

Forest Carbon Partnership Facility (FCPF) Technical Assessment of the Advanced Draft ER-PD Ghana

I General Approach of the Review

The TAP review of Ghana's ER-PD for the Ghana Cocoa Forest REDD+ Programme (GCFRP) began with a desk review of the draft ER-PD dated August 11, 2016, and received by the TAP on August 12, 2016. In addition to an introductory meeting of the FMT and TAP (August 5, 2016) to discuss roles, responsibilities and the schedule, the FMT provided a detailed briefing focusing on the Carbon Accounting elements of methodological framework.

In the desk review, the TAP team assessed the submitted ER-PD and referenced documents against the FCPF Carbon Fund Methodological Framework (Revised Final, June 22, 2016). The TAP team did not include a legal expert for the desk review but the FMT's legal expert was made available for consultation on any specific questions that arose. On September 6th, 2016, the TAP transmitted its first observations to the Ghana ER-PD team and the FMT, consisting of a number of questions and observations that asked for clarification and precision in order for the TAP team to better assess the Draft ER-PD against each criterion and indicator.

The TAP visit to Accra, Ghana, took place from 11-16 September 2016. Facilitated by the World Bank FMT and Task Team Leader and Ghana's National REDD+ Secretariat, the TAP interviewed representatives of government departments, traditional authorities, private sector, civil society and NGOs, as well as World Bank staff, involved in the REDD+ and the ER Program development in Ghana. From those interviews, additional documentation was obtained to support the TAP review. While lawyers involved in the development of the ER-PD or associated projects were consulted during the country visit, the TAP did not include a legal expert but the understanding is that the FMT's due diligence process will include the appropriate legal assessment.

Annex I shows the list of personnel interviewed during the country visit and Annex II shows the list of supporting documents for this review, including those which were provided during or as a result of the country visit.

The Advanced Draft ER-PD dated 12 October 2016 was reviewed following the TAP's initial assessment based on the additional information obtained through interviews and additional documentation. Any changes in our assessment, including justification, are indicated and described in the detailed technical review section below.

PART 1 OF TECHNICAL ASSESSMENT: Summary

Date of Current Assessment: 31 October 2016

Version and Date of Assessed ER-PD: ER-PD dated 12 October 2016

Name of Assessment team members:

Peter Graham - Lead reviewer, REDD+ policy and forestry; Elijah Yaw Danso - Country Expert; Simon Rietbergen - Social and Environmental safeguards; Fred Stolle - Carbon Accounting.

<p style="text-align: center;">Summary Assessment of the Quality and Completeness of the ER-PD</p> <p>The present TAP report is based on the assessment of the Advanced Draft ER-PD dated 12 October 2016. The Final ER-PD comprises some rewriting and reorganization of some sections compared to the first Draft ER-PD. The accessibility of the final ER-PD for the purpose of technical review was good overall. The document followed the template and provided links or references to relevant supporting material. The supporting material mentioned in the ERPD but that was not initially accessible on, or through, the GFC/NRS website was made available to the TAP during the in-country visit. The in-country interviews served to clarify the TAP's interpretation and understanding in areas of ER Program governance, safeguards, direction and implications of specified legal reforms, and forest carbon monitoring and accounting systems described in the ERPD. The review of the carbon accounting was the most challenging, technically, as it requires the clear presentation of a complex set of data and methods necessary to enable the TAP to reconstruct the reference level and projected ERs.</p> <p>As shown in the Readiness Package and associated TAP review, since the mid-term evaluation Ghana has made very significant progress in establishing key elements necessary for REDD+. The ER Program is integrated into the longer-term national REDD+ strategy, serving as an important first phase upon which to test the systems and strategy prior to scaling up to the national level. There appears to be strong buy-in to the Program from key stakeholders (government, traditional chiefs, private sector, and civil society), with plans for early implementation. Notably, the ER Program is integrated into the Cocoa sector strategy, the national climate change strategy, and is in-line with Ghana's Nationally Determined Contribution (NDC) under the UNFCCC Paris Agreement.</p> <p>Upon reviewing the Advanced Draft ER-PD, there were no changes to the TAP's assessment of the indicators based on the 11 August version. However, the organization and additional information provided in the updated ERPD provided a greater degree of clarity and detail that increased our confidence in the 2nd assessment. The revised ERPD contains information that was shared through the interviews during the TAP country visit and corrects references to annexes, tables and figures within the document. Key changes noted in the revised ERPD include:</p> <ul style="list-style-type: none"> • Additional information pertaining to the commitment of cocoa sector stakeholders to the ER Program, based on (as yet unpublished) Cocoa Sector Strategy II. This includes efforts to target youth employment. • Additional clarification on the governance framework, including role and function of ENRAC and plans to enhance capacity of the NRS. • Additional information regarding law enforcement, including the role of traditional authorities and the Rapid Response Unit of the GFC. • A qualitative forecast reduction in deforestation or degradation resulting from small-scale gold mining, based on an assumption of continuing decline in market price for gold. • Additional summary reports from stakeholder consultations. • Corrections to values for deforestation activity, fire impact, and associated emissions estimates. • Clarification on roles and responsibilities for operation of the Monitoring, Measurement and Reporting functions. • Additional detail in explanation of displacement risk associated with different drivers of deforestation and degradation. • Additional explanation of legal context for benefit-sharing arrangements, and related experience. 	Indicators	1 st Assessment	2 nd Assessment
---	------------	----------------------------	----------------------------

<p>II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects</p> <p>Based on Ghana’s estimate that over 1/3 of forest-related emissions in Ghana are due to deforestation and forest degradation related to cocoa production. In the Program area, it is estimated that 76% of deforestation during the reference period was a result of conversion to agricultural land – a third of which was caused by expansion of cocoa production. The other 2/3 of conversion are associated with encroachment of food crops, oil palm, rubber, and citrus farmers. Deforestation across the Cocoa forest landscape has been increasing from about 1.7% to 2.9% per year over the past 15 years.</p> <p>The ER Program identifies a suite of measures aimed to address a significant portion of these emissions, including through measures targeted at limiting further expansion of cocoa production and increasing yields and tree cover in existing cocoa plantations. The measures rely on the collaboration of government agencies (GFC, MLNR, Cocoa Board), private companies, traditional authorities and NGOs to implement and monitors the suite of measures.</p> <p>According to Ghana’s National REDD+ Strategy, the principal drivers of deforestation and degradation are: Agriculture expansion, Logging, Fuel-wood harvesting/charcoal production, Wildfires, Infrastructure development, and Mining. The ERPD identifies the main drivers and agents of emissions working within the Program area (see Table 3, page 30), including more a detailed assessment and description than had been provided in the National REDD+ Strategy. The measures aimed at improving land use planning, sustainable landscape management (e.g. CREMAs), monitoring and enforcement, are also expected to have some effect in reducing forest conversion to other crops and provide tools (e.g. more frequent and transparent land use monitoring) that may have some impact in reducing other drivers that were identified and assessed in Ghana’s REDD+ Strategy, including illegal logging and small-scale mining (galamsey).</p> <p>While deforestation in Ghana has normally followed a process of incremental degradation, a recent increase in small-scale, surface gold mining (galamsey) has been recognized and may be contributing to a rapid increase in the deforestation rate within a band of land that runs through the Program area. While this type of mining is not explicitly addressed in the ER Program, the suite of measures intended to improve land use planning and address illegality are expected to have some effect on reducing this trend. Similarly, it is the TAPs opinion that the ER Program is likely to have a greater impact on reducing drivers beyond the cocoa sector than has been described in the ER-PD. A fuller discussion of the extent of conversion of forest lands to other agricultural crops as well as rubber plantations would be required for a better appreciation of the expected impact of the ER Program.</p> <p>The data provided by Ghana shows that over the 15 years of the FREL 2.1 Mha have been deforested, and 1.5 Mha of this area is conversion from open forest to crop and grassland. Open forest in Ghana’s definition include cacao with 15% shade trees. Thus the deforestation of open forest can be caused by conversion from Cacao to crop/grasslands or the cutting of native open forest to non-shade cacao. From the data provided no conclusion can be drawn about the drivers of deforestation. In addition, the spatial pattern of the deforestation seems to indicate that one of the new drivers is local mining. Mitigating mining is mentioned in the ER-PD though there is not much attention paid how to address this driver beyond the assumption that it will decrease with decreasing gold price, though the proposed landscape management strategies could well work for this driver too.</p> <p>Considering the size of the Program area (spanning a cluster of five forest ecosystem types within the High Forest ecological zone), the range of drivers and multiple, differing interests, as well as a history of less than effective governance of forest resources, this ER Program is ambitious in its vision. As an important contributor to Ghana’s economic development, particularly rural economy, focusing the first ERP on the cocoa sector through a collaborative partnership with the Cocoa Board and industry</p>	<p>1.1</p> <p>1.2</p> <p>2.1</p>	<p>YES</p> <p>YES</p> <p>YES</p>	
---	---	---	--

<p>supports such an ambitious vision as the collaboration itself represents a significant change from business-as-usual.</p> <p>The ER Program anticipates the undertaking of new measures including: a Climate Smart Cocoa standard and associated practices and monitoring, tree tenure reform, new legislation governing the management of forests and wildlife, and the amendment of the Alternative Dispute Resolution legislation to cover environmental issues. The ER Program also specifies the enhancement of existing measures, including: extension services to enhance uptake of best practices by farmers, tree planting, CREMA and similar community-based sustainable land management / land use planning structures with appropriate benefit-sharing arrangements.</p> <p>The ER Program takes a programmatic approach that focuses on a nationally-significant global commodity—cocoa. As stated in the ERPD, “the plan to implement using a cross-sector coordination approach that leverages over US\$ 140 million in public-private initiatives and investments in target areas of the programme’s landscape, to facilitate a significant financial return to farmers and the government, in addition to climate benefits.”</p> <p>In terms of quantified emissions reductions, the ER Program is not very ambitious in its objective of reducing emissions from deforestation by 1.2 MtCO₂/yr (equivalent to approx. 3,000 ha/yr of deforestation) below the FREL. However, given the most recent rates of deforestation, it is very ambitious as this equates to reducing deforestation rates by 103,000 ha/yr below the 2015 level. The TAP is of the opinion that the quantified ambition is significant in the face of most recent trends.</p> <p>The ER program area (5.9 Mha) is of significant scale, covering a quarter of the area of Ghana. While not aligning perfectly with the boundaries It includes five administrative regions and 92 administrative districts, though does not fully align with all of their administrative boundaries. The Program Area is based on the boundaries of the High Forest ecological zone, which covers five forest ecosystem types.</p>			
<p>III. Carbon Accounting</p> <p>III (a) Scope and methods→ Criteria 3 - 6</p> <p>III (b) Uncertainties→ Criteria 7 - 9</p> <p>III (c) Reference Level→ Criteria 10 - 13</p> <p>III (d) Reference Level, Monitoring & Reporting on Emission Reductions→ Criteria 14-16</p> <p>III (e) Accounting for Displacement (leakage) → Criterion 17</p> <p>III (f) Accounting for Reversals→ Criteria 18 – 21</p> <p>III (g) Accounting for ERs → Criteria 22 - 23</p> <p>The Advanced Draft ER-PD provides most of the information necessary to demonstrate compliance or alignment with the criteria and indicators related to carbon accounting. While much of the information was included in the first draft ER-PD, the organization of the information and lack of access to actual datasets to verify certain methods or calculations made it difficult to assess. The country-visit proved to be valuable in clarifying methods, procedures and certain estimates, which was subsequently reflected in the Advanced Draft ER-PD.</p> <p>In the TAP’s view, the Advanced Draft ER-PD presents a sound approach to carbon measurement and accounting appropriate for the ER Program (e.g. scope of activities, carbon pools and greenhouse gases) while ensuring relevance to, and consistency with, the national GHG inventory and national</p>	<p>3.1</p> <p>3.2</p> <p>3.3</p> <p>4.1</p> <p>4.2</p> <p>5.1</p> <p>6.1</p> <p>6.2</p> <p>7.1</p> <p>7.2</p> <p>8.1</p> <p>8.2</p> <p>9.1</p> <p>9.2</p> <p>9.3</p> <p>10.1</p> <p>10.2</p> <p>10.3</p> <p>11.1</p> <p>11.2</p> <p>12.1</p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>NO</p> <p>YES</p> <p>NO</p> <p>NO</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p>	

