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PROJECT PERFORMANCE ASSESSMENT REPORT

GHANA

NATURAL RESOURCES AND ENVIRONMENTAL GOVERNANCE FIRST DEVELOPMENT POLICY OPERATION (IDA-44260)

SECOND NATURAL RESOURCES AND ENVIRONMENTAL GOVERNANCE DEVELOPMENT POLICY OPERATION (IDA-46270)

THIRD NATURAL RESOURCES AND ENVIRONMENTAL GOVERNANCE DEVELOPMENT POLICY OPERATION (IDA-47460)

June 30, 2014

IEG Public Sector Evaluation
Independent Evaluation Group

Currency Equivalents (annual averages)

Currency Unit = Ghana Cedi (GHS)

2008	US$1.00	GHS 0.92
2009	US$1.00	GHS 1.24
2010	US$1.00	GHS 1.41
2011	US$1.00	GHS 1.65
2014	US$1.00	GHS 2.50

Abbreviations and Acronyms

AFD	Agence Française de Développement
CSO	Civil Society Organization
DFID	Department for International Development
DPL	Development Policy Loan
DPO	Development Policy Operation
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
DPO	Development Policy Operation
EPA	Environmental Protection Agency
EU	European Union
FLEGT	Forest Law Enforcement Governance and Trade
ICR	Implementation Completion and Results Report
IEG	Independent Evaluation Group
NREG	Natural Resources and Environmental Governance
NGO	Non-Governmental Organization
PPAR	Project Performance Assessment Report
REDD	Reducing Emissions from Deforestation and Forest Degradation
SEA	Strategic Environmental Assessment
VPA	Voluntary Partnership Agreement

Fiscal Year

Government: January 1 – December 31

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Contents

This report was prepared by Stephen Hutton, who assessed the project in January 2014. The report was peer reviewed by Lauren Kelly and panel reviewed by George T. Keith Pitman. Marie Charles provided administrative support.

Tables

Figures

Principal Ratings

	ICR*	ICR Review*	PPAR
Outcome	Moderately Satisfactory	Moderately Satisfactory	Moderately Satisfactory
Risk to Development Outcome	Moderate	Moderate	Moderate
Bank Performance	Moderately Unsatisfactory	Moderately Unsatisfactory	Moderately Unsatisfactory
Borrower Performance	Moderately Satisfactory	Moderately Satisfactory	Moderately Satisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR. For this Development Policy Operation there was a single ICR at the end of the series of DPOs.

Key Staff Responsible

Project	Task Manager/Leader	Division Chief/ Sector Director	Country Director
Appraisal*	Jean-Christophe Carret	Marjorie-Anne Bromhead	Ishac Diwan
Completion*	John W. Fraser Stewart	Idah Pswarayi-Riddihough	Sergiy V. Kulyk (Acting)

* Appraisal indicates appraisal of the first project in the series; completion indicates completion of the third and final project in the series.

IEG Mission: Improving World Bank Group development results through excellence in evaluation.

About this Report

The Independent Evaluation Group assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank's self-evaluation process and to verify that the Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, IEG annually assesses 20-25 percent of the Bank's lending operations through field work. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons.

To prepare a Project Performance Assessment Report (PPAR), IEG staff examine project files and other documents, visit the borrowing country to discuss the operation with the government, and other in-country stakeholders, and interview Bank staff and other donor agency staff both at headquarters and in local offices as appropriate.

Each PPAR is subject to internal IEG peer review, Panel review, and management approval. Once cleared internally, the PPAR is commented on by the responsible Bank department. The PPAR is also sent to the borrower for review. IEG incorporates both Bank and borrower comments as appropriate, and the borrowers' comments are attached to the document that is sent to the Bank's Board of Executive Directors. After an assessment report has been sent to the Board, it is disclosed to the public.

About the IEG Rating System for Public Sector Evaluations

IEG's use of multiple evaluation methods offers both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. IEG evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (additional information is available on the IEG website: http://worldbank.org/ieg).

Outcome: The extent to which the operation's major relevant objectives were achieved, or are expected to be achieved, efficiently. The rating has three dimensions: relevance, efficacy, and efficiency. *Relevance* includes relevance of objectives and relevance of design. Relevance of objectives is the extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). Relevance of design is the extent to which the project's design is consistent with the stated objectives. *Efficacy* is the extent to which the project's objectives were achieved, or are expected to be achieved, taking into account their relative importance. *Efficiency* is the extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. The efficiency dimension generally is not applied to adjustment operations. *Possible ratings for Outcome:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Risk to Development Outcome: The risk, at the time of evaluation, that development outcomes (or expected outcomes) will not be maintained (or realized). *Possible ratings for Risk to Development Outcome:* High, Significant, Moderate, Negligible to Low, Not Evaluable.

Bank Performance: The extent to which services provided by the Bank ensured quality at entry of the operation and supported effective implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of supported activities after loan/credit closing, toward the achievement of development outcomes. The rating has two dimensions: quality at entry and quality of supervision. *Possible ratings for Bank Performance:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Borrower Performance: The extent to which the borrower (including the government and implementing agency or agencies) ensured quality of preparation and implementation, and complied with covenants and agreements, toward the achievement of development outcomes. The rating has two dimensions: government performance and implementing agency(ies) performance. *Possible ratings for Borrower Performance:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Preface

This is the Project Performance Assessment Report (PPAR) for the First, Second and Third Natural Resource and Environmental Governance Development Policy Operations in Ghana (IDA-44260, IDA-46270, IDA-47460). Together these represent a completed Programmatic Development Policy Operation series.

The first operation in the program was approved on June 3 2008, and closed on June 30 2009, disbursing SDR 12.5 million (US$20 million equivalent). The second operation was approved on June 30 2009 and closed on June 30 2010, disbursing SDR 6.8 billion (US$ 10 million equivalent). The third operation was approved on June 3 2010 and closed on June 30 2011, disbursing SDR 6.6 million (US$ 10 million equivalent).

The report presents findings based on a review of the project's Implementation Completion and Results Report, program documents, legal documents, and other relevant material. An IEG mission to Ghana in January 2014 held discussions with World Bank country office staff, government officials and agencies (at the central, regional and district level), development partners, civil society organizations and other project stakeholders (see Annex C). The mission included visits to Kakum National Park, to regional and district minerals commission, forestry commission and environmental protection agency offices in the Western Region, and to forestry and mining communities in the Western Region. Most discussions were held in Accra: non-government interviewees were selected based on recommendations from development agency staff and consultants and by internet searches, and so cannot necessarily be viewed as representative. Data presented in the evaluation was provided primarily from government sources; data were not quantitatively validated but were consistent with qualitative evidence from other stakeholders.

The three projects in the program represent a concerted effort with minimal changes over a three year period, so this review assesses the program as a whole without distinguishing between the individual operations, as it would not be meaningful to do so.

This program was selected for a PPAR for a number of reasons. The program was innovative, representing one of the first Development Policy Operations used to support environmental goals in the Africa Region, and was the first of these to complete the full intended programmatic series. The government's Natural Resource and Environmental Governance program continued beyond the end of the Bank's financing, financed by other development partners. This evaluation considers medium-term outcomes three years after the formal closure of the Bank-financed operation to gain a greater understanding of the program achievements. The PPAR is also designed to offer a case study to feed into a forthcoming IEG Learning Product on Development Policy Operations with environmental goals.

The contributions of all stakeholders, including World Bank staff in Washington DC and Accra, are gratefully acknowledged. Following standard IEG procedures, copies of the draft PPAR were shared with relevant Government officials and agencies for their review and comment, but no comments were received.

Summary

Ghana's growth is heavily reliant on natural resources, many of which have suffered from significant resource degradation, particularly in the forest sector. Resource degradation had occurred because of a history of poor governance and management of natural resources, weak environmental protection, and limited community involvement. The World Bank had been involved in previous efforts attempting to improve natural resource management in Ghana in the late 1990s and early 2000s, but these efforts were not successful and the World Bank withdrew from the sector. One reason for the poor performance of investment projects was the number of policy barriers, and so the Bank with other development partners decided to re-engage in the sector with a Development Policy Operation – the Natural Resources and Environmental Governance Program (NREG). The Operation represented an innovative effort to bring a new approach to a set of challenging subsectors and to do so in a harmonized manner with other major development partners.

The Program Development Objectives of the $40 million programmatic series were to *a) Ensure predictable and sustainable financing for the forest and wildlife sectors and effective forest law enforcement; b) improve mining sector revenue collection, management, and transparency; c) address social issues in forest and mining communities, and d) mainstream environment into economic growth.* While relevant to the broad goals of the Country Assistant Strategy and the Government's goals for the program, the objectives focused on inputs, outputs, and intermediate outcomes, which reduced their relevance. Setting achievable objectives that were sufficiently relevant was a difficult challenge given the envisioned three-year duration of the program length.

The program supported efforts to improve environmental and natural resource management under three Policy Areas: Forest and Wildlife, Mining, and Environmental Protection. Major elements included increased revenue collection from forestry royalties, creation of a system for tracking the legal origin of timber consignments, benefit sharing schemes with land users and investors, a mining revenue task force, mine audits, mining regulatory reform, more collaborative forest management, a social conflict tracking tool, increased use of environmental impact assessment and strategic environmental assessment tools, and development of a climate change strategy. Though program documents did not always identify a clear theory of change, the elements of the program contributed towards the program objectives. However, the design was not always sufficient to achieve the objectives: the design did little to address informal forestry and mining, it did not address land tenure issues that were a barrier to private sector investment in forestry, and it was not clear how program activities would reduce social conflict.

The operation was largely implemented as designed and prior actions and triggers were completed (with one exception that was dropped). A critical issue in management of funds was the decision to keep funds in a ring-fenced account, and earmark them specifically to the implementing agencies. This decision was made by the government, but arguably with the tacit support of the Bank and other development partners. The decision had three significant negative consequences. It acted to insert the Bank and

other development partners into the relationship between government and agencies, and led agencies to hold development partners responsible for providing sustained financing rather than the government. It undermined the ability of the operation to contribute to a mature budget dialog between the finance ministry and line ministries. And it encouraged the government to effectively delegate responsibility for carrying out the program to the implementing agencies.

Progress was made in a number of areas. Policy changes and internal investments increased revenue collection by the Forest Commission. Forestry policies and plans were revised, but competitive bidding for timber permits has stalled, and private investment in plantations has been less than was hoped. Planned increases in forestry royalty rates were blocked by the forestry industry. Significant progress has been made on a wood tracking system, but it has not yet been completed and no export licenses have been issued. Informal forestry remains a significant problem and strategies for managing it remain at the pilot stage. Though overall forest cover is increasing, forest degradation continues.

Changes to mineral royalties increased the revenue generated from the mining sector, though increasing production and rising gold prices were also major causes. A commitment to transparency for large mining company revenues through the Extractive Industries Transparency Initiative existed prior to the program, but incremental progress was made in expanding transparency. Little support was provided to small-scale miners, as planned mining cooperatives on new sites were not established.

There were significant improvements in relationships between government and civil society on natural resource management. Consultation and collaboration with forest communities was increased, and royalty payments to traditional authorities and district assemblies were published. A social conflict tracking tool and guidelines on social responsibility for large mining companies were established. But monitoring and evaluation systems did not track social conflict, and a planned social assessment was not carried out, so it is difficult to assess whether social conflict has declined.

Incremental improvements were made to the environmental impact assessment process. Strategic environmental assessments were carried out in a number of sectors and these have fed into policy development in some cases. A national climate change strategy was established and climate change was required to be considered in key national and local level policies. But capacity limitations mean the ability of these policies to have an impact is unclear. A self-reporting rating system for the environmental impacts of companies was expanded, and provides evidence that environmental damage from some companies has declined. The overall Outcome is rated *Moderately Satisfactory*.

Commitment to policies from implementing agencies is high, but government prioritization of the environment and natural resource management has declined. Revenues from forestry may decline unless forest degradation is reversed, and mining revenues remain highly dependent on gold prices. The ability of agencies to implement policies is unclear, as agencies were highly reliant on donor funding, and most development partners have not decided to continue to provide budget support to the sector. The Risk to Development Outcome is rated *Moderate*.

The choice of a Development Policy Loan instrument was justified, but there were a number of problems with the way it was implemented, caused in particular by the earmarking of funds, and the decision to use single year operations within the series. The operation had no clear exit strategy for what would occur once budget support ended. The decision to harmonize budget support with other development partners was positive, but harmonization was incomplete and partially broke down during implementation. The Bank's supervision consisted primarily of assessment of targets and triggers at the expense of ongoing policy and technical advice. Bank Performance is rated *Moderately Unsatisfactory*.

Initial high government commitment waned over time. The government decision to earmark funds undermined the use of the development policy operation instrument. Changes in government and elections led to some delays but did not disrupt the overall program. Implementing agencies were highly committed to the program, and improved their cooperation and coordination. Borrower performance is rated *Moderately Satisfactory*.

Monitoring and evaluation systems were weak, focusing largely on recording production of outputs rather than on assessing progress on outcomes. Many indicators were vague, and baselines were weak. The system was improved during implementation but the core problems remained. There is no evidence of substantive M&E utilization. Quality of Monitoring and Evaluation is rated *Modest*.

The experience of NREG offers a number of useful lessons about using development policy operations for sectoral interventions, about donor harmonization, and about natural resource management. These include:

- Earmarking funds to specific agencies can undermine the rationale of a development policy operation by inserting the Bank into the relationship between the finance ministry and the line ministries and their agencies. When agencies are heavily reliant on donor budget support, then there are risks to sustainability if there is no long-term plan for addressing what will happen at the end of the program.

- There is a risk that in sectoral development policy operations with one-year operational cycles, policy and technical advice to the client can be crowded out by processing requirements.

- Sectoral development policy operations may need complementary technical assistance and support.

- Donor harmonization has tradeoffs: it can help to provide a unified platform for sector reform, but can reduce the flexibility of programs, and differences in rules and expectations across agencies pose significant challenges.

Caroline Heider
Director-General
Evaluation

1. Background and Context

1.1 At the time of program preparation, Ghana's economy was growing rapidly (with average growth rates of 6 percent) and was making significant progress on poverty reduction. But the economy and livelihoods were heavily reliant on natural resources, many of which were suffering severe resource degradation. World Bank analysis conducted over 2005-2006 suggested that the equivalent of 10 percent of GDP was lost annually through unsustainable management of the country's forests, land resources, wildlife, and fisheries, and through health costs related to water supply and sanitation, and indoor and outdoor air pollution (World Bank 2006). The analysis indicated that after taking population growth and resource depletion rate into account, the per capita savings rate was negative. Forest cover had declined by 26 percent over 1990-2005 (World Bank 2008).

1.2 Resource degradation had occurred because of a history of poor governance and management of natural resources, weak environmental protection, and limited community involvement. The sustainability of natural resource sectors were put at risk by the absence of effective governance and regulatory institutions, weak mechanisms for citizen's voice, and indecisive leadership on natural resources and the environment (World Bank 2008). In the forest sector, resource degradation in turn further exacerbated institutional weaknesses, as the key management agency was heavily reliant on internally generated funds coming from forestry operations, which declined as production and income in the forestry sector dropped as high value species became scarce. Extreme poverty, especially in rural areas, contributed to informal resource extraction operations which sometimes inflicted serious environmental damage and harmed resources. While exported timber was generally from legal sources and from industrial mills, the vast majority of domestic timber came from illegal chainsaw processing, which had low conversion efficiency and so wasted timber. Banning chainsaw logging effectively criminalized the majority of timber workers, and allegedly contributed to widespread bribery.

1.3 The mining sector represented a major part of Ghana's economy, providing roughly 5 percent of GDP, 12 percent of government revenue, and 37 percent of exports, primarily from large scale gold mining by international companies. But existing calculation systems for royalties and a lack of capacity for collection meant that government believed that Ghana was not receiving as much benefit from the sector as it could be in terms of revenue capture. The mining sector was also a cause of significant social conflict and of environmental damage, especially from widespread illegal mining.

1.4 The Bank had been previously engaged in the natural resource sector through investment projects, notably the 1998-2003 Natural Resources Management Project. But this had been seen as unsuccessful for a number of reasons. Slow and uneven progress on policy reform did not translate into sustainable management practices because of overlapping responsibilities, distorted incentive structures, lack of transparency, poor governance, and the declining importance of 'nonproductive' environmental concerns to government (IEG 2008). Following this, the Bank had largely withdrawn from natural resource sectors in Ghana.

1.5 The Bank believed that an unfavorable policy and incentive environment had been a key barrier to previous operations, and so it considered re-engaging in the sector through a Development Policy Operation (DPO) instrument to focus on policy reform. Initially the Bank had considered including a forestry prior action in the general macroeconomic Poverty Reduction Support Grant series, but environmental experts argued that it would be hard to have much impact from a single prior action in a larger DPO, and that instead a sectoral DPO might be able to accomplish more things.

1.6 The Bank's analytical work on quantifying the costs of environmental degradation helped to galvanize attention of policymakers in the finance ministry, and the Minister decided that addressing these issues was a high priority and was receptive to the idea of sectoral budget support. Other development agencies were already considering budget support on natural resource management sectors. Following the 2005 Paris Declaration on Aid Effectiveness, agencies aimed to increase country ownership of programs, and alignment and harmonization of donors, which made joint budget-support an appealing option. The Bank decided to combine its support with that of other development partners. Bank staff reported that initially the available Bank financing being considered was relatively small, which meant that the Bank had an initially modest role in the design of the program, though the financing proposed by the Bank was subsequently increased to provide about half of total financing for the program's first three years. They also argued that the Bank had an important convening role, as other agencies were more willing to support a program that the Bank was also financing.

1.7 The sector-wide intervention was a new approach for the Bank and other donors. This was one of the earliest Environment Sector DPOs in the Africa Region, following early progress in Latin America and DPOs designed in Cameroon and Gabon. This meant that there was little prior experience to build on, and so the instrument and design was something of an experiment for the agencies involved.

1.8 The DPO series, with a planned total IDA resource envelope of US$60 million over three tranches, was composed of annual Credits supporting a medium-term reform program that underpins the Government of Ghana's implementation of its Natural Resources and Environmental Governance Program during its first three years.

2. Objectives, Design, and their Relevance

Objectives

2.1 No statement of objectives was made in the Financing Agreement for the program.

2.2 The objectives of the World Bank's programmatic series of development policy operations as listed in the original 2008 Program Document (page 8) were to:

a) Ensure predictable and sustainable financing for the forest and wildlife sectors and effective forest law enforcement;

b) improve mining sector revenue collection, management, and transparency;

c) address social issues in forest and mining communities; and

d) mainstream environment into economic growth through Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA), and development of a climate change strategy.

