



# SUPPORTING JUST TRANSITIONS TO SUSTAINABLE LAND USE IN GHANA

JUST TRANSITION CASE STUDY - MARCH 2022



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# EXECUTIVE SUMMARY

Tackling climate change requires structural changes in how goods and services are produced and resources are managed around the world. Some of these changes will have profound consequences for communities and local economies—not least in places where today, livelihoods and government revenues are entwined with unsustainable practices.

A critical pillar of global climate action is halting deforestation and forest degradation and restoring forest ecosystems. Not only is forest loss a major source of greenhouse gas emissions, but it creates other problems as well, from decreased biodiversity, to changes to hydrological flows and water quality, to the loss of valuable livelihood resources and culturally significant places.

Stopping and reversing deforestation requires broad, deep, and potentially disruptive changes in the sectors that are driving it. Such changes can be highly sensitive, especially in the global South, where large segments of the population work in agriculture

and forestry, so they need to be managed well to avoid negative impacts on individuals, communities, governments, and businesses.

This study looks at Ghana’s efforts to tackle deforestation by changing agriculture, mining, and forestry practices (referred to collectively here as the natural resource management, or NRM, transitions), to explore what it means to have just transitions in these sectors, especially in the global South. Drawing on examples of programs financed by CIF in Ghana, the study also identifies lessons about effective practices and ways to achieve more transformational changes in the future

## **THE POLITICAL ECONOMY OF DEFORESTATION AND NRM TRANSITIONS IN GHANA**

Ghana is experiencing one of the highest deforestation rates in the world, and the government has been trying to tackle deforestation for decades. Most recently, it has prioritized sustainable forest

management and the improvement of agricultural practices in its agenda for climate action. In practice, key actions needed to reverse forest loss include changes in how cocoa, the country's main crop, is produced, as well as in mining and timber production and harvesting.

There are many stakeholders—sometimes with competing interests—who could be affected by changes in cocoa production, tighter regulation of small-scale gold mining, the promotion of private timber plantations, or new incentives for commercial tree planting by individual farmers. Moreover, about 80 percent of land in Ghana is communally owned, overseen by traditional leaders (chieftains) who have considerable influence over NRM activities, in parallel with the formal government. This adds an extra layer of complexity to the political economy of NRM transitions.

The most critical challenge is that NRM transitions will occur in a context of significant poverty, rising income inequality, a highly informal (sometimes illegal) and precarious workforce, and institutions that can make it difficult for some people (including women and migrants) to access and use land. The Government of Ghana, its international development partners, and private sector actors involved in planning and implementing NRM transitions need to ensure that the process is socially inclusive and that potential trade-offs are addressed in ways that improve, rather than undermine, the economy, local livelihoods, and the natural environment.

The CIF Forest Investment Program (FIP) has been active in Ghana's High Forest zone since 2012, mainly in the Western and Brong Ahafo regions, working through partnerships with the World Bank and the African Development Bank. The CIF portfolio, most of which is ongoing in 2022, includes the promotion of sustainable wood supply through timber plantations; reforestation, afforestation, and enrichment planting to restore degraded forest areas; agroforestry and sustainable agriculture to increase the presence of trees in the agricultural landscape; and direct funding to support the creation of more sustainable livelihoods at the local community level.

The programs and projects examined in this study were not developed with an explicit focus on just transitions, so the analysis does not “evaluate” whether they achieved them. Instead, a just transitions lens is applied to draw insights that may be relevant to future efforts by CIF and others to explicitly support just transitions, in Ghana and elsewhere. Examples are provided of how CIF-financed programs have approached the core components of just transitions—ensuring social inclusion and distributional justice—as well as the extent to which they have encouraged the transformation of existing systems and structures as part of an effort to reduce historical inequality or marginalization.

## INSIGHTS ON SUPPORTING JUST NRM TRANSITIONS

Applying a just transitions lens, the case study shares insights from CIF projects that may be relevant for future efforts by CIF and others to deliberately support just transitions, in Ghana and elsewhere.

**Distributional impacts:** *To understand who needs what kinds of support, the complex distributional impacts (especially risks or losses) created by transition need to be well understood. Especially in NRM transitions, the distributional effects of changes in one sector may ripple across different sectors. As a result, common approaches to the assessment of risks in NRM-focused projects are usually inadequate, in part because some of the necessary measures to address risks or losses might ultimately be outside the scope of individual projects. Just transitions therefore require initiatives that build broad, programmatic engagement across sectors and different government ministries. This can help ensure that the full spectrum of needs and issues triggered by the socioeconomic transition are identified and managed simultaneously. Initiatives should also support whole communities that are affected by transitions, not only workers who are directly affected by changing technologies or practices.*

**Structural reform:** *The support needed by communities to ensure just transitions includes livelihood support and reskilling, but also broader structural reforms to ensure sustained impacts. A just*

transitions approach will be transformative only if it produces lasting structural change, which requires tackling the underlying reasons for marginalization and gender disparities. In practice, this means, for example, integrating gender equality goals more deeply at the project conceptualization and initial design stages, and identifying additional activities—beyond the immediate NRM-focused programs—that address pervasive problems for women. These might range from empowering women by developing networks, to policy reforms that address resource ownership, to tackling barriers that limit women’s access to education or to finance. Reforms in tree tenure, economic and labor market diversification, and possibly agricultural subsidies also represent opportunities to bring about structural change and just transitions.

**Social inclusion:** *Local communities should be empowered to lead the visioning of local development and influence funding decisions to execute their vision.* Just transitions require deep and well-tailored community engagement and their representative participation in development decisions, as well as ensuring local communities can influence funding decisions. CIF’s Dedicated Grant Mechanism for Indigenous Peoples and Local Communities, a unique small-scale, locally led finance model, has these characteristics and could be a valuable complement to larger programs from multilateral development banks by helping to address key aspects of just transitions.

**Governance:** *The quality and resourcing of local governance is critical in facilitating just transitions.* Local ownership is a key characteristic of just transitions, so local governance structures need to empower and mobilize community stakeholders and be locally accountable. Local authorities, including traditional authorities where they exist as in Ghana, have many important roles to play in managing the NRM transition process and preparing for its impacts. In some contexts, they also have significant influence over NRM decisions themselves. Mechanisms such as the Ghana Dedicated Grant Mechanism may be needed to ensure that funding and programs can

overcome the complex political economy and ensure that communities have channels for support.

**Finance:** *Pursuing just NRM transitions will be resource-intensive, partly because of the need to ensure meaningful social inclusion and bottom-up planning while operating on a wide geographic scale.* On top of this, the demand for finance at individual and community levels is far greater than the funding available. There is a need for interventions to deliberately explore and (ideally) resolve how a project’s positive outcomes are going to be sustained and scaled up once the initial intervention is over. Beyond “more finance,” another key issue is how that finance works to support planning, promote social inclusion, address risks or losses, and benefit a wide range of different (and particularly, vulnerable or marginalized) stakeholders. CIF’s use of diverse financial models in Ghana provide interesting examples, including on how to deploy locally led finance and mobilize private sector capital for NRM transitions.

**Global transformation:** *To deliver just transitions in the global South, transformations at a global level are required.* Two of the main drivers of deforestation in Ghana are cocoa and gold mining, both export commodities. It is essential that consumption patterns in the global North are transformed—as well as the power structures that enable multinational corporations and international markets to inhibit communities in developing countries from pursuing more sustainable land use practices. Just NRM transitions therefore require that a fair share of any value created accrues to local stakeholders, including communities, farmers, and migrants. Only then can it be ensured that globally, low-carbon transitions are just, and that they reduce, rather than increase, disparities between the North and South.

# PREAMBLE

## CLIMATE CHANGE, FORESTS, AND JUST TRANSITIONS

Preventing the worst effects of climate change will require transforming how many goods and services are produced and how land is used—globally, on a massive scale, and in very little time. Around 25 percent of global greenhouse gas emissions come from land use and land use change, a share second only to that of the energy sector. Around half these emissions come from deforestation and forest degradation. At the same time, forests are a key solution to tackling climate change. Halting forest loss and degradation and restoring forest ecosystems has the potential to contribute over a third of the total climate change mitigation required by 2030 to meet the objectives of the Paris Agreement.

Tackling deforestation requires broad, deep, and potentially disruptive changes in agriculture, mining, forestry, and conservation practices. Changing forest and wider land use and/or access to resources is a

highly sensitive proposition, especially in the global South, where large segments of the population work in agriculture and forestry, and many people also rely on the land and forests for subsistence and cultural purposes. These changes need to be managed well to avoid negative impacts on individuals, communities, governments, and businesses.

Small-scale farmers, laborers, and communities that are already poor and marginalized should not be excluded, but rather be empowered to benefit fully from this transformation”. That is why it is important to promote *just transitions*—a growing priority for many countries around the world, including as part of commitments under the Paris Agreement. A just transitions approach to achieving low-carbon, resilient, sustainable societies requires us to understand where the impacts of systemic shifts will be felt, then design actions to minimize harm and distribute gains fairly.

Financing just transitions to more sustainable agriculture, forestry, and other land uses can be a major challenge for governments in developing countries. Public revenues can be limited, and they are needed to address many concurrent socioeconomic challenges. Private sector investment, meanwhile, is often more limited and more concentrated than in the global North. Many countries also have underdeveloped social security structures, and many lack the data needed to support in-depth sectoral analysis (for instance, to assess informal employment, or identify people who cannot access social support services). Collaboration between government, workers, and industry is needed to identify support needs during transition, but the level of collaboration among these stakeholders can be contested or weak in some countries, especially where informal labor is prevalent.

However, failing to finance just transitions may result in resistance to change, significant delays, long-term negative impacts on communities, and an erosion of trust. To date, climate mitigation finance has been channeled in ways that focus mainly on reducing emissions, not on addressing the associated risks or potential negative impacts of a low-carbon transition. Adaptation to the impacts of climate change can also create new risks or negative impacts, yet adaptation finance does not always properly account for the potential risks created by adaptation measures.<sup>1</sup> There is thus an opportunity for climate finance to do better, supporting more just transitions to low-carbon, sustainable, and resilient development.

## TACKLING DEFORESTATION IN GHANA

In Ghana, there are multiple drivers of deforestation and several factors that are catalyzing changes in natural resource management. The rate of deforestation over recent decades has been staggering—among the highest in the world. At the local level, declining yields for key crops such as cocoa; environmental degradation due to mining, illegal timber harvesting, and other activities; and increasing weather variability linked to climate change, have highlighted the need to adopt more sustainable landscape management practices to reduce pressures on forests. The government has also prioritized sustainable forest management for both climate change mitigation and adaptation. Ghana’s updated nationally determined contribution (NDC) under the Paris Agreement,<sup>2</sup> submitted in 2021, includes mitigation priorities in the agriculture and forestry sectors. In 2016 the government also finalized its country strategy for REDD+ (Reducing Emissions from Deforestation and forest Degradation).<sup>3</sup>

In practice, tackling deforestation in Ghana requires a broad range of changes to agriculture, mining, forestry, and conservation practices (see Table 2 on page 27), referred to collectively in this report as a natural resource management (NRM) transition. There are many stakeholders—sometimes with competing interests—who could be affected by these changes: from landowners and farmers, to communities living around forests, government agencies, private investors, and even commodity buyers.

This case study is part of a series exploring what a just transition means in relation to some of the socioeconomic changes that will likely be catalyzed as the world increases its effort to tackle climate change. The issues that need attention as part of designing a just transition will vary from place to place and sector to sector; this means that there is no uniform approach or set of issues to be managed. However, through in-depth case studies of the programs financed by the Climate Investment Funds (CIF) in specific places and specific sectoral transitions, we can distill lessons that may offer guidance to future efforts in supporting just transitions around the world.

For more information see: <https://www.climateinvestmentfunds.org/topics/just-transition>



The Government of Ghana, its international development partners, and private sector actors involved in planning and implementing the NRM transition will need to ensure that potential trade-offs are addressed in ways that improve, rather than undermine, the economy, local livelihoods, and natural environment, and that the process of transition is socially inclusive.

## OUTLINE OF THIS STUDY

This study describes key features of a transition to more sustainable natural resource management in Ghana, and examines how activities funded by CIF, under the Forest Investment Program (FIP) and with partner multilateral development banks (MDBs), have approached some of the challenges that are relevant for ensuring just transitions. The analysis is based on a review of project documents, public reports, and peer-reviewed scientific studies, as well as interviews with stakeholders involved in the FIP projects and/or working in the wider context of natural resource management in Ghana.

**Section 1** provides an overview of the transition context—a description of the trends and drivers of forest loss in Ghana as well as the political economy of deforestation, including how current practices have created winners and losers.

**Section 2** delves into the concept of just transitions and uses it to identify some pertinent issues and challenges as Ghana tries to counter deforestation by encouraging NRM through transitions in sectors such as agriculture, mining, and forestry.

**Section 3** explores whether and how CIF-financed programs in Ghana have approached the foundational components of just transitions—ensuring social inclusion and distributional justice—as well as the extent to which they have encouraged the transformation of existing systems and structures. The programs and projects examined in this case study were not developed with an explicit focus on just transitions, so this case study does not “evaluate” whether they have achieved them. However, by applying a just transitions lens, the case study shares insights from CIF projects that may be relevant for future efforts by CIF and others to deliberately support just transitions, in Ghana and elsewhere.

**Section 4** draws together some of the key lessons and presents recommendations as to how more just transitions might be supported across many of the different geographies that will necessarily be reconfigured as the world tackles climate change.



# 1. THE POLITICAL ECONOMY OF DEFORESTATION AND TRANSITION TO THE SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES IN GHANA

## 1.1 CONTEXT: TRENDS AND DRIVERS OF FOREST LOSS

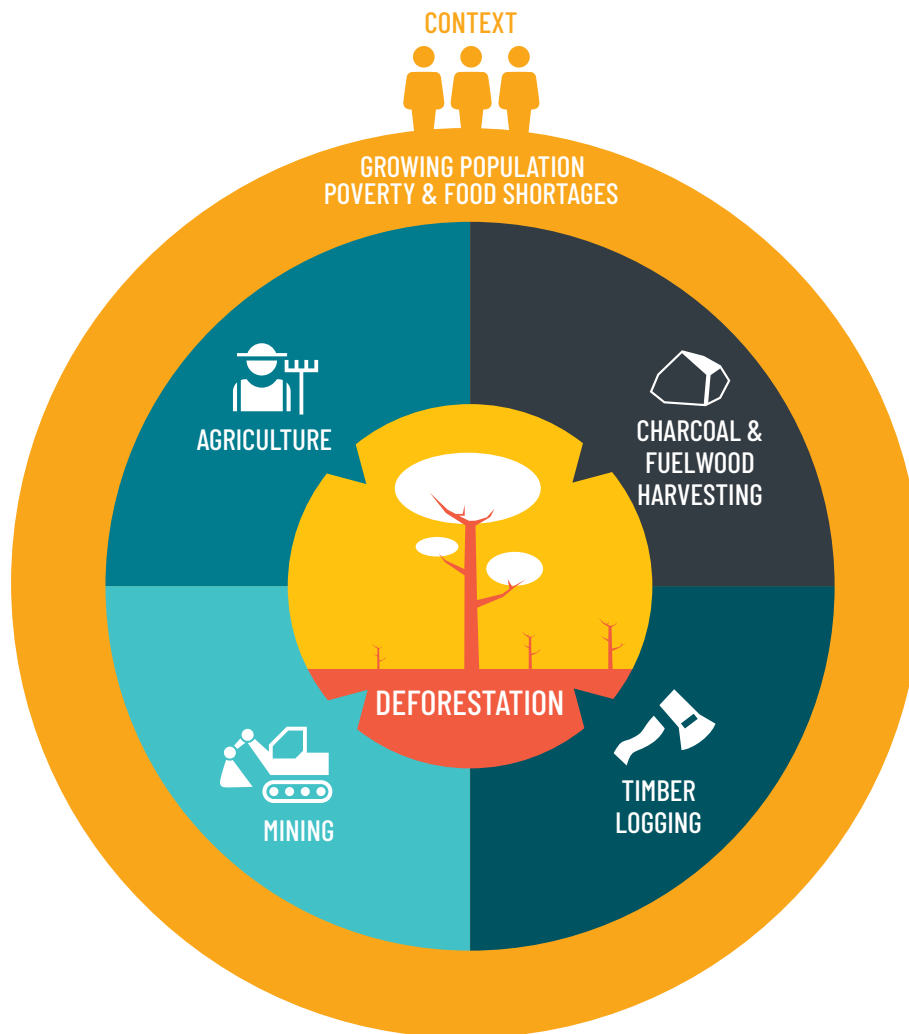
Since the late 19th century, Ghana's primary forests, including tropical rainforests, have been decimated. By one estimate, more than 80 percent of primary forest cover was lost between 1900 and 1999,<sup>4</sup> and almost half of what remained has been lost since.<sup>5</sup> Today, the annual rate of forest loss in Ghana is estimated at 2–3 percent<sup>6</sup>—among the highest in the world.<sup>7</sup> The World Bank estimates that about 4.7 million hectares (ha) of forest were lost between 2000 and 2015 – an area almost equivalent in size to Costa Rica – at an average of about 315,000 hectares (ha) per year.