<p>REDD+ components (NFMS, RL and MRV) described in Ghana's Readiness Package. The estimation methodologies are also consistent with IPCC guidelines.</p> <p>Deforestation is the biggest source of GHG emissions (62%) in the Reference Level (FREL). The remaining 38% result from forest degradation activities including illegal logging (29%), and a combination of fire, legal logging and wood-fuel (9%, in aggregate). The carbon accounting for the ER Program includes all sources and sinks impacted by deforestation, forest degradation, forest fires, and tree planting within the Program area.</p> <p>The reference level period proposed for the Program extends from 2000 to 2015, which, as argued in Section 8.1 of the ERPD, would imply that Ghana is out of compliance with (recently revised) indicator 11.1 by a minimum of 3 months. Ghana is therefore requesting permission to use 2015 as an alternative end date based on justification provided in Annex 3 of the ERPD. The longer reference period has been proposed as it takes into account the last two years in which the rate of deforestation has more than tripled, primarily due to the cumulative impact of an increase in small-scale, 'artisanal' gold mining. On the basis of the evidence provided and interviews conducted, the TAP is of the opinion that Ghana's request satisfies this indicator.</p> <p>Main areas of concern, with respect to the indicators, are:</p> <ul style="list-style-type: none"> • Lack of publicly available spatially-explicit information • Limited capability of differentiating estimates of forest degradation by driver type • Difficulty in verifying the calculations of uncertainty in the activity data and in the final estimates <p>The ER Program will be 'test-driving' a number of systems that are intended to be scaled up to other regions and to the national level. This includes Ghana's national REDD+ reference level for submission to the UNFCCC in the near future, and the operation of the monitoring, measurement and reporting functions by a consortium of institutions, primarily government but also sharing roles and responsibilities with local stakeholders. The Hotspot Intervention Area (HIA) require detailed plans involving local stakeholders in mapping and land use analysis including mapping farms, forest reserves and other land uses within the HIA. While it is not necessarily obvious in the ER-PD, there is evidence of effective, functional relationships among the government departments and agencies involved in aspects of carbon accounting.</p> <p>During the country visit, the TAP directed significant attention to the assumptions and determinations regarding risk of displacement and reversal, particularly as related to anticipated responses to changes in tree tenure and other long-standing policies or practices. Overall, we were satisfied with the assessment included in the ER-PD and with the proposed mitigation measures.</p>	13.1	YES	
	13.2	N.A	
	13.3	N.A	
	13.4	N.A	
	14.1	YES	
	14.2	YES	
	14.3	YES	
	15.1	YES	
	16.1	YES	
	17.1	YES	
	17.2	YES	
	17.3	N.A	
	17.4	N.A	
	18.1	YES	
	18.2	YES	
	19.1	YES	
	20.1	N.A	
	20.2	N.A	
	21.1	YES	
	21.2	N.A	
	22.1	YES	
	22.2	YES	
	22.3	YES	
	23	N.A	

<p>IV. Safeguards</p> <p>Actions undertaken to meet WB and Cancun Safeguards→ Criteria 24-26</p> <p>Safeguards documents developed for the Emissions Reduction Program (ERP) include the Strategic Environmental and Social Assessment (SESA) report, a Resettlement Policy Framework (RPF) and an Environmental and Social Management Framework (ESMF). Given that the ERP covers a large area and that the exact nature of project activities in different sites in the ERP area cannot be known at this stage, SESA and ESMF are the appropriate tools for managing environmental and social impacts of the ERP. In summary, the ER Program design meets the relevant World Bank social and environmental safeguards – while noting that the Ghana national REDD+ team is currently incorporating some final comments received from the World Bank on the August 2016 versions of SESA and ESMF – and is making good progress in meeting UNFCCC’s Cancun Safeguards.</p> <p>As noted above, given that the Emissions Reduction Program (ERP) covers a large area and that the exact nature of project activities in different sites in the ERP area cannot be known at this stage, SESA and ESMF are the appropriate tools for managing environmental and social impacts of the ERP and no Safeguards Plans are expected to be produced at this stage. The above-mentioned safeguards frameworks do take into account relevant existing institutional and regulatory frameworks and have been publicly disclosed.</p> <p>The kind of information that needs to be gathered and disseminated as part of safeguards implementation is well summarized in Table 10 of the ESMF, but it might be helpful to provide more guidance on how this information should be managed and processed. The Safeguard Information System that is currently under design should also be helpful in fulfilling this requirement</p> <p>A Feedback and Grievance Redress Mechanism (FGRM) is under development for Ghana’s REDD+ program, but it is not yet finalized and it has not been made public. It will build on experience gained with various existing mechanisms described in the detailed assessment below.</p> <p>While these safeguards criteria have been assessed as having been met (or N.A), since good progress has been made, the following key deficiencies should be addressed prior to ERPA signing: i) lack of FGRM specific to the Program area; ii) lack of benefit sharing mechanism for the Program; no clarity on access to adequate expertise and resources for the operation of the FGRM. The TAP notes that plans are already underway to address these deficiencies.</p>	24.1	YES	
	24.2	YES	
	25.1	YES	
	25.2	N.A	
	26.1	YES	
	26.2	YES	
	26.3	YES	

V. Sustainable Program Design and Implementation	27.1	YES	
V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28	27.2	YES	
V. (b) Benefit sharing → Criteria 29 – 33	28.1	YES	
V. (c) Non-Carbon Benefits → Criteria 34 – 35	28.2	YES	
	28.3	YES	
The ER Program clearly identifies the key and underlying drivers of deforestation and degradation, and potentially opportunities for forest enhancement. Beginning prior to Ghana’s Readiness program, there have been incremental improvements in the assessment of drivers of deforestation and degradation in Ghana, including for the development of Ghana’s National REDD+ Strategy and a more detailed assessment for the ER-PIN and ERPD. According to Ghana’s National REDD+ Strategy, the principal drivers of deforestation and degradation are agriculture expansion, logging, fuel-wood harvesting/charcoal production, wildfires, Infrastructure development, and mining.	29	N.A	
While efforts have been made to differentiate between natural forest, tree crops (such as citrus, rubber and palm oil) and cocoa plantation, there remains a significant degree of uncertainty in the quantitative or relative estimates of forest loss attributed to individual drivers based on the satellite imagery analyses. Further, step-wise development of the National Forest Monitoring System, described in Ghana’s Readiness self-assessment, will improve Ghana’s ability to focus measures and more accurately evaluate efforts to address specific drivers to achieve greater emissions reductions.	30.1	N.A	
	31.1	N.A	
	32.1	N.A	
	33.1	N.A	
	34.1	YES	
	34.2	YES	
	35.1	NO	
	35.2	N.A	
The Program follows a jurisdictional, programmatic strategy to address barriers to REDD+ at the landscape scale. Identified barriers include lack of coordination and planning amongst implementing agencies, companies, organizations and governance bodies across the cocoa and forestry sectors. An important part of the strategy includes the recently established coordination of the NRS and other GFC divisions (including FLEGT-VPA), Cocoa Board, cocoa buying companies and traditional authorities.			
The question of land and resource tenure and use rights is addressed in some detail in the ERPD and in the SESA. The ERPD actually seeks formal protection for customary rights to trees and other natural resources through the establishment of Community Resource Management Areas (CREMAs) or other legal forms of stakeholder commitments, so its impact on land and resource tenure and use rights is expected to be positive. In the implementation of the 2012 Forest and Wildlife Policy, the Ministry of Lands and Natural Resources intends to pilot tree tenure regime reforms under the FIP, which will be implemented in the ERP area. This is also expected to have a positive effect on resource management at the local level.			
The benefit-sharing plan was not available at the time of the TAP assessment but there is a considerable body of work upon which the plan can be developed. The principles regarding the design of the benefit-sharing mechanisms for the ERP set out in the ERPD (voluntary participation, inclusive and equal access, transparency, equity and fairness, return for efforts) are all sound.			
The ER Program clearly explains that Non-Carbon Benefits of the ERP will be much more important than the Carbon Benefits. The Non-Carbon Benefits include the increased income from new land use practices (especially “climate smart” cocoa and sustainably produced timber), natural resource based small enterprise development and a variety of ecosystem services provided by forest conservation and restoration. There is not much information as yet on how the ERP would guarantee that enhanced Non-Carbon Benefits would be distributed fairly among stakeholders engaged in REDD+.			

VI. ER Program Transactions			
VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36	36.1	YES	
	36.2	YES	
VI (b) Data Management and ER Transaction Registries → Criteria 37 - 38	36.3	YES	
	37.1	YES	
Subject to a legal assessment as part of the World Bank’s (FMT) due diligence, as trustee of the Carbon Fund, clear evidence is presented (Section 17.2 of the ERPA) that refers to an existing legal and regulatory framework stipulating such authority (Ministry of Finance) to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations. The TAP was not presented with any conflicting views on this issue. The ERPD describes the delivery of the ER Programme activities through HIA structures, which allow for locally appropriate contractual sub-arrangements under a Benefit-Sharing Plan. Despite the apparent legal authority, the TAP notes that the lack of Benefit-Sharing Plan and Grievance Redress Mechanism (at the time of the TAP review) limits confidence in the current ability of the Program Entity to address potential challenges to its authority or ability to transfer to the Carbon Fund Title to ERs.	37.2	N.A	
	37.3	N.A	
	37.4	N.A	
	38.1	YES	
	38.2	N.A	
	38.3	N.A	
Based on the information provided in Section 18.2 of the ERPD, Ghana has decided to maintain its own national REDD+ Program and Projects Data Management System, to be administered by the NRS. Ghana is in the process of developing such a system for the ER Program. Until the actual system has been designed and launched, the administration and rules for the operation of the registry cannot be fully assessed.	38.4	N.A	
SUMMARY SCORE and overall comment:			
Based on the methodological framework (MF), the TAP has rated the ER-PD as follows:			
<ul style="list-style-type: none">Advanced Draft ER-PD dated 11 August 2016: Of a total of 80 criteria and indicators 52 criteria or indicators are met (YES) and 6 are not met (NO); 22 indicators have been classified as Not Applicable (N.A) to the current assessment.			
It is the TAP’s assessment that most of the criteria and indicators are met, thereby providing a good degree of confidence in the viability of Ghana’s proposed ER Program on the basis of established criteria and indicators of the Methodological Framework. For those indicators that could not be confirmed, the TAP is confident that they will be addressed as the program advances into the first stages of implementation. In the TAP’s opinion, those indicators currently rated as “NO” (not met) should not prevent the Carbon Fund Participants from further consideration of Ghana’s ER Program as the deficiencies could be addressed through contractual provisions (or conditions) negotiated as part of an ERPA between the Carbon Fund, the Trustee and the Government of Ghana.			