2.3 These objectives were identical to those restated in the 2009 and 2010 Program Documents (page 1 in both documents). There were changes in PDO indicators during the preparation of the second project, but no change in the overall program objectives.

2.4 The 2008 Program Document also noted "*The specific development objectives of the program are to enact reform measures conducive to (a) improving management of government revenues and finances in the forestry and mining sectors; (b) securing livelihoods in these sectors; and (c) simultaneously improving environmental protection in these sectors and in the other sectors supporting growth in Ghana.*" (page 27) This language does not appear in the 2009 or 2010 program documents, and these documents do not include statements of objectives other than the program objective described above.

2.5 The financing agreements do not contain a clear statement of objectives, though they contain hints at broader objectives:
"Program" means the Recipient's program of actions, objectives and policies designed to promote sustainable growth and poverty reduction through improved natural resource management and environmental governance.[1]

2.6 The Letter of Development Policy from the Government of Ghana notes that "the objective of the Natural Resources and Environment Governance Program (NREG) is to address governance issues as regards natural resources and environment with the overall objective of ensuring sustainable economic growth, poverty alleviation, increasing revenues and improving environmental protection. Specifically, the programme will: 1. Increase government revenues in the forestry and mining sectors; 2. Reduce illegal logging; 3. Reduce social conflict in the mining sector and; 4. Reduce risks associated with climate change." (Program document, page 82). The first part of this (governance, sustainable economic growth, poverty alleviation, increased revenues, and improved environmental protection) constitutes the overarching program objectives.

2.7 This project performance assessment evaluates against the first set of objectives above (para. 2.2), following IEG policy which selects objectives from the financing agreement or if this is absent, from the statement of objectives in the Program Document.

2.8 The three Bank operations in the DPO series represent a concerted effort across policy areas with minimal changes over a three year period, so this review assesses the DPO series as a whole without distinguishing between the individual operations, as it would not be meaningful to do so.

[1] Financing Agreement 2008 page 9, Financing Agreement 2009 page 9, Financing Agreement 2010 page 9.

Relevance of Objectives

2.9 Forestry, wildlife and mining are key sectors in the Ghanaian economy, accounting at appraisal for 15 percent of GDP, 25 percent of government revenues, 60 percent of foreign exchange, significant employment[2], and sustenance and income for up to 2.5 million people in forested areas. The absence of sustainable forestry practices and management has contributed to resource depletion, with 50 percent of the original forest cover having been converted to agriculture (including a 26 percent reduction in forest cover over 1990-2006), serious declines in forest product production and biodiversity due in part to over-extraction, and a lack of government capture of revenues from forestry and mining. Forest rents not collected by the government were estimated at US$10 million to US$45 million per year. Environmental degradation has had an impact on health, quality of life, and productivity, primarily through air and water pollution.

2.10 The broad objectives of improving natural resource management and environmental governance were relevant and remained relevant to the FY08-11 Country Assistance Strategy (CAS) for Ghana. Managing natural resources in a sustainable and transparent way was a strategic priority in the strategy's pillar on Private Sector Competitiveness, which specifically identified the need to build the capacity of regulatory agencies, to regularize informal sectors, to improve budget formulation and execution as well as public financial management, to strengthen oversight capacity, and to enhance coordination mechanisms among regulatory agencies. The CAS identified sustainable natural resource management as critical to long-term growth, and identifies specific environmental problems, noting that forestry and wildlife depletion are costing Ghana 4 percent of annual GDP and water and air pollution a further 4 percent.

2.11 The Country Assistance Strategy also emphasized fisheries and sound environmental management of the oil and gas sectors, but the DPO elected not to cover these sectors as there were concerns that this would make the program too complex. There was widespread support in Ghana for the decision not to bring in the oil and gas sector, as this would have added a fourth ministry and additional agencies, and that the importance of oil and gas could have crowded out attention to forestry that had been a major motivation of the program. The fisheries sector was not included in the program or objectives, but was supported under a separate Bank-financed Agriculture Development Policy Loan (DPL) series. There were some disadvantages to bundling fisheries with agriculture rather than natural resource management, as the Agriculture DPL focused primarily on increasing production rather than resource conservation.[3]

2.12 However, the specific objectives used in the DPO series were inputs, outputs or at most intermediate outcomes, rather than the final outcomes emphasized by the government in

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[2] At appraisal, employment in natural resource sectors included 120,000 in the formal forestry sector, an estimated 50,000 in the informal chainsaw industry, 15,000 in the large-scale and medium-scale mining sector, and up to 500,000 in small-scale mining.

[3] The 2008-11 Agriculture DPL (P102675) did have a sustainable management sub-objective, but this focused on land management. The only fisheries indicator in the Agriculture DPL was on increasing internally generated funds for the fisheries agency. But the Agriculture DPL did include some resource governance aspects for fisheries, such as a licensing cap for the industrial fishing fleet.

the CAS or in the Letter of Development Policy, which reduced their relevance. The specific objectives might plausibly lead to the desired final outcomes but were not always sufficient to achieve those objectives. Some objectives were vague and difficult to evaluate. Some important sectoral issues were not addressed in the specific objectives and consequently in the program design.

2.13 Increased financing for the forest sector does not necessarily improve forest management and does not by itself constitute major progress in shifting to socially and environmentally sustainable forestry. "Effective forest law enforcement" was difficult to interpret and evaluate against, and it was unclear if an enforcement-oriented approach would be sufficient to address the unsustainable extraction rates that were driving resource degradation or to reduce illegal logging. As noted in the Bank's ICR (World Bank 2011, page 19) the forestry objectives did not clearly grapple with the informal forestry sector.

2.14 Improving mining sector revenue collection, management and transparency were relevant objectives for the government's strategies. However, they were focused on the large-scale mining sector rather than small-scale mining or illegal mining.

2.15 The program deserves credit for formally placing social conflict at the center of the program by including this in the specific objectives. However, the specific wording ("address social issues in forest and mining communities") was vague and difficult to evaluate.

2.16 The environmental objective could have been phrased more clearly; the intent was to mainstream environmental concerns into economic growth and development strategies and policies, rather than that the environment sector would directly support economic growth. Mainstreaming environmental issues into policies constituted a feasible short-term objective, though it may not have been sufficient to actually reduce environmental damage or improve environmental health. Developing a climate change strategy by itself constitutes only the very first step in a results chain that would help to mitigate and adapt to climate change.

2.17 After deciding to support a programmatic DPO series of only 3 years, the Bank team faced a difficult balancing act in selecting objectives. Ambitious objectives that addressed the key challenges in natural resource sectors could be difficult to fulfill in such a brief period, especially as some important policies would not be introduced until the third year and others introduced earlier would require more than a year or two to mature and gain acceptance. Evaluators examining the DPO series after closure might then complain that there was insufficient evidence to demonstrate achievement of those more ambitious objectives and assign low ratings to program efficacy. The Program Document explicitly noted that the preceding Natural Resource Management Project objectives were seen as too ambitious, and that the program should focus on realistic short-medium term objectives within the capacity of agencies (World Bank 2008, page 46). Instead the project appraisal decided to use intermediate objectives and desired outputs only and to design the monitoring and evaluation system around those objectives. Consequently, the Bank, development partners, and implementing agencies did not collect meaningful data on the relevant longer term objectives of the government's program they were supporting. As a result the development partners struggled to assess the extent to which the program was addressing the overarching sectoral goals.[4] The difficulty in assessing changes in key outcomes was one factor in the decisions made by development partners on whether or not to continue with budget support in the sector.

2.18 During preparation, the Bank team considered more ambitious objectives and indicators: early mission aides memoires identified for example that "the environment sector … needs to be strengthened to effectively control pollution and to reduce the long-term health effects due to environmental degradation", and proposed that "the ultimate or overarching goal of the program will be to reduce resource depletion and environment degradation as low as 3.5 percent of GDP in order to maintain quality of growth and help natural resource dependent communities move out of poverty traps". But these were not used in the DPO's specific program development objectives. Desirable outcome-oriented objectives consistent with the CAS might have included reducing deforestation rates, reducing illegal logging rates, reducing the environmental and health impacts of mining, increasing the share of forestry revenues going to forest communities, reducing poverty or social conflict in forestry and mining communities, reducing air and water pollution, or increasing resilience to climate change.[5]

The Relevance of Objectives is rated *Modest*.

Design

POLICY AREAS

2.19 The DPO program supported policy and institutional reforms in three natural resources subsectors::

1) Forest and Wildlife: The program would support:

- Reviewing, drafting, consulting on, and implement new forestry and wildlife laws and regulations;
- enforcing forestry laws and supporting systems to verify the legality of exported and domestic timber through a voluntary partnership agreement with the European Union to curb illegal logging;
- development of a financial framework that guarantees budgetary allocations and predictable and sustainable financing of the forest sector to enable the forestry commission to regulate and manage the forest sector;

[4] For example, while a study to assess the proportion of domestic timber coming from the informal forestry sector was conducted at appraisal, this was not monitored and assessed over time, making it difficult to judge the effects of forest law enforcement efforts.

[5] By comparison, the preceding Natural Resource Management Project in Ghana had objectives to "protect, rehabilitate and sustainably manage national land, forest and wildlife resources and to sustainably increase the income of rural communities who own these resources".

- review and implement benefit sharing schemes in forest districts and improve collaborative forest management to ensure equitable socio-economic benefits from forest resource management;

- encouraging value-added processing and establishing land lease and benefit sharing agreements with investors to enable sustainable finance of investment in the forestry sector;

- establishing integrated management plans for forest reserves and demarcating protected areas to reduce degradation of natural ecosystems and reduce wildfires;

- building capacity for improved information management and M&E capability of the sector.

2) Mining: The program would support:

- Increasing the availability of mining sector information and building improved information management and M&E capacity in agencies;

- human resources development in mining sector agencies;

- conducting stakeholder consultation and improvements to mine closure and post-closure process policy and making the distribution of mining revenues in communities more equitable to address social conflict in mining communities;

- conducting minerals exploration and establishment of mining cooperatives to improve support for small-scale mining;

- establishing and implementing a multi-agency mining revenue task force and auditing mines, to improve mining sector revenue collection, management and transparency;

- revising mining sector regulations to enhance the regulatory framework and coordination among mining sector agencies;

- registration of small-scale diamond miners to enhance regional and international cooperation.

3) Environmental protection: The program would support:

- Creation of an inter-ministerial environment forum, capacity building on environmental analysis, drafting a sustainable development action plan, development of a climate change strategy, and creation and implementation of a sustainable land management roadmap, to improve cross-sectoral environmental management;

- application of strategic environmental assessment in sectoral and district policies;

- decentralization, new sector guidelines, and capacity building in the environmental protection agency to improve environmental impact assessment processes;

- establishment of district level environmental plans to decentralize environmental management;
- increase budget allocations and implement a system of levies and fees to secure funding for the environmental protection agency;
- conduct strategic planning for the environmental protection agency;
- improve environmental monitoring and dissemination of environmental data;
- stakeholder consultations and CSO training to strengthen partnerships and participation in environmental management.

IMPLEMENTATION ARRANGEMENTS AND PROGRAM FINANCING

2.20 The program was to provide general budget support to the Government of Ghana, with primary implementation by the Ministry of Lands and Natural Resources through the Forestry Commission and Minerals Commission, and by the Ministry of Local Government, Rural Development and Environment through the Environmental Protection agency. The Ministry of Finance and Economic Planning was to provide overall coordination and supervision. However, in practice the program functioned more like an investment lending project, as funds were specifically earmarked for the key implementing agencies.

2.21 The Bank provided financing of US$20 million for the first project, and US$10 million each for the second and third, for total financing of US$40 million. These Credits were fully disbursed, so actual expenditures were also US$40 million. Parallel financing was also provided by the other development partners: the Netherlands Embassy committed Euro 7 million per year over 5 years for a total of Euro 35 million, the European Commission provided Euro 4 million in 2010, Euro 4 million in 2010, and committed Euro 7 million for 2013 and 2014. The United Kingdom's Department for International Development (DFID) provided GBP 4.5 million in 2009 and GBP 2 million in 2010. Agence Française de Développement (AFD) committed Euro 1 million per year for each of 5 years.[6] The European Commission and AFD have continued providing support in 2013-14 and NREG is still active under this support.

MONITORING AND EVALUATION DESIGN

2.22 A joint M&E system was established across all development partners to track progress. But there were a number of weaknesses in the design of this system and the program framework. The framework would have benefited from a clearer distinction between program triggers (outputs with formal verification used for processing subsequent operations) and outcome indicators (used to track achievements of the program). As it was, there were too many indicators (roughly 60 targets were identified in the matrix, on which progress was to be reported on each year) and these focused too much on recording completion of outputs rather than tracking intermediate or final outcomes. The program

[6] Data on development partner financing is drawn from Van der Linde 2012. More recent data was not available.

indicators selected did not always focus on the key results. The Bank's ICR notes (page 16) that an overly extensive program framework was substituted for under-developed sector planning systems. It almost appears that the Bank and development partners were reluctant to fully embrace the more hands-off development policy operation approach, preferring to use the performance assessment framework to manage production of outputs, as is often done in supervision of traditional investment lending projects.

2.23 The Bank team was aware of some of the risks in M&E design. An Aide Memoire during preparation noted that the policy matrix should be "lean and mean, focused on key issues (not everything being done has to be in the matrix)" but the final matrix agreed upon by all development partners did not follow this guidance, which seemed to try to use the assessment matrix to fully describe the outputs of the program. In design discussions there were plans to include cross-sectoral elements in the matrix beyond the control of any agency, noting that there would be joint responsibility at the government level. But the matrix in the final version instead created separate matrices for each of the three sectors.

2.24 There was insufficient clarity about targets, data, and sources of information. Baselines were often missing or vague ("high level of illegal logging", "low levels of benefits to communities", "low private sector investment", etc.). Many targets were qualitative and difficult to assess ("appropriate institutional setup in place and implemented") or represented intermediate progress ("continue reviewing existing benefit sharing schemes").

2.25 Government agencies each developed their own internal M&E systems, but these were not coordinated or combined at the program level.

Relevance of Design

2.26 The program design outlined in the program document did not always describe a clear theory of change as to how planned activities were likely to address desired long-term sectoral outcomes. Much of the emphasis in the design section of the program framework document was on making clear the need for action and describing the hoped for intermediate outcomes rather than explaining how the proposed activities would lead to those outcomes or to final outcomes.[7]

2.27 The policy areas supported under the program would contribute towards the specific program objectives, though in some cases they may not have been sufficient to achieve them. A financial framework for the forestry commission would contribute to ensuring predictable and sustainable financing for the forestry and wildlife sectors in the short-term – though it is not clear that it would support medium or long-term sustainable financing for the sector, which would be reliant on sustainable forest management and a reversal of forest degradation. New forest laws and regulations could contribute to effective forest law enforcement – though they would struggle to have much impact without addressing the main

[7] For example: How would improved financing for the forestry sector reverse resource degradation – through plantations? How would mining transparency improve resource governance? How would social issues in mining communities be resolved, especially beyond communities near large-scale mines? How would mainstreaming environmental issues into policy lead to improved environmental outcomes? It is not that no linkage exists but rather that the links were not filled out.

drivers of informal forestry. The Voluntary Partnership Agreement[8] on forestry certification would help to support the formal timber sector and exports to Europe, and was intended to leverage the fact that the forestry industry cares about export markets to have an avenue into governance and reform. Benefit sharing arrangements could contribute to some increases in investment. A mining revenue task force and audits of large mines could improve mining sector revenue, and improved information availability and mining agency capacity could improve mining management and transparency. Improved stakeholder consultation and transparency could potentially help to address social issues in forest and mining communities. Strategic planning and secure funding for the environmental protection agency, and application of strategic environmental assessments and environmental impact assessments could help to mainstream environmental issues into key development and economic policies. Much of the program design followed from recommendations from the Country Environmental Analysis report (World Bank 2006).

2.28 However, the design was not sufficient to achieve the broader environmental and natural resource management problems identified in the Country Assistance Strategy and the Program Document. The design did little to engage with the informal chainsaw forestry sector which contributes significantly to deforestation and provides timber for domestic supply (a strategy for regularizing the informal forestry sector was designed and piloted only during the program). It did not address land tenure or build a governance process for the land sector, despite lack of clarity in land and cutting rights being an important contributor to illegal forestry and a major barrier to the private sector plantation investment needed to combat resource depletion.[9] It included relatively little to engage with small-scale mining, which has serious environmental and health consequences, other than some expansion of the sector through surveys. Many of these issues were not covered by the program's objectives precluding their incorporation into the project design. But the design included little direct engagement with addressing social issues in forest communities. The activities on forestry communities were aimed at informing forest communities of forest royalties rather than reducing poverty or increasing incomes from forests, and it was not clear how these activities would reduce social conflict.

2.29 The specific prior actions and triggers stipulated in the DPO included some of the most important elements of the program, such as signing the Voluntary Partnership Agreement, implementing the financial framework for the forestry commission, implementing mining revenue task force action plan, and carrying out strategic environmental assessments of key sectors. However, some triggers were written in a way that allowed for subjective interpretation as to achievement[10], which added tension to the monitoring and verification process. Some major elements of the program (such as

[8] The Voluntary Partnership Agreement is a trade agreement between the Government of Ghana and the European Union, where both sides agree that only timber certified as from legal sources as defined by the Government of Ghana could be legally exported to European Union countries.

[9] There was parallel World Bank support for land administration through a Land Administration Project (for which there is a separate IEG evaluation - IEG 2013a), but some government officials argued that this reform effort had failed to address governance issues or to give farmers sufficient incentives to care for resources.

[10] For example: “make satisfactory progress on negotiations…”, “prepared and issued satisfactory guidelines on social responsibility for mining activities”.

expanding use of Environmental Impact Assessment) were not covered by the prior actions or triggers. And many triggers required preparation of a draft, or proposal for document, or strategy without requiring approval or adoption. The triggers were largely designed as elements that could be achieved by the implementing agencies, rather than actions that required higher level government involvement. Some of the detailed workings of the program were not fully fleshed out in preparation, leaving strategies to be developed within the operation.

2.30 There were synergies in bringing natural resource sectors together under a single program. This helped to encourage a whole-of-government attention to resource management and governance as a significant theme. And it helped to encourage cooperation between agencies on cross-sectoral issues (such as the environmental impacts of mining[11]). The transaction costs of trying to run separate projects in forestry/mining/environment sectors would have been high, and such a design would have struggled to improve inter-sectoral linkages. Some government officials argued that the program could have been usefully expanded further to bring in additional agencies (the Water Commission, the Ministry of Food and Agriculture (which includes fisheries) and the Ministry of Local Government), but others argued that these agencies do not have natural resource management mandates and would have make the program unwieldy.

