and improve the targeting of pro-poor programmes.
Global Public Good (GPG) Theme	Climate & environment
Sub-Theme	Preservation of biodiversity

Disclaimer: We based the case study on the information cited and publicly available as of May 2023. The findings – especially concerning the GPG perspective – have been concluded to our best knowledge. The views expressed are the authors' assessments and do not necessarily reflect the project stakeholders' views. Any errors that remain are our responsibility.

Sector	General Environment Protection
Country of Implementation	Côte d'Ivoire
Region	Sub-Saharan Africa
Income Category	Lower-middle-income economy
Implementation Period	2020-2023
Project Volume	US\$ 200 million
Financial Source	International Development Association (IDA): US\$60 million (credit) IDA Scale-Up Facility (SUF): US\$140 million (credit)
Instruments	Development Policy Financing
MDB Involved	World Bank
Implementing Partner	Ministry of Finance
Link to Detailed Project Information¹	https://documents.worldbank.org/en/publication/documents-reports/documentdetail/836881585965801277/cote-divoire-first-sustainable-and-inclusive-growth-development-policy-financing

3. WHY THIS IS A GOOD PRACTICE

This project is a good practice example for implementing the following features that promote GPG provision:

- **Ambition:** The project is one of the first DPF with such high climate and environmental co-benefits. For example, the expected capacity increase in renewables accounts for more than 13% of the variable renewable energy (VRE) capacity needed by 2030 according to the 2015 Nationally Determined Contribution (NDC) goals.
- **Sustainability:** The reforms in the project are designed to be sustainable as they aim to change the incentive structures of the main stakeholders. While sustainability somehow depends on the realisation of the policy reforms, the adoption of the policy reforms is a necessary step enabling its implementation and thus makes an important contribution to the sustainability in the first place.
- **Scalability:** The DPF instrument in general is scalable in the sense that new prior actions can be added to the DPF series as long as they contribute to the same political outcome. In Côte d'Ivoire, as the

¹ Unless otherwise stated, the information used in this case study can be found in this source.

project targets broad political outcomes, the character of the instrument and the scalability can pave the road for further reforms but also for the implementation of the policies and reforms adopted – which is the case in many DPF series.

- **Transformability:** The project focuses on implementing policy reforms and changes in the legal framework necessary to bring about transformative change. Especially the measures in the cocoa production sector as well as the implementation of the forest code emphasise the transformative nature of the project.

4. PROJECT INFORMATION

4.1 CHALLENGES OF GPG PROVISION IN THE COUNTRY CONTEXT

Since the end of the political crisis in 2011, Côte d'Ivoire has been one of the fastest-growing economies worldwide.² However, **poverty remains comparably high** and declined only from 29.1% in 2008 to 25.2% in 2018 (international poverty line US\$1.90 PPP).³ Since the economic boom happened mainly in capital-intensive sectors and the performance of the agriculture sector employing about 45% of the labour force was mixed due to climate and price shocks, poverty remains a major concern.

The government, therefore, put sustained and **more inclusive growth of the Ivorian economy at the heart of its National Development Plan (NDP)** for 2016-2020. The targets were ambitious: 8.7% GDP growth per year and halving the poverty rate by 2020. This requires large investments in physical and human capital of about 125% of GDP over four years. As private sector contributions are already higher than expected, the key to the NDP implementation is better resource mobilisation by the government. Additionally, the living conditions of the population as well as the quality of education and health services continue to be a challenge if the Ivorian government wants to make growth more inclusive.

A large part of economic growth is based on agricultural production. In 2021, over 50% of cocoa exports stem from two countries— Côte d'Ivoire and Ghana. Côte d'Ivoire alone was responsible for 40% of global exports. Consequently, **more than 5% of the Ivorian GDP in 2021 was based on cocoa exports.**⁴ About 5 million individuals, a fifth of the country's population, depend on cocoa production as the

FIGURE 1: TRANSPORTING LOGS IN COTE D'IVOIRE



Source: [BMZ](#)

² GIZ (2022): <https://www.giz.de/de/downloads/giz2022-en-afcfta-cote-d-ivoire-macroeconomic-trade-profile.pdf>

³ World Bank (2020): <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/836881585965801277/cote-divoire-first-sustainable-and-inclusive-growth-development-policy-financing>