There are many direct and indirect drivers of forest loss, as shown in Figure 1. In the 1980s, deforestation rates spiked after the implementation of the World Bank's structural adjustment program, which pushed

for the liberalization of Ghana's agricultural and timber sectors. Coming amid a period of massive currency devaluation, and in the absence of strong environment protections, the result was rapid, widespread forest loss.<sup>8</sup>

Today, conversion of land for agriculture is (by most accounts, at least)<sup>9</sup> the largest cause of deforestation, particularly to grow cocoa, Ghana's chief export crop, as well as cassava, plantain, cocoyam (taro root), oil palm, and rubber, as well as for livestock and for subsistence swidden agriculture.<sup>10</sup> Mining and mineral exploration, particularly for gold, along with the harvesting of forests for fuelwood, charcoal, and timber, have also contributed to forest loss.<sup>11</sup> These activities, which are often illicit, are driven by the pressures of a growing population, prevalent poverty, and other economic development challenges.<sup>12</sup> The sections below examine some of the key sectors involved.

Figure 1.  
DRIVERS OF DEFORESTATION IN GHANA



 **Agriculture**

Ghana is the world’s second-largest cocoa exporter. As of 2019, just under 1.5 million ha (roughly 7 percent of Ghana’s total land area) were under cocoa cultivation,<sup>13</sup> with exports of beans and processed cocoa products valued at almost US\$2.6 billion (cocoa is the country’s third -largest export earner, though considerably below gold and oil in value).<sup>14</sup> Cocoa production is also a major source of rural employment, much of it informal: about 850,000 households (roughly 15 percent of all households) are involved in farming the crop.<sup>15</sup> Most production is on small- to medium-scale farms of 2–3 ha, on average.<sup>16</sup>

The land under cocoa production continues to shift, especially in the Western Region and other parts of the High Forest zone, and farmers have been cutting down trees to replace shaded cultivation (under primary or secondary forests) with open cultivation.<sup>17</sup>

Across the landscape, about 50 percent of the land is used for agriculture, forestry, and/or agroforestry. Combined, these sectors employ around 60 percent of the population (and 53 percent of women).<sup>18</sup>

The underlying context is what the Solidaridad network describes as a region “hampered by unsustainable production practices, less commercialized farming, unfavorable land tenure, limited youth entrepreneurial skills, degradation of natural resources, low investments and access to finance.”<sup>19</sup> Ghana’s cocoa plantations have low and declining yields per hectare due to an aging rootstock, diminishing soil fertility, and environmental degradation. The combination of poverty and a lack of educational opportunities, particularly in rural areas, has also led to significant problems in the cocoa sector, including child labor.<sup>20</sup> Though global demand for cocoa has risen,<sup>21</sup> Ghanaian farmers are paid very low prices for their crop. They earn less than 6 percent of the chocolate industry’s overall revenue, or about US\$1 per day on average.<sup>22</sup> The poor financial returns, in turn, make it difficult for farmers to invest in more sustainable practices such as shade-grown cocoa or improving farm productivity, even as this need becomes ever more critical. With the confluence of the growing global demand for cocoa and declining yields, production levels have been sustained by cultivating more land, rather than improving efficiency or productivity. This has translated into the loss of forests, even in protected areas.



### Mining and mineral exploitation

Unregulated surface mining, particularly for gold, has catastrophically scarred the landscape, while contaminating water courses with cyanide and other chemicals. Gold is Ghana’s top export commodity, worth US\$10.8 billion in 2019.<sup>23</sup> An estimated 30–40 percent of gold production involves artisanal and small-scale miners,<sup>24</sup> including unlicensed and informal miners known as *galamseyers*. Their share in total production has increased substantially since the early 2000s,<sup>25</sup> as high gold prices, high unemployment, and a decline in agricultural productivity have led to more illegal mining. High gold prices pose a threat to forests because the mineral belts considerably overlap with Ghana’s remaining forests. According to the World Bank, the expansion of illegal mining operations is driven not only by poor local miners and itinerant laborers (often migrants), but also by the direct support of “entrepreneurial and

politically connected Ghanaians, foreign investors and equipment providers.”<sup>26</sup> Consequently, with the assistance of wealthy Ghanaians, “small-scale mining... has metamorphosed into large-scale surface mining at the community level.”<sup>27</sup>

In addition to driving forest loss, this small-scale gold mining has also affected food production and contributed to food price spikes—especially in regions where there are more *galamsey*—by degrading arable lands, contaminating water sources, and shifting labor from food production to mining.<sup>28</sup>

While destructive, small-scale and artisanal mining contributes to Ghana’s wealth and provides livelihoods for many people. Including both direct and indirect jobs, it is estimated to employ 500,000 to 1.1 million Ghanaians,<sup>29</sup> about half of them informally.<sup>30</sup> Women make up somewhere between a quarter and a half of this labor force.<sup>31</sup> There are claims that mining indirectly benefits 4.4 million people (around 14% of Ghana’s total population), including women who provide supporting services in mining communities, such as petty trading and food preparation.<sup>32</sup>



### Timber logging

Forestry contributes around 1.5 percent to Ghana’s gross domestic product (GDP)<sup>33</sup> and 1.6 percent of its export earnings, mainly from teak exports to Asia (predominantly China and India).<sup>34</sup> The global market for high-grade tropical hardwoods (including teak) is predicted to grow from around 100 million cubic meters (m<sup>3</sup>) per year in 2010 to at least 120 million m<sup>3</sup> by 2030,<sup>35</sup> indicating that demand will remain high. Ghanaians’ heavy dependence on charcoal and fuelwood for energy, both urban and rural areas, also drives timber harvesting. Illegal chainsaw logging supplies most of the domestic timber market and is also the main source of supply for overland export to neighboring countries, generating significant revenue for its mostly urban financiers.<sup>36</sup>

However, Ghana’s timber sector has been undergoing a transition. Timber’s contribution to the national economy and foreign exchange earnings has diminished significantly since the 1990s and 2000s.<sup>37</sup>

In fact, since the early 2000s, nearly 100 timber companies (about 80 percent of the firms that once operated) and some 75,000 jobs have reportedly disappeared.<sup>38</sup> Still, forestry—legal and illegal—remains a significant source of livelihoods: by some estimates, illegal chainsaw milling alone employs around 130,000 people and provides indirect livelihoods for another 650,000.<sup>39</sup>



### **Underlying conditions or drivers that motivate and incentivize these activities**

A lower-middle -income economy, Ghana continues to depend heavily on exploiting its natural resources for both employment and export earnings. A little under half of Ghana’s population lives in rural areas, where food shortages and poverty are common. Forest-related activities, including charcoal production, fuelwood collection,<sup>40</sup> and bushmeat hunting, provide livelihoods for an estimated two-thirds of the roughly 11 million people living in and around Ghana’s forests.<sup>41</sup>

These underlying pressures and drivers are common across many countries where deforestation rates are high; they have also been exacerbated by the COVID-19 pandemic. Globally, large numbers of Indigenous peoples, local communities, migrants, and returning urban workers have retreated into forests, seeking sustenance and shelter. At the same time, funding for forests has fallen, particularly in low- and middle-income countries, due to higher public expenditures on health and welfare and declining public revenues.<sup>42</sup>

## **1.2 THE TRANSITION VISION: SUSTAINABLE AGRICULTURE AND FOREST MANAGEMENT**

While agriculture, mining, and forestry have generated short-term economic benefits, the loss of forests has decimated biodiversity<sup>43</sup> and undermined other local livelihoods.<sup>44</sup> The scale of Ghana’s forest loss not only hinders sustainable development but has also driven up greenhouse gas (GHG) emissions.<sup>45</sup> Climate change could significantly affect agriculture and forestry, both of which are highly climate-sensitive. Rising concerns about these impacts, along with expansion of the cocoa frontier, have led to the launch of various initiatives to tackle deforestation by improving the growth and maintenance of forests, promoting sustainable agriculture, and reducing the impacts of mining. These focus areas are at the core of a landscape-scale NRM transition that is intended to reduce forest loss and restore some of Ghana’s forest cover.

### **1.2.1 HISTORY OF FOREST MANAGEMENT AND EFFORTS TO INTRODUCE SUSTAINABLE NRM PRACTICES**

Figure 2 illustrates important elements in the broader historical context of current government efforts to tackle forest loss, particularly policies and interventions targeting agriculture, afforestation and reforestation programs, and the timber industry. Community involvement in activities that stem forest loss—such as agroforestry and sustainable timber plantations—has been a recurring theme, and over time there have been efforts to strengthen benefit sharing arrangements.

Early efforts at community involvement in agroforestry, such as the *Taungya* System introduced in the 1960s, reportedly helped to improve local food security and rehabilitated some degraded forests. However, they ultimately failed because they did not fairly distribute the risks and benefits involved and actually disincentivized farmers from managing trees all the way to maturity.<sup>46</sup>

More inclusive benefit sharing arrangements for agroforestry practices were introduced in the 1990s through the Modified *Taungya* System (MTS) and



Social Responsibility Agreements (SRAs). MTS grants areas within degraded forest reserves to local communities to interplant food crops with plantation trees. Farmers earn a 40 percent share of timber returns, the government another 40 percent, the landowners 15 percent, and the community, 5 percent. SRAs oblige timber contractors to spend 5 percent of the value of stumpage fees on social amenities for communities within timber concession areas.<sup>47</sup> In 1998, the Wildlife Division introduced Community Resource Management Areas (CREMAs). It was initially an approach to allow local communities to manage wildlife resources in their jurisdictions,<sup>48</sup> but over time it has evolved into a governance mechanism for managing natural resources more broadly.<sup>49</sup>

Promoting private plantations as a strategy for reducing deforestation has also become a pillar of Ghana's conservation strategy. The National Forest Plantation Development Programs, introduced in 2001, aimed to replant 20,000 ha of degraded forests annually.<sup>50</sup> They were implemented through different schemes, including MTS as well as numerous efforts

to encourage private investment in plantations.<sup>51</sup> They catalyzed an estimated 190,000 ha of exotic and native species plantations between 2002 and 2015—around 75 percent by the public sector and 25 percent by private investors.<sup>52</sup> They are also credited with creating work opportunities and improving food security.<sup>53</sup>

Throughout most of this history, the Forestry Commission, part of the Ministry of Lands and Natural Resources (MLNR), has played a central role in forest resource management.<sup>54</sup> It has also controlled core decisions in the sector, despite previous efforts to decentralize and enhance community involvement.<sup>55</sup> Today, Ghana has about 24,000 square kilometers (km<sup>2</sup>) of forest reserves, or roughly 11 percent of its total land area<sup>56,57</sup> still overseen by the Forestry Commission. However, other government entities are also involved in some aspects of managing forest resources—though it is unclear how closely they work together—including the Wildlife Division of MLNR; the Ministry of Food and Agriculture (MoFA); the Ministry of Energy; the Ministry of Environment, Science, Technology and Innovation (MESTI); and the Lands Commission.<sup>58</sup>

Figure 2.  
HISTORY OF KEY LEGISLATIVE AND POLICY CHANGES RELATING TO FOREST MANAGEMENT AND CONSERVATION



## 1.2.2 ADDRESSING FOREST LOSS AS PART OF GHANA'S RESPONSE TO CLIMATE CHANGE

Ghana's most recent nationally determined contribution (NDC) is built on numerous domestic policy agendas<sup>59</sup> and highlights addressing forest loss and landscape restoration through more sustainable NRM practices, as a priority for both climate change mitigation and adaptation.<sup>60</sup> To this end, the NDC emphasizes strategies relating to agricultural production, timber production, and sustainable forest management and restoration.

The Ghana REDD+ (Reducing Emissions from Deforestation and forest Degradation) Strategy sets the overall framework for action to address forest loss, with investments funded by international organizations, such as the Forest Carbon Partnership Facility (FCPF), the Climate Investment Funds (CIF), and others.<sup>61</sup> The focal point for REDD+ implementation is the Forestry Commission. A multi-stakeholder working group, including representatives from government, the private sector, and civil society, advises on all REDD+ processes. The vision and aims of the REDD+ Strategy are broad. The primary goal is to reduce emissions from deforestation and forest degradation, and to foster conservation, sustainable management of forests, and enhancement of forest carbon stocks. Notably, when the national REDD+ Strategy for Ghana was finalized, the initial approach, based on individual, independent pilots by community-based organizations (CBOs), local communities, and private forestry businesses, shifted to a "landscape" approach<sup>62</sup> that was considered to be more inclusive in scale and better able to address the social and economic drivers of deforestation.<sup>63</sup>

Over the past two decades, many international funders have worked with the government in this space, including the African Development Bank (AfDB) and the World Bank, the European Union,<sup>64</sup> the Center for International Forestry Research (CIFOR),<sup>65</sup> and industry initiatives such as CocoaLife (Mondelez International) and the World Cocoa Foundation's sustainable tree crops program.<sup>66</sup> In addition, 11 cocoa trading companies operating in Ghana, accounting for 92 percent of cocoa exports by

weight, are signatories to the Cocoa Forest Initiative.<sup>67</sup> The goal of these external efforts is to support the government's agenda for tackling deforestation while addressing other sustainable development challenges.

## 1.3 THE CLIMATE INVESTMENT FUNDS IN GHANA

Ghana was one of the first countries to be supported under the Forest Investment Program (FIP) of CIF.<sup>68</sup> FIP starts its country engagement by creating an Investment Plan that sets out strategically linked investments, built around a vision of transformation. The plan is informed by consultations with multiple stakeholders and collaboration with multilateral development banks (MDBs). It clarifies the objectives and intended sectoral targets for the projects that are to be financed in the country by FIP.

The 2012 FIP Ghana Investment Plan<sup>69</sup> prioritizes the reduction of GHG emissions from deforestation and forest degradation, poverty alleviation, and biodiversity conservation. The aims highlighted in the plan include introducing "more inclusive management and benefit sharing models, financial incentives and investments" and developing "viable alternative livelihoods for local communities by addressing a broad range of technical, financial and market incentives, to reduce pressure on existing forests."<sup>70</sup>

Under that plan, FIP, in partnership with the government of Ghana and the MDBs, including AfDB and the International Bank for Reconstruction and Development (IBRD), has financed various pilot activities in the High Forest zone, mainly in the Western and Brong Ahafo regions, which have high rates of deforestation. The FIP projects, summarized in Table 1, are important components of Ghana's overall REDD+ agenda, alongside activities financed by FCPF and the FCPF Carbon Fund.<sup>71</sup>

The Investment Plan takes a landscape approach, targeting both forest reserves and off-reserve areas. Across the project portfolio (most of which is ongoing as of 2021), support is directed to various sectors to address the drivers of deforestation and empower different actors to contribute to more sustainable



land and resource use. The portfolio comprises sustainable wood supply through timber plantations; reforestation, afforestation, and enrichment planting to restore degraded forest areas; agroforestry and sustainable agriculture to increase the presence of trees in the agricultural landscape; and direct funding to support livelihoods in the communities.

Table 1.  
OVERVIEW OF THE PROJECTS FINANCED BY THE FOREST INVESTMENT PROGRAM (FIP) IN GHANA

APPROVAL YEAR	PROJECT NAME	PARTNER MDB	FINANCING	SUMMARY (MAIN FOCUS)
2013	<b>Engaging Local Communities in REDD+ / Enhancement of Carbon Stocks (ELCIR+)</b>	AfDB	FIP US\$9.75 million grant  AfDB (African Development Fund) US\$4.8 million grant	Community-led restoration of degraded forests; cocoa and other agroforestry systems; conservation of off-reserve remnant forest and sacred forest sites; wildfire management.
2015, 2018	<b>Enhancing Natural Forest and Agro-Forest Landscape Project (ENFAL)</b>	IBRD	FIP Grant: \$41.89M  FIP Credit: \$7.00M  Government of Ghana US\$3 million	<b>ENFAL1</b> Sustainable agriculture (cocoa) and forestry—targets both reserve areas and off-reserve lands in farms and communities; pilot activities aim to address drivers of deforestation at a landscape level, incentivizing farmers to protect existing trees, plant new trees, and adopt agroforestry and shade-grown cocoa production; and supporting for enrichment planting and nursery development to restore degraded reserves.  <b>ENFAL2<sup>72</sup></b> Rehabilitation and reforestation of forest sites degraded by illegal artisanal small-scale gold mining, along with the encouragement of private investment in forest plantations.
2016	<b>Ghana Dedicated Grant Mechanism (DGM).</b>	IBRD	FIP US\$5.5 million grant	Build awareness and provide finance to local communities through micro-scale pilot projects to support engagement in activities aligned with the broader FIP objectives. It is the only FIP funded initiative that focused solely on community led sustainable NRM (see Figure 4).
2016	<b>Public-Private Partnership (PPP) for the Restoration of Degraded Forest Reserve through Plantations Certified by the Verified Carbon Standard (VCS) Program and the Forest Stewardship Council (FSC) (“Form Ghana project”)</b>	AfDB	FIP US\$10 million loan  AfDB US\$14 million loan	Bringing in private investment to establish timber plantations, via the first public-private partnership (PPP) in Ghana’s forestry sector; structured around a Benefit Sharing Agreement between the national government (through the Forestry Commission), the private company Form Ghana as the project sponsor, and traditional landowners.