2.31 There were advantages from harmonizing development partners, uniting the efforts and funding into a single vehicle, raising the profile of resource management issues and reducing duplication across donors. Most development partners were not used to doing multisectoral projects, and so this represented a significant innovation in practice.

2.32 The decision by the Bank to commit to only three years of support weakened the ability of the program to achieve progress on long-term sectoral investments. Bank Aide-Memoires from preparation noted that three years might not be sufficient to address long-term sectoral objectives, and proposed a longer engagement[12], but this was not adopted.

Overall, the Relevance of Design is rated *Modest*.

3. Implementation

Implementation Experience

3.1 The three Bank operations were carried out as planned. Harmonized policy engagement was carried out through a donors' sector group made up of the development partners. Triggers were fully or partially achieved, and disbursements were made on time. Policy areas and objectives were not changed between projects, but the Performance

[11] The mining sector has serious environmental impacts, including vegetation removal, land degradation, ecosystem disruption, air/noise/vibration pollution from blasting and other operations, water contamination from tailings and chemicals, mercury pollution and poisoning from gold mining, and cyanide pollution and poisoning from illegal gold mining.

[12] "Institutional reforms take time, and some results do not materialize very quickly. Therefore, it is proposed that development partners supporting the NREG program commit to provide funding for a period of 5 years."

Assessment Framework was updated, with the number of policy objectives and targets reduced. During implementation, a decision was made to drop preparation of a national climate change adaptation strategy in favor of a comprehensive national climate change framework to be prepared separately. All other triggers were formally achieved (see Annex A2). The third Bank financed project closed in June 2011, but the program continued with support from other development partners.

3.2 Differences in expectations about the total program level of financing led to a strained relationship between the Bank and implementing agencies early in the program. The approved amount of financing totaled US$40 million - US$20 million in the first year and then US$10 million in each of the second and third years. The implementing agencies argued they had been led to believe that total financing would be US$60 million - US$20 million in each of the 3 projects – and felt disappointed by the final amounts. The Bank's ICR argues that the prospect of US$60 million in financing had been raised only when oil and gas sectors were being considered to be included in the program, and that the overall level of financing was reduced to US$40 million when the decision was made not to include oil and gas in the final program design. However, the Bank's Project Information Documents from December 2007 and March 2008 both tentatively proposed financing of "US$20 million for the first year and approximately the same amount for each of the two subsequent years". The project design in these documents largely mirrored that of the final project, with no significant policy areas on oil and gas.[13] Tensions around these different expectations affected the relationship between the Bank and the implementing agencies, but it is unclear to what extent they affected the policy dialog or program implementation.

3.3 By 2011 donor management of NREG had become complex and somewhat contested. Multiple changes in staffing had occurred in the makeup of the donor sector group, and new donor staff implemented a number of changes in the method by which government agency progress was to be assessed. These changes were introduced without much government involvement or formal discussions, which led to confusion on the government side.

IMPLEMENTATION OF MONITORING AND EVALUATION

3.4 Progress on the targets in the Program Assessment Framework was collected by agencies, and shared with development partners during supervision missions and as part of preparation of subsequent projects in the programmatic series. However, the M&E system design meant that engagement between the development partners and government agencies sometimes devolved into unproductive conflict over the acceptable level of quality of reports for particular triggers and targets, and a defensive attitude on behalf of government agencies, detracting from policy and technical dialog. Data that was available internally within government agencies was not always available or accessible to development partners or evaluation teams.

3.5 Development partners attempted to provide support on M&E, and brought in mix of local and international consultants. But this was largely unsuccessful, as the process was

[13] The two Project Information Documents discussed separate support for oil and gas, noting that "In addition, given its importance to natural resources governance, co-financing for initial capacity building and technical assistance activities in the emerging oil sector through a parallel PHRD technical assistance grant may be pursued."

seen by the government and agencies as policing them rather than a constructive engagement to help the project.

3.6 During preparation of the second DPO, the number of policy objectives was reduced from 24 to 16 and the number of targets was reduced from 43 to 35. Efforts were made to tighten indicators to make them more precise and measurable, but despite this the indicators still focused on production of outputs and provided weak evidence on which to assess the program's outcomes and impacts. The results chain by which the project would achieve outcomes was not always clear, and so there were difficulties in attributing changes in outcomes to the program. The multi-donor approach hindered the ability to revise the results framework.

3.7 The original program design had envisioned that civil society groups would have a role in monitoring and evaluation[14]; however, this did not occur. In principle it could have been useful for the government or a designated third party to be responsible for tracking production of detailed program outputs, leaving the development partners only responsible for focusing on the formal disbursement conditions.[15]

3.8 Because of the government's and development partners' focus on a 5 year program rather than 3 years, there was no systematic attempt to report against indicators after the Bank program closed, and so the Bank's ICR was not able to provide significant evidence on achievement of outcomes. A thorough evaluation was commissioned by the Netherlands Embassy and produced in 2013; it noted that M&E had been a weak element of the NREG program (Syzygy 2013).

Environmental and Social Impacts

3.9 Most impacts of the program were likely to have positive environmental and social effects, through improvements to natural resource managements and reductions in negative environmental externalities. However, some negative impacts from the program were possible.

3.10 The Program Document noted a range of environmental and social risks. These included environmental risks from greater investment in forestry or mining, and risks that a technical focus on environment that neglects capacity to deliver on social and environmental realities at local level. It noted three major categories of social risks: elites and interest groups may block reforms, vulnerable groups particularly in informal sectors could be negatively affected, and social accountability could remain a one-way information flow from government informing civil society and communities rather than a partnership. The program attempted to address these risks through its core design. Additional risks and strategies for managing them were to be covered by a planned poverty and social assessment.

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[14] For example, the Letter of Development Policy notes that "It also expected that during the implementation phase of the program civil society will play a vital role in monitoring and evaluating independently the plans and budgets of the sectors outlined in their policy matrices."

[15] The program could have benefited from an approach like that used in the Punjab Irrigation Sector Development Policy Loan in Pakistan, where a strategic planning unit was established to conduct oversight of the four pillars, with third-party validation of outputs.

3.11 There is little evidence that these risks were followed up during supervision. The planned social assessment of the program to be conducted by DFID was not carried out. At completion, the Bank's ICR did not explicitly consider negative environmental or social impacts, but did follow up some of these risks, noting that some reforms were in fact blocked by lobby groups, and that community outreach had been significant and meaningful. However, no ex-post assessment of the program on vulnerable groups was conducted.

3.12 IEG was not able to collect much information on impacts, but identified some possible impacts largely related to enforcement activities. Settlers were evicted from national parks by the Forest Commission, receiving some compensation for crops and buildings left behind. Illegal farm encroachments in forest reserves were destroyed and farmers may be prosecuted. Efforts to combat illegal forestry and mining displaced many workers from these livelihoods, and alternative livelihood activities under the program were of modest scale.

3.13 Mining has a number of negative environmental and social impacts: there are negative environmental consequences from large-scale and small-scale mining, both legal and illegal. The worst effects are from illegal mining, which use more dangerous chemicals, undertake no remediation activities, and mine in river beds (and so pollute water supplies). Farmers are displaced by legal mining: traditional authorities own the land, but government owns the mineral rights and can allocate those to mining companies, requiring farmers to be resettled. But these effects all existed prior to the program; there is no clear way that program makes them worse, and some activities supported by the program may have improved outcomes (such as by improving corporate social responsibility of large mining companies).

3.14 Forestry enforcement activities have been very dangerous for forestry worker staff. The Netherlands evaluation noted that over 2011-13 period 62 forest and wildlife officers had been killed while on duty combatting poaching, illegal logging, and illegal mining (Syzygy 2013).

FINANCIAL MANAGEMENT

3.15 A critical issue in management of NREG funds was that though Bank and other development partner funds were disbursed to the government's consolidated fund, they were deposited in a ring-fenced NREG subaccount, and earmarked specifically for use by the implementing agencies and ministries. This arrangement did not follow the preferred approach required under the Bank's Operational Policy 8.60 governing Development Policy Operations, which specifies that the loan or Credit should not be required to be used for specific purposes (unless Bank procurement policies are followed).

3.16 The Operational Policy does not appear to have been violated, as the earmarking was not a formal part of the program or the legal agreement between the Bank and the Borrower. The Letter of Development Policy from the Government of Ghana does not mention specific earmarking or ring-fencing, noting only that sector budget support would consist of transfers of financial resources to the Ministry of Finance and Economic Planning (World Bank 2008, page 82). A Framework Memorandum between the development partners explicitly states that "in principle" the use of funds will be un-earmarked and that the Government will provide adequate funding, but allows that in specific circumstances some development partners could earmark their budget support in accordance with its own policies (World Bank 2008, page 107).

3.17 The causes of the decision to earmark funds were not entirely clear. Some Bank staff reported that other development partners had requested that funds be earmarked specifically for the implementing agencies. Some staff from development partner agencies reported that this was not the case, that they had opposed earmarking and that the decision was made by the government in an agreement worked out between the finance ministry, land and natural resources ministry, and environment ministry.[16] Some officials from the implementing agencies said that there had been tacit acceptance of the approach by the Bank and other development partners, and that if the Bank or others had strongly objected then the result may have been different.

3.18 There is some evidence that there was no clear agreement between development partners over how funds could be used. Bank policies clearly indicate that funds are to be transferred to the finance ministry, comingled with the rest of the budget, and that the government can make disbursements as they see fit to achieve the project objectives, prior actions, and triggers. But there are indications that some other development partners expected that funds could only be used by disbursing directly to the implementing agencies, and that anything else constituted improper use.[17] A lack of agreement by development partners meant that mixed messages were provided to the government. One reason for this is that the development policy operation instrument used by the Bank had different requirements than budget support instruments used by some other donors.

3.19 The goal of the earmarking arrangement was to make sure that project funds were indeed used to promote the goals of the program, and it was successful in achieving this. But this approach had three significant disadvantages.

3.20 First, it acted to insert the Bank and other development partners into the relationship between government and agencies, and led agencies to hold development partners responsible for providing sustained financing rather than the government. Agency staff interviewed by IEG perceived money as having come from the development partners rather than from the government, and described many regular operational activities as having been

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[16] Previous development partner support had been largely through direct projects with the ministries or agencies. Line ministries were concerned that under development policy operations, they would not receive their funds. It is likely that this arrangement was made in order to alleviate these concerns.

[17] The 2013 Netherlands Embassy evaluation notes that "important sums were channeled away without the [Development Partners'] consent. This included the creaming off to the consolidated fund of accumulated funds (13 million GHc) and the funding of the coastal sanitation project (totaling 10 million GHc in 2010 and 2012)" (Syzygy 2013, page 27-28). The evaluation considered this to be "an inappropriate use of NREG-funds", and supported recommendations from Van Der Linde (2012) that these funds be reimbursed by the government.

This indicates a fundamentally different view of budget support from that of World Bank Development Policy Operations, under which the Bank is financing the central government budget, and the government is free to spend proceeds how they like and is under no obligation to disburse those funds to specific ministries; under this view the idea that funds could be "creamed off" to the consolidated fund is incoherent.

funded “by NREG”, even down to district level staff.[18] Agency staff had expected NREG to be an ongoing program with ongoing support for their general budgets, rather than finite support for specified policy reforms. Agency staff were frustrated by decisions by the Bank and some other development partners to not commit additional funds to NREG.

3.21 Second, it undermined a key rationale of the Development Policy Operation instrument, which is to contribute to building a mature relationship between the finance ministry and line ministries, where ministry budgets are set as a result of regular budget negotiations including dialog between ministries that requires a clear case be made for resources. The budget support to agencies was so large as to dominate other sources of financing: over 2009-11 combined development partner budget support from NREG covered about 42 percent of Forestry Commission expenditures, 67 percent for the Minerals Commission, and 63 percent of the Environmental Protection Agency (Van der Linde, 2012), with much of the remainder coming from internally generated funds (from royalties or fees) rather than from the general government budget.[19] Thus, as NREG funds were committed to the agencies, the finance ministry had relatively little control over agency budgets.

3.22 Third, it meant that the responsibility for achieving the objectives of the program was in effect delegated to the three implementing agencies, rather than being held at the government level. This reduced ownership of the program by the government, and limited the ability of the program to make progress on areas beyond the control of the implementing agencies.

3.23 In effect, this led to implementation of NREG to be more along the lines of traditional project finance, with the primary relationship being between donors and agencies – though without the financial management, procurement, or safeguards procedures required for investment lending.

3.24 Another financial management issue highlighted by agencies was disbursement delays. All three implementing agencies reported that were some delays between when development partners disbursed to the Ministry of Finance and when and the agencies received funds, and that this hindered their ability to meet the disbursement triggers for the next project in the programmatic DPO series. Delays could be particularly problematic for some forestry activities, which are seasonal. Other stakeholders suggested that these delays were due to a mix of sometimes slow accountability processes within the ministry of finance, and finance ministry concerns that the level of funding exceeded the absorptive capacity of the implementing agencies. Some development partner disbursements were also delayed when implementing agencies did not report on time.

[18] Note however that at least some of this may have been due to agency staff trying to demonstrate to visiting donors that their money had been spent on useful things.

[19] This could be even more extreme at the sub-sectoral level. For example, the Wildlife Division of the Forestry Commission reported that as of 2013, roughly 80% of their activities were implemented with funds from the NREG program.
Some development partner staff mused that when donor support exceeds the size of the core budget, it is not really “budget support” anymore; who is supporting who?

4. Achievement of the Objectives

4.1 The program development objectives focused on specific and somewhat narrow intermediate outcomes, and IEG evaluates program efficacy against those objectives. The narrow framing means that monitoring and evaluation systems tended to focus on those items rather than on wider environmental outcomes; IEG has attempted to gather additional information but in many areas no quantitative data is available. An evaluation of the first 4 years of NREG carried out for the Netherlands Embassy in 2013 (Syzygy 2013) drew few conclusions on the impact of NREG on environmental protection, forest conservation, and field and district level impacts, arguing that it was too soon to tell, but provides some useful material and data, which is used in this assessment when relevant.

4.2 The World Bank provided support to NREG for three years, but the program also received support and financing from other development partners. The total financing since inception from other development partners has been roughly 50 percent larger than the Bank's contribution. The Bank's presence and partnership arguably helped to cement the contributions of other development partners, but these partners were considering sector budget support for natural resource management even when the Bank was offering only a small financial contribution. So the results of the NREG program can be only partially attributed to the World Bank's DPO.

Ensure predictable and sustainable financing for the forest and wildlife sectors and effective forest law enforcement

OUTPUTS

4.3 A wide range of forestry sector activities were carried out, organized here under seven areas:

4.4 **Revenue collection and transparency.** A number of activities were carried out within the Forestry Commission to increase collection of already mandated fees and taxes. The most significant was a policy change requiring that all outstanding fees be paid before timber permits could be renewed. Improved accounting systems and software, increased staffing and expanded technical capacity within the Commission, and improved monitoring also likely contributed to improved collections and higher internally generated funds.

4.5 Land ownership in Ghana is complex, and many land ownership rights are vested in traditional authorities, while the right to manage forests is retained by the state. The royalty payment on trees ("stumpage fees") is thus shared equally between the government (of which half is retained by the Forest Commission as internally generated funds while the remainder is paid to the Treasury) and traditional authorities. The half of distributed to traditional authorities are paid out through the Office of the Administrator of Stool Lands; of this half 25 percent are distributed to traditional chiefs (the "stool chief"), 55 percent to the district assembly, and 20 percent to the traditional council. These shares are calculated after forest commission management fees and 10 percent for the Office of the Administrator of Stool Lands. Of revenue from plantations, 41 percent goes to the government while 59 percent is then split between local authorities and the forest commission in the same proportional manner.

4.6 The percentages of royalty payments to district assemblies and traditional authorities were not adjusted under NREG. However, under NREG the Forest Commission improved the speed at which royalties were distributed by shifting from a system where funds were transferred through regional government to one of direct allocation to the districts on a quarterly basis.

4.7 Biannual reports reflecting the exact amount of funds paid to district assemblies and traditional authorities were published and disseminated (see Annex B3). Government officials argued that these were helping communities to put pressure on district assemblies and traditional authorities to account for their use of these funds. There were delays in the production of the reports (at the time of the IEG mission the most recent reports were more than a year old) which weakened their value as an accountability tool was diminished, and that they were not distributed sufficiently. However, it was difficult for the NREG program to influence the production speed of reports, as these are produced by the Administrator of Civil Lands, which was not included as an implementing agency for the program. Publication of this data represents a significant achievement, and is almost unheard of in the African context.

4.8 Legislation increasing stumpage fees was prepared but not passed, as the increase was blocked by forestry industry lobby groups.[20] The Forest Commission increased its revenue to a minor extent by increasing some other fees and service charges (many charges were doubled in nominal terms in 2011), but stumpage fees remain the primary source of internally generated funds.

4.9 **Forest and timber rights management.** The national forest and wildlife policy was updated under the NREG program (completed in 2012), replacing an older policy established in 1994. The most important new elements of the updated policy were a move away from a focus on timber production and processing to consider more non-consumptive use of forests, such as tourism, an increased focus on benefit sharing with communities, and an increased emphasis on climate change (primarily as a source of income from forests through REDD[21] and similar mechanisms). An activity plan based on the new policy was still being developed as of 2014. The revised policy has widespread support from civil society, but there were some concerns about implementation. Environmental experts were worried that the Forest Commission might retain its focus on lumber and timber production in practice despite the forestry change. Some of these experts expressed skepticism about the feasibility of tourism as a major source of income, as most wildlife areas were a long way away from the population center and international gateway of Accra, and so relatively inaccessible. Revenue from the wildlife sector has increased but remains modest relative to consumptive

[20] As resource degradation means that profitability of the forestry sector is declining, there is strong resistance from forestry companies to additional fees.

[21] REDD is a mechanism negotiated under the United Nations Framework Convention on Climate Change which aims to reduce greenhouse gas emissions from deforestation and sequester carbon in forests by providing payments to developing countries for improving forest management.

forestry activities. Forestry NGOs argued that the policy had little impact on forestry staff at the local level, where the focus was still on timber production.

4.10 Under the NREG program, the Forest Commission prepared or updated management plans for 30 forest reserves. These operational plans describe the full set of economic and biological activities to be carried out in a reserve, including harvesting plans, enrichment and boundary planting, and other activities. Plans were disclosed to the public. Gradually updating these plans is a regular part of Forest Commission operations, but additional funding increased the rate at which plans could be prepared.