⁴ Observatory of Economic Complexity (2023): <https://oec.world/en/profile/hs/cocoa-beans?growthSelector=value2&yearSelector2=2011>

main source of livelihood. Of these, 1 million are smallholder farmers, of whom more than half live below the poverty line.⁵

While cocoa is a key commodity to Côte d'Ivoire, **cocoa production has been a major cause of deforestation over the last decades**. According to estimates, cocoa production caused 80% of the forest loss due to agriculture from 1960 to 2015.⁶ The resulting deforestation rate is alarming. From 2001 to 2021, Côte d'Ivoire lost 3.46 million hectares (ha) of tree cover, which is equivalent to a 23% decrease since 2000, and 1.71 gigatonnes (Gt) of CO₂ emissions.⁷ This is one of the highest deforestation rates worldwide.⁸ Despite the efforts taken to implement the country's National Biodiversity Strategies and Action Plans (NBSAP) for 2002-2010, according

to the Convention on Biodiversity's country page for Côte d'Ivoire, "biodiversity loss is not under control"⁹.

FIGURE 2: CHILD DETAINED DURING A CRACKDOWN ON CHILD LABOUR IN COCOA PLANTATIONS



Source: [Sia Kambou/Getty Images](#) via the [Financial Times](#)

There is also mounting concern about the **use of child labour in cocoa production**. It is estimated that about 1 million children between the age of 10 and 17 years work in cocoa fields. Despite the efforts taken already, progress has been slow in addressing this issue as media reports highlighted the continued prevalence of child labour in cocoa production systems in Côte d'Ivoire. Regulations such as the supply chain act in Germany and the EU address these problems as they require importing companies to prove that the products are deforestation and child-labour-free. These regulations can impact the exporting possibilities of cocoa farmers.

Furthermore, **economic growth has been associated with rising CO₂ emissions**. In 2015, Côte d'Ivoire committed itself through its first NDC to reduce its greenhouse gas (GHG) emissions by 28.25% by 2030 compared to business as usual (BAU) or reference scenario through increased renewable energy use, the adoption of climate-smart agriculture measures, and improved management of forests and waste.

⁵ World Bank (2020): <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/836881585965801277/cote-divoire-first-sustainable-and-inclusive-growth-development-policy-financing>

⁶ World Bank (2020): <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/836881585965801277/cote-divoire-first-sustainable-and-inclusive-growth-development-policy-financing>

⁷ Global Forest Watch (2023): www.globalforestwatch.org

⁸ PIK (2019): <https://www.pik-potsdam.de/en/institute/departments/climate-resilience/projects/project-pages/ag-rica/giz-climate-risk-profile-cote-d2019ivoire-en-final-2>

⁹ CBD (2023): <https://www.cbd.int/countries/profile/?country=ci>

4.2 INTERVENTION

4.2.1 Project Design and Agents of Change

Reconciling the different requirements that go along with economic growth, poverty reduction, and the depletion of natural capital by agricultural production is the key idea of the CDI Sustainable and Inclusive Growth DPF1 project. The Development Policy Financing (DPF) series, a well-established financing tool by the World Bank, is based on this logic and focuses on two pillars. One pillar is targeted at promoting green growth by encouraging environmentally sustainable investments in cocoa, agro-forestry, renewable energy, and energy efficiency. The other pillar aims to boost domestic resource mobilisation (DRM) and strengthen the targeting of pro-poor programmes.

DPF provides rapidly disbursed financing that supports governmental reforms through non-earmarked general budget financing that is subject to the borrower's implementation processes and systems. The disbursement is linked to prior actions critical to achieving the objectives of a programme or project.¹⁰ In this project, **the DPF supports ambitious reforms necessary to make progress in the Ivorian vision for a more inclusive and sustainable growth path in a holistic and integrated way.** Consequently, the project addresses various sectors, includes several different policy reforms, and is expected to have numerous results. Figure 3 provides an overview.

The **implementing agency of the DPF is the Ivorian Ministry of Finance.** The financing included a US\$ 60 million IDA credit, and a US\$ 140 million credit from the IDA Scale-Up Facility (SUF). Pillar 1, for which KfW approved a US\$67 million loan in December 2019 to support the renewable energy and energy efficiency reforms in this operation, has been prepared in close collaboration with the German government (BMZ, KfW, GIZ). The French Development Agency (Agence Française de Développement, AFD) and the European Union (EU) provided technical assistance for the legal modalities and management of the concessions for “agro-forests”.