## 2. WHAT DO “JUST TRANSITIONS” MEAN FOR GHANA’S NATURAL RESOURCE MANAGEMENT SECTORS?

### KEY MESSAGES

The “just transition” concept comprises a range of equity issues that arise as societies introduce measures to tackle climate change. It calls for ensuring wide and meaningful social inclusion in transition planning and implementation processes and fairly managing the distributional impacts (particularly risks and losses) of the transition. It can also imply, as part of the transition, working to reverse historical disadvantage and inequality so that the new opportunities and practices that emerge create a more just society overall.

As strategies for tackling forest loss in Ghana begin to re-shape the character of different natural resource management sectors, a just transition requires recognizing and addressing several issues:

- **Poverty and inequality:** Poverty levels are high in Ghana’s rural areas, and income inequality is rising. It is increasingly difficult for farmers to make a living and food insecurity is common in rural areas. Poorly managed changes in NRM practices could exacerbate poverty and deepen inequality.
- **A large informal economy:** Much of the economy and employment in NRM is informal and even illegal, leading to high levels of precarity. It makes planning for a just transition difficult, in terms of ensuring capacity building and livelihood programs reach the most vulnerable, because there is limited data on the informal economy. It also makes enforcing the “polluter pays” principle difficult, as the damage is done by poor, small-scale farmers, miners, and timber harvesters, even while the benefits accrue to larger, wealthier actors.
- **Limited land tenure:** Lacking or unclear tenure, especially for land, increases farmers’ vulnerability to exploitation in a transition process while reducing their incentives to manage the land for longer-term productivity or sustainability gains. Women, meanwhile, face many legal, economic, and cultural barriers that keep them from being able to influence decisions about land or other resources. They often have no land tenure at all.
- **Political economy challenges:** There are strong political economies around natural resources, as well as many opportunities for corruption and elite capture of resources. In Ghana, the presence of “traditional” governance structures (chieftains) in parallel with local bureaucracies may provide a mechanism for greater social inclusion at the community level, though can also add more complexity to the coordination of a just transition process.
- **External market influence:** Local farmers are embedded in a network of national and global markets and trade structures that exert great power over financial and sustainability outcomes. The opportunities for them to take action to improve sustainability and to benefit from transitions is often heavily constrained by external actors.

Many of these characteristics are similarly important in other countries in the global South.

## 2.1 THE CONCEPT OF JUST TRANSITIONS

Transitions to more sustainable natural resource management (NRM) are expected to create new economic and social development opportunities, in addition to posing new risks and losses. Whether the transitions are fair or just will depend on how those opportunities and risks are distributed among different populations and regions. It will also depend on the process for how transition is conceived and implemented, and who has agency or access to shape decision-making. These factors will determine whether the transitions are sustainable over time, or face local resistance. Poorly managed processes of socioeconomic change can result in excessive loss, hardship, resistance and the disempowerment of communities that depend on natural resources for their livelihoods, food security, or cultural purposes. Conversely, a deliberate just transitions approach can more effectively tackle deforestation while also capitalizing on the many socioeconomic opportunities created by these changes.

A just transition for natural resource management sectors is one that (1) mitigates the potential negative effects of change on certain workers, communities, and regional economies that currently depend on today's natural resource economies; (2) taps into new economic opportunities associated with more sustainable practices; and (3) addresses the environmental legacies of mining, agriculture, overexploitation of timber and other forest resources, and deforestation itself. Furthermore, taking a transformative perspective, a just transition seizes the opportunity to tackle historical (preexisting) inequalities and vulnerabilities, so the society and economy become more just than before.<sup>73</sup>

The process by which a transition is undertaken is also important: just transitions should be genuinely inclusive, involving meaningful participation across society, including by those stakeholders who are most vulnerable or marginalized. An inclusive process is more likely to be perceived as fair, and can thus create

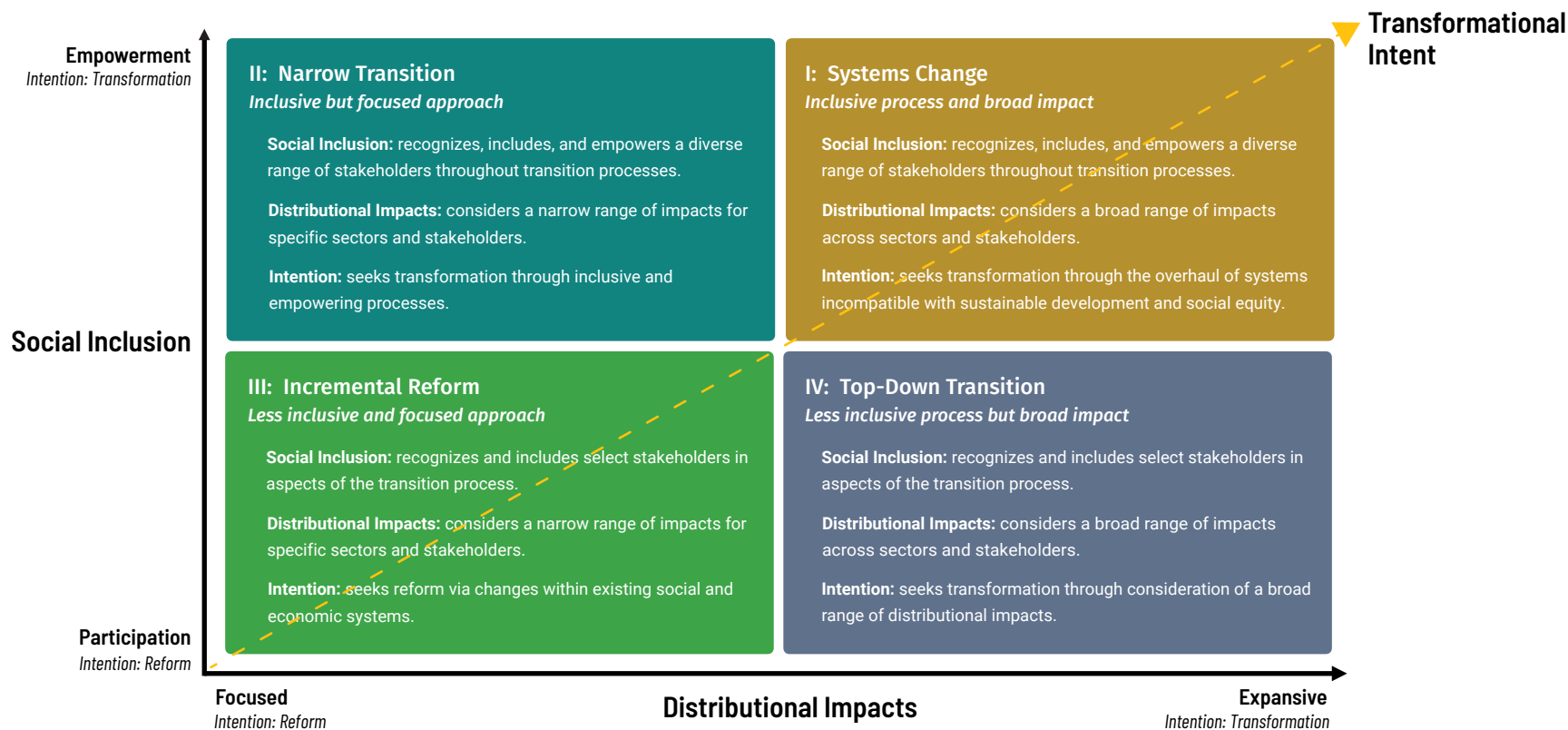


the buy-in and ownership needed to succeed. In fact, strong involvement by local communities can produce better outcomes, by ensuring that knowledge of the local context and culture and local visions for the future drive the transition.<sup>74</sup>

In the Just Transitions Framework developed by the Just Transition Initiative,<sup>75</sup> these key themes are arranged under the broad headings of *social inclusion* (or procedural justice) and *distribution of impacts and opportunities* (distributional justice). Those high-level concepts, shown in Figure 3, provide a heuristic for recognizing the types of issues that need to be considered in any transition context.

The framework adds a third dimension: *transformational intent*—the degree to which the transition processes are used to “transform” the systems, norms, or structures that have created social and economic inequalities—and often also created environmental problems, such as deforestation—in the first place. Some transitions proceed through incremental reforms, introducing technological or financial changes but leaving the existing social and economic systems largely intact. The more transformative approaches to just transition seek to overhaul or reconfigure features, including policies and institutions, that create or reinforce inequity, exclusion, or environmentally unsustainable outcomes.

Figure 3.  
JUST TRANSITIONS FRAMEWORK<sup>76</sup>



### USE OF THE JUST TRANSITION CONCEPT IN GHANA

A recent study found that the term “just transition” itself does not feature strongly in the rhetoric of the government or the civil society in Ghana<sup>77</sup>. The idea of ensuring that climate policies are designed and implemented in a just manner does resonate clearly, particularly with nongovernment stakeholders. However, the study found that there is limited local knowledge of strategies for ensuring just climate-related transitions. It also noted that the COVID-19 pandemic has brought into

stronger focus some of the challenges inherent in any effort to implement just transition strategies in Ghana—such as informal workers’ struggles to access government crisis support programs.

The International Labour Organization (ILO) and the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) have collaborated with Ghana as a pilot country for application of the ILO’s Just Transition Guidelines.<sup>78</sup>

In early 2018, a National Dialogue on “decent work and just transition to an environmentally sustainable economy” was convened by the Environmental Protection Agency (EPA) and the Ministry of Employment and Labour Relations (MELR), with participation by the Ghana Trade Union Congress and Ghana Employers Association, among others<sup>79</sup>.

## 2.2 KEY JUST TRANSITIONS ISSUES AS GHANA TACKLES DEFORESTATION

The costs and burdens of today's unsustainable agriculture, forestry, and mining practices are extensive. Deforestation itself contributes to soil erosion and the loss of biodiversity and environmental services; reduces agricultural productivity (particularly for a crop such as cocoa, which has evolved to grow in the shade); and has resulted in economic losses—including, for example, to the ecotourism industry,<sup>80</sup> a major income earner for Ghana (even more so than timber).<sup>81</sup> Deforestation also results in the loss of carbon sinks, contributing to climate change, which has outsized impacts on the poor.

These costs and burdens are unevenly distributed across Ghanaian society, and there are differences in the near versus longer term. The present situation might appear better for poor farmers, miners, and loggers, at least for now, because they are able to derive income, even if often illegally and on diminishing returns (whereas under tightly managed regimes, they might be excluded). However, the ones who benefit the most from current practices are the more powerful interests that are enabling and financing these activities. The situation is also worsening inequality and trapping poor people in low-productivity and financially insecure sectors. Most of the benefits of the current system thus accrue to only a few with vested interests, while entire communities suffer from the economic and cultural losses that result from the clearing of forests.

The ways that land and forests are used, the stakeholders who have access to them, and the benefits derived from them need to be transformed to achieve social and environmental justice and reverse inequality. A transition to more sustainable agriculture, forestry, and mining, along with expanded forest cover, is an imperative from a justice perspective. But such changes can also create equity challenges. For example, a focus on the carbon sequestration value of trees without careful consideration of how poor farmers, loggers, or miners might lose access to forests or the land underneath may further marginalize vulnerable individuals and communities.

There are many contextual challenges that need to be addressed to tackle deforestation justly and safely in Ghana, including:

### 1 | Widespread poverty and growing income inequality

Poverty and rising inequality are especially acute in rural areas, including among cocoa farmers. A survey of cocoa-farming households in Ghana and Cote d'Ivoire found that 30–60 percent of households have an income level below that defined by the World Bank as extreme poverty, and most (73–90 percent) do not earn a “living income” (that is, enough to afford a decent standard of living).<sup>82</sup> Farmer poverty levels fell between 1990 and 2005 due to technical and price support initiatives from the government and relatively higher world crop prices, but since then, amid declining productivity, more farmers have become poorer again.<sup>83</sup>

Rising income inequality is another dynamic that a just NRM transition needs to grapple with. Ghana's GINI index, a key measure of income inequality, has risen from 35.3 in 1987 to 43.5 in 2016.<sup>84</sup> Anecdotally, income inequality is also widening among tribal groups, and is increasing among many small tribes with increasing economic growth.<sup>85</sup> The impacts of socio-economic transition will be harder for lower income groups to absorb, as they do not have the same financial cushion to aid recovery as wealthier groups do.

For it to be just, a transition cannot make inequality worse, and it should strive to use the transition window to introduce reforms that reduce inequality.

## 2 High level of public debt and low public revenue

There are also financial challenges at the government level. Ghana's public debt was 78 percent of GDP in 2020, up from around 30 percent a decade ago.<sup>86</sup> Tax revenue in 2019 was roughly 12 percent of GDP, which is relatively low.<sup>87</sup>

Significant financial resources may be needed to support NRM transitions, such as for widespread education and reskilling programs, economic diversification incentives and supporting infrastructure, environmental remediation of degraded lands and waterways, to provide social safety nets that can sustain those most affected by the transition (such as Ghana's Livelihood Empowerment Against Poverty (LEAP) program,<sup>88</sup> which is partly funded by government revenue), and to ensure a highly inclusive planning process.

The process of just transitions also needs to ensure the sustainability of financial resources over longer time periods than individual projects, since change may take considerable time. Securing finance may be a significant challenge in countries such as Ghana, where high debt and low revenue rates coexist in an economy highly dependent on price-volatile export commodities.

## 3 The nature of work

As in many parts of the world, a significant share of Ghanaian workers are informally employed, with nationally more than 70 percent of jobs estimated to be in the informal sector.<sup>89</sup> In agriculture, mining, and timber logging, this also includes large numbers of people working illegally, making their job security and employment conditions even more precarious. Even those workers who are formally employed are typically not unionized and are exposed to dangerous working conditions, and more than 65 percent of formal jobs are categorized as "vulnerable employment."<sup>90</sup>

Any transition process in this context needs to recognize and include both the formal

and informal economy, and provide reskilling and reemployment opportunities and social assistance for all workers whose livelihoods may be affected in the short term.

Informality is not the only transition challenge arising from the structure of Ghana's labor market. Unlike in other parts of the world, World Bank analysis has found, structural change and urbanization have not contributed much to economic growth in Ghana because of a "missing middle" of employment opportunities in mid-productivity sectors for workers moving up from sectors such as agriculture.<sup>91</sup> Higher-performing services sectors of Ghana's economy employ few people (and very few unskilled workers), and the manufacturing sector has very low productivity, so most jobs are in low-productivity and often informal services sectors.

While supporting workers with reskilling, just transitions planning also needs to work simultaneously on the demand side to ensure there are decent job opportunities available, particularly for low- and mid-skilled workers who may be leaving NRM sectors. Linking the new jobs with the green economy of the future will reinforce the transition to more sustainable production and also reduce the risk of future job stranding.

## 4 Resource ownership, especially land and tree tenure

Landlessness and insecure access to and control over land are frequent challenges, especially (though not exclusively) in the global South.<sup>92</sup> Around 80 percent of Ghana's land is under communal ownership, where title is held by the traditional leader (chieftain). Traditional authorities usually permit use of the lands in one of two ways: Groups or individuals within the same group can be allocated "usufruct" rights<sup>93</sup> via contract. Others in the community, such as migrants, may be allowed to lease land, with a share of the farmer's crop paid to the landowner. Lease arrangements are often oral and undocumented, creating insecurity and sometimes conflict.<sup>94</sup>

The lack of tenure also greatly increases the vulnerability of landless individuals or communities to exploitation and can discourage them from investing in more sustainable practices.

Tree tenure is another important issue in the context of NRM in Ghana.<sup>95</sup> Ghana's legal framework distinguishes between rights to lands and to trees, and for forests it further distinguishes naturally occurring trees from planted trees.<sup>96</sup> Until relatively recently, farmers were encouraged to plant and nurture trees on lands they were using to grow crops, but they would not own the trees or receive financial compensation for their effort. That has changed, but even today, claiming tree tenure, or deriving financial benefits from it, remains fraught with challenges.