4.11 The legal framework for allocating permits for timber harvesting outside of forest reserves was revised.[22] While a system for auctioning permits for lots in forest reserves was already in place, prior to the program off-reserve permits were allocated administratively rather than competitively. Under the program, the legal systems for off-reserve and on-reserve permits were harmonized. However, there have been challenges in implementing competitive bidding for off-reserve permits. Off-reserve forested areas are a mix of farm and forest, and potential investors are reluctant to pay for permits, as they are concerned about tenure security and the risks of poor forest management or illegal cutting prior to maturity. Competitive bid results require parliamentary ratification which further complicates the process. Consequently, administrative allocation has continued: the last competitive bids were in 2011. There are significant concerns from civil society about this practice, and conflict over the interpretation of legislation that governs permit issuance. Civil society groups have also raised concerns about the lack of information access on timber rights allocations.

4.12 Wildfires are a major cause of ecosystem degradation in Ghana, with fires in forest reserves causing significant economic damage. Under the NREG program, efforts to reduce wildfire incidence in forest reserves were also carried out, building on a previous Wildfire Management Project funded by the Netherlands Embassy which supported development of a National Wildfire Policy. Activities included technical assistance on policy, training and equipment purchase, and construction of green firebreaks around forest reserves.[23]

4.13 The program framework document discussed plans for considering Payment for Environmental Services systems, but these were not implemented.

4.14 **Timber Legality Assurance.** As part of NREG, a Voluntary Partnership Agreement (VPA) treaty was signed between the Government of Ghana and the European Union in November 2009, the first such agreement to be signed anywhere in the world. The agreement serves as a commitment from Ghana to meet the EU's legality standards for timber exports, and specifically to implement the European Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan by establishing a process for identifying and certifying the legal origin of timber exports.

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[22] On-reserve forestry and off-reserve forestry each constitute roughly 50% of production.

[23] In Ghana, green firebreaks were constructed largely through planting of canopy trees whose shade would prevent development of undergrowth which fuels spreading fires.

4.15 This process is still under development in Ghana and has not been made fully operational. But significant progress has been made under NREG and with support from other development partners (primarily DFID), much of it after the end of the Bank's financial support. Legal and operational processes for tracking and verifying the legal status of timber have been designed. The wood tracking system, which tracks consignments from forest to end user, is being implemented in pilot areas, but is not yet fully operational nationwide. Key elements of the system conducted by the Forest Commission's newly established Timber Validation Department include reconciliation of data along the supply chain to establish the chain of custody of consignments, application of verification protocols to establish compliance of operators, and processing of complaints. The system has upgraded from paper-based to electronic record keeping, and the scope extended to cover the domestic market in addition to exports. Though no export license has been issued as of January 2014, other development partners argue that progress has been considerable. An annual review of DFID's work on forest governance in Ghana (ITAD and Tripleline Consulting, 2014) noted that the technical aspects of the legality assurance system were expected to be completed by March 2014. The Forest Commission reports that they expect the full system to be in place and the first license granted by the end of 2014.[24]

4.16 The VPA was intended to use access to the European Union export market as an incentive for opening discussion and debate on a variety of forest governance issues. Forestry experts argued that this was initially successful, with an innovative deliberative process on legal wood supply conducted in the lead up to signing the VPA. However, other development partners note this process was largely abandoned after signing in late 2009, and that during the development phase over 2010-13 the Forestry Commission adopted a largely technical approach focused on development of the wood tracking system and certifying that timber was legally harvested, leading to less progress on ensuring that harvest is sustainable or on other governance issues (ITAD and Tripleline Consulting 2014).

4.17 Once completed, the Ghanaian experience to establish a wood-tracking system will be a useful model for other countries to build on.

4.18 **Plantations.** The program aimed to encourage plantations by improving the institutional arrangements for the sector and to encourage private sector investment. Benefit sharing systems and tax incentives aimed at encouraging small-scale and large-scale private investment were approved by the cabinet. Prior to the program, farmers in forest reserve areas[25] received no revenue from timber harvesting on their farms, but under benefit sharing

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[24] The program framework documents for the NREG program initially envisioned that the first license would be issued by the end of the Bank's 3 year financing in June 2011, and the Bank's ICR noted that though this had not occurred that the first license was "expected shortly"; these expectations were not met. However, other development partners interviewed by IEG indicated that they believed these targets had always been unrealistic given the difficulties of establishing the full tracking system for the first time in any country (and so the lack of any prior experience on how long the process should take), but suggested that the end of 2014 target was realistic. The Forestry commission has a schedule for 2014 which clearly outlines the remaining steps (primarily a Joint Assessment of the functioning of the system and incorporation of the assessment's recommendation) and target dates for completion needed to issue licenses in December 2014. Government staff reported that delays in disbursements of donor funds had been a driver of delays, as had the need for widespread consultation and the difficulty of working across multiple public sector bureaucracies, civil society groups, and the full production chain of private sector companies in the forestry export sector.

[25] No new farming is permitted in forest reserve areas, but farms that existed prior to the establishment of the reserve are permitted to continue, and many of these farms are mixed agroforestry with both agricultural products and timber.

arrangements they would receive 40 percent of revenues, and this will provide incentives for them to support forest on their farms. However, no evidence is available on the effectiveness of these benefit sharing schemes. Forestry experts argued that these had been successful in improving conditions for embedded communities in forest reserves, but noted they had no impact on farmers or communities outside of reserves, where the existing tenure systems arrangements still did not provide incentives for good tree management.[26] Guidelines for slightly degraded forest reserves were established, aimed at allowing harvested plantation areas to regenerate through natural regrowth.

4.19 A National Plantation Strategy was developed by the Forestry Commission, but it estimates that full implementation it would require US$740 million of investment over the first 10 years. It is unclear where these funds would come from. The program did not address land tenure security issues, which are a major barrier to private sector investment, and consequently little private sector plantation investment has occurred. Concerns about informal forestry are another barrier to private plantation investment. There was a continued increase in plantation planting, but this was primarily through direct government planting by the Forestry Commission.

4.20 **Forest law enforcement.** Informal forestry remains a significant problem in Ghana, with the vast majority of domestic timber being sourced from informal sources (chainsaw processing with low efficiency), and with tens of thousands of people reliant on the sector. Informal forestry takes place both within and outside of forest reserves, though little takes place in wildlife reserves, which are more heavily patrolled. Under NREG, a Domestic Market Policy Proposal was developed with broad stakeholder consultation and approved by the Ministry in 2011. The policy outlines a strategy to provide legal lumber from both sawmills and from smaller artisanal mills while eliminating chainsaw operations.[27]

4.21 The policy is has not yet been implemented on a large-scale basis. A promising pilot following the policy proposal is ongoing, implemented by Tropenbos International working with the Netherlands Embassy and others. The pilot aims to reduce informal forestry by converting chainsaw timber processors into legal artisanal millers, by working with government and others to supply them with access to legal timber (from sustainable yields non-export quality trees in existing concession areas that large legal foresters do not cut), and by helping to provide them with relatively small mobile mills that are much more efficient (i.e. waste less timber) than chainsaw operations. The pilot includes training and organization of millers into associations that can jointly finance equipment purchase. This approach could bring people inside the system and give them incentives to help protect the resource, and could provide legal wood for the domestic market at higher efficiency. There is widespread support for the pilot from the Forest Commission, NGO groups, and industry groups, who hope the pilot will be successful and so could be scaled up beyond the pilot

[26] The 2013 evaluation notes that for off-reserve logging, benefit-sharing rights are acknowledged only if the farmer can prove that they or their family planted the tree, and do not extend to already existing trees (Syzygy 2013, page 47).

[27] The policy covers five objectives, aiming to meet domestic timber needs from legal sources, to eliminate illegal timber production and trade, to promote good governance in the timber market, to promote industry modernization, and to promote alternative livelihoods.

areas. The pilot was not directly financed through NREG, but had strong collaboration with Forest Commission staff.

4.22 Other indirect measures at reducing informal forestry aim to provide alternative livelihoods for chainsaw foresters. A pilot establishing commercial charcoal production as an alternative livelihood was established in one district, other livelihoods programs for displaced chainsaw operators were carried out assisting 873 households across 10 districts, and the Forestry Commission has continued technical assistance and capacity-building for the wood processing industry.

4.23 There have also been direct efforts at supporting enforcement. Ten rapid response enforcement units were established and three additional timber checkpoints where monitoring is conducted were created. Legal changes were made to allow the Forest Commission to prosecute illegal logging directly (rather than relying on non-specialist public prosecutors); 30 prosecutors were trained and established within the Commission. However, these were only brought into action in 2012-3 and so have not yet had much impact.

4.24 A government wood procurement policy requiring that all government purchases of timber come from certified legal timber sources has been developed, but it had not been approved by cabinet as of January 2014. As government agencies purchase up to half of the domestic wood in Ghana, this would be a major policy shift, if fully implemented.

4.25 The Forestry Commission worked to resolve boundary claim issues around forest reserves, and engaged communities on the forest fringe to sensitize them to the consequences of informal forestry. Greater funding increased the ability of the Forestry Commission to carry out monitoring activities within reserves, including re-demarkation of legal farms and prosecution of farmers illegally expanding within reserves.[28] Sensitization of buyers and timber companies against using chainsaw lumber may have had some impact.

4.26 **Wildlife.** The Wildlife sector is managed primarily through the Wildlife Division of the Forest Commission, which oversee the National Parks and other protected areas. NREG program funds were used to continue and expand the core operational activities of the Wildlife Division, including routine patrols, law enforcement, and maintenance of protected area infrastructure and boundaries. Other activities included development and distribution of a field operations manual, construction and rehabilitation of accommodation facilities for park rangers in national parks, upgrading and maintenance of roads and tracks in national parks, construction of ecotourism facilities in parks, and some livelihoods programs for communities on the fringes of national parks. 190 park staff were trained in law enforcement.

4.27 Management plans were prepared or revised for protected areas, so that 17 of the 18 areas now have plans that are being implemented. These are detailed operational plans that describe how areas to be managed, including law enforcement, visitor management, infrastructure management, budgeting, and research. Academic experts interviewed by IEG endorsed the quality of the plans. However, wildlife experts noted that many areas do not

[28] Farms that existed prior to the establishment of reserves were “admitted”, but were not allowed to expand further. Illegal farm expansions are a source of conflict between farmers and forestry companies.

have sufficient funds to fully implement their plans. The increase in budget under the NREG program increased the ability of the Division to implement plans but implementation is heavily reliant on donor funds. IEG visited Kakum National Park (the most visited National Park in Ghana and the largest source of revenue from the wildlife sector), and observed fee increases and tourist infrastructure upgrades that contributed to revenue increases, equipment purchases that enabled more effective patrolling, and outreach efforts to neighboring villages that reduced human/wildlife conflict (see Annex B2). However, most other parks have struggled to increase visitor numbers or revenue.

4.28 Some additional work on development of Community Resource Management Areas was conducted, with one new area established and management plan developed for a second area. These areas incorporate local people into the management and utilization of wildlife areas, combining wildlife management with existing land use. Wildlife officials argued that this model represented a feasible path for bringing additional land under protection, and can potentially improve and sustain biodiversity by providing corridors for movement of wildlife and plants between officially protected areas. Wildlife sector experts were very supportive of the Community Resource Management Areas, but argued that they were the rare exception and that there was relatively little community management in most areas.

4.29 **Capacity-building.** A range of capacity-building and training operations were carried out within the Forest Commission. Monitoring and evaluation systems within the Commission were expanded, with greater tracking of the production of outputs. Commission staff argued that human resource management changes had led to a change in institutional culture, moving from a civil service mentality to a greater focus on delivery, with target-based performance reviews for staff where performance was assessed based on outputs rather than inputs. Information and communication equipment were upgraded, including equipment purchase, email systems, financial systems, and website upgrades.

4.30 Planning and budget processes within the Forest Commission were improved, and shifted from an activity-based system to a program-based approach. More medium term strategic planning was carried out, merging activity planning with budgetary planning. Commission staff argued that a greater ability to demonstrate the economic and environmental benefits of forests helped to improve their ability to conduct budgetary discussions with government.

OUTCOMES

4.31 The stated program objectives focus largely on intermediate outcomes, on financing and enforcement activities.

4.32 **The budget for the forest commission has expanded significantly over 2007-13**, due to increases in direct government funding and funding from the World Bank DPO and other development partners. The nominal increase from 22.3 million cedis to 79.7 million cedis represents a 257 percent nominal increase, and roughly a 72 percent increase in real terms (Table 1). This has significantly increased the capacity of the agency to carry out its core functions.

Table 1: **Forestry Commission Approved Budget 2007 to 2013 (millions of Ghana cedis, nominal)**

Calendar Year	*Government budget*	*Internally generated funds*	*NREG budget support*	*Other development partners*	*Total*
2007	3.48	16.40	-	2.42	22.30
2008	3.80	15.45	4.60	1.58	25.43
2009	3.32	21.40	19.92	1.24	45.87
2010	28.13	10.00	25.00	10.82	73.95
2011	26.73	8.75	32.00	18.87	86.35
2012	27.68	18.00	22.00	12.31	80.00
2013	20.97	27.07	22.00	9.67	79.70

Source: Forest Commission
The NREG column represents the funds from the World Bank and other development partners involved in the program. The "other development partners" figure includes funding from separate bilateral projects, including from the Japan International Cooperation Agency and others.

4.33 **Efforts to improve revenue collection rates were successful.** Collection of stumpage fees increased from 65 percent of the assessed amount in 2008 to 95 percent in 2011 and 109 percent in 2013.[29] This has been a contributing factor to increases in internally generated funds. As stumpage fees are shared between government and traditional authorities, increased collections also led to an increase in payments made to district assemblies and chiefs.

4.34 **Little evidence is available on the effectiveness of activities aimed at forest law enforcement or the supply of legal timber**. Though great progress has been made on developing a wood tracking system, the system is not yet fully operational. A baseline study of the domestic timber industry carried out in 2009 under NREG established that 84 percent of the total monthly timber stocked at timber markets was chainsaw logging from illegal sources, with only 16 percent from legal sources. But no corresponding estimate study was carried out at since then, so there is no quantitative evidence on the effects of the program on the proportion of domestic timber from illegal sources. While there may have been some progress, it is likely that most domestic lumber continues to come from illegal chainsaw production.

4.35 There has been an increase in the amount of legal timber produced by mills. In 2013 38 percent of lumber production was for the domestic market, while 62 percent was exported, but no baseline data was available. The principle driver of this has been that declining exports mean that sawmills have more capacity available for processing lower quality timber for the domestic market. Most NREG activities aimed at reducing chainsaw logging or

[29] This percent can exceed 100% because revenue collection could come from the backlog of previously unpaid fees, and so revenue could exceed newly billed royalties.

increasing legal domestic timber supply are still at a pilot stage or are were implemented late in the program, and so it is likely that they have made only a modest contribution to this change.

4.36 Though not addressed in the specific program objectives, some evidence is available on broader outcomes aimed at by the program.

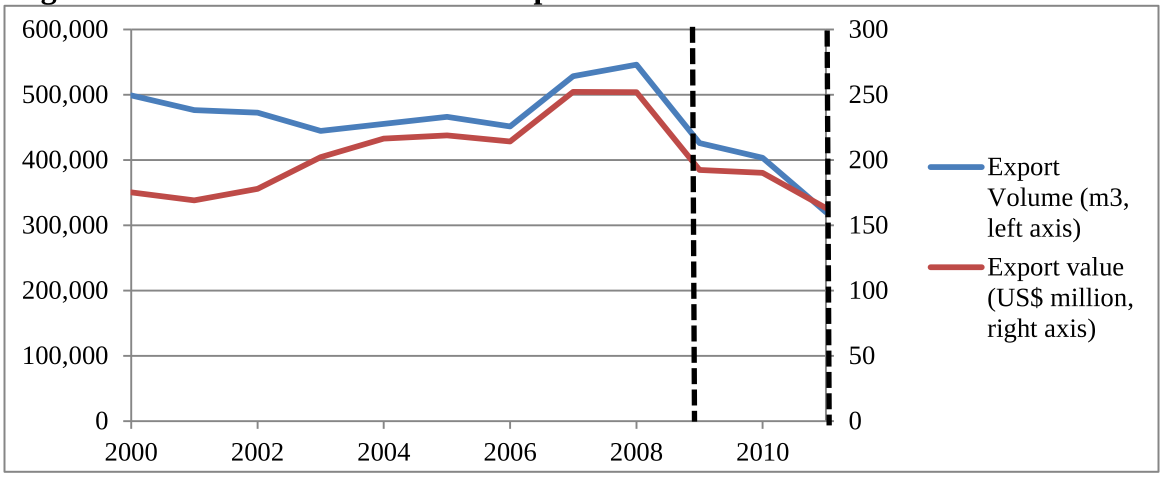
4.37 **While forest cover is slowly increasing, forest degradation has continued**. Some evidence on changes in forest cover is available from remote-sensing data of forest cover collected under a Forestry Preservation Programme financed by the Ministry of Foreign Affairs of Japan. A survey of forest cover over 1990-2010 concluded that there has been a small net increase in forest cover, with an average 0.3 percent annual gross expansion of forest cover and an average annual degradation of 0.19 percent, for a net annual expansion of 0.12 percent forest cover, with more expansion over 2000-2010 than over 1990-2000 (PASCO 2013).[30] The study did not allow for the disaggregation of natural regeneration vs. plantation forest, and the forest cover is based on the FAO definition which defines a hectare as forested if there is 15 percent coverage of trees at least 5 meters high. The study notes that while forest cover is slowly increasing, forest degradation has continued.

4.38 **Forest production continues to decline because of resource degradation.** The best species and highest quality trees have largely been cut, and remaining trees are of lower quality or are less valuable species, and so generate less revenue. This has contributed to an ongoing decline in timber exports, both in terms of production and value (Figure 1). Revenue from timber export levies has also continued to decline, from 3.8 million cedis in 2008 to 3.0 million cedis in 2012 because of declining export volumes.[31] The contribution of the forestry sector to GDP has declined from 8.1 percent in 2005 to 2.3 percent in 2010, due to declining production and the rapidly growing economy.

[30] The program generated national level data on forest cover in 1990, 2000, and 2010, with aggregate land use conversion data for changes in the two intervening periods. Because the study does not assess the intervening years, more specific analysis over the period of NREG is not possible.
The study concluded that while overall forest cover was increasing, “closed” forest land was decreasing while “open” forest land was increasing, meaning Ghana is having net afforestation, but with forest degradation. Degradation and deforestation combined led to a reduction in above ground carbon stocks of roughly 20-33% over the full period.

[31] Timer export levies have also declined because the export levy has been reduced from 5%, then to 3%, and then in 2006 to 1.5%, but this occurred prior to the NREG program.