4.2.2 Results

Pillar 1 focuses on the sustainability of growth encompassing regulations to reduce deforestation and introduce sustainability standards in cocoa production on the one hand and promoting renewables and energy efficiency on the other. As a result of the “biodiversity component” of Pillar 1, the rate of deforestation is expected to decrease, and an increasing share of cocoa will be produced following environmentally and socially sustainable standards. As a result of the “climate component” of Pillar 1, the renewable energy capacity is expected to increase from 0 Megawatt (MW) to 100 MW in 2021. Additionally, a minimum of four labelling standards for energy efficiency will be adopted by 2021.

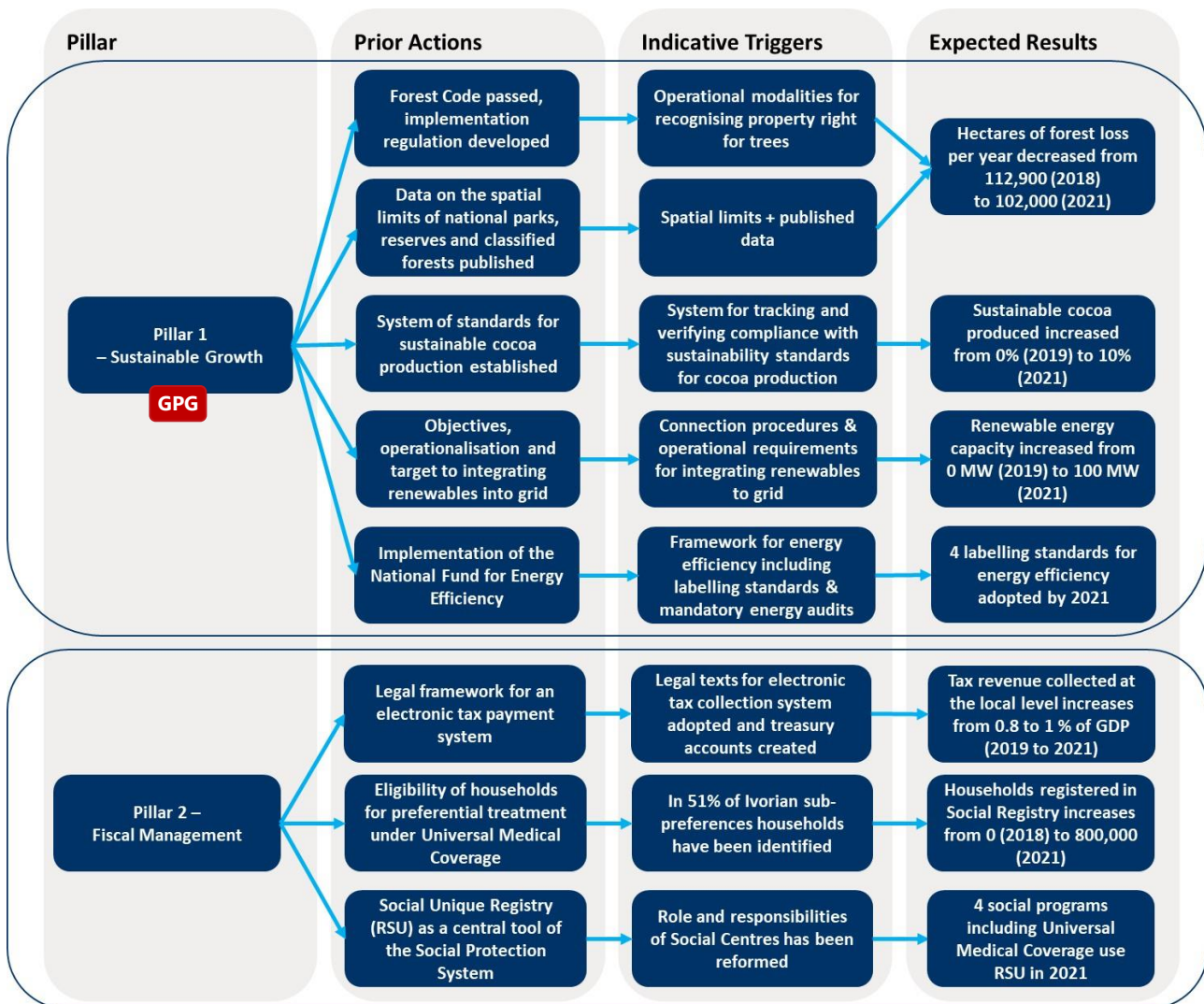
“Biodiversity component” of pillar 1: Agriculture is the main driver of deforestation and cocoa, the backbone of the Ivorian economy, is the main culprit. The increasing demand for agricultural land had put pressure on forests. Illegal cocoa plantations are interspersed into protected forest lands. This limits the landowners’ incentives to invest in agro-forestry because farmers only receive the associated property rights of a new tree only