Addressing the problems created by the absence of land and tree tenure, or the lack of clarity on this issue, is necessary as part of any just transition to tackle deforestation or to introduce other sustainable land management approaches.<sup>97</sup>

## 5 Gender and social inequality

Women make up almost half of farmers in Sub-Saharan Africa, but they face many legal, economic, and cultural barriers that limit their influence over the use of land or other resources and their ability to engage in community decision-making. In many cases, land tenure for women is weak or nonexistent<sup>98,99</sup> Under Ghanaian statutory law, women are granted land rights on par with those of men, but in practice these rights are curtailed by “patriarchal practices, marital status, gendered division of labour and access to monetary capital.” Furthermore, the councils that govern communal land under customary law are composed mainly of traditional leaders and family heads, typically men. Data show that men's share of farms is 3.2 times that of women, and 8.1 times among medium and large farms (5 acres or more).<sup>100</sup>

Women and girls in rural Ghana have fewer opportunities to access education and employment; are likelier than men to be in

informal rather than formal employment; have lower literacy rates (2018 data for Ghana's rural areas shows only 31 percent of women are literate, compared with 53 percent of men); and have less financial power, which partly explains, for example, why women-led farms are less productive than those run by men.<sup>101</sup>

In mining, meanwhile, women are frequently paid less than men for the same work, even though they often take on high-risk jobs, such as handling chemicals.<sup>102</sup> The presence of small-scale and illegal mining around communities also restricts access to key resources, such as clean water and fuelwood—a situation that burdens women and children the most because, within households, they typically have responsibility for providing these resources. The impacts of an NRM transition on children could also be dire, including on child labor in sectors such as cocoa production.

Migrants (which in Ghana refers to anyone who is not ancestrally tied to the community, and typically has no land tenure) are another structurally disadvantaged group. This includes seasonal workers who often come from the north of Ghana to work around farming areas—weeding plantations or picking fruits at harvest time. As noted above, migrants can informally lease land, but are usually not given permanent access rights, so they cannot plant permanent trees without the permission of the landowner and are generally in a more precarious situation than farmers who have stronger tenure rights.

As part of just transitions, the process of change should be specifically designed to reach individuals and groups who are usually marginalized, including women, migrants, and the illiterate (Ghana's cocoa farmers, illegal small-scale miners or galamseyers, and loggers typically have low literacy rates), to ensure that they too are educated about sustainable practices, can participate in decisions about natural resource use, and can benefit from livelihood diversification schemes.



## 6 The paradox of hunger

Food insecurity affects around 2.5 million Ghanaians, especially in rural areas, and one in five children under the age of 5 is chronically malnourished.<sup>103</sup> COVID-19 appears to have worsened the situation.<sup>104</sup> Paradoxically, hungry people often live where food is grown. In the case of Ghana's cocoa industry, what is grown is determined by an international market rather than by local nutritional needs. For any agricultural transition to be just, it has to address the systemic or structural issues that create disadvantage and vulnerability among smallholder farmers and their communities, and tackle the root causes of hunger.<sup>105</sup>

## 7 Challenging political economy considerations

There are often strong political economies around natural resources, not only because of the value of those resources, but also because of the large number of stakeholders whose livelihoods are entwined with their use. NRM activities can also be susceptible to vested interests and corruption.

In Ghana, traditional authorities have been granted power and responsibility alongside local governments, and they are considered to be part of the local political structure. Several studies have raised concerns that, because these traditional authorities are not democratically elected, they may not be accountable to their own communities. Consequently, when they are chosen

as representatives, for instance, in decentralization reforms, or by international funders, there is a risk of exacerbating existing inequalities and of elite capture of resources.<sup>106</sup> Other studies suggest that decentralization reforms in the forestry and NRM space have not given traditional authorities enough power to ensure that local priorities are reflected in decisions.<sup>107</sup> Though chieftains are not democratically elected, some consider the governance style of Ghana's roughly 190 Traditional Councils to be more representative and accountable to communities than national and local governments.

From a just transitions perspective, the imperative to work with and through traditional authorities requires a delicate balance. On one hand, these are culturally legitimate institutions that should be included in community engagement and capacity building. On the other hand, just transitions require transforming power structures or norms that create inequality or constrain social inclusion or the fair distribution of benefits. In essence, the risk of working with traditional authorities is not significantly different from the risks of working through any government structure, especially in cultures where elite capture or corruption are prevalent. Still, it adds another layer of governance and cultural complexity.

## 8 The power of international markets

National and global markets and trade structures can undermine local agency and increase inequality and vulnerability. Farmers growing cocoa in Ghana, for example, are vulnerable to low and unpredictable prices, and may be tied to the use of costly inputs (such as patented seeds and fertilizers) through their relationships with global agribusiness companies.<sup>108</sup>

The idea of a "Living Income Differential" (LID) was introduced in 2020–2021 by the governments of Ghana and Cote d'Ivoire to help correct this situation for cocoa producers. In this case, an additional amount ("differential") of US\$400 per metric ton is to be paid by buyers on all cocoa



sales, with an aim of bringing all farmers' income in line with the living income level, estimated in 2020 at US\$312 per month for a household of two adults and three children.<sup>109</sup> As of October 2020, the LID had reportedly increased the farm gate price for Ghana's cocoa farmers by 28 percent (to US\$1,837 per ton), but it has been suggested that these prices are still much lower than needed for farmers to earn a living income (US\$3,166 per ton is estimated as a minimum "liveable" price level). There are also reports that some multinational companies are "dodging" or trying to undercut the LID, either by finding new markets to buy from, or by negotiating with governments to lower the floor price for producers.<sup>110</sup> There are concerns too that price increases driven by the LID might in any case be wiped out because the differential will encourage additional cocoa supply.

Another issue is that interventions that aim to strengthen the resilience of these farmers can often reinforce their dependence on cocoa production—for instance, when they focus only on cocoa farming inputs. Helping them diversify their livelihoods away from agriculture might be of greater assistance.<sup>111</sup> A just transition should aim to help farmers break away from exploitative relationships, reward them for adopting more sustainable practices, and enable them to shift their livelihoods entirely if needed.

## 9 Addressing environmental damages and enforcing the "polluter pays" principle

Just transitions also requires restoring or rehabilitating damage to the landscape and natural resources. The environmental damage arising from decades of unsustainable practices needs to be addressed, and in a way that respects the "polluter pays" principle.<sup>112</sup> However, it can be difficult to apply the principle in landscapes where the damage has been done through illegal or informal activities, often by small-scale farmers, miners, and timber harvesters (even if their activities are funded by and benefit larger, wealthier actors). This could leave communities and governments with a huge liability or cost burden.



## 2.3 PERSPECTIVES ON COMMUNITY INVOLVEMENT IN NATURAL RESOURCE MANAGEMENT IN GHANA

The trend in Ghana's natural resource management has ostensibly been toward community involvement and greater benefit sharing with forest-adjointing communities. There has been an active effort to incentivize and sustain the involvement of rural communities in the governance of resources and distribution of forest benefits.<sup>113</sup> These efforts potentially provide the foundation for just transitions in key NRM sectors associated with deforestation. However, the results have been mixed: successive policies have tried to address earlier deficiencies, but they have been difficult to implement.

There are questions as to whether the various approaches to decentralization in natural resource management have succeeded in transferring significant power or agency to the local level, or whether the central government retains most of the power in practice.<sup>114</sup> Previous governments have argued that keeping central control is necessary because local communities lack the capacity needed to manage forests,<sup>115</sup> so decentralization would lead to local conflicts and resource destruction.<sup>116</sup>

In the implementation of MTS, some argue that local authorities' influence has been limited to articulating local community needs, meeting with those implementing projects, and deciding which community members may be involved from year to year and derive financial benefits.<sup>117</sup> Similarly, the mechanisms for establishing CREMAs have not

always delivered on the promise of meaningful community engagement, ownership, or long-lasting involvement. Instead, it has been suggested that some communities have only been included in the initial process of setting up sites, but they are then managed by government officials and workers who do not come from the community.<sup>118</sup>

A key issue here is representation. The choice by intervening agents of whom to recognize as representatives of local communities determines how responsive and accountable interventions are to local people.<sup>119</sup> In Ghana, some argue that this selection has often increased the privilege or power of a few traditional authorities and local NGOs, which can capture the benefits. Meanwhile, the voices and interests of people who are already marginalized, including “poor farmers, experienced elderly men and women, unemployed rural youth,” are excluded.<sup>120</sup> This pattern of reinforcement of traditional power structures has been observed both in the creation of CREMAs<sup>121</sup> and the MTS.<sup>122</sup> As a result, some say that local communities are now reluctant to participate in new forest management initiatives.<sup>123</sup>

Moreover, even when communities do want to participate, they still face challenges. The District Forestry Service Division (the local institution representing the Forestry Commission) is seen as under-resourced and unable to deliver the support needed by local communities to implement MTS.<sup>124</sup>

Local communities are also not adequately rewarded for their involvement in driving more sustainable practices, nor guaranteed ongoing access to forest resources for their own livelihoods.<sup>125</sup>

Many of these factors hold true for the Reducing Emissions from Deforestation and forest Degradation (REDD+) agenda in Ghana as well—particularly local communities’ limited ability to meaningfully participate in, or own, the vision or the implementation agenda. REDD+ institutions, such as the Forest Carbon Partnership Facility (FCPF) and the United Nations-Reducing Emissions from Deforestation and Degradation (UN-REDD) platform, are criticized for operating in ways that can exclude stakeholders and do not take into account their particular “interests, knowledges, practices, forest uses, and claims to resources.”<sup>126</sup> FCPF itself concludes that the positive technical progress of REDD+ needs to be accompanied by reforms that extend ownership beyond the government and the industry to involve the community by addressing tree tenure and benefit sharing issues.<sup>127</sup>

In planning just transitions, it is therefore essential to comprehensively understand the local political economy, not just as a technical arena in which new technical solutions are applied, but as a contested political space with its own logic and historical trajectory.

Table 2:  
TACKLING FOREST LOSS REQUIRES TRANSITIONS IN NATURAL RESOURCE MANAGEMENT THAT AFFECT PEOPLE

*\*\*This summary table is not an exhaustive list of the NRM transition in Ghana but designed to illustrate the transitions required and the need for a just transition approach.*

AGRICULTURE			
Context: the need for transition	Target climate/env outcome	Transition risk	Vision for a just transition
<ul style="list-style-type: none"> <li>• Conversion of land for agriculture (particularly cocoa) is considered the largest cause of deforestation</li> <li>• Land conversion for cocoa is likely to expand due to growing global demand for cocoa and declining yields, coupled with a reliance on expanding cultivation of more land, rather than improving efficiency or productivity.</li> </ul>	<ul style="list-style-type: none"> <li>• Agro-deforestation stops</li> <li>• Agro-forestry practices support land restoration</li> </ul>	<ul style="list-style-type: none"> <li>• Cocoa is a major export earner. As of 2019, cocoa exports were valued at US\$1.6 billion making it the country's third -largest export earner</li> <li>• Cocoa production is a major source of rural employment, much of it informal: about 850,000 households (roughly 15 percent of all households) are involved in farming the crop</li> <li>• Cocoa farmers are paid little for their crops, and many may lack the financial resources to change practices without support.</li> </ul>	<ul style="list-style-type: none"> <li>• The shift to sustainable agro-forestry production methods enhances resilient livelihoods and rural communities.</li> <li>• Farmers and communities have a greater share of value from produce, and influence over decision-making. They play an essential role in shaping the transition.</li> <li>• Where the shift to sustainable agro-forestry is infeasible, the local economy is reoriented to create new green jobs.</li> </ul>
MINING			
Context: the need for transition	Target climate/env outcome	Transition risk	Vision for a just transition
<ul style="list-style-type: none"> <li>• Unregulated surface mining, particularly for gold, has catastrophically scarred the landscape, while contaminating water courses</li> <li>• Small-scale gold mining affects food production and contributes to food price spikes by degrading arable lands, contaminating water sources, and shifting labor from food production to mining</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminate illegal, small-scale gold mining</li> <li>• Mining practices become less damaging for the environment</li> </ul>	<ul style="list-style-type: none"> <li>• Gold is Ghana's top export commodity, worth US\$10.8 billion in 2019.</li> <li>• Including both direct and indirect jobs, it is estimated to employ 500,000 to 1.1 million Ghanaians, about half of them informally. Women make up somewhere between a quarter and a half of this labor force.</li> <li>• There are claims that mining indirectly benefits 4.4 million people, including women who provide supporting services in mining communities, such as petty trading and food preparation.</li> <li>• An estimated 30–40 percent of gold production involves artisanal and small-scale miners (ASGM),<sup>128</sup> including unlicensed and informal miners</li> </ul>	<ul style="list-style-type: none"> <li>• Mining is curtailed in forest areas</li> <li>• Historically-mined areas are rehabilitated, and land is able to be re-used for timber production, agriculture, reforestation or other productive uses for local communities.</li> <li>• Illegal ASGM are supported to re-skill, if needed, and move into other forms of employment.</li> <li>• Economic diversification, including of mining areas, creates alternative pathways for the local and national economy.</li> </ul>

## FORESTRY

### Context: the need for transition

- Harvesting of forests for fuelwood, charcoal, and timber contributes to forest loss

### Target climate/env outcome

- Shift harvesting of timber from native forests to plantations on historically-cleared lands

### Transition risk

- Illegal chainsaw milling alone employs around 130,000 people and provides indirect livelihoods for another 650,000.
- Many Ghanaians' depend on charcoal and fuelwood for energy, in both urban and rural areas
- Illegal chainsaw logging supplies most of the domestic timber market and is also the main source of supply for overland export to neighbouring countries, generating significant revenue for its mostly urban financiers.

### Vision for a just transition

- Achieve greater community involvement in producing sustainable timber in off-reserve areas, and greater benefit sharing with forest-adjacent communities.
- Support illegal chainsaw loggers with re-skilling and new employment opportunities.

### There are a number of reforms that could support just transitions across NRM sectors:

- Strengthen social safety nets for those who are unemployed
- Reform land tenure practices in ways that improve the ability of women and other vulnerable groups like migrants to participate in sustainable NRM practices
- Developing new curricula tailored to preparing the workforce for new kinds of jobs
- Improve access to education for some groups, such as women.
- Repurpose any current perverse subsidies (i.e. those which may be driving expansion of area under agricultural production rather than higher productivity of existing production) and aligning fiscal incentives with the goal of reducing pressures on forests



### 3. CIF'S EXPERIENCES IN SUPPORTING NRM TRANSITIONS IN GHANA

This section explores how CIF-financed activities have approached some of the just transitions issues discussed in Section 2. The programs financed by the Forest Investment Program (FIP) in Ghana are:

- Engaging Local Communities in REDD+/ Enhancement of Carbon Stocks (ELCIR+);
- Enhancing Natural Forest and Agro-Forest Landscape Project (in two parts, ENFAL1 and ENFAL2);
- Public-Private Partnership (PPP) for the Restoration of Degraded Forest Reserve through Plantations Certified by the Verified Carbon Standard Program and the Forest Stewardship Council (Form Ghana project); and
- The Ghana Dedicated Grant Mechanism (DGM).

Table 1 at the end of Section 1 summarizes their key features. While these projects were not developed with an explicit just transitions focus, there are elements of their design and implementation that could inform and guide other natural resource management (NRM)

transitions in Ghana and elsewhere. In this context, the study has been written as a learning review rather than a performance assessment or an evaluation. This section **draws out some examples of the way FIP has worked with themes or challenges that are relevant from a just transitions perspective.**

The insights are organized around the elements of the Just Transitions Framework: ensuring social inclusion, managing a fair distribution of costs and benefits, and transformative intent.

Individual actors such as CIF alone cannot ensure just transitions, not only due to resource limitations, but because achieving just outcomes requires many different types of actions, in parallel, across sectors and borders and up and down value chains. Some of these actions are beyond the mandate or expertise of individual organizations. This is why CIF has adopted a programmatic approach that emphasizes inclusive planning and implementation as well as cross-sectoral collaboration.

## 3.1 SOCIAL INCLUSION

### KEY INSIGHTS

**Fostering meaningful participation:** The Ghana Dedicated Grant Mechanism (DGM) exemplifies the value of adopting a diverse, tailored approach to ensure different stakeholders can participate in and influence new NRM practices. Its inclusion of local community members in its national steering committee, too, has given communities a central say in how finance is used.

**Capacity building:** Most FIP projects in Ghana have sought to build the capacities of local communities. This is crucial to enable local actors to play a significant role in shaping their own transitions. In the case of DGM, the only FIP funded initiative that focused solely on community led sustainable NRM, targeted capacity building for traditional authorities, along with a project governance model that limits their decision-making role, was also a strategy for reducing the risk of elite capture of resources at the local level.

**Gender sensitive programming:** Gender inequality is acknowledged in all FIP projects, and measures to address it are built into the design of the FIP's landscape interventions. However, a just transition approach would require design project interventions to also tackle the wider, underlying causes of gender inequality.

**Programmatic approach:** At the national policy level, the FIP programs have been able to bring together different institutions that are crucial for making decisions about landscape management, but that have previously tended to work in isolation from one another.

Key questions explored here as part of addressing the social inclusion elements of just transitions are:

- **Who is included or represented in the project/process?** This question addresses which communities or other stakeholders are included, why they were chosen, who specifically has been chosen to represent the community and other actors (including the government), and who has a say in governance structures. It also examines how different stakeholders are included (that is, the process itself). Inclusion should not be tokenistic, but ensure representative participation and an ability to shape decisions.
- **What parameters can stakeholders influence?** What is the extent of community involvement in project design, implementation, and review? A related question is whether the activities are aligned with community members' vision.