Figure 1: **Trends in Ghana Timber Exports**



Source: Forest Commission, Timber Industry Development Division
Note: Dashed lines indicate period of World Bank financing of NREG program. Data after 2011 is not yet available, but likely continues the downward trend.

4.39 **Government plantation forestry has increased but private sector plantation investment has been less than hoped.** A major plantation effort was carried out over 2004-2009 through the Government Plantation Development Programme, but this had no direct connection to NREG. A follow-up National Plantation Development Programme was launched in 2010 (with support from NREG and following the national plantation strategy developed under NREG) but progress was below targeted values. Plantations over 2010-2012 led to establishment of 18,503 hectares, 10,982 hectares, and 8,453 hectares respectively, which was only 42 percent of the targeted value (Syzygy 2013).[32] This investment was driven largely by government planting through the Forest Commission, with only 29 percent of plantations from private developers over 2010-12 (as compared to roughly one third for plantations over 2007-9). For 2010, the actual trees planted were only two thirds of the target, and 8.5 percent of those planted had not survived by 2012 due to dry spells, floods, and wildfire.[33] Most plantations are teak and mahogany, though the Forest Commission reports that there are minimum requirements for mixing in indigenous species, to avoid monoculture.

4.40 **Wildfires have decreased.** The Netherlands evaluation noted that there had been a considerable reduction in wildfires, and that this had led to some increased tree-planting by farmers who had focused in past on annual crops instead for fear of losing their tree crop to fire (Syzygy 2013, page 30). Detailed data on wildfire incidence was collected for the 2011-12 and 2012-13 wildfire seasons, with 225 fires affecting 12,803 hectares in 2012-13 (with an estimated economic cost of 42.7 million Ghana cedis), as compared to 203 fires affecting

[32] Over 2010, 2011 and 2012 these programs employed 31,346 people, 26,073 people, and 30,687 people respectively.

[33] Forestry experts saw this as poor performance. Recent plantation efforts have had a history of low survival rates. For plantations under the 2004-2009 program, experts interviewed by IEG offered a range of reasons for poor performance. Some argued that earlier contracts were awarded to politically connected groups that did not have good forestry expertise and that later plantations have had better attention and higher survival rates. Others argued that early Forest Commission plantations had performed worse than private plantations, because the Commission had not had the resources for adequate management.

27,245 hectares in 2011-2012 (Forest Commission 2013). However, this detailed data was not available prior to the program, and so no comparison to the baseline is possible, and there can be significant variation from year to year depending on weather and other factors.

4.41 **Data on informal forestry is sparse**. The Forest Commission reports data on the level of observed illegal activities (number of illegal trees reported, cases of chainsaw activities, etc.) which demonstrate increased rates over 2009-2011, but it cannot be determined whether this represents increased activity, increased enforcement, or both. No clear evidence was available on the impact of livelihoods activities, which were of modest scale.

4.42 **Little evidence was available on the impact of the program on wildlife areas**. Total visitor numbers to protected areas and zoos increased from 272,050 in 2008 to 286,747 despite closure of the Accra Zoo. Revenue from ecotourism (primarily park entrance fees, and primarily from Kakum National Park) increased from 254,874 Ghana cedis in 2008 to 1,200,737 Ghana cedis in 2013, driven primarily by an increase in park fees and construction of eco-lodges. Revenue from these non-consumptive uses of forests remains small as compared to the forestry sector, though reserves continue to provide un-priced biodiversity benefits and ecosystem services.

4.43 Achievement of the specific Project Development Objective (which does not address forest degradation) is rated *Substantial*.

Improve mining sector revenue collection, management, and transparency

4.44 Mining sector activities concentrated on increasing revenue from large mining companies and expanding transparency through Extractive Industries Transparency Initiative (EITI), though some activities to support small-scale mining and address illegal mining were carried out. Gold is the most important mineral by far, with roughly 80 percent of income from the formal mining sector coming from large-scale gold mines.

OUTPUTS

4.45 **Revenue collection.** Large-scale mining companies are required to pay royalties to government based on their gross revenues. Prior to the NREG program, the law stated that companies should pay 3 percent to 6 percent of gross revenues, but in practice most companies were paying the minimum value of 3 percent.

4.46 A multi-agency Revenue Task Force was established to increase cooperation between the Revenue Agencies and the Minerals Commission and address the mining sector fiscal regime. Financial models of large-scale mines were developed, and as of January 2014 these had been applied to 9 of the 13 large mines in Ghana by the task force. The models indicated that capital gains taxes were largely being avoided by large mining companies, and led to efforts to address this problem and collect the taxes. These included streamlining tax administration rules for mineral rights transfers, and so making it more difficult to avoid taxes through rights transfers.[34] Rules governing transfer pricing within corporate subsidiaries were put in place to make it more difficult to avoid taxes.

4.47 An assessment of mining tax payments was undertaken, leading to the government passing legislation to change royalty payments to a flat rate of 5 percent, and the Minerals Commission implemented this change as contracts came up for renewal.[35] The Commission also made efforts to ensure that companies paid the full amount of tax owed. The program concentrated on revenue from large mining companies; it did little to address widespread nonpayment by small-scale miners (which constitute up to one third of gold production).[36]

4.48 **Transparency.** The main avenue for addressing mining sector transparency has been through the Extractive Industries Transparency Initiative (EITI), which requires the public disclosure of payments made by mining companies to government.[37] Ghana was an early adopter of EITI, well before the NREG program. Starting in 2003, Ghana was the fifth country in the world and the second in Africa to become EITI compliant. The first EITI report (covering January-June 2004) was published in 2007. EITI reports prior to NREG led to a number of policy recommendations on which NREG was designed, including the review of fiscal regime and increase of royalties.

4.49 NREG financed the production of EITI reports covering 2006-2009.[38] A validation assessment of EITI was carried out in 2010, confirming Ghana's compliance with EITI standards. Under NREG, the reports were expanded to cover sub-national payments. These sub-national payments included transfers made to district and municipal assemblies, but did not include transfers made to traditional authorities, who blocked publication of payments they receive. However, reporting was very slow. As of April 2014, the most recent EITI report was for 2011 (which was published in February 2013). At a mining community visited by IEG, community leaders reported that royalty payments were made to the paramount chief in the area, who shares funds with division chiefs, but that funds did not reach the local chiefs. They understood how the royalty payment was determined, but were not aware of payment amounts, and said they could not easily find out if they wanted to know.

34 In order to encourage investment, government policy offered initially lower tax rates for new companies and existing companies could exploit these rules by transferring their mineral rights to a new company which was then eligible for the tax advantage.

35 As of January 2014, the two largest mines are still paying the 3 percent rate, under a previously arranged stability agreement.

36 One option is to collect this "ground rent" royalty from the licensed gold buyers rather than from miners, but this could lead to smuggling and miners selling to illegal buyers in order to evade the tax, as occurred in past. Efforts to require small-scale miners to bring sales receipts and demonstrate taxes paid when they renew their permits have also been largely unsuccessful. Mining experts argue that the unintended consequences of tightening collection efforts could outweigh the potential benefits; under the current system government buyers are still purchasing nearly all gold from legal small-scale miners, and government earns foreign exchange from resale, which would be lost if small-scale miners sold to illegal buyers or smuggled gold to neighboring countries for export.

37 EITI reports include production volumes, mineral export values, the names of companies operating in the country, production data by company, production stream values, royalties, special taxes, dividends, license fees, and acreage fees. All reports are available at www.gheiti.gov.gh

38 2010-12 EITI reports were financed by other World Bank sources.

4.50 **Small-scale mining and illegal mining.** There is a significant legal small-scale mining sector in Ghana regulated and supported by the Minerals Commission, but a significantly larger illegal mining sector (known as *galamsey*). During the period of NREG, illegal mining expanded dramatically, driven by large increases in international gold prices. Much illegal mining involves large numbers of people and heavy equipment, exceeding what has traditionally been thought of as small-scale.

4.51 The Minerals Commission strategy for reducing illegal small-scale mining includes a process of regularization. By increasing the number of areas where small-scale miners could apply for permits and by carrying out prospecting activities to indicate resource potential, the Commission hoped to bring more small-scale miners inside the legal system, where they could be licensed, regulated, geographically concentrated and managed. Prospecting to provide geological data would make it more likely that small-scale miners would concentrate in official areas, and would increase the value of the technical advice and extension services offered by Minerals Commission offices. If small-scale mining occurs on legal sites that could be monitored, it would likely have less serious environmental consequences (illegal mining often takes place in riverbeds, which is outlawed, and uses cyanide). The Commission intends to help small-scale miners form associations, which can help to improve social conditions on small-scale mining sites. Other efforts to reduce illegal mining include programs aimed at supporting alternative livelihoods to mining, which have been carried out both by government and by one large-scale mining company. Mining NGOs interviewed by IEG were supportive of the strategy, but skeptical that it could be accomplished for large numbers of small-scale miners because in their view it would require large mining companies to relinquish some concessions.

4.52 The NREG program design had intended to support this approach, but progress has been slower than expected. No mining cooperatives had been established as of 2013. By then end of 2013, 7 potential areas covering 349 km^2 were explored and some drilling and prospecting was carried out at these sites, and 2 more sites were planned for 2014. Of these areas, one site was identified as viable and mining permits are being acquired by small-scale producers. However, as of January 2014 no mining had begun on any of these sites. Government officials reported that the main reason for the delays was the lack of money available for exploration and prospecting, and mining experts argued that the refusal of large-scale mining companies to lease lands where they have permits was also a contributing factor. One reason for a lack of funding is a presumption of heavy reliance on donor funding: a draft strategy on small-scale mining developed in 2012 presumed that 75 percent of the funding would come from NREG, with only 25 percent from the government.[39] The Commission has also increased support it offers to legal small-scale miners by creating 2 new district level monitoring offices, which can offer technical advice and extension work in mining communities.

4.53 The other means of addressing illegal mining has been through enforcement. An Inter-Ministerial Task Force on illegal mining has been launched by the President, with government security forces undertaking enforcement activities. The task force was not

[39] Expected government contributions were made, but the plan anticipated that the World Bank and other donors would continue with follow-up budget support programs, which did not occur.

directly part of the NREG program, but government officials and NGOs argued that there was some causal linkage through the Environment and Natural Resources summit in 2012 (which was established under NREG). Media pressure and public outcry over illegal mining were also important factors in driving the establishment of the taskforce. Civil society members and technical experts outside of government interviewed by IEG were generally positive about the task force, but were concerned that that the high cost of security force operations meant that the efforts would not be sustainable. The Minerals Commission was supporting the main task force with regional task forces in 5 regions.

4.54 **Other policy reforms.** A number of minerals regulations were updated and implemented, on support services, compensation and resettlement, explosives, health and safety, and licensing. These were seen by development partners to be of good quality.

4.55 Changes in policy have also improved financial management of payments. Prior to the program, royalty payments went to district offices, and the share of payments to traditional authorities was distributed directly. Under government policy changes, all payments go centrally to the consolidated fund and are then paid out. However, this had led to delays in payments. Royalties for the oil and gas sector have learned from this experience; those payments now go into a separate dedicated central account, where they can be monitored and disbursed more easily.

OUTCOMES

4.56 **Over the period of the NREG program there have been very large increases in government revenue from the mining sector**. These increases are partly attributable to the increased collection efforts following audits and the tax rate changes implemented under the NREG program, but they are also due to the increases in gold production over the period[40] and rapidly rising gold prices, which increased government revenue as royalties are charged on gross revenues. Over 2007-12, nominal revenue from mining increased by 913 percent, which is roughly 455 percent in real terms.[41] Over the same period, gold mining production increased 64 percent and international gold prices increased roughly 99 percent.[42] Nonetheless, these figures suggest that even controlling for production and price increases that there has been a substantial improvement in mining sector revenue collection, and this is plausibly attributable to the NREG program.[43] EITI reports confirm significant increases in government revenue from mining over 2009-10 and dramatic increases over 2010-11.

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[40] Increases in production from large-scale mining cannot be attributed to the program, as there is a 5-7 year lag between investment in large mine expansion and production. Production increases were based in large part on increases in investment prior to the program: total mining company investment (production, exploration, service support) increased from $232 million in 2000 to $765 million in 2008, and then stayed flat until a spike in 2012. Mining experts attributed this increase in investment to Ghana's good resource availability, stable democratic rule, and favorable investment climate.

[41] Nominal figure from Minerals Commission data. CPI adjustment based on World Development Indicators 2013.

[42] The gold mining sector is much larger than that of other minerals. Diamond production in Ghana declined 67% over the period, bauxite production declined 45%, and manganese production increased 40%. Mining production figures from Minerals Commission data. Gold price calculation based on data from London Bullion Market Association. Note that 2012 is a potentially misleading end point, since gold prices have declined roughly 25% since their mid-2012 peak.

[43] To a first approximation, increased production and gold prices accounts for roughly two thirds of the revenue increase, with revenue collection increases accounting for most of the remainder.

Table 2: **Mining sector contribution to Government revenue, 2005-2012**

Year	*Total revenue from mining (GHC millions)*	*Total revenue from domestic taxes (GHC millions)*	*% of revenue from mining*
2005	94.0	644.6	14.6%
2006	90.4	734.1	12.3%
2007	144.2	910.2	15.8%
2008	210.8	1,222.5	17.2%
2009	354.4	1,790.6	19.8%
2010	555.1	2,338.5	23.7%
2011	1,050.4	3,705.7	28.3%
2012	1,461.2	5,403.0	27.0%

Source: Minerals Commission
Revenues are nearly all from royalties and corporate taxes, though other fees and charges are included. Revenues for 2013 are likely to have been lower than 2012, due to declining international gold prices. All figures are nominal.

4.57 **It is difficult to assess the benefits of transparency and its impact on resource governance**. Government officials are proud of their commitment to transparency and the ongoing production of EITI reports. They argue there has been more active engagement of stakeholders to discuss transparency issues, and greater willingness by government and mining companies to provide data. There is a general agreement by civil society that transparency has improved, and groups confirmed the significant degree of civil society involvement in EITI, the EITI audit, and mining sector legislation. Large mining companies are supportive of EITI and transparency efforts; as companies have made information available, public pressure shifts from mining companies to the government. Some mining sector experts argue that EITI audit reports have been helpful in identifying systemic weaknesses and revenue leakage, and that consequently these have been improved. For example, audits identified that the Minerals Commission was not exchanging information with revenue authorities, which meant that mining companies could change hands without paying required capital gains taxes, but that cooperation and capital gains collection have improved during the NREG period.

4.58 But some mining sector experts interviewed by IEG were skeptical of how much impact this transparency has for mining, arguing that there is not a high demand for information from mining communities, whose primary relationship is with the local mining company, focused primarily on payments, corporate social responsibility benefits from companies, and employment opportunities. Mining experts argue that a focus on revenue transparency is not sufficient to improve governance or outcomes. This is a controversial issue that remains unresolved. Critics also note that EITI is largely limited to revenues, and does not look at transparency on the cost side, or transparency on the impacts of mining. Widespread support for a full cost-benefit analysis of the mining sector, which included analysis of production costs and of environmental impacts, was reported to IEG. EITI also considers only large-scale mining companies, which are often the “better players” in the industry; it does not address small-scale mining. And investment by large-scale mining companies is driven largely by prices and financial factors, rather than transparency of revenue.

4.59 Small-scale mining production has risen significantly during NREG (1.46 million ounces in 2012, up from 0.42 million ounces in 2008), but this is largely driven by rising gold prices rather than any activities from NREG.

4.60 The level of illegal mining is not well documented, but is widely agreed to have risen dramatically over recent years, driven by rising gold prices. Hundreds of thousands of people are involved in the sector. There is no quantitative evidence on the impact of NREG on illegal mining, but there is widespread agreement that it continues to have severe environmental impacts: water pollution, landscape destruction, and public health damage from mercury and cyanide.

4.61 Achievement of the specific project development objective (which does not address illegal mining) is rated *Substantial*.

Address social issues in forest and mining communities

4.62 The causes of social conflict in forest communities are very complex, and come from many sources including competing claims to resources, elite or market capture of revenues or resources, informal forestry operations that damages resources but provides much-needed income, and others. In mining communities, many disputes are driven by the health and environmental consequences of mining, compulsory resettlement and disputes over compensation, a lack of trust between communities and government and/or industry, tensions between locals and migrant workers, disputes over capture of payments from mining companies, and others. The program aimed to address these through direct efforts in communities and through improving relationships with civil society on natural resource management and governance. However, no baseline survey or social assessments were conducted, and so it is difficult to assess progress.

OUTPUTS

4.63 **Forests.** Under NREG, the Forest Commission increased its consultation and collaboration with civil society aimed at improving relations and at addressing conflict issues. The commission undertook a program of communication capacity development of civil society groups and communities. Regional forest fora were established to discuss forest issues, operating at the national level, across the 10 regions, and in all districts. Community forestry committees were established as advisory groups, and Commission staff conducted outreach programs with traditional authorities and community groups. Commission staff argued that these efforts had led to greater willingness of communities to report illegal forestry or mining in forests near their communities.

4.64 As noted above, payments of forestry royalties to district assemblies and most but not all traditional authorities are now published, though not always in a timely fashion. There has been strong resistance from chiefs on efforts to increase transparency and accountability of forest royalty payments. There is an unresolved constitutional question on how funds disbursed to traditional authorities are to be used.[44]

4.65 Some social conflict in communities adjacent to protected areas is driven by human/wildlife conflict. The program had some impact on this by increasing the ability of the Wildlife Division to undertake efforts to reduce these conflicts. For example, at Kakum National Park, efforts to train farmers in park-adjacent communities reduced the number of incursions by elephants into plantations (see Annex B2).

4.66 **Mining.** Mining is a significant cause of social conflict, due to displacement of communities and disruption or destruction of livelihoods when new areas are mined, to environmental damage and disruption from mining, to social disputes related to employment, migration, economic dependency, and inequality.

4.67 Under NREG, the Minerals Commission conducted a baseline study on social conflict (Minerals Commission 2013). The study developed a baseline analysis of social conflict through focus groups, informant interviews, public meetings, and other stakeholder engagement with community members, mining companies and small-scale miners, police, district authorities, and others. The main drivers of conflict included employment opportunities (or lack thereof), water pollution, building cracking due to blasting, water shortages, land appropriation, human rights violations, misappropriation of royalties, land rights conflicts, and others. The Commission has also piloted a social conflict tracking tool, aimed at functioning as an early warning system for conflict. In 2012 and 2013 the tool was used in 10 communities near 5 large mines, leaving a further 8 large mines to be covered in upcoming years. The tracking tool identified additional sources of conflict not covered by the baseline study, relating largely to labor issues and delays in wages and compensation payments.