PART 2 OF TECHNICAL ASSESSMENT: DETAILED ASSESSMENT

C. 1 The proposed ER Program is ambitious, demonstrating the potential of the full implementation of the variety of interventions of the national REDD+ strategy, and is implemented at a jurisdictional scale or programmatic scale.

Ind. 1.1 The ER Program Measures aim to address a significant portion of forest-related emissions and removals

YES

Based on Ghana's estimate that over 1/3 of forest-related emissions in Ghana are due to deforestation and forest degradation related to cocoa production. In the Program area, it is estimated that 76% of deforestation during the reference period was a result of conversion to agricultural land – a third of which was caused by expansion of cocoa production. The other 2/3 of conversion are associated with encroachment of food crops, oil palm, rubber, and citrus farmers. Deforestation across the Cocoa forest landscape has been increasing from about 1.7% to 2.9% per year over the past 15 years.

The ER Program identifies a suite of measures aimed to address a significant portion of these emissions, including through measures targeted at limiting further expansion of cocoa production and increasing yields and tree cover in existing cocoa plantations. The measures rely on the collaboration of government agencies (GFC, MLNR, Cocoa Board), private companies, traditional authorities and NGOs to implement and monitors the suite of measures.

According to Ghana's National REDD+ Strategy, the principal drivers of deforestation and degradation are: Agriculture expansion, Logging, Fuel-wood harvesting/charcoal production, Wildfires, Infrastructure development, and Mining. The ERPD identifies the main drivers and agents of emissions working within the Program area (see Table 3, page 30), including more a detailed assessment and description than had been provided in the National REDD+ Strategy. The measures aimed at improving land use planning, sustainable landscape management (e.g. CREMAs), monitoring and enforcement, are also expected to have some effect in reducing forest conversion to other crops and provide tools (e.g. more frequent and transparent land use monitoring) that may have some impact in reducing other drivers that were identified and assessed in Ghana's REDD+ Strategy, including illegal logging and small-scale mining (galamsey).

While deforestation in Ghana has normally followed a process of incremental degradation, a recent increase in small-scale, surface gold mining (galamsey) has been recognized and may be contributing to a rapid increase in the deforestation rate within a band of land that runs through the Program area. While this type of mining is not explicitly addressed in the ER Program, the suite of measures intended to improve land use planning and address illegality are expected to have some effect on reducing this trend. Similarly, it is the TAPs opinion that the ER Program is likely to have a greater impact on reducing drivers beyond the cocoa sector than has been described in the ER-PD. A fuller discussion of the extent of conversion of forest lands to other agricultural crops as well as rubber plantations would be required for a better appreciation of the impact of the ER Program.

From the data provided, it is not clear how the program is targeting the activities responsible for the majority of emissions. The ER-PD focuses on the mitigation of expansion of cocoa into the forest area; however, the data provided by Ghana (and analyzed by Winrock) shows that the biggest change is from open forest (which is likely mainly cacao with 15% shade trees) to cropland (this does not include cocoa plantation, since cocoa plantation is its own category) and grassland. Over the 15 years of the FREL 2.1 M ha have been deforested, and 1.5 Mha is from open forest to crop and grassland). Although no direct conclusion can be concluded on these findings (since forest in Ghana interpretation can be cocoa with shade trees or 'native' forest). The data suggests there could be a massive change from cocoa forest (with shade trees) to cropland/grassland going on, or a massive conversion of 'native' forests to cropland/grassland. This is accelerating (2000-2010 = 70,000 ha/yr of open forest converted, 2010-2012 = 115,000 ha/yr converted and 2012-2015 = 190,000 ha/yr converted). It is thus not clear if cocoa expansion is currently still the most important driver of deforestation. In addition, the spatial pattern of the deforestation seems to indicate that one of the new drivers is local mining. Mitigating mining is mentioned in the ER-PD though there is not much attention paid how to address this driver beyond the assumption that it will decrease with decreasing gold price, though the proposed landscape

management strategies could well work for this driver too.	
Ind. 1.2 The ER Program is ambitious, uses new or enhanced ER Program Measures to reduce Emissions or enhance removals, is undertaken at a jurisdictional scale and/or takes a programmatic approach (i.e., involves multiple land areas, landowners or managers within one or several jurisdictions), and reflects a variety of interventions from the national REDD+ strategy in a coordinated manner.	YES
<p>Considering the size of the Program area (spanning a cluster of five forest ecosystem types with the High Forest ecological zone), the range of drivers and multiple, differing interests, as well as a history of ineffective governance of forest resources, this ER Program is ambitious in its vision. As an important contributor to Ghana's economic development, particularly rural economy, focusing the first ERP on the cocoa sector through a collaborative partnership with the Cocoa Board and industry supports such an ambitious vision as the collaboration itself represents a significant change from business-as-usual.</p> <p>The ER Program anticipates the undertaking of new measures including: a Climate Smart Cocoa standard and associated practices and monitoring, tree tenure reform, new legislation governing the management of forests and wildlife, and the amendment of the Alternative Dispute Resolution legislation to cover environmental issues. The ER Program also specifies the enhancement of existing measures, including: extension services to enhance uptake of best practices by farmers, tree planting, CREMA and similar community-based sustainable land management / land use planning structures with appropriate benefit-sharing arrangements.</p> <p>The ER Program takes a programmatic approach that focuses on a nationally-significant global commodity—cocoa. As stated in the ERPD, “the plan to implement using a cross-sector coordination approach that leverages over US\$ 140 million in public-private initiatives and investments in target areas of the programme’s landscape, to facilitate a significant financial return to farmers and the government, in addition to climate benefits.”</p> <p>In terms of quantified emissions reductions, the ER Program is not very ambitious in its objective of reducing emissions from deforestation by 1.2 MtCO₂/yr (equivalent to approx. 3,000 ha/yr) below the FREL. However, given the most recent rates of deforestation, it is very ambitious as this equates to reducing deforestation rates by 103,000 ha/yr below the 2015 level. The TAP is of the opinion that the quantified ambition is significant in the face of most recent trends.</p> <p>It is not clear why the area of change calculated for this ERPD, FAO-FRA, and University of Maryland global product are different.</p> <p>ERPD: 2000-2015 average deforestation: 145,000 ha/yr. ERPD area UMD: 2000-2015 average deforestation 40,000 ha/yr. ERPD area FAO-FRA*: 2000-2015: average <u>increase</u> of forests: 28,500 ha/yr. *Full country with different forest definition</p>	
C. 2 The Accounting Area matches a government- designated area that is of significant scale	
Ind. 2.1 The Accounting Area is of significant scale and aligns with one or more jurisdictions; or a national-government-designated area (e.g., ecoregion) or areas.	YES
<p>The ER program area (5.9 Mha) is of significant scale, covering a quarter of the area of Ghana. While not aligning perfectly with the boundaries It includes five administrative regions and 92 administrative districts, though does not fully align with all of their administrative boundaries. The Program Area is based on the boundaries of the High Forest ecological zone, which covers five forest ecosystem types.</p>	
C. 3 The ER Program can choose which sources and sinks associated with any of the REDD+ Activities will be accounted for, measured, and reported, and included in the ER Program Reference Level. At a minimum, ER Programs must account for emissions from deforestation. Emissions from forest degradation also should be accounted for	

where such emissions are significant.	
Ind. 3.1 The ER Program identifies which anthropogenic sources and sinks associated with any of the REDD+ Activities will be accounted for in the ER Program	YES
All sources and sinks impacted by deforestation, forest degradation, forest fires, and tree planting within the Programme area are accounted for.	
Ind. 3.2 The ER Program accounts for emissions from deforestation.	YES
Deforestation is accounted for and is the biggest source of emissions (62%) of GHG in the FREL.	
Ind. 3.3 Emissions from forest degradation are accounted for where such emissions are more than 10% of total forest-related emissions in the Accounting Area, during the Reference Period and during the Term of the ER-PA. These emissions are estimated using the best available data (including proxy activities or data).	YES
Forest degradation is reported as 38% of total emissions. In the FREL, by far the biggest source of emissions from forest degradation is the illegal logging (29%), while fire, legal logging and wood-fuel collection account for 9% in aggregate.	
C. 4 The ER Program should account for, measure and report, and include in the ER Program Reference Level, significant carbon pools and greenhouse gases, except where their exclusion would underestimate total emission reductions.	
Ind. 4.1 The ER Program accounts for all Carbon Pools and greenhouse gases that are significant within the Accounting Area, both for Reference Level setting and Measurement, Monitoring and reporting (MMR).	YES
All the significant pools are accounted for and for those carbon pools that have been excluded (e.g. soil carbon in all activities except deforestation), their exclusion is acceptable as it would underestimate total emission reductions.	
Ind. 4.2 Carbon Pools and greenhouse gases may be excluded if: I. Emissions associated with excluded Carbon Pools and greenhouse gases are collectively estimated to amount to less than 10% of total forest-related emissions in the Accounting Area during the Reference Period; or II. The ER Program can demonstrate that excluding such Carbon Pools and greenhouse gases would underestimate total emission reductions.	YES
Non-CO2 gases are often excluded. Only for fires (as a deforestation or degradation activity) are emissions estimates calculated including CH4 and N2O, in addition to CO2. All other calculations of carbon pools and GHG emissions estimates only include CO2 (see Section 7.2). There is no quantitative evaluation of this exclusion but the TAP considers this to be a reasonable assumption. As forests converted to other land uses are more likely to result in some increase in emissions non-CO2 gases relative to the reference case, it is expected that excluding these GHGs would underestimate total emissions reductions associated with the successful implementation of the ER Program.	
C. 5 The ER Program uses the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines, as adopted or encouraged by the Conference of the Parties as a basis for estimating forest-related greenhouse gas emissions by sources and removals by sinks.	
Ind. 5.1 The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR).	YES

The methods used, as described in Sections 8 and 9 of the ERPD, are robust and consistent with most recent IPCC Guidelines.

C. 6 Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions), are documented and made publicly available online. In cases where the country's or ER Program's policies exempt sources of information from being publicly disclosed or shared, the information should be made available to independent reviewers and a rationale is provided for not making these data publicly available. In these cases, reasonable efforts should be made to make summary data publicly available to enable reconstruction.

- | | |
|--|-------------------|
| <p>Ind. 6.1 The following methodological steps are made publicly available:</p> <ul style="list-style-type: none"> I. Forest definition; II. Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable; III. Choice of activity data, and pre-processing and processing methods; IV. Choice of emission factors and description of their development; V. Estimation of emissions and removals, including accounting approach; VI. Disaggregation of emissions by sources and removal by sinks; VII. Estimation of accuracy, precision, and/or confidence level, as applicable; VIII. Discussion of key uncertainties; IX. Rationale for adjusting emissions, if applicable; X. Methods and assumptions associated with adjusting emissions, if applicable. | <p>YES</p> |
|--|-------------------|

Overall, the ER-PD describes the methodological steps applicable to the ER Program, with more detailed descriptions provided in Annexes or referenced documents that are publicly available. The definition of forest is clear, however the difference between the two different forest categories - "Open" and "Closed" forest - is not clearly described. We assume these two categories are distinguished by a maximum/minimum percent canopy cover but there is no mention of this in the ER-PD. As mentioned above, it is not clear whether the publically available activity data is sufficiently dense and analyzed to understand the scale, dynamics and trends of individual drivers. Emissions estimates have not been adjusted.