- **How is the capacity to engage enhanced?** Of particular interest here is (1) whether the projects improve the ability of different stakeholders to engage meaningfully with the projects themselves; and (2) whether capacity has been strengthened to engage with broader policy or other processes that affect land use decisions and planning beyond the project itself.

Most of the FIP-funded programs in Ghana were designed with a specific emphasis on social inclusion—that is, the engagement of different stakeholders, especially at the local level. Each program has interpreted this need/aim differently, so several approaches are highlighted.

### 3.1.1 WHO IS INCLUDED OR REPRESENTED IN FIP PROJECTS/PROCESS?

#### Community entry points

The choice of entry points for engaging local communities is critical, because it significantly shapes whose local vision is given prominence and which parts of a community are included in, and may benefit from, activities. All FIP projects in Ghana have taken the approach of working through local chieftains as the traditional authority, deeming it necessary in the local cultural context. As highlighted in Section 2, concerns have been raised about this choice: on one hand, because these bodies are characterized by limited democratic processes and accountability, and on the other, because traditional councils may not be sufficiently empowered to ensure that NRM decisions reflect community priorities.

The Ghana Dedicated Grant Mechanism (DGM) sought to manage the risks of elite capture of resources by actively engaging with the community chiefs, seeking their guidance mainly on “what needs to change” in the community, while limiting their say on funding decisions. Although this approach initially caused some tensions with the traditional authorities, it has arguably helped to balance respect for local authorities with the need to enable a wider range of community voices to influence local outcomes. In addition, local focal points were elected by each community, and they report to the community chiefs and provide feedback on what is happening with the DGM on a day-to-day basis.

#### Community inclusion in project-steering bodies

The cohort of community focal points in the DGM elected a national steering committee (NSC) comprising 13 of the community focal points, in addition to observers from NGOs, the government, the World Bank, and a national executing agency (NEA). This model places local community representatives at the center of the DGM’s national governance structure, so they can influence many important aspects of the DGM during its implementation. Another benefit of this approach has been that the training required

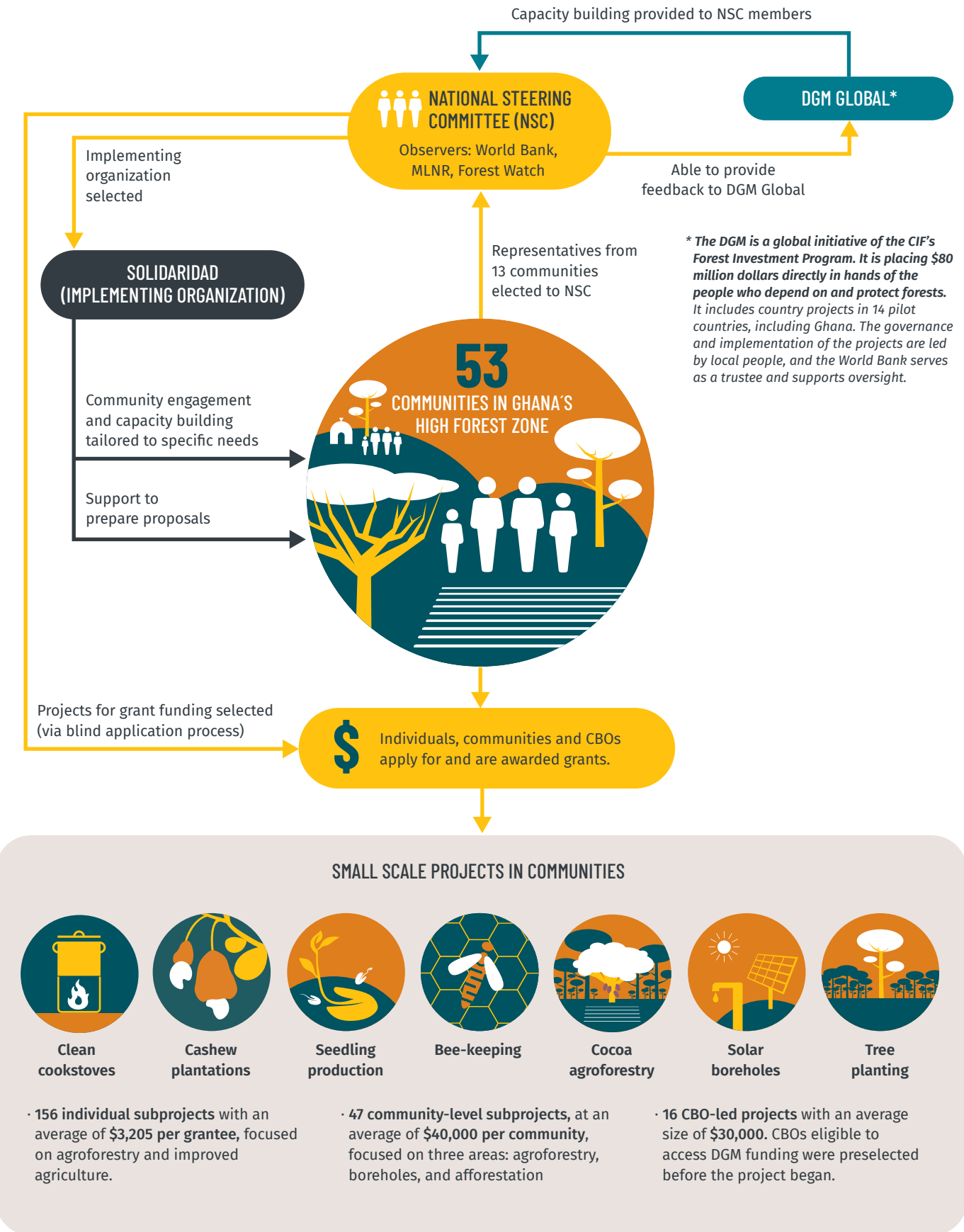
of NSC members (most of whom had no previous experience in such a role) has improved their capacity to engage with the government more broadly, strengthening the community’s ability, at least through them, to engage in larger questions beyond the DGM.

An important factor in shaping the success or failure of community-driven initiatives is the body executing projects at the national level—in the case of the DGM, the NEA. This body is responsible for planning and implementation, designing community engagement and capacity building, and addressing community complaints. The NEA’s skill level, resourcing, legitimacy among local communities, and innovation and communication with different parts of the community, can shape how outcomes are perceived at the local level. Solidaridad West Africa was the NEA for the DGM in Ghana. It designed engagement programs that were tailored not only to local communities, but also to different groups within communities, including women. Solidaridad dedicated a large team, around 10 people, who were on the ground every day in these communities, explaining and discussing the activities.

FIP has also indirectly influenced norms around stakeholder engagement and inclusion. In the ELCIR+ project, the FIP’s requirements for broad stakeholder inclusion reportedly influenced the composition of the government’s own Natural Resources & Environmental Governance Group Technical Coordination Committee (NREG TCC). This entity coordinates all internationally funded projects involving land use, land use change, and forestry (LULUCF). Following the FIP example, the NREG TCC was opened up to include participation by the private sector, local communities, and civil society.

As a mechanism for working closely with local communities, the engagement of local *community-based organizations* (CBOs) has been an important, and generally positive, feature of several of the FIP projects beyond the DGM example. Although the ENFAL project was centered on the delivery of project components by the Forestry Commission and Ghana Cocoa Board (COCOBOD), local CBOs were subsequently brought in to support the engagement

Figure 4.  
OVERVIEW OF THE GHANA DIRECT GRANT MECHANISM (DGM)





with communities and overcome some of the logistical challenges experienced in the early phases of the project. Their involvement led to more frequent communication with communities and improved engagement in local languages, which, in turn, greatly accelerated the process of project coordinators visiting communities and helped to build trust among local communities towards the Forestry Commission.<sup>129</sup> Not all FIP-financed projects have made use of CBOs, however. In the ELCIR+ project, field extension activities in and around local communities have been led by the Extension Divisions of the Ministry of Food and Agriculture (MoFA) and COCOBOD, in collaboration with regionally based Forestry Commission officers. In the Form Ghana project, the private company that owns the plantations and is implementing the project is also responsible for community engagement. In general, such an approach may reduce the space for community ownership or influence, as private companies are less likely to be perceived as impartial in dealings with the community.

### Government involvement

Several ministries were involved in the preparation of the FIP Investment Plan for Ghana, led by the Ministry of Lands and Natural Resources (MLNR) and its Forestry Commission: the Ministry of Finance and Economic Planning, MoFA, the Ministry of Environment, Science, Technology and Innovation (MESTI), and the Ministry of Local Government and Rural Development.<sup>130</sup> Actual implementation of the FIP-financed projects, however, has mainly involved the institutions that are directly responsible for NRM. There was no precedent for engaging institutions with expertise in issues that are important for just transitions, such as labor, gender equality, social welfare (including safety nets), or broader economic planning and diversification, nor were they assigned roles in these projects.

A deliberate just transitions approach would widen the involvement to include different types of government agencies whose expertise, policies, and resources may be needed to address issues ranging from labor force reskilling, to social welfare and environmental remediation.

### Identifying and including marginalized groups

The FIP projects in Ghana identify women, migrants, and people working illegally (including *galamseyers* in the mining sector) as particularly vulnerable or marginalized groups (as described in Section 2).

All projects identify the need to address the marginalization of women and to empower them, so they can engage with and influence project activities. For example, the organization coordinating the DGM, Solidaridad, separated men and women into different groups when discussing ideas about what to do with grant funding, giving women space to speak more freely about their priorities. It also provided on-site childcare while women participated in the meetings. In addition, meetings were scheduled in the late evening, when women were typically done with household duties, and communications, such as radio programs, were scheduled for the late evening and early morning, when women are likelier to be listening. The project disaggregates data to track participation in the project by women, youth, and migrants. Solidaridad also ensured that the training sessions were conducted in local languages, with the delivery of some communications tailored to illiterate people.

However, these projects were not designed with gender outcomes as the primary focus, and they did not address structural inequalities or the underlying reasons for gender inequality. Applying a wider just transitions lens and a gender transformative focus to future projects will require dealing with structural constraints to women's empowerment, such as those described in section 2.2. This would likely influence not only the implementation of projects, but also the fundamental objectives, nature, and design of activities.

The ENFAL2 project offers an example of targeting broader regulatory or policy reform as a mechanism for diversifying livelihoods and addressing structural inequality. It has been suggested just simplifying licensing procedures and providing sites for legal artisanal and small-scale mining will benefit some of the workers currently engaged in illegal mining by formalizing their activities.



### 3.1.2 WHAT PARAMETERS DO STAKEHOLDERS HAVE INFLUENCE OVER IN FIP PROJECTS?

The consultation process around the Ghana FIP Investment Plan provided an opportunity for different stakeholders<sup>131</sup> to shape the overall objectives for subsequent FIP-financed programs. To an extent, these objectives were bounded by the framing objectives of the FIP, the REDD+ agenda, and existing national plans. At the national level, the process emphasized climate change commitments and plans, while at the local level, the emphasis was on securing livelihoods in the context of changing environmental pressures.

A key question is how significantly communities could influence what was being funded. In the case of the DGM, some form of shared vision could effectively be articulated by the communities during the capacity building phase, undertaken prior to funding proposals being developed. Yet, when applying for grants, individuals/communities had to choose from a predefined list of what they wanted to seek funding support for.<sup>132</sup> This, arguably, limited their options to diversify *away from* NRM activities.

When designing for just transitions, broader diversification into non-NRM sectors might reduce the strain on natural resources and, at the same time, create more vibrant or sustainable livelihood opportunities, especially as it has been noted that the livelihoods that are dependent on natural resources are, in fact, the most vulnerable.<sup>133</sup> Achieving this will likely require wide coordination—across government, and among the different funders working in the landscape context.

### 3.1.3 HOW IS CAPACITY TO ENGAGE WITH FIP PROJECTS AND BROADER LANDSCAPE DECISIONS ENHANCED?

At the local community level, all FIP projects include capacity -building activities. These tended to focus on learning about climate change, local practices leading to environmental degradation, and/or more sustainable NRM practices. They target personal behavior change within the community, and on enabling community members to better engage with other aspects of the project itself.

From a just transitions perspective, it is also important to address any long-standing inequalities or structural conditions that limit community participation in wider decisions about the landscape and management of natural resources. To this end, there is scope to target some capacity building on enabling local communities to engage—beyond the project—with planning decisions relating to the landscape, particularly with government policy development.

The DGM's approach to its NSC provides an example of how this can be done. As noted, the NSC members were all local community representatives, with little experience in this kind of higher-level governance role but with intimate knowledge of the livelihood- and resource-related challenges facing communities in the High Forest zone. Some time and effort were thus required from the global DGM team to help them to better understand their roles and expectations, as well as to connect them to the government process. As a result of this investment in building up NSC and the communities, both should now be in a stronger position to connect communities to some of the other processes that may be affecting land or resource use at the local level.

## 3.2 DISTRIBUTION OF IMPACTS AND OPPORTUNITIES

### KEY MESSAGES

**Scope of FIP:** The FIP-financed projects in Ghana were not designed using a just transition lens, so they do not systematically consider all the risks or losses that just transition planning might address.

**Environmental and social safeguards:** Environmental and social safeguards provide project level mechanisms to identify and mitigate local risks, but a wider lens, and other mechanisms, are required to ensure just transition outcomes at the local and national level.

**Gender:** FIP projects focused mainly on project-level gender outcomes and use gender-based selection criteria in funding or employment opportunities, to ensure a minimum level of involvement by women or that they stand to benefit from the projects. A transformational just transition approach would integrate gender equality goals more deeply into the project conceptualization and initial design.

**Benefit sharing:** Different benefit sharing models have been tested by FIP projects. They include the DGM's direct community-led grant financing; models more akin to financial equity (including via enabling tree tenure); and more indirect benefits that may arise from locally generated employment and indirect economic activity.

### 3.2.1 ASSESSING AND MANAGING RISKS OR LOSS

NRM interventions have a significant potential to disproportionately affect specific groups. There are many different types of risks to consider. Some are direct, such as exclusion from land or loss of jobs. Others are more indirect, such as impacts on local revenue and economic activity, or increased dependence on the government or on multinational corporations for livelihoods. Some of these losses may arise if interventions inadvertently reinforce existing inequities and marginalization. To fairly manage the potential negative socioeconomic impacts of climate interventions, it is important to understand what kinds of losses may occur and where, and who might be most vulnerable—and then craft strategies and provide financial support to help address them.

The FIP-financed projects undertook analyses of some of these risks through the MDB environmental and social safeguards process.<sup>134</sup> However, the scope of those safeguards is narrower than the scope of issues involved in just transitions. There is also a need to ensure that the entities responsible for implementing the existing safeguards, especially regional and district offices of MLNR, have sufficient capacity to do so. Another tool, the Grievance Redress Mechanism (GRM), exists to enable community members to raise concerns about projects as they are implemented—

as such it is focused mainly on addressing immediate harms, rather than on strategic design of interventions to look at systematic risks that may be introduced and options for addressing these at the design stage. Nonetheless, as part of managing risks, any GRM needs to be flexible and locally appropriate. In at least one FIP project this was apparently not tailored adequately to local needs, so people have been reluctant to use it.<sup>135</sup>

FIP project documents tend to identify broad categories of risk, such as the potential loss of access by communities to forest resources, but do not describe how those risks are distributed among different populations or places. Just transitions planning requires a deep and comprehensive distributional analysis. For example, the risk of exclusion from access to resources is presumably higher in certain places than in others, and the consequences, and options for addressing them, may be place-specific.

The Form Ghana project relocated a small number of migrant households from the intended plantation sites. They were offered access to land for intercropping on part of the plantation site, but only for two years, after which they would have to move to another area to access land. It was also suggested that these households might find jobs with Form Ghana,<sup>136</sup> though it is unclear whether they

were made aware of these opportunities or even had the right skill sets. A just transitions approach could target the underlying drivers of vulnerability or loss, and prioritize (in this case) migrant workers for job training or education, to improve outcomes for them in the longer term.

### 3.2.2 DISTRIBUTING BENEFITS

In order to analyze how FIP projects have approached benefit sharing, it is necessary to look at whom the project activities were intended to benefit, what types of benefits are generated, and how they are distributed, particularly with respect to marginalized or at-risk groups.

Ghana's FIP portfolio has targeted a range of different beneficiaries, varying across programs. They include individuals, communities, farmers, private entrepreneurs (for example, in timber plantations, woodlots for fuelwood, and charcoal production as under the ELCIR+ project), other businesses (for example, nurseries), as well as groups who tend to be vulnerable or marginalized, such as women, *galamseyers*, and migrants.