4.68 A number of other efforts were carried out by the Minerals Commission. New legislation on compensation for losses from mining was passed in June 2013 and was beginning to be implemented. The new law required that both sides agree to a compensation package, and if no compensation was reached that the dispute go to third party arbitration. Under the new law, there will also be compensation for loss of use of an asset, rather than only loss of the asset under previous laws.

4.69 Industry guidelines for corporate social responsibility activities for large-scale mining activities were developed and implemented. Though formally non-binding, the Commission reported that all large mining companies were in compliance based on an analysis of self-reporting from the companies.[45] Mining NGOs interviewed by IEG argued that even though social responsibility guidelines were not legally binding, they did have a significant effect on large mining companies because of public pressure. All large mining companies provide at

[44] The 1992 Constitution of Ghana notes that payments to the stool chief are to be used "for the maintenance of the stool in keeping with its status", and there is disagreement over whether this means funds should be used for the community or for the traditional authorities.

[45] The rules were non-binding as the Minerals Commission does not have the legal authority to require companies to make corporate social responsibility payments.

least some corporate social responsibility benefits to local communities. However, benefits provided are often in-kind, with valuations asserted by the mining companies, and so the actual value of benefits may be overstated.[46]

4.70 The Commission has begun to implement an Alternative Livelihoods Program in mining communities, aimed at creating non-mining jobs and so generating employment (and so potentially reducing conflict), reducing poverty, and providing alternatives to illegal mining. A pilot project was carried out in one area, with 23,000 acres planted with oil palm seedlings. Based on this, as second project has commenced, and as of January 2014 about 3,000 acres of oil palm had been planted. A lack of funds remains the primary constraint on scaling-up these programs. No evidence is available on the extent to which livelihoods programs reduced conflict, poverty, or illegal mining. The 2013 Netherlands evaluation noted the difficulty in trying to convince young (and often relatively well-paid) illegal miners to convert to farming.

4.71 **Civil society**. All three implementing agencies used the platform of NREG to improve relationships with civil society, especially with NGOs. There was significant stakeholder input into the VPA, EITI, mining policies/laws/regulations, environmental policies, and others. The EPA reached out to NGO groups for inputs and comments on environmental impact assessment. A central part of this engagement has been through an annual Natural Resources and Environment Sector summit, which were multi-day conferences with participation of ministers, senior government officials, civil society, and other stakeholders.

4.72 The NREG Program Framework Document included plans for a civil society facility, to be funded by development partners at $0.5 million to $1 million per year, but this did not eventuate. However, a civil society platform was established during NREG by other donors (the Kasa program, see Annex B1). The platform was not directly attributable to the NREG program, but was a useful complement to the program in helping to improve engagement. In the absence of additional external funding for Kasa, it is likely that civil society contributions to resource governance would have been weaker. Similarly, in the absence of the NREG program it is likely that Kasa would have been much less effective in leveraging the impact of natural resource management NGOs.

4.73 There had been some suggestions that NGOs data should be used in assessing means of verification but this was not adopted. NGOs were calling for such a system, but this could risk re-creating adversarial relationships if it places civil society in a position where their data could lead to disbursements from donors being delayed or halted. If donor funding triggers are reliant on reporting from civil society, this could place immense pressure on processes used for generating those results, especially as NGO groups are unelected and unaccountable. Civil society data collection may be more useful if used for information purposes rather than for formal financing conditions

[46] Benefits also vary across regions, as some agreements specify a percent of profits, which grow when gold prices rise, while others specify a fixed amount per ounce of gold.

OUTCOMES

4.74 Monitoring and assessing the impact of efforts to address social conflict was a major weakness in NREG's M&E systems, and so little quantitative evidence is available on the outcomes of these efforts.

4.75 **Outreach efforts improved relationships between government and forest communities.** Government officials and most forestry NGOs argued that outreach efforts by the Forest Commission had been significant and meaningful. In a forest community randomly selected by IEG, interviewed community members reported that they had an improved relationship with Commission staff, and knew that they could call and staff would respond. An interviewed community leader noted that prior to the program, he would not have reported illegal foresters, believing they were just trying to make a living, and would not have known who to report to. After training and sensitization efforts during the program, he would report illegal harvesting, knowing that this had a negative effect on the forest and his community and that a response from the Commission would be forthcoming. However, he noted that outreach efforts had been scaled back more recently, and was concerned that community attitudes could backslide.

4.76 Interviewed community members noted that the transparency of forestry payments had improved, and that they could access information on forestry royalty payments at a nearby city. However, they noted that the data provided was at too high a level, focusing on paramount chiefs rather than lower level chiefs, and consequently had little impact on their community.

4.77 **The effect of outreach efforts to mining communities is not clear.** IEG could not identify any impact from the mining social conflict baseline study or tracking tools. The baseline study makes a number of recommendations on how to avoid and manage conflict, but is not directly connected to any program of mitigation measures. Most potential mitigation measures would be beyond the scope of the Minerals Commission to implement. As no communities have yet been visited twice, no direct comparison of baseline to endline is possible, so the tracking tool does not allow for the impacts of the program or other efforts to be assessed. An IEG visit to a randomly selected mining community in the Western Region where the tool had been used found that local officials, traditional authorities, and community members reported that they had almost no contact with the Minerals Commission. They did not recall any results from the visits by Minerals Commission staff or any recent changes in their interaction with the large mining company operating near their community.[47]

4.78 Improvements in transparency discussed above may also have an impact on social conflict, but little evidence is available on the link.

4.79 **Systems to resolve environmental complaints may have improved.** Efforts to mainstream environmental effects into policies (see below) may have had an impact on social conflict in mining communities, as negative environmental impacts are a major cause of

[47] Individuals interviewed by IEG asked that they and their community remain anonymous.

conflict. Government officials reported a higher resolution of complaints from mining and manufacturing sectors and fewer complaints being made. The AKOBEN rating tool (see below) provides some evidence on complaints: in 2012, 11 of 16 large mining companies received an "adequate" rating on community complaints.[48] This indicates an improvement over previous years, where 7 out of 14 tracked companies received a green rating in 2011, 5 out of 11 in 2010, and 3 out of 11 in 2009.[49] Based on discussions with mining experts, it is plausible that this represents improved complaints resolution rather than reduced complaints.

4.80 **There has been a major change in the relationship between government and civil society in the natural resource management sectors**. Nearly all members of civil society interviewed by IEG argued that the change in attitude had been dramatic, and that this had resulted directly from the NREG program. Prior to the program, the relationship between government and civil society was limited and often antagonistic. Consultation was seen as tokenistic, with NGO groups invited to listen, rather than to speak or be part of the process. Government outreach was often limited to the private sector, rather than civil society. But throughout NREG engagement has improved, with greater trust and respect in both directions. Multiple NGO groups described a transition in their relationship with government agencies as shifting from adversarial to partnership, and from confrontation to consultation to collaboration.

4.81 NGO groups described a number of examples of improved engagement. Government ministers and ministries sometimes listen to concerns from NGO groups, which can have practical impacts.[50] Government agencies are more willing to share data with NGO groups, and NGOs were willing to provide constructive and practical suggestions rather than merely making demands or criticizing government. Many groups saw themselves as having been brought partially inside the policy process. NGOs argued that the greatest progress in natural resource management sectors had been in areas where civil society engagement had been high. EPA staff and environmental groups reported mutual respect, noting that NGO groups had significant technical knowledge, were an important part of the process of providing expert commentary particularly on environmental impact assessments, and worked well with communities to undertake advocacy work.

4.82 However, some NGO groups argued that while they appreciated being listened to, they were skeptical about the impacts, as they saw the same issues being raised with government repeatedly year after year. Changes seemed much stronger with the NGO sector than with other civil society groups, especially with local communities or traditional authorities. There are still some elements of mistrust between communities and government. Forestry NGOs reported skepticism on the ability and willingness of Forestry Commission officers to combat illegal forestry.

[48] An Adequate rating for a company requires that at least 90% of complaints were resolved.

[49] Source: AKOBEN website http://www.epaghanaakoben.org/rating/listmines2

[50] A wildlife expert interviewed by IEG cited a case in 2012 where a globally significant biodiversity area had been slated for conversion to mining, and where comments and events held by NGOs let to a new strategy development and conservation of the area.

4.83 In some cases early engagements with civil society were done in part because of encouragement from development partner agencies, who pushed for civil society inclusion and engagement (such as in the VPA process). But it is likely that these changes were due to the combined work of donor pressure, government agencies expanding their willingness to engage, and civil society groups' willingness to adopt a constructive setting.

4.84 Achievement of this objective is rated *Modest*. Though the impact on the engagement between government and civil society was significant, no good evidence on social conflict rates exists and so a decline cannot be demonstrated.

Mainstream environment into economic growth

4.85 The Project Development Objective addressed policy changes, rather than changes in environmental outcomes.

OUTPUTS

4.86 **Environmental Impact Assessment.** A system for Environmental Impact Assessment (EIA) of development projects existed in Ghana prior to NREG: with legislative requirements for environmental impact assessments first established in 1994. Project proponents must submit an application form to the EPA including detailed documentation and site plans. The EPA conducts scoping, consultations, site inspections, and in some cases public hearings, and decides whether to approve, approve with conditions, or decline the application. Applicants can appeal results to the environment ministry or to the courts. The EPA reports that they carry out compliance monitoring exercises, and that enterprises operating without a permit are shut down, and pay a penalty enforced by the general court system. EPA staff argue that the process is transparent; all decisions are publicly disclosed, and reports and permits are printed in newspapers and the government Gazette.

4.87 Under the NREG program, a number of improvements were made to the EIA system. The EPA reported that the number of assessments conducted had increased, but was unable to supply data on the number of assessments conducted.[51] The 2013 evaluation cited EPA figures that 671 licenses (including renewals) were issued in 2010, 2,418 in 2011, and 2,778 in 2012. The Bank's ICR reported that the proportion of assessments meeting established service standards for speed had increased due to capacity building in the EPA (World Bank 2011), but the EPA was unable to provide more specific data to confirm this.[52]

4.88 The level of compliance monitoring was increased. EPA has conducted training programs for private companies and consultants on how to fill out applications and on what

[51] The EPA provided data on applications received in 2012 and 2013 only - but no baseline data was available for comparison. For 2012, this comprised 562 environmental assessment applications for small and medium impact projects, 38 preliminary environmental reports, 26 environmental assessment applications for large impact projects, 62 environmental impact statements, 30 scoping reports, and 2 environmental and social management frameworks. For 2013, this comprised 511 environmental assessment applications for small and medium impact projects, 32 preliminary environmental reports, 55 environmental assessment applications for large impact projects, 99 environmental impact statements, and 30 scoping reports.

[52] The EPA has a service standard for processing, 25 working days for small to medium enterprises and 90 working days for large-scale projects.

documentation is required. Applications can now be made and processed at regional offices rather than only at headquarters in Accra, and the number of regional offices has been increased as part of EPA's efforts to decentralize. Sectoral specialists have been hired at some regional offices to handle specialist needs in mining, oil and gas, energy, and other sectors. An online electronic system for filing EIA requests has been designed but has not implemented as of January 2014. Additional resources have enabled the agency to hire external technical experts as needed for specialized assessments. A grievance mechanism system is being designed but has not yet been completed. Technical guidelines on environmental assessment and management were developed for some additional sectors, including the oil and gas sector. These guidelines define screening criteria, determine the scope of EIAs, detail procedures for environmental impact statements to be produced by developers, and provide guidance on common potential environmental impacts and mitigation measures. As noted above, the degree of civil society involvement in the EIA process has been expanded.

4.89 The EIA system is seen as a meaningful process by most (but not all) environmental experts interviewed by IEG. One sign that the system is seen as significant is that private sector banks are beginning to monitor whether permits had been issued for their corporate borrowers, as failing to receive the permit posed a commercial risk to the bank. There have been some high profile cases where mining companies were denied permits for some operations that were seen to have high environmental costs.

4.90 However, some NGOs argued that it could still be difficult for communities to engage with the system due to the level of technical complexity of documents, especially in the mining sector. Some also argued that public meetings were sometimes a formality, with little opportunity for genuine community consultation. Transparency is not complete, as environmental monitoring reports remain confidential. Civil society groups argue that the time allowed for submissions is small, and that it is difficult to provide a meaningful contribution on large numbers of documents very quickly. These are common problems in EIA systems, and are not unique to Ghana. EPA staff argued that transparency has been improved by the requirement that applications have a non-technical executive summary.

4.91 **Strategic Environmental Assessment.** Strategic environmental assessments (SEA) are a policy planning tool used to ensure that environmental and sustainability impacts are considered in policy making. SEAs existed as a tool before the NREG program, but the number and scope of assessments conducted has been increased under the program. Strategic environmental assessments of key economic sectors, programs, and plans have been conducted (32 since 2002, including 23 after 2008), including reviews of energy policy, oil and gas policy, water policy, mining policy, sanitation policy, transport policy, and others.[53] These assessments were initially led by the National Development Planning Commission, which advises the president on development policy and strategy. But capacity-building and training has meant that SEAs can now be used as part of district level planning processes. In the past, SEAs were conducted ex post, but under NREG SEAs are now being done pre-emptively before strategy development in some cases such as for oil and gas.

[53] However, many of these assessments were specifically financed and supported by other donors (OECD 2012), and so cannot be fully attributed to NREG.

4.92 Government officials reported that these assessments have fed into government policy developments, and listed some examples. SEAs of sanitation policies have led to greater assignment of responsibility for waste at the district assembly level, and some districts are now looking at establishing landfill sites rather than dumping sites. A SEA of the water sector has led to some controls on borehole drilling. A SEA of the transport sector contributed to plans to develop bus rapid transit systems, to improve engine emission standards for imported vehicles, and to begin the establishment of a vehicle emission testing system. SEAs have contributed to improved cooperation across agencies in some sectors, such as greater coordination between the agriculture ministry and health ministry on small irrigation dams, where stagnant water can be a breeding ground for mosquitos and so contribute to malaria.

4.93 Regional EPA staff argued that the main advantage of adopting SEA as an approach was that it recognized that environmental regulation cannotbe done just within the EPA, and that the agency needed to work with local government, water agencies, and others. They argued that progress had been made in having district assemblies take an SEA approach to their district development plans, which had previously rarely considered environmental impacts.

4.94 **Climate change.** There has been significant progress in mainstreaming climate change into government policies and agencies. Under the NREG program, a national climate change policy was designed, including a national climate change adaptation strategy in 2012, low-carbon development strategies, and a technology needs assessment. The overall climate change policy had not yet been launched as of January 2014, but the launch by the president is planned for 2014. The EPA provided technical support and operates as a national focal point for climate change strategies, but the strategies are national strategies not EPA strategies, and most projects under the strategy will be implemented by other ministries and agencies (health, agriculture, energy, forestry, transport, hydrometeorological, etc.). Climate change has been included explicitly as a policy goal at the National Development Planning authority, a major step as this body is central to development planning. Many key institutions have created their own climate change units (including agriculture, forestry, and energy) or had integrated significant climate change elements into their national sectoral development plans (including health and agriculture). District assemblies are now required to include climate change in their development plans, but capacity at the district level is very low and so it is unclear how meaningful this process will be.

4.95 Despite this progress on the policy front, there is little evidence that the program has yet had much impact. No clear actionable investment plans for climate change exist yet. Under NREG, there have been capacity improvements in the ability to undertake climate change work at the central government, but not in local government. Even in national agencies, there is little climate change experience and capacity and so it is difficult to translate the goal of climate change policies into progress on the ground.

4.96 Climate change mitigation actions remain in early stages: mitigation issue is beginning to show up in plans but there are few actions formally aimed at climate change mitigation being implemented. Every government agency is required to submit a technical proposal to the finance ministry which includes climate change issues. Some policies were not motivated by climate change mitigation, but have had greenhouse gas emission reduction effects: energy policies have led to increases in natural gas imports which have reduced oil consumption and imports and have reduced emissions. The government's energy strategy has a target of 10 percent renewable energy generation by 2016, and is supporting renewable energy development by passing a feed-in tariff system under a 2011 renewable energy act. It has policies for ending subsidies on petroleum products and moving to full cost recovery, though these have not yet been implemented. Some of these policy developments were influenced by the Strategic Environmental Assessment of the energy sector, produced under NREG.

4.97 A climate change unit established within the Forestry Commission prior to the NREG program is aimed at supporting climate change mitigation through forestry leveraging opportunities generated through REDD+ and the Clean Development Mechanism. The unit received some support from NREG for policy development, as well as from a range of other development partners and climate finance sources. A REDD readiness proposal is being developed but has not been completed. Systems for monitoring, reporting and verification are being developed but are not yet in place.

4.98 Some staff in the Bank and development partner agencies reported frustration at slower than hoped for progress on climate change. While NREG initially functioned as a focus for climate change planning and policy with donors, this has splintered over time as REDD and the Forest Investment Program introduced parallel approaches, and some donors decided to fund climate change actions separately rather than through NREG. Climate change experts raised concerns that progress had largely stalled through 2013. There are significant financing constraints which mean that full implementation may be difficult.

4.99 **Environmental policy, capacity, and monitoring.** An updated National Environmental Policy was designed and approved in 2012, along with an updated National Environmental Action Plan. The policy outlines major environmental challenges, operational principles for environmental management, strategic goals, and sectoral and cross-sectoral environmental policies. [54]

4.100 NREG funding has supported capacity increases within the EPA. EPA offices have invested in additional equipment and technical capacity for environmental monitoring, e.g. of water quality, noise, hydrocarbons, air quality, greenhouse gas emissions. Prosecutors were trained on environmental issues. The decentralization process of the EPA has continued. Prior to NREG, 10 regional offices existed, but most EPA functions were centralized in Accra. Now, work on small-scale environmental permitting is conducted at the regional level, while large-scale project permits are issued from the national office. Two additional offices were opened. Decentralization of environmental permitting is important because many development activities are conducted at the local level. District assemblies have mandates and requirements to consider environmental effects, but have relatively little capacity to manage environmental issues. Environmental NGOs were very supportive of the

[54] Challenges include land degradation, deforestation, biodiversity loss, water pollution, marine and coastal degradation, mining and industrial development, urbanization, environmental health, climate change, natural disasters, urban noise, oil and gas industry, invasive species, tourism, and transport.

decentralization process, arguing that EPA had highly skilled staff but that they were not present at the local level where needed.

4.101 A pre-existing program for rating the environmental impacts of companies was expanded. The AKOBEN system was originally created under prior World Bank support, and launched in 2001, but under NREG it was expanded from covering just the mining sector to also include the manufacturing sector. The system is based on self-reporting from companies backed by an audit process conducted by the EPA.[55] Companies report in a wide range of categories, which are then aggregated to produce an overall performance rating on a 5 point scale. Company ratings are published online http://www.epaghanaakoben.org/ , though the detailed data on which ratings are calculated are not published.