- | | |
|---|------------------|
| <p>Ind 6.2 For the following spatial information, maps and/or synthesized data are displayed publicly, and reasonable efforts are made to explain how these were derived from the underlying spatial and other data, and to make key data sets or analyses publicly available:</p> <ul style="list-style-type: none"> I. Accounting Area II. Activity data (e.g., forest-cover change or transitions between forest categories) III. Emission factors IV. Average annual emissions over the Reference Period V. Adjusted emissions <p>Any spatial data used to adjust emissions, if applicable.</p> | <p>NO</p> |
|---|------------------|

There is very little spatial information available except the accounting area and forest reserves. The spatial distribution of activity data (deforestation, logging and illegal logging) within the program area is not available. All GHG calculations are done by Excel spreadsheet, without spatially-explicit modeling. Emission factors are very well reported on. It would appear that the underlying spatial data has not been collected and therefore is not publicly available. Emissions estimates have not been adjusted.

C.7 Sources of uncertainty are systematically identified and assessed in Reference Level setting and Measurement, Monitoring and reporting

Ind 7.1 All assumptions and sources of uncertainty associated with activity data, emission factors and calculation methods that contribute to the uncertainty of the estimates of emissions and removals are identified.	YES
All sources of uncertainty are identified. Some of the uncertainties in carbon stocks of different land uses are very large. For example, in wet, moist, moist SE, moist NW and upper regions of the ER-PD area, the conversion of open forest to citrus has a 65% uncertainty, and to rubber a 70% uncertainty. However, these conversions cover a small area. Conversion of open forest to citrus accounts for around 3,000 ha over 15 years (< 1% of total FREL emissions) and to rubber 10,000 ha/15 yr (around 1% of total FREL emissions). The main conversions (from closed and open forest to cropland or grassland) have a carbon uncertainty of around 25%.	
Ind 7.2 The sources of uncertainty identified in Indicator 7.1: are assessed for their relative contribution to the overall uncertainty of the emissions and removals.	NO
It is not clear how the final uncertainty, reported as 7% in the ER-PD, has been calculated. As mentioned above, every conversion has its own carbon uncertainty and the importance of each conversion depends on the size in the overall land use conversion. The calculations could not be found in the ER-PD and therefore we were unable to verify the 7% estimate.	
C 8 The ER Program, to the extent feasible, follows a process of managing and reducing uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting.	
Ind 8.1 Systematic errors are minimized through the implementation of a consistent and comprehensive set of standard operating procedures, including a set of quality assessment and quality control processes that work within the local circumstances of the ER Program.	NO
The emission factors are very well described with uncertainties. The activity data however, lack a clear analysis of the different uncertainties. With specific regard to the interpretation of satellite imagery, it is not clear what the impact was of cloud cover, or how change results were extrapolated from a pilot area to the entire ER Program area.	
Ind 8.2 Random errors and other uncertainties are minimized to the extent practical based on the assessment of their relative contribution to the overall uncertainty of the emissions and removals.	YES
Random errors are minimized following accepted procedures described in Sections 8 and 9, and associated Annexes of the ERPD.	
C 9 Uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting is quantified in a consistent way, so that the estimation of emissions, removals and Emission Reductions is comparable among ER Programs	
Ind 9.1 Uncertainty associated with activity data and emission factors is quantified using accepted international standards, for example by providing accuracy, confidence interval, distribution of error, and propagation of error. Where errors in data and methods are considered large as defined in IPCC Guidelines, Monte Carlo methods (numerical simulations) should be used to estimate uncertainty	NO
The emission factors are well described but the activity data are not well described. The propagation of errors and biases in the data are also not well described. No Monte Carlo exercise has been carried out to estimate uncertainty.	
Ind 9.2 Uncertainty of the estimate of Emission Reductions is quantified using Monte Carlo methods. Underlying sources of error in data and methods for integrated measurements of deforestation, forest degradation and enhancements (e.g., as in a national forest inventory) are combined into a single combined uncertainty estimate and are reported at the two-tailed 90% confidence level	NO
No Monte Carlo analysis has been carried out.	

Ind 9.3 Uncertainty of Emissions Reductions associated with deforestation, forest degradation and enhancements are reported separately if measured through separate (i.e., non-integrated) approaches and when degradation is estimated using proxy data.	YES
The uncertainties are separately calculated and reported in Section 12 of the ER-PD.	
C 10 The development of the Reference Level is informed by the development of a Forest Reference Emission Level or Forest Reference Level for the UNFCCC	
Ind 10.1 The Reference Level is expressed in tonnes of carbon dioxide equivalent per year	YES
RL data are reported in the correct units.	
Ind 10.2 The ER Program explains how the development of the Reference Level can inform or is informed by the development of a national Forest Reference Emission Level or Forest Reference Level, and explains the relationship between the Reference Level and any intended submission of a Forest Reference Emission Level or Forest Reference Level to the UNFCCC	YES
The ER-PD FREL is coordinated with the country system, though how these systems will link and or inform each other is not yet fully clear, but there is good interaction between the different institutes responsible for the ER-PD FREL and the national FREL.	
Ind 10.3 The ER Program explains what steps are intended in order for the Reference Level to achieve consistency with the country's existing or emerging greenhouse gas inventory	YES
The updated ERPD describes (in Section 8.5) the simple step that Ghana's national FRL is currently under development and will be completed at the end of 2016, following the completion of the REL for the GCFRP. As the REL for the GCFRP is following and building on the current foundation of national RL and NFMS and MRV systems developed through the Readiness phase, and the same institutions and individuals are involved, it is reasonable to expect continued consistency with the country's GHG inventory. There is a close and effective working relationship between the Environment Protection Agency (MESTI) team responsible for the GHG inventory and the NRS measurement, monitoring and reporting team.	
C 11 A Reference Period is defined	
Ind 11.1 The end-date for the Reference Period is the most recent date prior to two years before the TAP starts the independent assessment of the draft ER Program Document and for which forest-cover data is available to enable IPCC Approach 3. An alternative end-date could be allowed only with convincing justification, e.g., to maintain consistency of dates with a Forest Reference Emission Level or Forest Reference Level, other relevant REDD+ programs, national communications, national ER program or climate change strategy.	YES
The FREL reference period is 15 years, from 2000-2015, which, as argued in Section 8.1 of the ERPD, would imply that Ghana is out of compliance with this (recently revised) indicator by a minimum of 3 months. Ghana is therefore requesting permission to use 2015 as an alternative end date based on justification provided in Annex 3 of the ERPD. The longer reference period has been proposed as it takes into account the last two years in which the rate of deforestation has more than tripled. By including these years, the average of the FREL is increased but still remains significantly below the rate of the last few years. There is no evidence of gaming and the scale of reductions needed before crossing the FREL (i.e. without payment) is significant. If 2015 data holds true in coming years, the rate would have to be reduced by 100,000 ha/yr before reaching the FREL. On the basis of this evidence, the TAP is of the opinion that Ghana's request satisfies this indicator.	

<p>Ind 11.2 The start-date for the Reference Period is about 10 years before the end-date. An alternative start-date could be allowed only with convincing justification as in Indicator 11.1, and is not more than 15 years before the end-date.</p>	<p>YES</p>
<p>The start-date is 15 years before the end-date but satisfies the Criterion while accommodating circumstances particular to the ER Program area. See explanation above, with indicator 11.1.</p>	
<p>C 12 The forest definition used for the ER Program follows available guidance from UNFCCC decision 12/CP.17</p>	
<p>Ind 12.1 The definition of forest used in the construction of the Reference Level is specified. If there is a difference between the definition of forest used in the national greenhouse gas inventory or in reporting to other international organizations (including a Forest Reference Emission Level or Forest Reference Level to the UNFCCC) and the definition used in the construction of the Reference Level, then the ER Program explains how and why the forest definition used in the Reference Level was chosen.</p>	<p>YES</p>
<p>The ER-PD forest definition and the UNFCCC forest definition are the same. The forest definition that Ghana reports to the FAO is different but, subject to FAO parameters for the next Forest Resources Assessment, Ghana has indicated an intent to use ERPD's 15% tree cover, instead of the previous 10% tree cover for their forest definition.</p>	
<p>C 13 The Reference Level does not exceed the average annual historical emissions over the Reference Period. For a limited set of ER Programs, the Reference Level may be adjusted upward by a limited amount above average annual historical emissions. For any ER Program, the Reference Level may be adjusted downward.</p>	
<p>Ind 13.1 The Reference Level does not exceed the average annual historical emissions over the Reference Period, unless the ER Program meets the eligibility requirements in Indicator 13.2. If the available data from the National Forest Monitoring System used in the construction of the Reference Level shows a clear downward trend, this should be taken into account in the construction of the Reference Level</p>	<p>YES</p>
<p>The FREL is equal to (does not exceed) the average annual historical emissions over the 15-year reference period.</p>	
<p>Ind 13.2 The Reference Level may be adjusted upward above average annual historical emissions if the ER Program can demonstrate to the satisfaction of the Carbon Fund that the following eligibility requirements are met:</p> <p>(i) Long-term historical deforestation has been minimal across the entirety of the country, and the country has high forest cover (country or jurisdictional area);</p> <p>(ii) National circumstances have changed such that rates of deforestation and forest degradation during the historical Reference Period likely underestimate future rates of deforestation and forest degradation during the Term of the ERPA.</p>	<p>N.A</p>
<p>Not applicable as the ER-program does not meet the eligibility criteria.</p>	
<p>Ind 13.3 For countries meeting the eligibility requirements in Indicator 13.2, a Reference Level could be adjusted above the average historical emission rate over the Reference Period. Such an adjustment is credibly justified on the basis of expected emissions that would result from documented changes in ER Program circumstances, evident before the end-date of the Reference Period, but the effects of which were not fully reflected in the average annual historical emissions during the Reference Period. Proposed adjustments may be rejected for reasons including, but not limited to:</p> <p>i. The basis for adjustments is not documented; or</p> <p>ii. Adjustments are not quantifiable.</p>	<p>N.A</p>