Various types of benefits are generated, directly and indirectly, by FIP-financed interventions: (1) healthier, more sustaining natural environments for communities; (2) increased income through business development and expansion, employment, and secondary economic activities (for example, providing services to plantations); (3) individual support to shift land use practices towards more environmentally and financially sustainable approaches to agriculture (such as shade-grown cocoa), in the form of equipment, seeds, and finance; (4) infrastructure construction (for example, through community grants for boreholes or solar energy systems); (5) access to land, particularly for private plantation developers and, in some cases, for groups that had limited access; (6) change in the ownership of resources (a financial benefit for land owners or managers), such as through tree tenure reforms; and (7) capacity building and training or reskilling programs to enable the pursuit of livelihoods that are aligned with more sustainable natural resource economies.<sup>137</sup>

Local communities are not homogenous nor necessarily socially cohesive, so it is important to know more precisely who in those communities is deriving benefit, and how. While all development projects aim to deliver some form of benefit, a key idea in just transitions is that benefits should accrue to particularly marginalized or vulnerable groups, as well as to people who might otherwise lose out in the transition. All FIP project documents stress the intent to generate benefits for local communities, in line with the FIP global mandate and the subsequent Ghana Investment Plan. Individual FIP project documents typically identify beneficiaries in a general sense, and tend to estimate large numbers of direct and indirect beneficiaries: the ELCIR+ project, for example, reports more than 12,000 direct beneficiaries and 23,000 indirect beneficiaries. Women *as a group* tend to be highlighted, and in many cases there are specific targets for participation in subprojects (see below).

A review of FIP projects yields several lessons about some key dimensions of distributional impacts:

#### Livelihood diversification

Livelihood diversification is emphasized across FIP programs in Ghana, but it has been difficult to achieve. Structural inequalities limit certain people's access to education, finance, and markets, and/or their influence on community decision-making.<sup>138</sup> To be truly effective, livelihood diversification programs will thus need to simultaneously address the underlying factors that create inequality.

Most of the livelihood activities supported through FIP programs have concentrated on creating opportunities in more sustainable NRM sectors. The DGM, for instance, has focused on opportunities in forest and natural resources management, renewable energy, and soil and water conservation<sup>139,140</sup> However, an assessment of rural livelihoods in the FIP project areas in Ghana found that the people who have succeeded in achieving optimal resilience are the ones who were able to diversify their livelihoods away from natural resource-based activities.<sup>141</sup> An approach designed to achieve just transitions might

draw on this insight and widen the scope of livelihood diversification opportunities.

### Women and other marginalized groups

FIP programs have recognized the risk that gender disparities could prevent women from benefiting equitably from project activities, and have also highlighted other demographic groups, including migrants and *galamsefers*, as particularly vulnerable and in need of targeted support.

The strategies employed to assist these stakeholders specifically have included setting targets for women's participation in specific project outputs or activities (as in the DGM and ELCIR+ projects), targets for women's access to the new jobs created (as in the Form Ghana project), positively filtering for women or migrants in access to finance (as in the DGM's micro-funding proposals), and tailoring of project communications and community engagement sessions to fit the specific constraints faced by, for example, women or illiterate community members (as Solidaridad has done in implementation of the DGM in local communities). The ENFAL2 project has a specific component targeting *galamsefers*, providing training and reskilling opportunities to enable these people to shift into new types of work.

Of the 156 people selected to benefit from the DGM's grant window for individuals, 42 percent are women—and 34 percent are migrant women—while overall 31 percent of all subprojects, including those proposed by communities and CBOs, were led by women.<sup>142</sup>

### Benefit -sharing models

The kinds of benefit-sharing models that FIP projects have used to create value for different stakeholders have different advantages—and, in some cases, risks:

- *Direct community-led financing:* The DGM provides grant finance and direct community ownership of financial decisions, and is building local capacities to try to ensure the projects can continue and scale up even after the grants end. However, ongoing finance is needed for communities to

expand uptake of the demonstration pilots across a much wider community.

- *Financial returns based on share of plantation profits and/or carbon revenues:* This model, some variation of which is used by Form Ghana and ENFAL1, effectively gives communities a stake in the plantations (sometimes in return for relocation or restricted access to land), though their financial returns depend on the terms of the benefit-sharing agreement (BSA), carbon market trends, and how well the plantation owners manage the trees – meaning communities themselves have no control over the financial outcome.
- *Land lease payments:* As used by Form Ghana for plantations, formal leases with community authorities are established for the use of their land. The rate of payments is fixed, regardless of how the business performs, guaranteeing (but also capping) the revenue for communities.
- *Access to land:* Various projects (ENFAL1, Form Ghana) set up models that allow local communities to use forest or plantation land for intercropping, for example.
- *Tree tenure:* The ENFAL1 project has supported ongoing work by the national government to reform tree tenure, so that landowners and farmers own a direct financial stake in any trees they plant and nurture for timber harvesting. Reforms to address the institutional and legal conditions that incentivize land use decisions have laid the foundation for long-term benefit sharing aligned with the transition to more sustainable land use. The scale of benefits depends on the market, and many people are given an opportunity to participate.
- *Promotion of payments for environmental/ecological services:* The ELCIR+ project included, as part of its capacity -building efforts, the promotion of strategies and policies to enable community members to earn payments for environmental/ecological services (PES). Also, FIP projects contribute to the achievement

of emissions reductions that will lead to the payment by Forest Carbon Partnership Facility (as per the Emissions Reduction Payment Agreement signed between Ghana and the World Bank<sup>143</sup>

- *Generate employment and indirect economic activity:* Projects aim to stimulate various forms of economic activity (for example, nurseries, woodlots, charcoal production), to create jobs as well as indirect demand for other services as they become profitable.

As noted, some projects combine different benefit-sharing models. For example, ENFAL1 has supported the establishment of MTS plantations in degraded forest reserves. Local farmers are assigned land to cultivate food crops and plant timber species that they also maintain. Every five years, the farmers move

to a new assigned area and begin the process again. When the trees they have planted are harvested (after 15 years), they get 40 percent of the proceeds, while 15 percent goes to the landowners (usually the traditional authorities), and 5 percent goes to local development activities.<sup>144</sup>

Another factor to consider is whether a benefit-sharing approach focuses mainly on individual or on community-scale benefits. The largest component of the DGM is grants for small local sustainability initiatives—some by individuals, some by communities collectively, and some by local NGOs. As a general model, individual grants may increase the risks of elite capture of benefits, neglect of the commons, and failure to help build community resource rights as part of the transition.

### 3.3 TRANSFORMATIONAL INTENT

#### KEY MESSAGES

**Landscape approach:** FIP's programmatic approach demonstrates integrated approaches to tackling deforestation on a landscape scale which helps address multiple drivers simultaneously and more coherently and breaks down institutional silos.

**Policy reform:** FIP's support for reform of several major policies or institutions illustrates the value of targeting some of the rules or norms that create and perpetuate vulnerability or inequality or which prevent wide benefit sharing.

**Localized focus:** The emphasis of the DGM in particular, but also of other FIP programs, to place local communities at the center is a good example of how to help align project interventions with local priorities.

**Testing financial models:** FIP programs have tested different financial models to enhance community ownership and scale up investment in NRM, from the DGM's local community-led financing, to Form Ghana's attempts to catalyze private sector interest in financing sustainable timber production via Ghana's first public-private partnership (PPP) in the forestry sector.

The idea of *transformational intent* is that some activities may need to significantly challenge basic assumptions or conventional practices that currently produce unsustainable or unjust outcomes, or excluding some stakeholders from decision-making and benefit sharing.

The FIP Investment Plan for Ghana leans heavily on the language of transformation. It identifies the major transformations needed as relating to coordination

among stakeholders, resource tenure policies, types of benefit sharing arrangements in forest management, and activating more private sector investment in sustainable land use practices.<sup>145</sup>

A few aspects of the FIP portfolio that might contribute to a wider transformation in the approach to NRM management—and climate action more broadly—in Ghana are discussed below.



### Landscape approach to tackling deforestation

The FIP's whole-of-landscape approach means that, across the portfolio, it supports interventions targeted at forest reserves and off-reserve areas. It also involves:

- Investments to address a range of key deforestation drivers, including in agriculture, mining, timber, the restoration of degraded reserves, and charcoal production;
- Engaging with local communities across a wide area, including development of benefit-sharing arrangements associated with sustainable practices; and
- Formalizing collaboration among different institutions with a role to play in landscape outcomes, but no strong history of collaboration, to achieve more cohesive governance.

The landscape approach has enabled complex problems of a more programmatic (as opposed to a project-by-project) nature to be tackled through

a broader planning and investment process. Such a model is necessary if the ambition is to ensure just transitions, given the diversity of stakeholders and potentially wide distribution of impacts.

### Reshaping stakeholder relationships and breaking down institutional silos

Related to the above, a key feature of the ENFAL1 project is its joint implementation by MLNR, particularly the Forestry Commission, and COCOBOD—a state-controlled company. This is an attempt to foster cooperation and overcoming institutional challenges that have previously hindered the development of coherent and sustainable land and forest management practices. The fact that the project is being managed by MLNR has been described as helpful because it works with multiple sectors, so it is able to convene different kinds of stakeholders working in the landscape. For ENFAL1, MLNR has been working on tree tenure reform, while the Forestry Commission has been providing seedlings and working closely with COCOBOD in the field.

Over time and with sustained investment, this kind of approach can help shift underlying structures and ways of doing business.<sup>146</sup>

### **Policy reforms targeting resource ownership**

Policy reforms can be important mechanisms for transformation, since many of the conditions and norms that create vulnerability or inequality are coded in legislation and policy—or created by gaps in them. FIP has supported major policy initiatives on tree tenure, wood procurement policy (and the need to facilitate the production and sale of legal timber), plantation strategy and guidance, and the development of CREMA rules under new legislation.<sup>147</sup>

FIP's support to the Forestry Commission to clarify tree tenure is a particularly interesting example. The preexisting tree tenure regime has discouraged the maintenance and management of high-value timber trees on farms. Instead, it has spurred unsustainable timber harvesting and forest depletion, particularly through illegal chainsaw milling from which farmers could profit.<sup>148</sup> Migrants are also reluctant to plant timber trees on the farm land they lease, since they have no rights to the land or the trees.<sup>149</sup> The rationale for clarifying tree tenure while investing in restoring forest reserves and supporting plantations is that this will dramatically scale up the long-term carbon stock while also improving benefit sharing in the wider NRM transition. Indeed, changes in ownership structures have the potential to be transformational for both social inclusion and distributional impacts.

Changing Ghana's tree tenure regime is complex and difficult, and reforms over the last two decades have not yet fully met farmers needs – particularly those of smallholders. Some progress has been made—for instance, a policy of “plant and own” has been adopted, and there is software to support the registration and mapping of trees (although some view it as inaccessible to some farmers, or impractical because it creates a bureaucratic process while relying on government institutions which may have limited capacity, so it may need refinement). FIP-funded projects are supporting the Government of Ghana in shaping the benefit-sharing arrangements and

determining where the money to pay for the trees should come from.<sup>150</sup>

### **Placing communities at the center of the governance structures**

As discussed, the DGM implemented a novel approach to project governance. Establishing a national steering committee composed of local community representatives from areas where the DGM is being implemented enabled greater community influence over it. This structure could, in theory, provide a mechanism for closely aligning project interventions (for example, capacity building and the funding of small projects) with local development plans or visions. It could also be broadened to ensure that women, youth, and other vulnerable groups are able to participate and influence this.

### **Activating the CREMAs and unlocking community barriers**

The CREMA concept introduced by the Ghana Forest and Wildlife Policy<sup>151</sup> aims to establish community resource committees that are empowered to make decisions on the management of the resources (for example, hunting and wildfire management) in areas outside of protected forests.

The process of setting up CREMAs was slow at first. The communities initially did not trust the model: they were suspicious that they might lose control of their land. The ENFAL1 project helped key stakeholders to better understand the CREMA approach, empowered CBOs to manage the CREMA establishment process, and sped up CREMA creation. The CBOs were well positioned to build trust with the communities. As a consequence, local ownership has been increased, the relationship between farmers and the Forestry Commission has improved, and the area managed by CREMAs has been dramatically expanded.<sup>152</sup>

This highlights the benefits of working with different stakeholders, in this case CBOs, to improve local outcomes. Various international development partners have since expressed interest in building on the CREMA approach.



## Testing new financial modalities

A key objective of CIF is to test new financial modalities to support higher-risk investments through the MDBs, either to crowd-in private sector investments (intermediated, equity, etc.) or to reach public scale through innovative blended arrangements (with governments or other MDBs for instance). From a just transitions perspective, an important question is how new types and sources of finance might be brought in to support climate action while promoting (and not undermining) just transitions. So, beyond “more finance,” the key issue is how that finance works to support planning, promote social inclusion, address risks or losses, and benefit a wide range of stakeholders, especially those who are vulnerable or marginalized.

The FIP has experimented with several finance models in Ghana, including two that are particularly worth considering: the DGM's community-led finance model, and the PPP model developed by the Form Ghana project to attract investments in private plantations.

By design, the DGM model focuses on providing communities with new skills and capacities related to forest transitions, while empowering them with small, locally led finance to invest in new activities that can support their livelihoods and contribute to the wider transition. Such micro-scale finance is viewed very positively in communities. It is also likelier to ensure that investments connect with locally determined priorities. It is challenging to scale up, however, in part because of the high transaction costs associated with

deep, broad community engagement. Still, now that the communities have been trained in sustainable practices and emerging livelihood opportunities in landscape management, there are suggestions that they would be willing to move from the DGM's grant model to a more extensive use of microfinance loans, opening up opportunities for more funders to engage with the communities.

The Form Ghana project is an effort to establish the first PPP in the forestry sector in Ghana.<sup>153</sup> The project is essentially about market activation rather than transformation as conceived from a just transitions perspective. The extent to which the Form Ghana project stimulates transformational just transition outcomes would not be a result of the financial model itself, but depend on the actors involved, their understanding of and commitment to just transitions principles, as well as the policies, systems, procedures, and safeguards that are in place. To connect the goal of private sector engagement with the transformative intent of just transitions, projects will need to purposefully reshape the risks or concerns that exist about private capital, especially in land-related interventions, and deliver a model of greater inclusion and benefit sharing. In the Form Ghana example, the requirement on the company to be certified by the Forest Stewardship Council (FSC) might be considered a step in this direction—although whether the FSC approach is delivering on its objectives of improving the social and environmental sustainability of the timber industry is an open question,<sup>154</sup> and some argue that, at the very least, the impacts of FSC are difficult to determine in the real world.<sup>155</sup>



## 4. INSIGHTS ON SUPPORTING JUST NRM TRANSITIONS

This section distills some lessons from the experience of FIP projects in Ghana on ways to better support just transitions in natural resource management (NRM).

**Whole communities need support in these transitions—not just the workers who are directly affected by changing technologies or practices.**

NRM transitions affect entire communities, who may need support to learn about and take on new practices, or to reorient the local economy and to create new jobs.

FIP projects have focused on entire communities across Ghana’s High Forest Zone, and made efforts to ensure that project beneficiaries include marginalized or vulnerable groups, especially women and *galamseyers*. The wider benefits of this community-focused approach are seen in anecdotal evidence that the FIP projects influenced local youths who had planned to migrate away in search of work to stay

for emerging economic opportunities within their community.

When focusing on workers, FIP projects also included informal workers. During transition planning it is important to understand the size and characteristics of the formal and informal sectors, and to help people shift into more secure, formal employment.

**To understand who needs what kinds of support, the distributional impacts (especially risks or losses) created by transition need to be well understood.**

Analysis of impacts should disaggregate effects by different locations, groups, and population categories. Table 2 provides examples of common pitfalls in the assessment of risks in NRM-focused projects, drawn from the FIP portfolio and other NRM activities in Ghana, that can undermine the justness of the transition.

Some of the necessary measures to address risks or losses might ultimately be outside the scope of individual projects. As already noted, just transitions imply broad engagement across sectors and different government ministries in order to ensure that the full spectrum of issues triggered by the socioeconomic transition can be managed simultaneously.

Table 3.