4.102 Civil society groups were generally supportive of AKOBEN, though many hoped that it would be expanded to additional sectors. Some were very enthusiastic, arguing that it helped with transparency and was useful for allowing CSO groups to undertake evidence-based advocacy, and to focus attention on poor performers. NGO groups argued that mining companies had responded to media pressure based on weak AKOBEN ratings and improved their processes, especially for large multinational companies. Government officials reported that banks and insurance companies had put pressure on corporate clients who had low ratings. However, the tool also has limits in that it is based only on company data, with no inclusion of community consultation. Mining sector experts argued that the EPA did not have the capacity to assess corporate social responsibility very well, and tended to give inaccurately positive ratings.[56]

OUTCOMES

4.103 **There is significant evidence of mainstreaming environment into policies**. The awareness and prioritization of environmental issues has been increased across a wide range of government agencies. There is more consideration of environmental impacts in national and district level development plans. Involvement of NGO groups helped to expand the space for dialog on environmental issues.

4.104 However, these remain intermediate outcomes. Little data is available on national level environmental outcomes (air pollution, water pollution, noise pollution, land degradation, biodiversity, etc.), which were not included in the program's formal objectives.

4.105 **There is some evidence of reduced pollution from major industrial and mining companies** based on self-reported data from AKOBEN ratings (see Table 3), but non-toxic discharge noise and vibration compliance remains low and some other indicators have not improved. Some environmental experts interviewed by IEG argued that improvements were

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[55] Companies report data in 7 areas: legal, on-site hazardous/toxic waste management, toxic discharge compliance, non-toxic/noise/vibration compliance, monitoring and reporting, best practice environmental management, complaints management, and corporate social responsibility. These are then aggregated into a color coded rating system, with poor, unsatisfactory, good, very good, and excellent ratings.

[56] There are many ways for corporate social responsibility systems to be gamed. Most forms of payment to communities are undertaken through in-kind payments, with the valuation of benefits at the discretion of mining companies, and with little to no external check on whether those valuations were accurate.

driven mainly by the rating system (and private sector efforts to avoid poor ratings) rather than by the EIA process.

Table 3: **Environmental ratings from AKOBEN based on self-reporting**

Large-scale mining sector: Share of companies receiving at least "blue" rating				
YEAR	**2009**	**2010**	**2011**	**2012**
On-site hazardous/toxic waste management	45%	100%	64%	87%
Toxic discharge compliance	29%	56%	64%	80%
Non-toxic discharge, noise and vibration compliance	55%	60%	14%	38%
Environmental management best practice	50%	73%	71%	75%
Number of companies reporting	11	11	14	16

Manufacturing sector: Share of companies receiving at least "blue" rating				
YEAR	**2009**	**2010**	**2011**	**2012**
On-site hazardous/toxic waste management	67%	80%	91%	67%
Toxic discharge compliance	60%	19%	50%	61%
Non-toxic discharge, noise and vibration compliance	12%	20%	24%	24%
Environmental management best practice	53%	64%	76%	60%
Number of companies reporting	49	50	49	100

Notes: Blue rating requires 100% of samples comply with Ghana environmental quality standards for on-site hazardous/toxic waste, at least 98% of samples comply for toxic discharge, 75% comply with non-toxic/noise/vibration, and 75% utilize best practice environmental management techniques.
The number of companies covered by the system is increasing over time (especially for manufacturing in 2012), so declining compliance percentage s in some areas is a function of newly added companies performing worse than companies already monitored.
All large mining companies are covered, and nearly all large companies in specified manufacturing subsectors are covered: the increase in companies represents additional subsectors being added.
Source data and methodology is available at http://www.epaghanaakoben.org/

4.106 **Application of climate change adaptation and mitigation strategies remain in early stages**, so it is too soon to tell whether they will have an impact on resilience or greenhouse gas emissions.

4.107 Achievement of this objective is rated *Substantial*.

Overarching program objectives

4.108 The letter of development policy from the borrower outlined overarching goals for the government's program: *to address governance issues regarding natural resources and environment in order to ensure sustainable economic growth, poverty alleviation, increasing revenues and improving environmental protection*. As noted above, there is significant evidence that government revenues have increased as a results of the program, and some evidence that environmental protection has occurred.

4.109 The extent to which the program has contributed to poverty alleviation and sustainable economy growth remains unclear. No data are available on the impact of the program on poverty or shared prosperity. Few program activities would have a direct impact on these, but indirect long-term benefits are plausible. If better forest management leads to more sustainable resource use then it could slow the decline of employment and income from forests; if royalty payments to traditional authorities benefit communities then increased stumpage fee collection could reduce poverty in forestry communities; greater revenue from mining could potentially be put to use in anti-poverty programs; if mainstreaming of environmental policies reduces pollution and environmental degradation then this will improve quality of life for the poor. However, enforcement activities on informal forestry and mining sectors that end livelihoods could make poverty more severe in some areas.

4.110 Potential sustainable economic growth benefits are also largely indirect. If forest management and plantation investments help to make the forestry sector more sustainable then this could slow its decline and ensure economic contributions in the long term. If transparency of revenue flows helps to signal reduced corruption risks to investors, then it could help support sustained investment flows that will support long term growth. Reduced environmental pollution could reduce negative health impacts, and a healthier population could be more productive. But evidence that would confirm these possible effects is not available.

4.111 The program document cites one definition of environmental governance that covers seven elements, and there has been at least some progress on most of these elements.[57] Additional funding for resource management agencies has increased their capacity to set and enforce rules over natural resources. Public participation in decision-making has improved, though much of the public input comes from unelected NGOs who may or may not be representative. Authority for resource management remains largely centralized in national government agencies, though there has been partial decentralization of the EPA and many environmental decisions are made through elected district assemblies. Ecological science is used in development of management plans for forestry and wildlife areas. Large-scale mining companies manage most mineral resources, and are more transparent than in the past; processes for allocating forestry permits are still controversial and not fully transparent; there is still almost no transparency or accountability for the informal sectors. Publication of royalty payments for forestry to district assemblies and traditional authorities represents a significant contribution to governance.

Other program impacts

4.112 Beyond the specific sectoral achievements, NREG has also accompanied a change in attitudes by government to natural resource management. In the past, extractive industries were considered primarily as a source of income, but with the program agencies now look

[57] The seven elements are: i) Institutions and laws relating to who makes and enforces rules for governing natural resources; ii) participation and representation of the public; iii) authority level (from local to international) over natural resources; iv) property rights and tenure over natural resources; v) impacts of markets and financial flows on natural resources and the environment; vi) how ecological and social science is incorporated into decisions on natural resources use to reduce risks and identify new opportunities; and vii) accountability of those who manage natural resources and transparency of their actions (World Bank 2008, page 8, from WRI 2003).

seriously at the sustainability of the renewable resource base, and at environmental and ecosystem services. Environmental issues were taken seriously by senior government officials in a way that had not occurred before. Causality for this is likely bidirectional: an increased willingness by government to emphasize resource management issues was one reason why the program existed, and the existence of the program helped to solidify this change in mindset.

4.113 In past, agencies functioned largely independently with little contact. But through NREG there has been a significant increase in inter-sectoral cooperation and coordination. There has been greater coordination between the environment ministry and the lands and natural resources ministry on biodiversity issues. There is a greater ability of the EPA and the Minerals Commission to work on the environmental impacts of mining. There are greater links between the Forest Commission and Minerals Commission on mining in forest reserves. However, there has been less improvement in linkages between the Forest Commission and EPA, as the Commission remains largely responsible for environmental issues within forest areas. There are tensions between agencies and interest, for example between whether prospecting and mining should be allowed in forest reserves, but cooperation has helped to resolve and manage these issues. Natural Resources and Environment summits organized under NREG were an important focal point, as they were able to address all natural resource sectors (water, fisheries, agriculture and land, oil and gas), not just those included in the NREG design. An evaluation of the first 4 years of NREG carried out on behalf of the Netherlands embassy concluded that governance of natural resource sectors had been improved, based on internal governance within agencies, between agencies, and with other stakeholders including civil society.

4.114 The oil and gas sector were not formally in NREG, but there have been some positive effects. The Strategic Environmental Assessment for the oil sector has been important for oil and gas policy design. Increases in EPA capacity have helped in its ability to manage environmental risks from the offshore oil industry. Experience from the mining sector and EITI helped to inform the policy approach to oil and gas, particularly the design of the Petroleum Revenue Management Act, which has had revenue reporting requirements enshrined from the beginning.

5. Ratings

Outcome

5.1 The Relevance of Objectives is rated *Modest*, as the formal program objectives focused on very intermediate outcomes and so the objectives did not engage with many of the broader sectoral objectives of the government and its agencies. The Relevance of Design is rated *Modest*, as the program documents did not always clarify a clear theory of change and there were some weaknesses in the selection of prior actions and triggers. Achievement on ensuring financing for the forest and wildlife sectors and forest law enforcement is rated *Substantial*, though IEG could not establish the degree to which the program is likely to have reversed ongoing forest degradation. Achievement on improving mining revenue collection and transparency is rated *Substantial*. Achievement on addressing social conflict is rated *Modest* as little evidence is available on social conflict, though the program has had a significant effect on the relationship between government and civil society. Achievement on mainstreaming environmental policy and climate change strategy development is rated *Substantial*, though IEG cannot determine the extent to which the program has led to improved environmental outcomes. Following the harmonized IEG/OPCS guidelines, Efficiency is not evaluated for Development Policy Operations.

5.2 While there were moderate shortcomings in program relevance and design, objectives were generally substantially achieved and the Outcome rating is ***Moderately Satisfactory***.

Risk to Development Outcome

5.3 **Technical and operational.** There are some risks to the policy reforms that have been put in place, and the implementation of these policies will depend on commitment from government and ongoing funding. There is more risk in policy areas that are more controversial, including work on increasing the domestic supply of legal timber. Lobbying efforts from the forestry industry have blocked major reforms to timber royalties, and this threats sustainability of funding to the Forest Commission. There is resistance from traditional authorities to increasing transparency of resource royalties at the local level.

5.4 There are a number of areas where IEG observed some risks to sustainability. As timber production and exports continue to decline, it is unclear whether increased revenue from the forestry sector can be sustained. Revenue increases from mining have been heavily driven by gold price increases, which have been declining since their 2012 peak. It is unclear if Ghana has sufficient revenue management systems to smooth the volatility of gold prices – though in the short-term increasing revenue from oil and gas is counteracting declines from gold prices.

5.5 **Government commitment.** There is strong commitment to the program and to natural resource management and governance from the three implementing agencies, the two line ministries, and the program coordinator within the finance ministry. A technical committee including senior officials within the agencies continues to meet quarterly, and functions as an effective platform for addressing cross-sectoral issues.

5.6 But the level of commitment from the rest of government is less clear. Many non-government stakeholders interviewed by IEG argued that natural resource management was not seen as a high government priority. A natural resource and environment council chaired by vice president is still meeting though infrequently. Perceptions on the impact of the council vary: the 2013 evaluation noted that this council was important for high-level political impact and mainstreaming environmental policy, but some civil society groups interviewed by IEG argued that it had limited practical effectiveness.

5.7 The annual Natural Resource and Environment Summit was not held in 2013. Government officials reported that this was due to uncertainties surrounding elections, high workload of agencies, and a lack of donor funding, but that a Summit would be held early in 2014.

5.8 **Financial.** Some civil society members argued that many activities had stopped since the end of Bank financing, as agencies no longer had the funds to continue them. Other natural resource management experts argued that agencies had not planned well for the end of donor funds – in part because they had expected additional donor funds to be forthcoming. A DFID program review of the forest sector noted concerns about the cost of implementing the legality assurance and wood tracking system given the funds currently available to the Forest Commission (ITAD and Tripleline, 2014). Many Strategic Environmental Assessments have been implemented through specific donor funding (OECD 2012), and so the degree to which the tool will be sustained is unclear.

5.9 Because budget support from development partners was so large a proportion of agency budgets, there is risk that performance of implementing agencies on policy implementation will drop in the short-term if declining donor support is not offset by greater support from government. It is unclear if agencies have funding to fully implement the reforms implemented under NREG. Agencies were not willing to share 2014 budget figures and 2013 budget figures were available only for the Forestry Commission (which showed a flat total nominal budget as compared to 2012, with declining central government budget matched by increasing internally generated funds). Consequently, IEG was unable to determine whether budget levels are being sustained. Rising internally generated funds within agencies have helped to offset declining support from development partners.

5.10 Following the implementation and full disbursement of the three planned operations in the programmatic series, the World Bank and Government of Ghana did not choose to prepare and implement additional follow-up investment or budget support projects.[58] Bank staff reported that one reason for this was that the Government did not like the earmarking of funds under which NREG had operated; the finance ministry did not like the fragmentation of the core budget allocation process and preferred not to be obligated to transfer funds to agencies if doing so would exceed agency absorptive capacity. Bank budget support to Ghana has continued through non-sectoral mechanisms: the most recently project in the Poverty Reduction Support Grant series committed $100 million in January 2012, though it did not contain policy areas or prior actions relevant for natural resource management or environmental governance. The Bank views DPOs as a tool for supporting particular high impact policy reform programs, not to provide ongoing operational funds for agency budgets.

5.11 Donor harmonization is fragmenting as some donors continue to provide budget support for the NREG program, some have largely withdrawn from the sectors, and some prefer to provide support through bilateral interventions rather than joint budget support. Shortly after the Bank decision not to continue NREG financing, DFID and the Netherlands Embassy also elected not to extend their support for NREG. Government officials in the implementing agencies believe the Bank withdrawal was seen as a vote of no-confidence in the program and agencies and contributed to withdrawal of other donors. However, IEG finds that the withdrawal decisions were not based on the Bank’s actions, but rather on broader circumstances within other donor agencies. These included changes in headquarters policy to move away from budget support, changes in sector priorities, reductions in donor

[58] However, the Bank is financing a US$5 million Natural Resources and Environmental Governance Technical Assistance Project approved in June 2013 which provides ongoing institutional support and capacity-building

budgets and support, and prioritization and targeting towards other countries as Ghana attains middle-income country status. Support from the European Union and AFD for NREG is ongoing.

5.12 **Stakeholder ownership.** Civil society groups argue that many of the gains in resource governance have happened because of a strong, high quality civil society presence, but that over the last 2-3 years there has been a decline in donor funding for civil society work, as Ghana has become a middle-income country, and this has led to some NGOs collapsing. Successful facilities like Kasa are reliant on specific donor funds. Some NGOs hoped for government funding, but there is a risk that this could interfere with their independence.

5.13 Large mining companies offer continued support of EITI and transparency, and agree in principle with the idea of a full cost-benefit analysis of the mining sector that includes environmental and social risks. They are however concerned about the prospect of efforts to increase revenue collection further, as gold prices decline from their 2012 peak. Forestry companies oppose increasing stumpage fees, as declining production and exports mean profits are declining.

5.14 The Risk to Development Outcome that have already been achieved is rated ***Moderate***. However, the ability of agencies to make additional progress will be contingent on sustained financing for the sectors.

Bank Performance

QUALITY AT ENTRY

5.15 The program was founded on a considerable analytical base, including a 2007 Country Environmental Analysis and other economic and sector work, though some recommendations from the Analysis were not included in the program design.[59] Institutional analysis including budget and financial management was undertaken using a recipient-executed trust fund grant, but delivery of the work was delayed and could not be completed by the time the program became effective, and 40 percent of the grant was not disbursed.

5.16 The choice of a budget support instrument rather than investment lending seems to be justified. The Bank had previously tried to improve natural resource management in Ghana through investment lending - the 1998-2003 Natural Resources Management Project - but this had been unsuccessful and the envisaged 10 year program was halted because the project was considered to be overly complex and because policy and governance gaps limited the effectiveness of project investments. Further investment lending projects without policy reform may have had only a marginal impact given policy barriers. During the design period of NREG the government was committed to improving management of natural resource sectors, and development partners were present and supportive of using budget support instruments. Government agencies liked the flexibility of budget support, which allowed

[59] Competitive bidding for timber and wildlife concessions, and active community-based natural resource management were recommended by the Country Environment Analysis but not included in the design. However, some progress on these issues has been made regardless.

them to shift expenditure priorities in response to changing needs. The program was prepared in the context of strong macroeconomic performance; this performance worsened during the DPO series because of the global economic downturn, but remained acceptable.

5.17 However, there were a number of problems with the way in which the DPO instrument was used in practice. The Bank's ICR notes (page 13) that many of the activities included were technical rather than policy related, and arguably could have been supported through technical assistance rather than budget support. Other activities that were sector priorities but were more investment-related (such as plantations) were not directly covered by the program. The decision by the government to ring-fence funds and earmark them for NREG ministries and agencies (and the mixed messages from development partners over expectations) undermined the ability of the budget support approach to improve the national level budgeting process for the resource management sector. The Bank could arguably have done more to convince the government not to adopt this arrangement.

5.18 As noted above, there were a number of weaknesses in the design of the monitoring and evaluation system. The program assessment framework seemed to be used to detail the contents of the program's expected outputs, rather than using prior actions and triggers to detail only the most important or critical aspects, or using indicators to provide useful input to program implementation or to assess impact on important sectoral outcomes.

5.19 Development of a complementary technical assistance program based on a comprehensive needs assessment was discussed during appraisal and was expected to be provided by other development partners. But Technical Assistance was not formalized in the design, and most of the expected support did not materialize.

5.20 There is little evidence of the widespread stakeholder consultation outside of government in the design phase that is recommended as good practice under the Bank's operational policies for development policy operations. All civil society groups interviewed by IEG reported that they had not been consulted, and that the program design did little to include civil society in its preparation and design. One reason for this was that the Bank team intensively involved the four other development partners, three government ministries and three key implementing agencies, leaving relatively little time for wider consultations. This led to problems in implementation: efforts were made to reach out to NGO groups during implementation, but not to many other civil society sectors including traditional authorities and community groups. The Bank team noted that civil society had not been excluded from the design process, and were involved and present at some public outreach efforts.[60]

5.21 The program design suffered from a lack of clarity and planning on what was supposed to happen after three years, and on how the program would transition from donor funding to full government ownership – there was no exit strategy. Part of this problem was that the development partners were not just funding a specific one-time set of policy reforms,

[60] The Program Document also notes that comments were received from Forest Watch Ghana, a coalition of 30 forestry NGOs, and incorporated into the matrix (World Bank 2008, page 29).

they were financing the core operation and functionality of agencies – as noted above, NREG funds at times were roughly half the budgets of the implementing agencies.