Not applicable as the ER-program does not meet the eligibility criteria.	
Ind 13.4 An adjustment of the Reference Level above the average annual historical emissions during the Reference Period may not exceed 0.1%/year of Carbon Stocks	N.A
Not applicable as the ER-program does not meet the eligibility criteria.	
C 14 Robust Forest Monitoring Systems provide data and information that are transparent, consistent over time, and are suitable for measuring, reporting and verifying emissions by sources and removals by sinks, as determined by following Criterion 3 within the proposed Accounting Area	
Ind 14.1 The ER Program monitors emissions by sources and removals by sinks included in the ER Program's scope (Indicator 3.1) using the same methods or demonstrably equivalent methods to those used to set the Reference Level.	YES
The MRV methods described are based on the FREL methods, so there should not be any discrepancies between the methods. The only point of concern is the illegal logging data (29% of total emissions) that in the FREL is taken from a study by Hansen et al. The Forestry Commission's NRS worked with Hansen to calculate this estimate and intends to replicate the same method with the MRV team. It is relevant to note that the interpretation of satellite image to develop deforestation numbers for the FREL has been very cumbersome vis-à-vis methods and satellites (radar imagery was used to augment data from Landsat 7). MRV will be carried out likely with similar satellite (Landsat 8 instead of Landsat 7) but likely not with radar.	
Ind 14.2 Activity data are determined periodically, at least twice during the Term of the ERPA, and allow for ERs to be estimated from the beginning of the Term of the ERPA. Deforestation is determined using IPCC Approach 3. Other sinks and sources such as degradation may be determined using indirect methods such as survey data, proxies derived from landscape ecology, or statistical data on timber harvesting and regrowth if no direct methods are available	YES
The MRV organization chart and methods are described very well and are similar to the FREL. However, while the updated ERPD presents a clearer indication of roles and responsibilities, the ability to determine activity data in a timely and consistent manner has not yet been fully tested with a defined work flow and timing of who does what, where, and when. The ERPD does mention that MRV will at least be carried out twice in the ER-PD timeframe.	
Ind 14.3 Emission factors or the methods to determine them are the same for Reference Level setting and for Monitoring, or are demonstrably equivalent. IPCC Tier 2 or higher methods are used to establish emission factors, and the uncertainty for each emission factor is documented. IPCC Tier 1 methods may be considered in exceptional cases	YES
There is no plan to update the emission factors within the next 4-5 years. The next update is expected when a new forest inventory will be carried out. Therefore, the emission factors should be the same or demonstrably equivalent over the life of the Carbon Fund.	
C 15 ER Programs apply technical specifications of the National Forest Monitoring System where possible	
Ind 15.1 ER Programs articulate how the Forest Monitoring System fits into the existing or emerging National Forest Monitoring System, and provides a rationale for alternative technical design where applicable.	YES
The Ghana Forestry Commission and its parent Ministry (MLNR) manages existing forest inventory systems, plantations programs and FLEGT-VPA and has an effective cooperative relationship with the environmental protection agency (MESTI) on monitoring forest and land use. The NFMS is yet to be operational, but is closely linked to the design of the FREL and MRV system for the ER Program, and will follow the same methodology.	

C 16 Community participation in Monitoring and reporting is encouraged and used where appropriate	
Ind 16.1 The ER Program demonstrates that it has explored opportunities for community participation in monitoring and reporting, e.g., of ER Program Measures, activity data, emission factors, safeguards and Non-Carbon Benefits, and encourages such community participation where appropriate	YES
The Hotspot intervention area (HIA) has a detailed plan of involving local stakeholders in mapping and land use analysis “including mapping farms, forest reserves and other land uses within the HIA”.	
C 17 The ER Program is designed and implemented to prevent and minimize potential displacement	
Ind 17.1 Deforestation and degradation drivers that may be impacted by the proposed ER Program measures are identified, and their associated risk for displacement is assessed, as well as possible risk mitigation strategies. This assessment categorizes Displacement risks as high, medium or low.	YES
As cocoa farming in Ghana occurs primarily within the High Forest zone (the Program area), the choice to align the cocoa sector boundaries (the key driver of deforestation and forest degradation in Ghana) to the ecological zones means that there is a low probability that impacts on the cocoa sector will result in leakage outside the ER-PD area. Illegal logging, as the second biggest driver, is also not very likely to get displaced. Since the wet, high forest zone coincide with the ER-PD area.	
Ind 17.2 The ER Program has in place an effective strategy to mitigate and/or minimize, to the extent possible, potential Displacement, prioritizing key sources of Displacement risk.	YES
Overall, the risk of displacement is assessed to be relatively low (see above), and the ERPD describes the monitoring systems (e.g. NFMS) that should enable identification and monitoring of any displacement outside the Program area. The mitigation strategies are built into the program design. Outstanding design of the benefit sharing and grievance redress mechanisms could influence risk of displacement.	
Ind 17.3 By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement	N.A
Only applicable at the time of verification.	
Ind 17.4 ER Programs are also invited to report on changes in major drivers in the ER Accounting Area, any Displacement risks associated with those drivers, and any lessons from the ER Programs’ efforts to mitigate potential Displacement	N.A
Only applicable at the time of verification.	
C 18 The ER Program is designed and implemented to prevent and minimize the risk of reversals and address the long-term sustainability of ERs	
Ind 18.1 The ER Program has undertaken an assessment of the anthropogenic and natural risk of reversals that might affect ERs during the Term of the ERPA and has assessed, as feasible, the potential risk of reversals after the end of the Term of the ERPA	YES
A basic assessment has been carried out and the results documented in Section 11.2 of the ER-PD. The potential risk of reversals after the end of the Term of the ERPA is not clearly differentiated but the identification of a monitoring process indicates on-going capacity in this area of work.	

Ind 18.2 The ER Program demonstrates how effective ER Program design and implementation will mitigate significant risks of Reversals identified in the assessment to the extent possible, and will address the sustainability of ERs, both during the Term of the ERPA, and beyond the Term of the ERPA	YES
<p>The ERPD (Section 11, in particular) clearly demonstrates how several areas of the Program are designed to mitigate significant risks of reversal. Tree tenure reform and well-designed benefit sharing mechanisms linked to CREMAs, or other legal forms of stakeholder commitments to be implemented in HIAs, when combined with improved enforcement capacity, are expected to be effective at mitigating reversal risk beyond the Term of the ERPA. The community involvement on cocoa expansion and mining is very convincing. The effectiveness of the existing and planned controls on illegal logging, in light of an expected rise in demand for timber, is not very clear but there is policy and legislation in place.</p>	
C 19 The ER Program accounts for Reversals from ERs that have been transferred to the Carbon Fund during the Term of the ERPA	
Ind 19.1 During the Term of the ERPA, the ER Program accounts for Reversals from ERs using one of the following options: <ul style="list-style-type: none"> Option 1: The ER Program has in place a Reversal management mechanism (e.g., buffer reserve or insurance) that is substantially equivalent to the Reversal risk mitigation assurance provided by the 'ER Program CF Buffer' approach referred to in option 2 below, appropriate for the ER Program's assessed level of risk, which in the event of a Reversal during the Term of the ERPA will be used to fully cover such Reversals. Option 2: ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), and based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Program. 	YES
<p>Ghana has chosen Option 2, where ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), based on a Reversal risk assessment.</p>	
C 20 The ER Program, building on its arrangements put in place during the readiness phase and during the Term of the ERPA, will have in place a robust Reversal management mechanism to address the risk of Reversals after the Term of the ERPA	
Ind 20.1 At the latest 1 year before the end of the Term of the ERPA, the ER Program will have in place a robust Reversal management mechanism or another specified approach that addresses the risk of Reversals beyond the Term of the ERPA	N.A
<p>Only applicable before the end of the ERPA term.</p>	
Ind 20.2 If the ER Program has selected option 2 under Indicator 19.1, all or a portion of the Buffer ERs of the ER Program, subject to a Carbon Fund review of the Methodological Framework and a decision of the parties to the ERPA in 2019, will be transferred to the mechanism identified in Indicator 20.1 at the end of the Term of the ERPA. If the ER Program fails to meet the requirements of Indicator 20.1, all remaining Buffer ERs in the ER Program CF Buffer will be cancelled	N.A
<p>Only applicable before the end of the ERPA term.</p>	
C 21 The ER Program monitors and reports major emissions that could lead to reversals of ERs transferred to the Carbon Fund during the Term of the ERPA	

Ind 21.1 The ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals	YES
The monitoring system and the associated plan to measure, report and verify (MRV) the results of the ER Program twice within the Term of the ERPA will be based on a methodology consistent with the FREL. Although at the time of the assessment it is not possible to confirm if it can identify reversals, with this consistency in methods between the FREL and MRV, the system should be technically capable of identifying reversals.	
Ind 21.2. The ER Program reports to the Carbon Fund within 90 calendar days after becoming aware of any emissions in the Accounting Area or changes in ER Program circumstances that, in the reasonable opinion of the ER Program, could lead to Reversals of previously transferred ERs by the next Monitoring event. The ER Program explains how the potential Reversals would be addressed by additional ER Program Measures or by the Reversal management mechanism described in Indicator 19.1.	N.A
Only applicable at the time a reversal occurs and at the time of verification.	
C 22 Net ERs are calculated by the following steps: <ol style="list-style-type: none"> 1. Subtract the reported and verified emissions and removals from the Reference Level 2. Set aside a number of ERs from the result of step 1, above, in a buffer reserve. This amount reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA. The amount set aside in the buffer reserve is determined using the conservativeness factors for deforestation listed in the MF. For estimated emissions reductions associated with degradation, the same conservativeness factors may be applied if spatially explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) are used. Otherwise, for proxy-based approaches, apply a general conservativeness factor of 15% for forest degradation Emission Reductions. 3. Set aside a number of ERs in the ER Program CF Buffer or other reversal management mechanism created or used by an ER Program to address Reversals 	
	YES
The ERPD Section 13 outlines a calculation approach in line with the indicator. Actual compliance can of course only be assessed during programme monitoring when reported and verified emission reductions are available. For the ex-ante estimation, the ERPD applies a conservativeness factor of 0% based on an uncertainty of 5.4% for deforestation in the FREL, and 15% conservativeness factors for both degradation and enhancement estimates, in accordance with Indicator 22.2. While this is correct insofar as the Methodological Framework, as noted under Indicator 7.2 the TAP had difficulty verifying the final estimate of uncertainty. The set aside includes a 20% buffer for reversals.	
C 23 To prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once. Any reported and verified ERs generated under the ER Program and sold and/or transferred to the Carbon Fund shall not be sold, offered or otherwise used or reported a second time by the ER Program Entity. Any reported and verified ERs generated under the ER Program that have been sold and/or transferred, offered or otherwise used or reported once by the ER Program Entity shall not be sold and transferred to the Carbon Fund	
(i) [Participation under other GHG initiatives 14.1]	N.A
No information on this. Prior to actual registration and transfer of ERs, this indicator can only be assessed on the basis of policy statement and appropriate design and operation of registry and tracking system.	