**COMMON PITFALLS IN THE TREATMENT OF RISKS OR NEGATIVE IMPACTS IN NRM PROJECTS**

OBSERVATION	A JUST TRANSITION APPROACH WOULD:
Project documents tend to emphasize beneficiaries and estimate large numbers of direct and/or indirect beneficiaries, while saying little about those who might lose out or be harmed.	Provide a comprehensive, in-depth analysis of potential risks and losses—direct and indirect—as well, not only to ensure that the projects include risk mitigation measures, but also to inform the basic premises and design of projects. Specifically, projects should be reconfigured to ensure that those who stand to lose from interventions are also targeted as beneficiaries, through additional activities, or else mechanisms should be put in place to compensate them for losses and provide social safety nets.
Project documents tend to focus on risks to project delivery, rather than risks <i>arising from</i> project delivery for other stakeholders.	Recognize that the potential communities and individuals to suffer losses is also a real risk that requires in-depth treatment. As noted, this knowledge should inform the approaches taken, as well as which stakeholders are included.
There is a tendency to rely on the multilateral development banks' (MDBs) Social and Environmental Safeguards as the main process for identifying risks and losses. However, as discussed in Section 3.2.1, the scope of the safeguards process is too narrow to meet the needs of just transitions planning.	Consider a broader range of potential impacts, through a holistic analysis of the costs and benefits (as well as the distributional impacts) of proposed interventions. This requires ensuring that there is sufficient capacity to conduct a detailed analysis, including environmental and social safeguards. Mechanisms to facilitate grievance reporting by the community also need to be locally appropriate.
Risk analyses, including the safeguards process, rarely consider the impacts that may arise if the transitions piloted by individual projects are scaled up after initial successes—but larger projects have the potential to affect far more people across a landscape.	Model and/or carefully assess how the impacts of interventions might change as the scale of a piloted behavior or new technology ratchets up. A small-scale pilot project may not generate significant risks, but this is not necessarily the case if the same activities are scaled up.
The risks highlighted tend to involve direct impacts at the project level, in relatively broad categories (for example, potential exclusion from land/resources).	Recognize that transition risks will likely occur at many different scales, and some indirect impacts may be significant. Individual projects may not be able to address all these impacts, which is why a programmatic approach can be valuable. Risks are also distributed unevenly within communities. The distributional analysis should reveal how the risk is spread, and specifically identify costs or risks that fall upon groups who are already marginalized or vulnerable.
Redress measures to avoid or reduce risks/loss tend to be short-term, for example, providing immediate options for livelihoods, but not a longer-term sustainable alternative for the affected stakeholders.	Design measures to provide long-term solutions to losses or risks, such as sustainable employment opportunities or long-term land access, not just short-term solutions like temporary use of land.
The social or cultural context for specific risks or impacts is not recognized, so project activities rarely seek to address the underlying causes of risk, vulnerability, or marginalization.	Address the structural conditions that create risk or inequality, not just the symptoms, to effect lasting and just change.

**The support needed by communities to ensure just transitions includes livelihood support and reskilling for local communities, and also broader structural reforms to ensure sustained impacts.**

While livelihood-focused activities for individual workers and local communities can provide a one-off catalysts, some of the impact may fade away after individual projects end. Some degree of structural reform is almost always necessary to support just outcomes and transformation, along with strengthening of the institutional capacities and governance structures to implement supportive policies.

The case of NRM transitions in Ghana illustrates that many of the contextual conditions that are creating inequality and/or driving deforestation might require policy reform, such as tree tenure, gender inequality, economic and labor market diversification, and possibly agricultural subsidies. Without tackling these, interventions are unlikely to succeed in delivering on just transitions.

To ensure there are jobs available for workers affected by NRM transitions, and that communities can diversify their economies, education and training institutions may need support to develop new curricula tailored to preparing the workforce for new kinds of jobs. Efforts may be needed to improve access to education for some groups, such as women. Public and private sector investment in new infrastructure and technologies might be crucial: to drive economic transformation in Ghana, for instance, the World Bank recommends reforms to expand and improve mobile internet access and to accelerate the adoption of information technologies, particularly by smaller firms and the manufacturing sector.<sup>156</sup> Livelihood-focused programs at the local level need to be complemented by this kind of support at the macro- or policy level.

Gender inequality is another relevant example. Section 3 highlights that gender equality is often approached by projects as an implementation issue—as a result, strategies to address gender inequality focus on participation rates for specific

project activities, for example (such as gender-based selection criteria to ensure a minimum level of involvement of, or benefit for, women through direct funding or employment opportunities generated by the immediate project). However, a just transitions approach will be transformative only if it produces lasting structural change, which requires tackling the underlying reasons for marginalization and gender disparities. In practice, this means integrating gender equality goals more deeply at the project conceptualization and initial design stages, and identifying additional activities—beyond the immediate NRM-focused programs—that address pervasive problems for women. These might range from empowering women through development of networks, to policy reforms that address resource ownership, to tackling barriers which limit women's access to education or to finance. Working in local communities, the DGM provided nursery facilities around project meetings to care for children so that women could attend capacity -building events and community forums. This support had a clear, positive impact on women's participation and hence ability to derive benefit from the DGM project. This project-level model is an example of something that, if broadened to the level of institutional reform, might have a significant positive impact on the ability of women more broadly in Ghana to access education and to enter the labor market.

Another example is related to the vulnerability of small-scale farmers in Ghana, and across much of the global South, to international markets and the power of multinational companies. For many small-scale agricultural producers, farm-gate prices are an important driver of production behavior and livelihood sustainability. Prices affect the ability of farmers to shift to the sustainable practices promoted by programs such as FIP. Cocoa farmers typically receive a fraction of the end value of their crop, but are being asked to adopt production models that can increase costs. At the same time, simply increasing prices received by farmers could potentially lead to unsustainable outcomes—for example, if it encourages them to clear more forest land for cocoa plantations. A transformative redistribution of benefits is likely to require both that local producers receive a larger

share of the end value of cocoa, and that the value be aligned sustainable landscape management. It seems timely now—given the urgent need for a rapid global economic transition to reduce climate risk—for international organizations and development funders to focus on reforming the long-running problem of inequality created through, and perpetuated by, global supply chains that rely on commodity production in the global South.

**Local communities should be empowered so they are positioned to take control of the visioning of local development and can influence funding decisions to execute their vision.**

Just transitions require deep and well-tailored community engagement and their representative participation in development decisions, as well as ensuring local communities can influence funding decisions. The DGM model has these characteristics and could be a valuable complement to larger MDB programs by helping to address key aspects of just transitions.

The DGM's small-scale, locally led finance is a unique model for MDBs, which usually focus on allocating much larger sums of capital. Its community control over funding decisions and deep community engagement (tailored to different groups within communities) connects with several core tenets of just transitions. It may help complement larger MDB programs, which can struggle with such deep community engagement. This bottom-up engagement and community planning might also help to inform the focus and design of larger programs working in the same landscapes. The implementation of the DGM globally, as in Ghana, has generated some very positive outcomes, especially in terms of community perceptions and participation.

The biggest challenge identified by DGM implementers is its sustainability. The demand for finance at individual and community levels is far greater than the funding available. And in most countries, when the DGM ends, the associated project activities also end, with no ongoing funding sources. Unless governments take on the role to ensure ongoing

engagement and fundraising, continuation can be difficult. It has taken a significant amount of work and investment to enable the DGM in Ghana to reach its current point today; ending it at this point could see a decline in momentum and traction within the community.

**The quality and resourcing of local governance is critical in facilitating just transitions.**

Local authorities, including traditional authorities where they exist as in Ghana, have many important roles to play in managing the NRM transition process and preparing for its impacts. In some contexts they also have significant influence over NRM decisions themselves.

Local ownership is a key characteristic of transition, so local governance structures need to empower and mobilize community stakeholders and be locally accountable. A limitation of local governments in Ghana is that mayors are appointed by the President, not elected, so they are not directly accountable to local voters. The DGM has illustrated the advantages of working through a locally led, transparent governance structure that generated community buy-in and led to projects that addressed local needs.

There are implications here for international climate finance, which tends to operate through national governments in the first instance. In countries such as Ghana, with people of diverse tribal backgrounds, mechanisms may be needed to ensure that funding and programs can overcome the complex political economy, and that communities have channels through which to obtain support.

**As the effort to reduce deforestation is inherently multisectoral, interventions across the NRM space need to take a broad programmatic—and collaborative—approach in their design and implementation.**

Deforestation in Ghana is driven by complex interactions among different sectors, factors, and policies. These include land use plans and practices, economic conditions, education standards, land



tenure, demand for timber, minerals, and agricultural commodities, and the markets for these commodities. Hence, it is important to target changes in all these sectors while promoting policy coherence between sectors. Regional economic diversification that also considers the specific needs or challenges of marginalized groups, such as women or migrants, is also key.

Especially in NRM transitions, the distributional effects of changes in one sector may ripple across different sectors. This is why, as noted above, social and economic support programs are likelier to support just transitions if they are designed to address “communities,” not just individual “workers.” It is more effective to engage at the holistic systemic level, rather than in isolated areas or sectors.

This means a much wider diversity of sectoral expertise and institutions will need to be included. This can be challenging for many government agencies and international funders, whose common practice is to work in narrower silos. In the ENFAL1 project in Ghana, a new institutional relationship

between the Forestry Commission and COCOBOD was deliberately nurtured. Even this relatively modest attempt to create broader partnerships required substantial coordination, however, as well as time to set up and smooth out. We can expect, then, that accomplishing the much broader programmatic approaches needed to support just transitions will take significant time and resourcing.

**Pursuing just NRM transitions will be resource-intensive, partly because of the need to ensure meaningful social inclusion and bottom-up planning while operating on a wide geographic scale.**

Significant time and resources are needed to ensure that local communities are given a central place in planning and are empowered to participate in implementation. That is particularly true in NRM, where a landscape-scale approach is essential. Engagement needs to begin early in the planning process and be well-resourced. Engaging the many actors—individual farmers, miners, loggers, and other

members of local communities—who have a stake in the landscape require large resource commitments.

This has been a challenge even for the DGM, which focuses exclusively on local communities as participants and beneficiaries and has emphasized both wide and deep community engagement. To maximize inclusion, community-level capacity building and engagement by Solidaridad, the DGM's NEA, was face-to-face and conducted in the local Twi language.<sup>157</sup> Tailoring content and engagement formats to be locally appropriate required considerable effort and resourcing, and at times the NEA has borne the costs of doing so because they were not sufficiently appreciated at the project design stage.

The implementation of the CREMA model of community resource management, supported through the ENFAL1 project, is another example of a successful approach that led to a high degree of community consultation and engagement, but required dedicated resources to do so.<sup>158</sup>

**There is a need to unlock finance beyond individual projects to sustain and replicate positive changes over the longer term.**

The biggest challenge identified by implementers and local communities involved with the DGM is its sustainability over time. It has taken a significant amount of work and investment to enable the DGM in Ghana to reach its current point today, and ending it at this point could lead to a decline in momentum and traction within the community. The demand for finance at individual and community levels is far greater than the funding available during the project itself. There is a need to deliberately explore and (ideally) resolve how a project's positive outcomes are going to be sustained and scaled up once the initial intervention is over. Securing long-term finance has also been flagged as an issue for the CREMAs.<sup>159</sup>

Public finance to invest in crucial policy reforms, expand access to education, or provide daycare services that would allow more women to take on employment may be difficult to secure in a context

like Ghana, where there are many competing issues that need funding and where tax revenue is relatively low as a function of GDP. Fiscal reform may be needed at the national level to generate the revenues needed for the reforms and investment that can stimulate economic transformation.<sup>160</sup>

It is also important that, across the economy, finance is aligned with the goals of sustainability and just transition. For example, given that agriculture is a key driver of deforestation, in Ghana and often elsewhere, the impacts of agriculture-related fiscal policies—on production methods, for instance—can be a crucial issue. To be more transformational, a just transition that seeks to reduce deforestation by introducing more sustainable agricultural practices may also need to bring about reform in certain agriculture-related fiscal policies, specifically by repurposing any current perverse subsidies (i.e. those which may be driving expansion of area under agricultural production rather than higher productivity of existing production) and aligning fiscal incentives with the goal of reducing pressures on forests.

**To be just, but also to be sustainable over time, NRM transitions will need to ensure that a fair share of any value created accrues to local stakeholders, including communities, farmers, and migrants.**

NRM livelihoods tend to be precarious because they typically earn very little for their crops. If they protect local ecosystems, including forests, farmers are usually not compensated at all. Worldwide, forest degradation and loss are typically more intense where there is no economic value placed on standing forests, including by treasuries in national accounting systems.

If the value of ecosystem services is recognized and integrated into policy and management approaches, including through natural capital accounts and mechanisms that pay communities or others for the ecosystem services they protect and restore, NRM-related livelihoods will be far less precarious.



## 5. CONCLUSIONS

The concept of just transitions is rising in prominence as the world becomes increasingly aware of the urgency of climate action and its potential to trigger disruptive social and economic change. The success of sustainability transitions will depend to a great extent on whether they are deemed fair and just. Just transitions require socially inclusive and locally led processes that determine the fair distribution of costs and benefits, supporting those who are most affected to build new livelihoods, and leveraging climate transitions to catalyze a broader transformation of the conditions that create or perpetuate inequality or vulnerability.

Understanding the importance of just transitions is the first step, but operationalizing these elements to actually deliver on a just transition is the next challenge. It means translating intention into tangible investments, policy reforms, and capacity building and empowerment at different levels of society. Some of the problems that need to be solved require a longer time frame than a typical five-year project may be able to deliver on.

Just transitions require broad *social inclusion* that results in meaningful, locally led planning. The FIP projects demonstrate a variety of efforts to engage across the government, the private sector, and through local civil society organizations with local communities but such efforts will need to be extended when the goal of a just transition is deliberately emphasized by governments and international funding partners. For example, there are many government agencies whose expertise or mandate is likely to be part of the solution space when devising just socioeconomic and environmental transitions—gender, economic diversification, education, social welfare, regional infrastructure, and so on. CIF and the MDBs are well placed to bring these agencies together around a common vision for the transition. Beyond the government, within communities, there should be a deliberate intent to identify and include groups that are typically marginalized as a result of their social or economic status or other practical constraints (for example, literacy).



The imperative of engaging deeply at the local level in all climate-related transitions, which is especially important in the NRM sectors in the global South, can be a challenge for institutions such as the MDBs, which usually work at the national government level. Yet, as transition outcomes are very locally determined, achieving them demands local leadership and capacity. Efforts are thus needed to make that shift, even if the coordination of projects continues to be centralized. Lessons can be drawn from the experiences of the DGM: although it is coordinated nationally, it managed to achieve deep local engagement and a highly decentralized finance approach. Indeed, dedicated funding that is community-led can further the community's willingness to engage, while also financing the implementation of the local transition plan. Locally led finance makes a big difference, especially from the perspective of the communities themselves. The DGM, while not without its challenges, offers an interesting model for combining a broader landscape-level impact through the other FIP programs with community-owned investments and a greater sense of ownership and direction.

On managing *distributional impacts*, many of the positive and negative effects of NRM transitions may occur in the same geographic space, broadly speaking. This should make it simpler to ensure that the ecosystem of policies and fiscal mechanisms that collectively influence NRM decisions are coherent, and are reformed if needed to address many of the distributional impacts expected in a specific place. At the same time, some of the structural or systemic drivers of deforestation, like those of poverty, originate at national or even international levels, and attention on reform may be needed here, too, if just transitions are to be achieved.

The notion of *transformation* has become popular in development discourse, but not all “transformations” are really transformative. Sometimes, project documents use the language of “transformation” to describe incremental changes that actually reinforce existing norms and systems instead of challenging them. True transformation requires not only addressing the symptoms of a problem—for example,



by cleaning up degraded former mining sites—but tackling the underlying drivers of unsustainable and unjust outcomes. Hence, a broad programmatic approach is necessary to deal with both project-level impacts, and with the structures driving unsustainable practices in the first place, recognizing the complexity of social structures and distributional forces at play. It should help to identify and respond to the need for reform of regulatory and institutional frameworks, in order to create the environment for more transformative actions.

In this context, it is crucial to find mechanisms that properly value ecosystems and sustainable land management, and then share that value fairly. A systemic approach that values ecosystem services and transfers some of this value to the communities charged with restoring and protecting them can achieve a deeper and more lasting transformation.

It is also important to recognize the local political economy and find ways to engage constructively with it, while addressing structural issues that create

vulnerability or inequality and striving for widespread benefit sharing. This report has highlighted a few examples, particularly from the DGM, whereby its approach to the composition of the NSC demonstrates an effort to elevate the significance of local communities in planning and financing decisions. The DGM's engagement of traditional authorities at the community level also reflects an intent to balance the value of working through culturally legitimate channels with avoiding the risk of elite capture of resources. Bringing together the Forestry Commission and COCOBOD within the ENFAL1 project is yet another example of a strategy for navigating the political economy, and at the same time, hoping to reshape this ecosystem going forward.

For just transitions to become a reality and a norm, the concept should continue to be deepened and localized in different parts of the global South. With a deliberate focus on truly transformative outcomes, and sustained, meaningful community engagement, investments to drive climate transitions can also catalyze the social, economic, and political transformations that vulnerable and marginalized people truly need.

Finally, to deliver just transitions in the global South, transformations at a global level are also required. Two of the main drivers of deforestation in Ghana are cocoa and gold mining, both export commodities. It is essential that consumption patterns in the global North also be transformed—as well as the power structures that enable multinational corporations and international markets to inhibit communities in developing countries from pursuing more sustainable land use practices. Only then can it be ensured that globally, low-carbon transitions are just, and that they reduce, rather than increase, disparities between the north and south.

For Ghana itself, as it tries to tackle deforestation by reforming NRM sectors, the pursuit of just transitions is imperative. It will deliver social and economic benefits to parts of the population whose livelihoods today are most precarious, who face being left behind as current economic trends widen inequality gaps, and who are most affected by the agenda to protect forests—which not only delivers a public or common good but, if well designed, can also improve local outcomes considerably.