¹⁰ World Bank (2023): <https://www.worldbank.org/en/what-we-do/products-and-services/financing-instruments/development-policy-financing>

if they hold a legal land certificate. Moreover, the lack of clarity of spatial limits of land zones diminishes the possibility of enforcing forest protection and limiting land security for farmers. Less than 1% of rural plots have a land certificate as procedures of land titling are long and costly. To address deforestation, the government wanted to adopt a new Forest Code which serves as a regulatory framework for the new government Forest Policy.

The new Forest Code seeks to promote better forest management by changing the farmers’ incentives to engage in afforestation. By assigning property rights to trees planted, introducing a new zoning type called “agro-forest” that allows farming of cocoa under tightened rules for agroforestry in zones that had already lost more than 75% of its original forest cover, illegal cocoa farming in protected areas is expected to decrease. Farmers can legalise their cocoa production while reducing the constant threat of being evicted from their illegal plantations. The number of hectares of forest loss is expected to decrease from 112,887 ha in 2018 to 102,000 ha in 2021.

FIGURE 3: RESULTS FRAMEWORK FOR THE PROJECT



Note: GPG highlights indicators that are particularly relevant from the GPG perspective.

Source: Oxford Economics based on [World Bank \(2020, 36-38\)](#)

At the same time, sustainable production standards are introduced that improve the competitiveness of Ivorian cocoa in global markets. Consumers increase their demand for sustainable products and importing countries impose regulations aiming to stop importing cocoa produced with child labour and causing deforestation. This poses a huge risk to cocoa farmers as cocoa main markets in Europe and USA represent more than 80% of the Ivorian cocoa export market. Thus, the Ivorian government—together with Ghana—wants to establish a system of standards for sustainable and social cocoa production. The standards will define the obligations not only for farmer cooperatives but also for the companies purchasing from them. Furthermore, a system for tracing cocoa and for verifying that the cocoa produced complies with the standards for sustainable cocoa production will be established. This is expected to have positive economic impacts on cocoa farmers and the 5 million people working in the cocoa value chain because they can produce a more valuable product in the long run. The associated results indicator will be the quantity of cocoa produced in line with the standards, which is expected to reach 10% by 2021.

“Climate component” of pillar 1: According to its NDC in 2015, Côte d’Ivoire seeks to reduce emissions from electricity production from the BAU projection by 7.8% (conditional plus scenario). This requires introducing significant quantities of VRE including solar, small hydro, and biomass in its energy mix by 2030 as climate change mitigation is supposed to take place primarily in the power sector. In 2018, the generation mix was dominated by gas-fired thermal and large hydropower generation while there was no power generation coming from VRE sources in Côte d’Ivoire. Based on an assessment by CI-ENERGIES, the Ivorian government decided to focus on solar energy. To facilitate the integration of solar energy into the national grid, the government will develop a study which establishes an objective of VRE integration by 2030. Based on this, the Ivorian government will publish targets for the licensing of solar independent power producers, considering the network’s ability to integrate solar energy. Moreover, to boost private investments in this sector, the government wants to establish a commission in charge of the authorisations and approvals for independent power producers (IPPs) and self-producers as well as regulations on developing mini-grids and for connecting renewable energy projects and mini-grids to the national grid. The proposed measures are expected to boost the country’s VRE capacity from 0 MW in 2018 to 100 MW in 2021. This would be more than 13% of the VRE capacity needed by 2030 according to the 2015 NDC goals.

In addition to boosting solar energy, the project also aims at improving energy efficiency by introducing labelling standards. In 2016, the National Fund for Energy Efficiency (FONAME) was established to support private investments in energy efficiency by reducing credit constraints as a cause for underinvestment in energy efficiency. As the operationalisation of FONAME is still pending, the project triggers the government to appoint the management team for FONAME and design the structure responsible for the preparation and monitoring of the execution of decisions submitted to the FONAME management team. This will include energy audits for large consumers as well as the adoption of labelling standards for appliances, cooling, and refrigeration. The operationalisation of FONAME is expected to result in the issuance of four labelling standards, and a requirement for energy audits for large consumers by 2021.