(ii) [Data management and Registry systems to avoid multiple claims to ERs 19.2]	N.A
<p>Prior to actual registration and transfer of ERs, this indicator can only be assessed on the basis of policy statement and appropriate design and operation of registry and tracking system. However, the ERPD does describe systems that will enable this indicator to be satisfied, including through a national registry system (under development) that would complement the use of the ER Program CF Buffer managed by the World Bank.</p>	
<p>C 24 The ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+</p>	
<p>Ind 24.1 The ER Program demonstrates through its design and implementation how it meets relevant World Bank social and environmental safeguards, and promotes and supports the safeguards included in UNFCCC guidance related to REDD+, by paying particular attention to Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC</p>	YES
<p>As documented in the Strategic Environmental and Social Assessment (SESA) report, which was first published in late 2014 and updated in August 2016, the World Bank environmental and social safeguard policies triggered by REDD+ in Ghana are: OP/BP 4.01: Environmental Assessment; OP/BP 4.04: Natural Habitats; OP 4.09: Pest Management; OP/BP 4.11 Physical Cultural Resources; OP/BP 4.12: Involuntary Resettlement; and OP 4.36: Forests. A Resettlement Policy Framework (RPF) was prepared and the Environmental and Social Management Framework (ESMF) was updated in August 2016. Given that the Emissions Reduction Program (ERP) covers a large area and that the exact nature of project activities in different sites in the ERP area cannot be known at this stage, SESA and ESMF are the appropriate tools for managing environmental and social impacts of the ERP. The ERP safeguards work can also benefit from the Process Framework and the Pest Management Plan that were developed for the Forest Investment Programme (FIP) funded project - Enhancing Natural Forest and Agroforest Landscapes.</p> <p>The preparation process for the SESA, which started when the REDD+ Strategy had not yet been fully developed, was highly influential in reshaping the REDD+ strategy, and thereby in influencing the content of the ER Program.</p> <p>A REDD+ Safeguard Information System, as per UNFCCC rules and guidance, was not anticipated at the time of Ghana's R-PP endorsement but a consulting firm has been engaged to design and develop Ghana's SIS. The Safeguards Information System, which will be managed by the Ghana Environmental Protection Agency, is expected to be operational at the same time as the National Registry, in December 2016.</p> <p>In summary, the ER Program design meets the relevant World Bank social and environmental safeguards – while noting that the Ghana national REDD+ team is currently incorporating some final comments received from the World Bank on the August 2016 versions of SESA and ESMF – and is making good progress in meeting UNFCCC's Cancun Safeguards.</p>	
<p>Ind 24.2 Safeguards Plans address social and environmental issues and include related risk mitigation measures identified during the national readiness process, e.g., in the SESA process and the ESMF, that are relevant for the specific ER Program context (e.g., land tenure issues), taking into account relevant existing institutional and regulatory frameworks. The Safeguards Plans are prepared concurrently with the ER Program Document, and are publicly disclosed in a manner and language appropriate for the affected stakeholders</p>	YES
<p>As noted above, given that the Emissions Reduction Program (ERP) covers a large area and that the exact nature of project activities in different sites in the ERP area cannot be known at this stage, SESA and ESMF are the appropriate tools for managing environmental and social impacts of the ERP and no Safeguards Plans are expected to be produced at this stage. The above-mentioned safeguards frameworks do take into account relevant existing institutional and regulatory frameworks and have been publicly disclosed.</p> <p>One important actor in this sphere, and in REDD+ more generally, that is currently underemphasized in the ERPD is the</p>	

District Assembly (DA). DA should play a key role in REDD+ implementation, including in the validation of local land use plans for Community Resource Management Areas (CREMAs) and for prevention and mediation of conflict between stakeholder groups (see also FGRM below)

The present version of the ESMF contains much relevant information, but it may be hard for field staff to apply it as the mitigation measures are given as long lists for each of the potential impacts – rather than in a more appropriate form, like a flow chart showing how and in what sequence mitigation responses are triggered. If possible, it would be helpful to update the ESMF through a review of the Forestry Commission's initial implementation experience with the safeguards of the Forest Investment Program-funded project - Enhancing Natural Forest and Agroforest Landscapes, which aims to achieve similar objectives (improved local land use planning, promotion of climate-smart cocoa) in the ERPD area, and which was approved in February 2015.

C 25 Information is provided on how the ER Program meets the World Bank social and environmental safeguards and addresses and respects the safeguards included in UNFCCC guidance related to REDD+, during ER Program implementation

Ind 25.1 Appropriate monitoring arrangements for safeguards referred to in Criterion 24 are included in the Safeguards Plans

YES

The kind of information that needs to be gathered and disseminated as part of safeguards implementation is well summarized in Table 10 of the ESMF, but it might be helpful to provide more guidance on how this information should be managed and processed.

As noted above, it would be helpful to update the ESMF on this point through a review of the Forestry Commission's initial implementation experience with the safeguards of the Forest Investment Program-funded project- Enhancing Natural Forest and Agroforest Landscapes, which aims to achieve similar objectives (improved local land use planning, promotion of climate-smart cocoa) in the ERPD area, and which was approved in February 2015.

The Safeguard Information System that is currently under design should also be helpful in fulfilling this requirement.

Ind 25.2 During ER Program implementation, information on the implementation of Safeguards Plans is included in an annex to each ER monitoring report and interim progress report. This information is publicly disclosed, and the ER Program is encouraged to make this information available to relevant stakeholders. This information is also made available as an input to the national systems for providing information on how safeguards are addressed and respected (SIS) required by the UNFCCC guidance related to REDD+, as appropriate.

N.A

Only applicable at the time of verification.

C 26 An appropriate Feedback and Grievance Redress Mechanism (FGRM) developed during the Readiness phase or otherwise exist(s), building on existing institutions, regulatory frameworks, mechanisms and capacity

Ind 26.1 An assessment of existing FGRM, including any applicable customary FGRMs, is conducted and is made public. The FGRM applicable to the ER Program demonstrates the following:
i) Legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program;
ii) Access to adequate expertise and resources for the operation of the FGRM

YES

A Feedback and Grievance Redress Mechanism (FGRM) is under development for Ghana's REDD+ program, but it is not yet finalized and it has not been published. It will build on experience gained with various existing mechanisms, such as the Forestry Commission's Customer Service Desk, which is staffed by officers who have received specialized training in dealing with requests for information and complaints from the public. It is also supposed to benefit from the experience gained with the Conflict Resolution Mechanism that was established under the Voluntary Partnership Agreement on Forest Law Enforcement, Governance and Trade that was signed between Ghana and the EU (for instance, as in section 17 of LI 2184 – the Timber Legality Licensing Regulations, 2012 passed to as well as section 50 of the proposed revised timber resource management and timber licensing regulation). Finally, the Forestry Commission is assessing the possibility of seeking an amendment to the 2010 Law on Alternative Dispute Resolution (which currently excludes “environmental” issues) to enable the resolution of conflict by customary authorities. A first consultancy report on this topic, Development of a Dispute Resolution Mechanism for REDD+ in Ghana, was produced in 2014.

In June 2016, the Ghana Environmental Protection Agency published a Grievance Redress Mechanism (GRM), including an Operational Manual for its staff, on the EPA website. The relevant documents may be hard to find, though, for the public interested in registering a complaint – as the documents are posted under the heading Strategic Environmental Assessment (<http://www.epa.gov.gh/epa/publications/strategic-environmental-assessment-sea>) rather than on the front page or under a specific GRM heading.

While this indicator has been assessed as having been met, since good progress has been made, the following key deficiencies should be addressed prior to ERPA signing: i) lack of FGRM specific to the Program area; ii) lack of benefit sharing mechanism for the Program; no clarity on access to adequate expertise and resources for the operation of the FGRM. The TAP notes that plans are already underway to address these deficiencies.

Ind 26.2 The description of FGRM procedures, included in the Benefit-Sharing Plan and/or relevant Safeguards Plans, specifies the process to be followed to receive, screen, address, monitor, and report feedback on, grievances or concerns submitted by affected stakeholders. As relevant, the Benefit-Sharing Plan and/or relevant Safeguards Plans and/or ER Program Document describe the relationship among FGRM(s) at the local, ER Program, and national levels

YES

The process for receiving, screening, addressing, monitoring and reporting feedback to the public is well described in the ESMF and summarized in Figure 17 of that document. Again, review of the Forestry Commission's initial implementation experience with the FGRM of the Forest Investment Program-funded project - Enhancing Natural Forest and Agroforest Landscapes, which aims to achieve similar objectives (improved local land use planning, promotion of climate-smart cocoa) in the ERPD area, and which was approved in February 2015, might be helpful.

Ind 26.3 If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM

YES

As noted under 26.1 above, a plan to address deficiencies of FGRM is underway

C 27 The ER Program describes how the ER Program addresses key drivers of deforestation and degradation

Ind 27.1 The ER Program identifies the key drivers of deforestation and degradation, and potentially opportunities for forest enhancement

YES

[Analysis of drivers and underlying causes of deforestation and forest degradation, and existing activities that can lead to conservation or enhancement of forest carbon stocks 4.1]

The ER Program clearly identifies the key and underlying drivers of deforestation and degradation, and potentially opportunities for forest enhancement (See ERPD Section 4. Description of actions and interventions to be implemented

under the proposed ER Programme). Beginning prior to Ghana's Readiness program, there have been incremental improvements in the assessment of drivers of deforestation and degradation in Ghana, including for the development of Ghana's National REDD+ Strategy and a more detailed assessment for the ER-PIN and ERPD. According to Ghana's National REDD+ Strategy, the principal drivers of deforestation and degradation are agriculture expansion, logging, fuel-wood harvesting/charcoal production, wildfires, Infrastructure development, and mining. The ERPD identifies the main drivers and agents of emissions working within the Program area (see Table 3, page 30).

Forest enhancement opportunities have been identified through: Ghana's Forest Investment Program (FIP), which includes tree planting for shade cocoa and plantation development; Ghana's Forest Plantation Strategy (2016-2040).

Ind 27.2 The ER Program identifies currently planned ER Program Measures and how they address the key drivers identified in Indicator 27.1, and the entities that would undertake them

YES

While efforts have been made to differentiate between natural forest, tree crops (such as citrus, rubber and palm oil) and cocoa plantation, there remains a significant degree of uncertainty in the quantitative or relative estimates of forest loss attributed to individual drivers based on the satellite imagery analyses. Further, step-wise development of the National Forest Monitoring System, described in Ghana's Readiness self-assessment, will improve Ghana's ability to focus measures and more accurately evaluate efforts to address specific drivers to achieve greater emissions reductions.

The Program follows a jurisdictional, programmatic strategy to address barriers to REDD+ at the landscape scale. Identified barriers include lack of coordination and planning amongst implementing agencies, companies, organizations and governance bodies across the cocoa and forestry sectors. An important part of the strategy includes the recently established coordination of the NRS and other GFC divisions (including FLEGT-VPA), Cocoa Board, cocoa buying companies and traditional authorities.

Included within the ER Program envelope, the establishment of forest plantations under the National Forest Plantation Development Programme (NFPDP) holds promise for contributing to removals and offsetting demand for illegal, off-reserve timber. Ghana will utilise forest plantations established in the Accounting Area under the NFPDP to contribute towards the generation of ERs for the Program.

C 28 The ER Program has undertaken and made publicly available an assessment of the land and resource tenure regimes present in the Accounting Area

Ind 28.1 The ER Program reviews the assessment of land and resource tenure regimes carried out during the readiness phase at the national level (i.e., SESA) and, if necessary, supplements this assessment by undertaking an additional assessment of any issues related to land and resource tenure regimes in the Accounting Area that are critical to the successful implementation of the ER Program, including:

YES

- I. The range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and categories of rights-holders present in the Accounting Area (including Indigenous Peoples and other relevant communities);
- II. The legal status of such rights, and any significant ambiguities or gaps in the applicable legal framework, including as pertains to the rights under customary law;
- III. Areas within the Accounting Area that are subject to significant conflicts or disputes related to contested or competing claims or rights, and if critical to the successful implementation of the ER Program, how such conflicts or disputes have been or are proposed to be addressed; and
- IV. Any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area.