# ANNEX 1: LIST OF INTERVIEWEES

NAME	ORGANIZATION
Musa Abu Juram	Ministry of Lands and Natural Resources, Ghana
Professor Kwabena A. Anaman	Department of Agricultural Economics and Agribusiness, University of Ghana
Ines Angulo, Meerim Shakirova, Yasmina Oodally, Nyaneba Nkrumah, Deborah Pierce, Phillippe Ambrosi	World Bank
Srestha Banerjee	iForest, JTI Board
Melissa Pinfield	Just Rural Transition Initiative (Meridian Institute), JTI Board
Kidanua Abera Gizaw, Eric Dirabou-Yapi, Ernest Tettey	African Development Bank
Mafalda Duarte, Ezgi Canpolat	Climate Investment Funds
Hayford Duodu	Ghana DGM National Steering Committee, Jomoro Local Community in the Aowin Municipality of Ghana
Dr Winston Adams Asante, Bossman Owusu	Solidaridad Ghana
Kame Westerman	Conservation International

# ACRONYMS AND ABBREVIATIONS

<b>AfDB</b>	African Development Bank
<b>BSA</b>	Benefit -Sharing Agreement
<b>CBO</b>	community-based organization
<b>CIF</b>	Climate Investment Funds
<b>COCOBOD</b>	National Cocoa Board
<b>CREMA</b>	Community Resource Management Area
<b>DGM</b>	Dedicated Grant Mechanism
<b>ELCIR+</b>	Engaging Local Communities in REDD+
<b>ENFAL</b>	Enhancing Natural Forest and Agro-Forest Landscape Project
<b>FCPF</b>	Forest Carbon Partnership Facility
<b>FIP</b>	Forest Investment Program
<b>GHG</b>	greenhouse gas
<b>IBRD</b>	International Bank for Reconstruction and Development
<b>IFC</b>	International Finance Corporation
<b>LSPCPD</b>	Large Scale Private Commercial Plantations Development
<b>MDB</b>	Multilateral Development Bank
<b>MLNR</b>	Ministry of Lands and Natural Resources
<b>MESTI</b>	Ministry of Environment, Science, Technology and Innovation
<b>MoFA</b>	Ministry of Food and Agriculture
<b>MTS</b>	Modified <i>Taungya</i> System
<b>NDC</b>	Nationally Determined Contribution
<b>NEA</b>	national executing agency
<b>NGO</b>	nongovernmental organization
<b>NREG TCC</b>	Natural Resources & Environmental Governance Group Technical Coordination Committee
<b>NRM</b>	national resource management
<b>NSC</b>	national steering committee
<b>PPP</b>	public-private partnership
<b>SMEs</b>	small and mid-sized enterprises
<b>VCS</b>	Verified Carbon Standard

# ENDNOTES

- 1 A. Atteridge and Remling 2018
- 2 Republic of Ghana 2021
- 3 Forestry Commission 2016a
- 4 J. Owusu, Abeney, and Frimpong 1999; in Andoh and Lee 2018
- 5 GDI 2018
- 6 GDI 2018; World Bank 2020
- 7 Figures on forest cover (area) and loss vary considerably, perhaps because of the way “forests” are defined and measured in different studies; for instance, some distinguish native or protected forests from plantation forests, while others do not. Nonetheless, the overall direction and scale of the trend is clear and dramatic.
- 8 J. H. Owusu 1998; Codjoe and Dzanku 2009
- 9 de Grassi 2004 argues that loggers and the government are scapegoating “slash-and-burn farmers,” who are blamed for deforestation, when the timber industry and its powerful backers have been driving land clearing in the first place. The key to solving the issue, he writes, is to make “real changes in policy and government to foster conservation and rehabilitation.”
- 10 World Bank 2014
- 11 GDI 2018
- 12 AfDB 2016
- 13 See FAO statistics: <https://www.fao.org/faostat/en/#data/QCL>.
- 14 See the Observatory of Economic Complexity (OEC) data dashboard: <https://oec.world/en/profile/country/gha>.
- 15 Ghana Cocoa Board 2021
- 16 Asamoah and Owusu-Ansah 2017
- 17 World Bank 2014
- 18 World Bank 2014; World Bank 2020
- 19 See <https://www.solidaridadnetwork.org/region/west-africa/>.
- 20 Diakite 2020
- 21 The European Union is by far the largest buyer; other significant destinations include Malaysia, Brazil, Japan, and the United States Trase 2021.
- 22 Odijie 2021
- 23 See the Observatory of Economic Complexity (OEC) data dashboard: <https://oec.world/en/profile/country/gha>.
- 24 World Bank 2018; World Bank 2020
- 25 World Bank 2020
- 26 World Bank 2018 p7
- 27 IBRD 2017 p26
- 28 Gilbert and Albert 2016
- 29 World Bank 2020
- 30 UNECA 2011
- 31 World Bank 2018; World Bank 2020
- 32 World Bank 2020
- 33 Ghana Statistical Service 2019
- 34 See the Observatory of Economic Complexity (OEC) data dashboard: <https://oec.world/en/profile/country/gha>.
- 35 AfDB 2016
- 36 AfDB 2016
- 37 World Bank 2020
- 38 World Bank 2020
- 39 AfDB 2016
- 40 Wood fuel accounts for around 78 percent of Ghanaian households’ primary energy consumption (World Bank 2020).
- 41 Chao 2012
- 42 UN DESA 2021
- 43 Norris et al. 2010; Benhin and Barbier 2004
- 44 Appiah et al. 2009; Hansen et al. 2015
- 45 Ghana’s fourth National Inventory Report to the UNFCCC cites deforestation as a driver of rising emissions, and notes emissions from LUCF rose by 17.7% between 2000 and 2016 (in % terms considerably less than relative increases in other sectors, but LUCF is still by some distance the largest GHG source sector overall (Ghana EPA 2019).
- 46 Acheampong, Agyeman, and Amponsah 2018; Adjei, Agyei, and Adjei 2020
- 47 Adom and Adjei 2017
- 48 Adom et al. 2019
- 49 IUCN 2017
- 50 MLNR 2016
- 51 Forestry Commission 2016b
- 52 Forestry Commission 2016b
- 53 Andoh and Lee 2018
- 54 Adjei, Agyei, and Adjei 2020
- 55 de Grassi 2003; Adjei, Agyei, and Adjei 2020
- 56 Adom et al. 2019
- 57 The 2012 *Ghana Forest and Wildlife Policy* specifies two types of forest reserves—*protection and production* reserves. All forms of commercial resource exploitation are prohibited on protection reserves, while up to 75 percent of production reserves can be exploited for timber and non-timber products.
- 58 Adom 2017
- 59 Republic of Ghana 2021
- 60 Republic of Ghana 2015
- 61 Forestry Commission 2016a
- 62 Forest landscape restoration has become increasingly popular as a framework for designing forest-related interventions. For an overview of the approach, see: <https://www.iucn.org/theme/forests/our-work/forest-landscape-restoration>.
- 63 Asiyambi, Arhin, and Isyaku 2017
- 64 Under the EU FLEGT facility: <https://www.euflegt.efi.int/background-ghana-and-sustainable-cocoa-production>: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_193](https://ec.europa.eu/commission/presscorner/detail/en/IP_21_193).
- 65 For an overview of the Ghana component of CIFOR’s Governing Multifunctional Landscapes in Sub-Saharan Africa, see Foli 2018the global aspiration to restore 150 million hectares of the world’s deforested and degraded lands by 2020 was established as the Bonn Challenge. Subsequently, during the U.N. Climate Summit in 2014, this target was extended by adding another 200 million hectares to be restored by 2030 under the New York Declaration on Forests, bringing the global target to 350 million hectares by 2030. The goal drives many of the reforestation efforts ongoing today.”; language: “en”; note: “-publisher: Center for International Forestry Research (CIFOR).
- 66 See others mentioned here: <https://www.reutersevents.com/sustainability/communications-reporting/cocoa-ghanas-glass-and-half-sustainability>.
- 67 Trase 2021
- 68 Other CIF support directed to the energy sector is not discussed here.
- 69 MLNR 2012b
- 70 MLNR 2012b p47
- 71 World Bank 2016
- 72 Originally, CIF was to co-finance another project—“Engaging the Private Sector in REDD+”—with IFC and the private sector, but the project was cancelled after the private company was unable to meet the bank’s fiduciary requirements. The government asked that the finance be repurposed as a concessional loan that could be used to encourage private investment in plantations (see <https://mlnr.gov.gh/index.php/programs-projects/ghana-forest-investment-program-fip/>).

- 73 Aaron Atteridge and Strambo 2020; Hirsch, Matthes, and Fünfgelt 2017
- 74 Aaron Atteridge and Strambo 2021 and minimize disruption to local economies. It finds commonalities among de-carbonization transitions in the United Kingdom, United States, Australia and South Africa, expanding the scope of success from simply closing industries to including social and economic equity in the transition process.”; note”:”DOI: 10.51414/sei2021.009”; publisher”:”Stockholm Environment Institute”; source”:”-DOI.org (Crossref
- 75 See <https://justtransitioninitiative.org/a-framework-for-just-transitions/>
- 76 CSIS and CIF 2021
- 77 Błachowicz et al. 2021
- 78 See [https://www.ilo.org/global/topics/green-jobs/publications/WCMS\\_432859/lang-en/index.htm](https://www.ilo.org/global/topics/green-jobs/publications/WCMS_432859/lang-en/index.htm).
- 79 Mensah 2019
- 80 Amankwah et al. 2021
- 81 In export revenue terms, Ghana’s international tourism receipts (for all tourism purposes combined) have increased steadily over the last two decades, reaching around US\$1.49 billion in 2019 (<https://data.worldbank.org/indicator/ST.INT.RCPT.CD?locations=GH>). Personal-related international travel generated an estimated US\$ 428 million in 2019 (<https://oec.world/en/profile/country/gha#trade-services>). It is noted that demand for ecotourism, cultural attractions and adventure tourism is growing more quickly than in segments such as wellness, business and cruise tourism (<https://oxfordbusinessgroup.com/overview/competitive-destination-country-seeks-transform-its-tourism-offering-attract-investment-and-increase>). By comparison, the value of timber exports in 2020 is estimated at US\$ 134 million, and has been on a declining trend since 2016 (<https://www.statista.com/statistics/1172232/export-value-of-timber-and-timber-products-from-ghana/>).
- 82 van Vliet et al. 2021 but the extent of their poverty is rarely defined. We analyzed six data sets derived from household questionnaires of 385–88,896 cocoa producers in Côte d’Ivoire and Ghana. Across all data sets, many households (30–58%
- 83 van Vliet et al. 2021 but the extent of their poverty is rarely defined. We analyzed six data sets derived from household questionnaires of 385–88,896 cocoa producers in Côte d’Ivoire and Ghana. Across all data sets, many households (30–58%
- 84 [https://www.theglobeconomy.com/Ghana/gini\\_inequality\\_index/](https://www.theglobeconomy.com/Ghana/gini_inequality_index/)
- 85 Based on unpublished research by the University of Ghana
- 86 <https://tradingeconomics.com/ghana/government-debt-to-gdp>
- 87 <https://data.worldbank.org/indicator/GC.TAX.TOTL.GD.ZS?locations=GH>. For comparison, World Bank data indicates the average for EU states is almost 20%, for all OECD countries is 15.5%, and for LDCs is 10.4%.
- 88 See <http://leap.gov.gh/>
- 89 World Bank 2021a
- 90 World Bank 2021a
- 91 World Bank 2021a
- 92 Actionaid 2019
- 93 Usufruct rights refer to a temporary right to use and benefit from the property owned by another party.
- 94 World Bank 2021b
- 95 In Ghana, land and tree tenure are separated. Since the 2000 *Forest Plantations Fund Act* and the 2002 *Timber Resources Management Act (Amendment)* timber trees that areas planted by farmers could be privately owned, a right that was reinforced in the 2012 Policy. However, to claim this right requires tree registration, and efforts to introduce a workable national registration system since 2003 have yet to produce something that makes it feasible and cost-effective for individual small farmers to register trees they have planted and nurtured (O’Sullivan et al 2021).
- 96 World Bank 2021b
- 97 IPCC 2019
- 98 Keene et al. 2019
- 99 Keene et al. 2019
- 100 IUCN 2019
- 101 IUCN 2019
- 102 World Bank 2018
- 103 See the World Food Programme’s country profile for Ghana: <https://www.wfp.org/countries/ghana>.
- 104 IPA 2020
- 105 Actionaid 2019
- 106 Baruah 2017
- 107 Adjei, Agyei, and Adjei 2020
- 108 Actionaid 2019
- 109 For explanation of the Living Income calculations in Ghana’s cocoa regions, see <https://www.uncommoncacao.com/blog/2020/10/20/the-lid-in-ghana-and-cote-divoire>
- 110 Blackmore and Berger 2021
- 111 Odjijie 2019
- 112 Aaron Atteridge and Strambo 2020
- 113 Agyei and Adjei 2017
- 114 Adjei, Agyei, and Adjei 2020; de Grassi 2003; Ribot 2004
- 115 de Grassi 2003
- 116 Ribot 2004
- 117 Adjei, Agyei, and Adjei 2020
- 118 Adom et al. 2019
- 119 Agyei and Adjei 2017
- 120 Adom 2017
- 121 Baruah 2017
- 122 Adjei, Agyei, and Adjei 2020
- 123 Acheampong, Agyeman, and Amponsah 2018; Agyei and Adjei 2017
- 124 Adjei, Agyei, and Adjei 2020
- 125 Addo-Fordjour and Ankomah 2017
- 126 Asiyambi, Arhin, and Isyaku 2017
- 127 Forestry Commission 2016c
- 128 World Bank 2018; World Bank 2020
- 129 GDI 2018
- 130 MLNR 2012b
- 131 Consultation on the Investment Plan included, in addition to the government, the private sector (the timber industry, wood workers associations, plantation developers, cocoa farmers, and those involved in charcoal production, agriculture, and finance), civil society actors (CBOs working in environment, climate change, natural resource management, and/or community development), and forest fringe communities AfDB 2013.
- 132 This list included “re-afforestation, agroforestry related to shade grown cocoa and other cropping systems, orchards, drought-resistant crops, water and soil conservation measures, efficient wood-burning stoves, alternative energy to wood, rehabilitation of degraded areas, rainwater collection and storage systems for crops, firefighting services for the community, alternative climate-smart livelihoods, and others” IBRD 2017.
- 133 IBRD 2017
- 134 One of FIP’s investment screening criteria, outlined in its design document, is the safeguarding of natural forests and the prevention of support for industrial logging, the conversion of natural forests to tree plantations, or other large-scale agricultural conversion. Guidance on safeguards is mostly related to the inclusion of relevant stakeholders in the development of country-level FIP investment strategies, as well as the transparency of the process and the need to make available all documents related to proposed programs/projects for public review and comment. The safeguards, included at the project level under FIP, depend on the partner MDBs implementing the project.
- 135 World Bank 2016
- 136 AfDB 2016
- 137 The ELCIR+ program, for instance, includes support for tertiary education, specialized short courses on REDD+ and managing carbon- and climate-smart agriculture, training in the restoration of degraded forests, and other forms of community capacity building related to sustainable alternative livelihoods and climate-smart agriculture.
- 138 IBRD 2017

- 139 IBRD 2017
- 140 Seven thematic areas are specifically listed: "Increase vegetation cover in the community and on farms to improve soil fertility, prevent runoff and soil loss; Improved sustainable livelihoods to bolster against the effects of climate change while ensuring a reduction in deforestation (all examples on page 46 are variations of agriculture); Climate-proofing investments (agricultural); Water conservation; Reduction of deforestation and carbon emissions (reduce reliance on fuelwood and timber); Scale-up of existing ventures that increase and maintain biomass; and Capacity building for CBOs" IBRD 2017.
- 141 IBRD 2017
- 142 DGM Global 2020
- 143 <https://www.worldbank.org/en/news/press-release/2019/07/09/ghana-signs-landmark-deal-with-world-bank-to-cut-carbon-emissions-and-reduce-deforestation>
- 144 GDI 2018
- 145 MLNR 2012b
- 146 GDI 2018
- 147 World Bank 2016
- 148 MLNR 2012b
- 149 GDI 2018
- 150 ENFAL is supporting a new study, in collaboration with the timber industry, to better understand the dynamics of off-reserve timber production, to identify an appropriate level of benefit to be paid to the farmers. The Ministry and the Forestry Commission are also exploring options for funding the payment of benefits, including an increase in stumpage fees.
- 151 MLNR 2012a
- 152 GDI 2018
- 153 AfDB 2016
- 154 Conniff 2018; Mehta 2020
- 155 Romero et al. 2017
- 156 World Bank 2021a
- 157 See <https://www.solidaridadnetwork.org/news/accessible-technology-for-artisanal-miners/>.
- 158 GDI 2018
- 159 IUCN 2017
- 160 World Bank 2021a

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