Pillar 2 focuses on **fiscal management** and more specifically on reforms that boost DRM and strengthen the targeting of pro-poor programmes. To make growth more inclusive, the government wants to use digital solutions to boost DRM and create fiscal space for its development objectives. Furthermore, the authorities want to improve the targeting of pro-poor programmes as these have been inefficiently allocated based on categories (e.g., children, widows, disabled) or universal transfers (for instance, subsidies).

The DRM component of pillar 2 aims at leveraging the digitalisation of the tax payment system to boost local revenue mobilisation. Low revenue mobilisation due to weak tax administration affects the authorities' capacity to deliver public services. In 2017, local tax revenues represented only 0.8% of GDP. To increase local DRM, the government wants to establish a legal framework for electronic tax payments. This will improve administrative efficiency, reduce transaction costs for citizens, and boost local revenue collection. The overall target is therefore to increase the tax revenue collected at the local level to 1% of GDP by 2021.

In the “pro-poor component” of pillar 2, the targeting of pro-poor programmes is supposed to be strengthened. Thus far, social protection services often fail to reach the poorest households in Côte d'Ivoire. To better target the poor, poor households need to be identified and aligned with new national programs and initiatives such as the Universal Medical Coverage (Couverture Maladie Universelle, CMU) programme and the Cash Transfer programme). Based on a pilot database of the poorest households in 880 villages, the Ivorian government wants to develop a Social Unique Registry (Registre Social Unique, RSU). As a result, 800,000 households are expected to be registered in the RSU by 2021 and four social programmes will use the RSU to identify their beneficiaries—including the CMU.

5. PROJECT IMPACT

5.1 NATIONAL BENEFITS

Although no cost-benefit analysis has been conducted for the project, it has probably produced a net profit to the country. The strong alignment of the project with the NDP ensures that the country's development priorities are considered in the project. Hence, the client-country benefits of the project are various:

- The project tackles one of the major obstacles in the NDP's implementation, i.e., the financial resources for the high investment needs in the country. Especially through the DRM component, tax revenues collected will increase and free up fiscal space.
- The social registry of households will improve the targeting of social programmes. This will reduce poverty and increase the health coverage of poor households.
- Fostering energy efficiency also comes with great benefits to Côte d'Ivoire, as the dependency on fluctuating energy prices is reduced. Moreover, private investments in the energy market also boost national income generation.
- Even the sustainability standards for cocoa production and the measures to reduce deforestation come with national benefits. While the **sustainability standards will ensure the long-term competitiveness of the Ivorian key commodity in international markets, reducing the biodiversity loss secures the long-term “forest rent” for cocoa producers**. Moreover, by sustainably producing cocoa, Côte d'Ivoire could provide **quality signals to consumer markets and sell cocoa at a higher price**.

5.2 CROSS-COUNTRY BENEFITS

The project produces significant cross-country externalities by preserving the Ivorian forest. Côte d'Ivoire is one of the most biodiverse-rich countries in West Africa with over 1,200 animal species and 4,700 plant species¹¹. 82 species are included on IUCN's Red List as endangered, comprising one amphibian, 59 birds, and 22 mammals.¹² If the forest loss per year decreased from 112,900 ha in 2018 to 102,000 ha in 2021, 10,900 ha of forest can be saved yearly compared to a situation without the project. Tropical forest ecosystems are globally recognised for their benefits and services to humans. Valuing the 10,900 ha of forest saved yearly at US\$5,000 per hectare would result in yearly benefits of US\$54.5 million for Côte d'Ivoire but also for other countries worldwide. If only the cross-country externalities are considered, the project produces yearly cross-country benefits of US\$38.15 million. Hence, **70% of the project's environmental benefits accrue to countries other than Côte d'Ivoire**.¹³

10,900 hectares
of forest yearly

can be saved with this project resulting in benefits of US\$38.15 million yearly for other countries



Additionally, introducing solar energy will have positive effects on the Ivorian grid emissions factor and reduce the country's CO₂ emissions which also benefits all countries worldwide.

6. LESSONS FOR FUTURE GPG PROVISION

6.1 SUCCESS FACTORS



*The project is one of the DPFs with the highest climate co-benefits. The project had a climate share of 62% while contributing to macro-economic targets too. —
World Bank*



The project is one of the DPFs with the **highest climate co-benefits**. The project had a climate share of 62% while contributing to macro-economic targets too. The expected success of the project is caused by the following characteristics.