The ER Program demonstrates that the additional assessment has been conducted in a consultative,

transparent and participatory manner, reflecting inputs from relevant stakeholders	
<p>The question of land and resource tenure and use rights is addressed in some detail in the ERPD and in the SESA. The ERPD actually seeks formal protection for customary rights to trees and other natural resources through the establishment of Community Resource Management Areas (CREMAs) or similar, legally recognized structures, so its impact on land and resource tenure and use rights is expected to be positive. Areas that are subject to significant conflicts will not be included in the initial implementation areas, HIAs.</p> <p>The Ministry of Lands and Natural Resources has carried out further studies on Tree Tenure aimed at reforming the tenurial regime to give more rights and enhance benefit flows to land owners and resource managers (including tenant farmers) in accordance with the 2012 Forest and Wildlife Policy. The Ministry will pilot these reforms under the FIP, which overlaps with the ERP area. This is also expected to have a positive effect on resource management at the local level.</p>	
<p>Ind 28.2 The ER Program explains how the relevant issues identified in the above assessment have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s). If the ER Program involves activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, the relevant Safeguards Plan sets forth an action plan for the legal recognition of such ownership, occupation, or usage. Beyond what is required for the successful implementation of the ER Program, the ER Program is encouraged to show how it can contribute to progress towards clarifying land and resource tenure in the Accounting Area, where relevant.</p>	YES
<p>As noted above, the Emissions Reduction Programme aims to seek formal protection for local people's use rights, by helping them to establish Community Resource Management Areas (CREMAs) or other legal forms of stakeholder commitments, so its impact on land and resource tenure and use rights is expected to be positive.</p> <p>Other tree tenure arrangements resulting from the implementation of the 2012 Forest and Wildlife Policy would also contribute positively to the implementation of the ER Program.</p>	
<p>Ind 28.3 The ER Program provides a description of the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund</p>	YES
<p>Section 17.2 – “Transfer of Title to ERs” - provides such a description.</p>	
<p>C 29 The ER Program provides a description of the benefit-sharing arrangements for the ER Program, including information specified in Indicator 30.1, to the extent known at the time.</p>	
Description of benefit-sharing arrangements	N.A*
<p>The benefit-sharing plan was not available at the time of the TAP assessment. The principles regarding the design of the benefit-sharing mechanisms for the EPRD set out in the ERPD (voluntary participation, inclusive and equal access, transparency, equity and fairness, return for efforts) are all sound.</p> <p>Options for benefit-sharing arrangements have been assessed as part of the national readiness process, through a consultative, transparent and participatory manner, and which included consultations in the ER Program area. It is expected that the benefit-sharing plan for the ER Program will be drawn from the options presented in the national assessment.</p>	
<p>C 30 The Benefit Sharing Plan will elaborate on the benefit-sharing arrangements for Monetary and Non-Monetary Benefits, building on the description in the ER Program Document, and taking into account the importance of managing expectations among potential beneficiaries</p>	

<p>Ind 30.1 The Benefit-Sharing Plan is made publicly available prior to ERPA signature, at least as an advanced draft, and is disclosed in a form, manner and language understandable to the affected stakeholders for the ER Program. The Benefit-Sharing Plan contains the following information:</p> <p>The categories of potential Beneficiaries, describing their eligibility to receive potential Monetary and Non-Monetary Benefits under the ER Program and the types and scale of such potential Monetary and Non-Monetary Benefits that may be received. Such Monetary and Non-Monetary Benefits should be culturally appropriate and gender and inter-generationally inclusive. The identification of such potential Beneficiaries takes into account emission reduction strategies to effectively address drivers of net emissions, anticipated implementers and geographical distribution of those strategies, land and resource tenure rights (including legal and customary rights of use, access, management, ownership, etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations.</p> <p>Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.</p> <p>Monitoring provisions for the implementation of the Benefit-Sharing Plan, including, as appropriate, an opportunity for participation in the monitoring and/or validation process by the Beneficiaries themselves.</p>	<p>N.A</p>
<p>The benefit sharing plan was not available at the time of the TAP assessment; however, the TAP assessed the relevant information available in the ER-PD and related documentation.</p>	
<p>C 31 The benefit-sharing arrangements are designed in a consultative, transparent, and participatory manner appropriate to the country context. This process is informed by and builds upon the national readiness process, including the SESA, and taking into account existing benefit-sharing arrangements, where appropriate</p>	
<p>Ind 31.1 The Benefit-Sharing Plan is prepared as part of the consultative, transparent and participatory process for the ER Program, and reflects inputs by relevant stakeholders, including broad community support by affected Indigenous Peoples. The Benefit-Sharing Plan is designed to facilitate the delivery and sharing of Monetary and Non-Monetary Benefits that promote successful ER Program implementation. The Benefit-Sharing Plan is disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program</p>	<p>N.A.*</p>
<p>The benefit-sharing plan was not available at the time of the TAP assessment. The principles regarding the design of the benefit-sharing mechanisms for the EPRD set out in the ERPD (voluntary participation, inclusive and equal access, transparency, equity and fairness, return for efforts) are all sound.</p> <p>Options for Benefit Sharing arrangements have been assessed as part of the national readiness process, through a consultative, transparent and participatory manner, and which included consultations in the ER Program area. It is expected that the benefit-sharing plan for the ER Program will be drawn from the options presented in the national assessment.</p> <p>While a Benefit-Sharing Plan for the ER Program has not been completed, there is a considerable body of work upon which the plan can be developed. An existing constitutional arrangement for benefit sharing of land revenue, considered as providing perverse incentive for deforestation and forest degradation, has formed the basis for the development of different options of reform. There is a stated policy position (in the 2012 Forest and Wildlife Policy) of ensuring that management of forest resources returns maximum benefit flow to farmers and landowners. The relevant section of Policy referenced here is Section 5.4 under Strategic Direction 4.1, Policy Strategy 4.1.1 (b). <i>“enact the legislations that will enable communities and individuals to benefit from trees on their farms and fallow lands, provide off-reserve tree tenure security, authority to legally dispose of resources and allocate greater proportion of benefits accruing from resource management to community members individually or collectively”</i></p>	

Options for appropriate benefit-sharing plans have been developed through the national REDD+ Readiness process, with specific options related to tree tenure analyzed through the NREG/TA process. Benefit sharing agreements exist for CREMAs and have been authorized by the MLNR. A benefit-sharing mechanism has been established for public-private partnerships under the GFC's Forest Plantation Strategy.	
C 32 The implementation of the Benefit-Sharing Plan is transparent	
Ind 32.1 Information on the implementation of the Benefit-Sharing Plan is annexed to each ER Program monitoring report and interim progress report and is made publicly available [16.1]	N.A
Only applicable at the time of verification.	
C 33 The benefit-sharing arrangement for the ER Program reflects the legal context	
Ind 33.1 The design and implementation of the Benefit-Sharing Plan comply with relevant applicable laws, including national laws and any legally binding national obligations under relevant international laws	N.A.*
The benefit-sharing plan was not available at the time of the TAP assessment.	
C 34 Non-Carbon Benefits are integral to the ER Program	
Ind 34.1 The ER Program outlines potential Non-Carbon Benefits, identifies priority Non-Carbon Benefits, and describes how the ER Program will generate and/or enhance such priority Non-Carbon Benefits. Such priority Non-Carbon Benefits should be culturally appropriate, and gender and inter-generationally inclusive, as relevant	YES
The ER Program clearly explains that Non-Carbon Benefits of the ERP will be much more important than the Carbon Benefits. The Non-Carbon Benefits include the increased income from new land use practices (especially "climate smart" cocoa and sustainably produced timber), natural resource based small enterprise development and a variety of ecosystem services provided by forest conservation and restoration. A total of 13 priority Non-Carbon Benefits are described in a table in Section 16.1 of the ERPD. There is not much information as yet on how the ERP would guarantee that enhanced Non-Carbon Benefits would be distributed fairly among stakeholders engaged in REDD+.	
Ind 34.2 Stakeholder engagement processes carried out for the ER Program design and for the readiness phase inform the identification of such priority Non-Carbon Benefits	YES
Extensive stakeholder consultations were organized in the field by the Forestry Commission in preparation for ER Program Design, see annexes of SESA and ESMF.	
C 35 The ER Program indicates how information on the generation and/or enhancement of priority Non-Carbon Benefits will be provided during ER Program implementation, as feasible.	
Ind 35.1 The ER Program proposes an approach utilizing methods available at the time to collect and provide information on priority Non-Carbon Benefits, including, e.g., possibly using proxy indicators. If relevant, this approach also may use information drawn from or contributed as an input to the SIS	NO
The ER Program confirms that information on priority Non-Carbon Benefits will be provided partly through the SIS (still under construction) and Data Management System. Indicators for measuring Non- Carbon Benefits will be tested in the High Impact Areas first. At the next stage of ERP development, when the SIS design will have been completed, it would be important to provide additional information on indicators selected and how they will be monitored in practice, including the role of implementing partners.	

Ind 35.2 Information on generation and/or enhancement of priority Non-Carbon Benefits will be provided in a separate annex to each ER Program monitoring report and interim progress report, and will be made publicly available	N.A
Only applicable at the time of verification.	
C 36 The ER Program Entity demonstrates its authority to enter into an ERPA and its ability to transfer Title to ERs to the Carbon Fund	
Ind 36.1 The ER Program Entity demonstrates its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, either through: i. Reference to an existing legal and regulatory framework stipulating such authority; and/or ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority.	YES
Subject to a legal assessment as part of the World Bank's (FMT) due diligence, as trustee of the Carbon Fund, evidence is presented (Section 17.2 of the ERPA) that refers to an existing legal and regulatory framework stipulating such authority (Ministry of Finance) to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations.	
Ind 36.2 The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, while respecting the land and resource tenure rights of the potential rights-holders, including Indigenous Peoples (i.e., those holding legal and customary rights, as identified by the assessment conducted under Criterion 28), in the Accounting Area. The ability to transfer Title to ERs may be demonstrated through various means, including reference to existing legal and regulatory frameworks, sub-arrangements with potential land and resource tenure rights-holders (including those holding legal and customary rights, as identified by the assessments conducted under Criterion 28), and benefit-sharing arrangements under the Benefit-Sharing Plan	YES
Subject to a legal assessment as part of the World Bank's (FMT) due diligence, as trustee of the Carbon Fund, satisfactory evidence is presented (Section 17.2 of the ERPA) and there are no conflicting views on record. Delivery of the ER Programme activities through HIA structures, as described in the ERPD, will allow for locally appropriate contractual sub-arrangements under a Benefit-Sharing Plan. Despite the apparent legal authority, the TAP notes that the lack of Benefit-Sharing Plan and Grievance Redress Mechanism (at the time of the TAP review) limits confidence in the current ability of the Program Entity to address potential challenges to its authority or ability to transfer to the Carbon Fund Title to ERs.	
Ind 36.3 The ER Program Entity demonstrates its ability to transfer Title to ERs prior to ERPA signature, or at the latest, at the time of transfer of ERs to the Carbon Fund. If this ability to transfer Title to ERs is still unclear or contested at the time of transfer of ERs, an amount of ERs proportional to the Accounting Area where title is unclear or contested shall not be sold or transferred to the Carbon Fund	YES
There is no demonstrated precedent for transfer of Title to ERs. However, subject to a legal assessment as part of the World Bank FMT's due diligence, the evidence presented (Section 17.2 of the ERPA) sufficiently demonstrates the ability of the Program Entity (under authority of the Ministry of Finance) to transfer Title to ERs prior to ERPA signature.	
C 37 Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.	
Ind 37.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management	YES

System managed by a third party on its behalf. In either case of a country's use of a third party centralized REDD+ Programs and Projects Data Management System, or a country's own national REDD+ Programs and Projects Data Management System, the indicators below apply	
Based on the information provided in Section 18.2 of the ERPD, Ghana has decided to maintain its own national REDD+ Program and Projects Data Management System, to be administered by the NRS. Ghana is in the process of developing such a system for the ER Program, as described in the <i>Terms of Reference for consultancy services for the development of an information system/ database for REDD+ activities in ER programme area</i> .	
<p>Ind 37.2 A national REDD+ Programs and Projects Data Management System or a third party centralized REDD+ Programs and Projects Data Management System needs to provide the attributes of ER Programs, including:</p> <ul style="list-style-type: none"> i. The entity that has Title to ERs produced; ii. Geographical boundaries of the ER Program or project; iii. Scope of REDD+ activities and Carbon Pools; and iv. The Reference Level used. <p>An ER Program for the Carbon Fund should report its activities and estimated ERs in a manner that conforms to the relevant FCPF Methodological Framework C&Is</p>	N.A*
The Terms of Reference for the system design includes these specifications. However, a strict interpretation of this indicator would require a review of the system itself, which was not completed at the time of the TAP review.	
<p>Ind 37.3 The information contained in a national or centralized REDD+ Programs and Projects Data Management System is available to the public via the internet in the national official language of the host country (other means may be considered as required).</p>	N.A*
The system was not completed at the time of the TAP review. The TOR for the consultancy to design the system (referred to under 37.1, above) includes the design objectives of enhancing transparency and accountability, among other attributes.	
<p>Ind 37.4 Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System; and an audit of the operations is carried out by an independent third party periodically, as agreed with the Carbon Fund</p>	N.A*
Section 18.2 of the ERPD describes the administrative roles and responsibilities for the operation of the system, and specifies periodic auditing of the data management and registry systems but does not specify the role of an independent third party. Until the actual system has been designed and launched, an assessment or initial audit of the defined administrative procedure is not possible.	
<p>C 38 Based on national needs and circumstances, ER Program host country selects an appropriate arrangement to ensure that any ERs from REDD+ activities under the ER Program are not generated more than once; and that any ERs from REDD+ activities under the ER Program sold and transferred to the Carbon Fund are not used again by any entity for sale, public relations, compliance or any other purpose</p>	
<p>Ind 38.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own national ER transaction registry, or instead to use a centralized ER transaction registry managed by a third party on its behalf</p>	YES
Based on information in Section 18.2 of the ERPD, Ghana has decided to maintain its own national ER transaction registry; starting with a relatively simple system to meet ERPA requirements and to use as the basis for a more comprehensive national system.	
<p>Ind 38.2 The national or centralized ER transaction registry reports ERs for the Carbon Fund using the</p>	N.A*

accounting methods and definitions described above in the MF	
The system was not completed at the time of the TAP review.	
Ind 38.3 An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public.	N.A*
The system was not completed at the time of the TAP review.	
Ind 38.4 Operational guidance exists, or is in advanced stage of preparation, that clarifies the roles and responsibilities of entities involved in the national or centralized ER transaction registry, as well as rules for operation of the registry.	N.A
Section 18.2 of the ERPD provides simple guidance for the administrative roles and responsibilities of the NRS and EPA in the operation of the registry system. Until the actual system has been designed and launched, the administration and rules for the operation of the registry cannot be fully assessed.	

Annex 1 to the TAP technical assessment

Country visit of TAP for review of Ghana's ERP

September 12-16, 2016

List of Persons Interviewed

1. Edward Obiaw, Director, RMSE, Forestry Commission
2. Kofi Affum-Baffoe, Manager, RMSE, Forestry Commission
3. Ernest Anamena, Cocoa Sustainable Manager, Touton
4. Richard Gyimah, Manager Verification and Audit Department, Forestry Commission
5. Chris Beeko, Dir Timber and Validation Department, Forestry Commission
6. Rhoda Donkor, Climate Change Unit, Forestry Commission
7. Frank Kwadwo Owusu, Climate Change Unit, Forestry Commission
8. Yakubu Mohammed, Manager, GIS and Mapping, Forestry Commission
9. Kofi Affum-Baffoe, Manager, Production, Forestry Commission
10. Patrick Kwakye, Climate Change Unit, Forestry Commission
11. Hugh Brown, Forestry Services Division
12. J. K. Adomako, SAL Consult
13. Seth Larmie, SAL Consult
14. Prince Senyo, SAL Consult
15. Yaw Osafo, Y. Osafo & Sons
16. Kwame Mensah, KASA Ghana
17. Samuel Mawutor, FWG
18. John Masu, NCRC
19. Michael Akowuah, Director Legal, Forestry Commission
20. Roselyn F. Adjei, Safeguards Focal Point, Forestry Commission
21. Sena Yawa Tabbicca, Senior Research Officer, COCOBOD
22. Lawrence Nyanor, Senior Economics Officer, Ministry of Finance
23. Edith Abruquah, Operations Manager, Forestry Service Division, Forestry Commission
24. Hilma Manan, FGRM Officer, Forestry Commission
25. Kingsley Obeng, Project Accountant, Forestry Commission
26. Kwame Agyei, Registry / MRV Officer, Climate Change Unit, Forestry Commission
27. Oppon Sasu, Director, Projects, Forestry Commission
28. Raymond K. Sakyi, Knowledge Management Officer, Forestry Commission
29. Yaw Kwakye, Head, Climate Change Unit, Forestry Commission
30. Jacob Amoako, GIS Specialist, Forestry Commission
31. Patrick Kwakye, Management Training, Forestry Commission
32. Charles Sarpong Duah, M&E / Budgeting, Forestry Commission
33. Ernest Foli, FORIG, member of the MRV working group
34. Tabi Agyarko, Project Manager – FIP, Ministry of Lands and Natural Resources
35. Kwadwo Kissiedu Kwamong, Deputy Director, M&E, COCOBOD
36. Daniel Agyei, FC HQ
37. Rev. Dr. William Jonfia-Essien, QCC, COCOBOD

Annex 2 to the TAP technical assessment

Forest Carbon Partnership Facility, Carbon Fund

TAP Technical review of Ghana's ERP

List of documents included in Assessment

38. ERP - Ghana Cocoa Forest REDD+ Programme (GCFRP) dated August 11, 2016
39. ERP - Ghana Cocoa Forest REDD+ Programme (GCFRP) revised October 12, 2016
40. Ghana's National REDD+ Strategy, December 2015
41. A Road Map to Mainstreaming Gender Considerations into Ghana's REDD+ Process, November 2015
42. Development of Reference Emissions Levels and Measurement, Reporting and Verification System in Ghana, January 2015
43. Development of Dispute Resolution Mechanism for REDD+ in Ghana, November 2014
44. Benefit Sharing Mechanisms for REDD+ Implementation in Ghana, October 2014
45. Report on REDD+ Communication Strategy, October 2013
46. Operational Guidance and Standards for National and Subnational REDD+ Programs in Ghana, October 2014
47. Ghana M&E Framework for the REDD+ R-PP process and M&E template, March 2014
48. Participatory self-assessment and synthesis of Ghana's REDD+ readiness process (R-Package), July 2016
49. TAP assessment of Ghana's Readiness Package, August 2016
50. World Bank - Grant Reporting and Monitoring (GRM) Report, August 2016
51. REDD+ Mechanism in Ghana: Strategic Environmental and Social Assessment (SESA) report, including workshop and stakeholder engagement reports, August 2016
52. REDD+ Mechanism in Ghana: Resettlement Policy Framework, August 2016
53. REDD+ Mechanism in Ghana: Environmental and Social Management Framework (ESMF), August 2016
54. Benefit sharing mechanism for REDD+ implementation in Ghana, October 2014
55. REDD+ Communication Strategy, Forestry Commission, Ghana's National REDD+ Secretariat, October 2013
56. Development of Reference Emissions Levels and Measurement, Reporting and Verification System in Ghana. Final Report. Indufor Oy, September 2014
57. High level engagement with private sector and state actors on the emission reduction programme. Final report. Ghana's National REDD+ Secretariat, July 2016
58. A road map to mainstreaming gender considerations into Ghana's REDD+ process. Ghana Forestry Commission and IUCN, November 2012
59. Development of dispute resolution mechanism for REDD+ in Ghana. Consultancy final report, Emmanuel Marfo, Yaw Osafo and Nana Darko Cobbina, November 2014
60. Timber Resources Management and Legality Licensing Regulation, 2016

61. Environmental and social safeguard information systems demo. Presentation by Sal Consult, September 2016
62. Managing risk in cocoa production: Assessing the potential of climate-smart crop insurance in Ghana. By Justin McKinley, L. Lanier Nalley, Rebecca A. Asare, Bruce L. Dixon, Jennie S. Popp, and Marijke D’Haese. Journal of International Agricultural Trade and Development, Volume 10, Number 1, 2016
63. Managing and linking cocoa sector data related to climate smart approaches in an integrated manner. A Report Prepared for Nature Conservation Research Centre. By Mawuko Fumey October, 2013
64. Establishment of a Rapid Response Unit (RRU) within the Forestry Commission, Ghana Forestry Commission, February 2011
65. Aligning Climate-Smart Cocoa & Ghana’s Emission Reductions Program: Landscape Level Sustainability Assessment and Validation Process for Climate-Smart Cocoa. NCFC & Forest Trends, September 2015
66. Understanding and Defining Climate-Smart Cocoa: Extension, Inputs, Yields, and Farming Practices. NCRC & Forest Trends, January 2014
67. Implementing Climate-Smart Cocoa Land Use Planning via Ghana’s CREMA Mechanism: A Pathway Forward for the Emission Reductions Program. NCRC & Forest Trends, September 2015
68. Ghana Cocoa Forest REDD+ Programme (GCFRP). The development of Ghana’s Emission Reductions Programme Implementation Plan. Final Implementation Plan Report. Ghana Forestry Commission & Ghana Cocoa Board, July 2016
69. Consultative meeting on Ghana’s Emission Reduction Programme for MMDA’s and Traditional Authorities held In Takoradi and Kumasi from 16th To 23rd August 2016. Forestry Commission in collaboration with the Ministry of Local Government and Rural Development. Report, 2016
70. Parliamentary Select Committee Meeting on Ghana’s Emissions Reduction Programme (ERP), 21st July. Report, 2016
71. Ghana Forestry Commission Service Charter, 2008
72. Operating Policy and Procedures of the Timber Validation Committee (TVC)
73. Procedures and Guidelines Manual for the Timber Validation Committee (TVC)
74. Timber Validation Committee (TVC) Complaint Form
75. Draft Terms of Reference for Development of National Fund Management Arrangements for Channeling and Management of REDD+ Funds. Ghana’s National REDD+ Secretariat, 2016
76. Draft Terms of Reference for consultancy services for the Development of an Information System/ Database for REDD+ activities in ER Programme Area. Ghana’s National REDD+ Secretariat, 2016
77. Draft Terms of Reference for consultancy services for the Analysis of Environmental and Social Impacts of the Emissions Reduction Program and the development of a REDD+ Social and Environmental Safeguards Information System (SIS), Ghana’s National REDD+ Secretariat, 2016
78. Annual Report of Ghana Forestry Commission
79. Ghana forest Investment Program Enhancing Natural Forest and Agroforest Landscapes Project. See <http://documents.worldbank.org/curated/en/229471468031741377/Ghana-Forest-Investment-Program-Enhancing-Natural-Forest-and-Agroforest-Landscapes-Project>

80. Sissala East and Kassena Nankana West District Assembly Community Resource Management Areas (CREMAs) Bye-Law, June 2016
81. Registering The Trees You Plant. Official form for registration of private plantations located outside of Forest Reserves. Ghana Forestry Commission
82. An Enterprise Map of Ghana. By John Sutton and Bennet Kpentey, International Growth Centre (IGC), 2012
83. Independent Evaluation of REDD+ Readiness at Mid-Term. By Peter Graham for the Ghana Forestry Commission, 2014
84. Ghana M&E Framework for the REDD+ R-PP process. Draft for Validation. By Ghana's National REDD+ Secretariat and Le Groupe-conseil baastellée, March 24, 2014