First, there was **momentum for transformational changes** as the agricultural sector had suffered from severe climate change affecting agri-food chains, export revenues, and rural farming communities.

Second, the project is a perfect example of **finding synergies between national development and the global goals** of protecting the climate and the world's natural capital. Ensuring that the project aligns with the NDP raised the ownership of the Ivorian government. Moreover, this reduces the risk that the policies adopted will be reversed a couple of years later.

¹¹ USAID (2023): <https://2012-2017.usaid.gov/cote-divoire/environment>

¹² CBD (2023): <https://www.cbd.int/countries/profile/?country=ci>

¹³ For the deduction of these values see Oxford Economics (2023): Multilateral Development Banks for Global Public Goods.

Third, although DPFs can be very attractive to countries in need of financial resources such as Côte d'Ivoire by the time of the conceptualisation of the project, the attractiveness of a project hinges on the ambition of the prior actions because the DPF remains a loan to be repaid. Although the Ivorian government indicated readiness for reforms, there was an **extensive policy dialogue necessary to convince the Ivorian government of the attractiveness of the highly ambitious project**. Leveraging as much analytics as possible to generate common ground and inform an evidence-based policy dialogue was a crucial success factor for this project.

Fourth, the design of the policy matrix was discussed with several development partners (IMF, EU, African Development Bank (AfDB), and AFD). Furthermore, the German government (BMZ, KfW, GIZ) closely collaborated with the World Bank in terms of energy-related measures. German authorities are supporting the project implementation with technical assistance but also additional financing.

Fifth, the **ambition of the prior actions also increased with the additional financing by the German bilateral development cooperation**. Being able to increase the loan volume helped to negotiate more ambitious result indicators and helped to reduce the Ivorian government's concerns about financial sustainability.

6.2 HOW TO REPLICATE THE BEST PRACTICE

The key idea of the project, i.e., reconciling national development with global goals, is highly replicable as long as the national benefit-to-cost ratio stays positive. Then again, the reforms and prior actions must be adapted to the country's context and its specific development needs to ensure successful implementation.

In addition to that, the following lessons can be learnt from the project:

- It is complex to bring the client into the climate discussion—especially if the ministry borrowing the credit is the Ministry of Finance and not the Ministry for the Environment. It is therefore crucial to (empirically) show the Finance Ministry, in particular, that climate change is important and costly if no actions are taken. Quite the opposite, investments in these global goals can even be highly profitable.
- **Policies in importing countries can have a large effect on the sustainability of exporting countries. The supply chain act in major importing countries served as a real threat to one of Côte d'Ivoire's key commodities—cocoa.** This supported the argument that BAU is not an option because trade partners are already changing their behaviour, as the comment by BMZ's State Secretary Jochen Flasbarth shows.
- The cross-ministerial collaboration necessary to define the policy matrix and prior actions was essential in advancing climate and national goals at the same time. The NDP and the NDC are a good basis to start this dialogue and anchor the policy dialogue.
- Establishing common standards for more than one country is quite complex and time-consuming. Given that the sustainability standards in cocoa production need to be aligned with the importing countries' policies it is still a necessary exercise.



The fact that Côte d'Ivoire experienced such tremendous forest loss in the past has much to do with our cocoa consumption in Europe and the resulting expansion of cocoa cultivation areas in Côte d'Ivoire. For the future, we jointly want to ensure that our cocoa consumption will no longer lead to deforestation.



— Jochen Flasbarth (BMZ)

- Transformative projects can have negative impacts on the poor. Forbidding occupation and farming of protected forests could lead to a loss of income and physical displacement for some poor households, particularly in the shorter term. Then again, the establishment of agro-forests and standards for sustainable cocoa production will have a positive impact on poor farmers in the longer term by contributing to addressing the issue of child labour and by reducing informality and increasing productivity associated with cocoa farming. To mitigate the short-term consequences of these projects, Just Transition needs to be considered and appropriate support mechanisms for the people who face negative consequences in the short term need to be developed.
- The adoption of reforms does not necessarily lead to their implementation. The DPF following the one described here, therefore, builds on this learning and includes new prior actions to make sure that the existing regulatory framework is correctly implemented. This is because in general there might be enforcement problems when it comes to the implementation of policy reforms which need to be accounted for in the design of the DPF.