5.22 The decision to harmonize support with other donors by jointly financing a common program was a positive step, helping to raise the profile of the program and natural resource management issues by creating a single major focal point for discussion of these issues, reducing the administrative and compliance costs of government relationships with donors, and reducing duplication of effort across donors. The program design was conducted jointly across development partners, with a good working relationship between agencies. The Bank's preparation protocols were the most elaborate of the development partners, and so other agencies decided to harmonize around the Bank's preparation process as this would also meet their own standards. Other development partners noted that the Bank's internal review and quality assurance process as part of preparation led to a number of design improvements.

5.23 But incomplete harmonization led to a number of problems over the course of the program. Though there was an informal division of labor between development partners in which sectors and subsectors they would support, this division did not always function well in practice. Informal agreements turned out not to be sufficient, especially with high staff turnover across development partner agencies. Implementing agencies did not feel that there was sufficient harmonization, and that this led to heavy transaction costs and parallel discussions with multiple donors on the same topics.

5.24 Harmonization made the program less flexible, as any changes to the program framework design required signoff and buy-in across all development partners and government agencies, and this sometimes proved to be unworkable.

5.25 An additional complication in harmonization was that the Bank DPO was devised as a three-year program while the budget support from other development partners was for 5 years. The mismatch in horizons contributed to challenges in program supervision and assessment as the mix of donor staff changed.

5.26 Quality at entry is rated *Moderately Unsatisfactory*.

QUALITY OF SUPERVISION

5.27 The Bank conducted missions to provide support, and the primary supervision missions were conducted jointly with other development agencies. There was some degree of specialization between development partners, based on varying interest and technical expertise of staff. Government officials were generally satisfied with the degree of technical support received and advice received from the Bank and other development partners.

5.28 The use of a programmatic DPO where each project lasted for a single year added significantly to the documentation and processing burden for the Bank. During supervision the Bank came to be seen as difficult to deal with due to the annual processing requirements. Major interactions with government became focused around the Bank's process assessments of triggers for the next project, and disputes over verification and the quality of particular outputs, rather than over providing meaningful advice or policy dialog. The large number of triggers in the program design meant that agencies focused primarily on meeting those, sometimes at the expense of broader policy objectives. A number of non-governmental observers argued that the design of the program encouraged agencies to think about NREG purely from a financing perspective, focusing on the specific triggers and output targets to the detriment of broader engagement. Civil society groups noted that they had opposed what they saw as the "triggerization" of the program, which they believed diverted agency attention away from longer-term sectoral policy objectives.

5.29 Some expert participants in the program noted that Bank was sometimes overly focused on documentation and very legalistic in determining precise wording. This encouraged a legalistic response by government agencies, focusing on the letter of the triggers. This hampered development of the relationship that is necessary for policy engagement. The Bank's ICR notes (page 25) that the documentation of the program was sparse, focusing on processing requirements rather than technical and policy discussions.

5.30 In 2009 the Bank worked to establish an independent monitoring and advisory team to try to reduce the burden of reporting, but this effort was not welcomed by the implementing agencies and the mechanism was not repeated for the 2010 project. Towards the end of the program, the development partners changed their means of assessing program performance, which led to confusion among agencies on what they were expected to do and how they were to be assessed.

5.31 Staff turnover in Task Team Leaders for the Bank and other development partners was high. This was particularly problematic for a DPO, where a major part of the ability of development agencies to have a positive impact is dependent on ongoing policy dialog. Meaningful policy dialog requires trust, which requires personal relationships between key development agency and government officials. Implementing agency officials found it hard to work with new people from development agencies who they perceived as not understanding the background of the program. They argued that the technical expertise of key development partner staff sometimes covered only a narrow part of program, noting that the agencies sometimes lacked governance experts.

5.32 Donor harmonization partially broke down during supervision, with parallel financing and efforts introduced for some subsectors. Some sectoral experts involved in the program argued that some development partners tried to add items to the program that were outside the main objectives. The Bank team argued that the need for consensus among all development partners and government agencies made it extremely difficult to implement any changes.

5.33 Quality of Supervision is rated *Moderately Unsatisfactory*.

5.34 Overall Bank Performance is rated ***Moderately Unsatisfactory*.**

Borrower Performance

GOVERNMENT PERFORMANCE

5.35 There was good commitment to the program and its objectives from the government at the beginning of the program, but this waned over time except for specific areas.[61] A key champion of the program during preparation had been the Minister of Finance, but he died shortly after approval. Other key people involved in design moved on to other roles and replacements did not always have the same high levels of priority. Support from the program coordinator in the ministry of finance continued, but prioritization from rest of ministry is unclear. The program has sustained support from the relevant line ministries, currently the Ministry of Lands and Natural Resources and the Ministry of Environment, Science, Technology and Innovation.

5.36 The government's decision to earmark funds to the three main implementing agencies meant that program implementation was largely delegated to those agencies, as occurs during investment lending projects. Non-government observers argued that the government saw the program as the responsibility of those agencies, which made it difficult to make progress on elements of reform that required wider government inputs, and made it difficult for agencies to meet triggers that could not be achieved by those agencies (such as legislative or cabinet approval of policies). They also argued that natural resource management issues have not remained a priority at the highest levels of government. The Bank's ICR notes that the program would have benefited from greater engagement from senior government officials on contentious policy issues such as revising stumpage fees.

5.37 A change in government in autumn 2008 caused some delays in policy dialog and coordination but did not disrupt the broad policy content of the program. Similarly elections in 2013 led to some implementation delays as agencies paused to await the results, but did not cause significant negative effects.

5.38 The Environmental and Natural Resources Advisory Council chaired by the Vice President exists and continues to meet, but experts interviewed by IEG were skeptical of the impact of the council, with infrequent meetings and modest follow-up to recommendations. However, the 2013 Netherlands evaluation found that the council was seen as having a positive impact for high level policy impact, especially on mainstreaming environment into other sectors (Syzygy 2013).

5.39 Government performance is rated *Moderately Unsatisfactory*.

IMPLEMENTING AGENCY PERFORMANCE

5.40 With the Ministry of Finance and Economic Planning providing oversight and coordination, the program was implemented under the institutional mandate of the Forestry Commission, the Minerals Commission, and the Environmental Protection Agency.

[61] The government has demonstrated continued commitment to EITI prior to and throughout NREG. The government has initiated highly public campaigns against illegal mining.

Agencies demonstrated significant commitment: the program was of central importance to them, as NREG funds constituted a major portion of their budget. Most program triggers were met and most products were produced. There was general agreement from development partners and civil society that policies that were produced were of high quality, though there were widespread concerns about the ability of agencies to fully implement them. Agencies developed and sustained a significant degree of cooperation and coordination, especially through the NREG technical committee, which still functions.

5.41 The Bank's ICR argued that agencies were more focused on delivery of outputs rather than policy support or achieving sector goals. But this was at least partially due to the focus of the Bank and other development partners on outputs and monitoring program triggers. The implementing agencies struggled with absorptive capacity, and did not always put in place sufficient staff and technical support to absorb the additional funding or carry out all programmed activities. Program coordinators had numerous other duties and were not always able to provide sufficient attention to the program. Some disruptions occurred due to the institutional transition of the EPA to the newly formed Ministry of Environment, Science and Technology, with institutional tensions over mandate and funding, but the situation has stabilized over time.

5.42 Implementing agency performance is rated *Moderately Satisfactory*.

5.43 As the Outcome rating is in the satisfactory range, these lead to a rating of overall Borrower Performance of ***Moderately Satisfactory***.

Monitoring and Evaluation

5.44 **Design.** As noted above, the design of the M&E framework was overly detailed, and focused largely on recording production of outputs rather than on assessing progress on outcomes. Many indicators were vague, and useable baselines were often absent. The segmentation of M&E across the three implementing agencies reinforced the delegation of program engagement and responsibilities to the agency level rather than at the cross-sectoral level.

5.45 **Implementation.** As noted above, the M&E framework was revised and simplified during implementation, but still retained a focus on outputs rather than outcomes.

5.46 **Utilization.** The program's M&E was utilized mostly as a means of tracking outputs produced under the program so as to assess completion of disbursement conditions, rather than for improving performance of policy actions or assessing progress on outcomes. Agencies developed their own internal M&E systems, and they found these operationally much more useful than the formal assessment framework of the program.

5.47 The Quality of Monitoring and Evaluation is rated ***Modest***.

6. Lessons

6.1 The experience of NREG offers a number of useful lessons about using development policy operations for sectoral interventions, about donor harmonization, and about natural resource management.

Lessons about Development Policy Operations

6.2 **Earmarking funds from a DPO to specific agencies can partly undermine the choice of instrument.** It can shift perceptions of responsibility by agencies to the Bank rather than to the government, it can disrupt the relationship between the finance ministry and the line ministries by inserting the Bank, and it can mean that responsibility for the operation is delegated from government to the agencies reducing overall government program ownership. In this case, it led to the program to be implemented more along the lines of investment lending projects at the agency level – though without the financial management, procurement, or safeguards required for investment lending.

6.3 **There is a risk that in sectoral DPOs with one-year operational cycles, technical and policy advice to the client can be crowded out by processing requirements**. In this program, the short period between disbursement of one operation and assessment of triggers for the next meant that only moderate progress could be made under each operation. Combined with the large number of outputs and targets being tracked, this meant that much of the supervision process focused on verification rather than client support and engagement. A short program horizon also led to selection of very intermediate outcomes for program development objectives, which meant that the program framework and monitoring and evaluation progress were not focused on addressing the main outcomes of concern in the sector (resource degradation, environmental damage, etc.).

6.4 **Program documents should clearly distinguish between the description of policy areas and the program being implemented, the specific prior actions and triggers, and the indicators needed to assess performance.** Prior actions and triggers are disbursement conditions, meant to represent the elements of the program critical for success or reforms that are politically difficult to produce. A DPO does not need to formally track the production of every output in the program. Creating too many output-oriented targets can cause agencies to focus on producing specific outputs, at the expense of more outcome-oriented policy progress. Outcome indicators should be separate from the disbursement condition verification process, and should be selected to provide useful information to guide the program during implementation, and to allow assessment of progress on broad outcomes of interest. Development policy operations require trust in government that they will do the right thing, rather than a design that micromanages the program.

6.5 In this program, some triggers and targets were useful, while others were focused on outputs of secondary importance that arguably could have been included in the program without being formal disbursement conditions or targets. Some triggers and targets were quite subjective, which added tension to the verification process.

6.6 **Sectoral development policy operations may need complementary technical assistance and support.** Sectoral DPOs are implemented by line ministries that often do not have the skills or capacity to implement policy reform programs quickly, and so may require high levels of client support and engagement. Donors cannot expect that government will necessarily purchase its own technical assistance with budget support funds: developing country governments are often reluctant to pay for expensive international experts, even when that technical expertise may be valuable. In this operation a lack of technical assistance arguably led to delays and difficulties in some of the more complex activities, like the design and implementation of the wood tracking system. Particularly in sectors with complex political economy and social dynamics such as natural resource management, a lack of accompanying tools (such as rigorous political economy and/or social analysis) conducted upfront make it difficult to address underlying problems.

6.7 **Sectoral development policy operation programs should include a long-term plan for addressing what will happen at the end of the program.** If budget support funds are used to significantly increase the budgets of specific agencies, then there are risks that progress will not be sustained when donor support ends at the end of the program. Explicitly planning for the transition period at the end of programs might help to reduce these risks.

Lessons about donor harmonization

6.8 **Donor harmonization is important, but has tradeoffs.** Large, harmonized programs can have higher reach and a greater ability to function as a single platform for sector reform. But coordination between donors adds significantly to preparation and supervision burden, which may reduce the time left for wider stakeholder outreach. A clear and formal division of labor between development partners within the harmonized program could help to reduce this burden and improve the accountability of individual donors. If such agreements are informal then they may not last as staff turnover occurs, accountability may be dispersed, agencies may not focus efficiently on providing specialist expertise, and duplication may emerge. There needs to be a clear understanding and formal agreement between partners about monitoring and evaluation and who in government will be accountable. Harmonized programs may also be less flexible, as the agreement of all partners is needed before major design frameworks can be revised. A key challenge for harmonization is that each agency has its own rules and procedures, and there may be significant differences across agencies in expectations (for example, the Bank's DPO instrument is not the same as sector budget support instruments of other donors).

6.9 **Introducing parallel financing into a sector with harmonized budget support can fracture harmonization.** It can encourage government agencies to focus on bilateral relationships with individual development partners rather than engagement through the harmonized mechanisms.

Lessons about Natural Resource Management

6.10 **Civil society can play a useful role in natural resource management if government and civil society groups are able to collaborate productively**. This requires government ministries and agencies that are willing to listen and act collaboratively, and civil society groups that can coordinate to focus messages and engage in a productive rather than purely adversarial manner. Donor pressure can have a positive role in improving this relationship.

6.11 **Addressing social conflict is important, but progress is difficult to assess without social assessment analysis that describes the causes of conflict and measures conflict levels and changes over time.** Tracking tools that are not connected to an ability to take actions may have little impact.

6.12 **Creating and publishing environmental ratings of large companies can help to provide public pressure on the private sector to improve their environmental performance.** Self-reporting backed by audits and inspections can be a cost-effective means of generating ratings if the process is designed in a way to avoid governance risks, such as by having a clear rules-based methodology for translating data into ratings.

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Annex A1. Basic Data Sheet

NATURAL RESOURCES AND ENVIRONMENTAL GOVERNANCE FIRST, SECOND AND THIRD DEVELOPMENT POLICY OPERATIONS PROJECT (CREDIT NOS. 4426-GH, 4627-GH & 4746-GH)

Key Project Data (amounts in US$ million)

	Appraisal estimate	Actual or current estimate	Actual as % of appraisal estimate
Total program costs	40	40	100
Loan amount	40	40	100
Cofinancing	n/a	n/a	n/a
Cancellation	n/a	n/a	n/a

Note: parallel financing of roughly $75 million was provided by other development partners: Netherlands Embassy, European Commission, DFID, and AFD

Cumulative Estimated and Actual Disbursements

	FY09	***FY10***	***FY11***	
Appraisal estimate (US$M)	20	10	10	
Actual (US$M)	20	10	10	
Actual as % of appraisal	100	100	100	
Date of final disbursement:				07/31/2010

Project Dates

Natural Resources and Environmental Governance First Development Policy Operations Project (P102971)

First	Original	Actual
Concept Review		09/13/2007
Negotiations		04/28/2008
Appraisal		02/19/2008
Board approval		06/03/2008
Signing		07/11/2008
Effectiveness	08/05/2008	08/05/2008
Closing date	06/30/2009	06/30/2009

Natural Resources and Environmental Governance Second Development Policy Operations Project (P113172)

Second	Original	Actual
Concept Review		10/09/2008
Negotiations		05/26/2009
Appraisal		05/20/2009
Board approval		06/30/2009
Signing		08/14/2009
Effectiveness	10/14/2009	10/14/2009
Closing date	06/30/2010	06/30/2010

Natural Resources and Environmental Governance Third Development Policy Operations Project (P118188)

Third	Original	Actual
Concept Review		12/16/2009
Negotiations		05/26/2009
Appraisal		04/12/2010
Board approval		06/03/2010
Signing		08/14/2009
Effectiveness	12/08/2010	11/02/2010
Closing date	06/30/2011	06/30/2011

Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank budget only)	
	Staff Weeks (number)	**US$ 000s (including travel and consultant costs)**
P102971 Lending		
FY07	34	160.49
FY08	63	316.77
Total:	**97**	**477.26**
P102971 Supervision		
FY08	0	13.79
FY09	19	107.79
Total:	**19**	**121.68**
P113172 Lending		
FY09	39	187.58
Total:	**39**	**187.58**
P118188 Lending		
FY10	35	172.13
Total:	**35**	172.13
P118188 Supervision		
FY11	23	90.90
Total:	**23**	**90.90**

Task Team members

Name	Title (at time of appraisal and closure, respectively)	Unit	Responsibility/ Specialty
Lending (preparation of original Program under P102971)			
Jean Christophe Carret	Sr Environmental Economist	AFTEN	TTL
Paola Agostini	Senior Economist	AFTEN	Environment & NRM
Edward Dwumfour	Sr Environmental Economist	AFTEN	Environment & NRM
Allison Berg	Senior Operations Officer	COPCO	Mining & operations
Boubacar Bocoum	Senior Mining Specialist	COPCO	Mining & EITI
Caroline M. Kende-Robb	Lead Soc. Dev. Specialist	SDV	Social Development
Jan Bojo	Lead Environmental Econ.	ENV	Environmental Econ.
Carlos Cavalcanti	Senior Economist	AFTP4	Macroeconomic Assess.
Manush Hristov	Senior Counsel	LEGAF	Country Lawyer
Rajiv Sondhi	Senior Finance Officer	LOAFC	Loan Officer
John Nyaga	Sr Fin. Management Specialist	AFTFM	PFM
Christine Kimes	Senior Operations Officer	AFTRL	Results
Robert Wallace DeGraft-Hanson	Financial Management Spec.	AFTFM	PFM
Sandra Bulls	Program Assistant	AFTEN	Team support (HQ)
Victoria Ahlonkoba Bruce-Goga	Program Assistant	AFTEN	Team support (CO)
Supervision/ICR (including completion of preparation of P113173 & P118188)[38]			
John W. Fraser Stewart	Sr Natural Resources Mgt Res.	AFTEN	Task Team Leader
Peter Kristensen	Sector Leader	AFTEN	Climate change, oil & gas SEA
Alyson Kleine	Operations Analyst	WBICC	Operations
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Carolyn Winter	Senior Social Dev. Spec.	AFTCS	Social Development
Franke Hendrik Toornstra	Adviser	AFTDE	Policy matrix revision
David John Santley	Sr. Petroleum Specialist	SEGOM	Oil & gas SEA
Sunil Mathrani	Sr. Energy Specialist	AFTEG	Climate change /energy
Smile Kwawukume	Sr. Public Sector Specialist	AFTPR	Governance
Anders Jensen	Monitoring & Evaluation Spec.	AFTDE	M&E
Sebastien Dessus	Lead Economist	AFTP4	Macroeconomic Assess.
Ferdinand Tsri Apronti	Procurement Specialist	AFTFM	PFM
Virginie Vaselopulos	Program Assistant	AFTEN	Team support (HQ)
Jayne Kwengwere	Program Assistant	AFTEN	Team support (HQ)
Ernestina Aboah-Ndow	Program Assistant	AFCW1	Team support (CO)
Rose Abena Amapadu	Program Assistant	AFCWI	Team support (CO)
Stephen Ling	Natural Res Management Spec	AFTEN	ICR

Other Project Data

Borrower/Executing Agency:

Follow-on Operations

Operation	*Credit no.*	*Amount (US$ million)*	*Board date*
Natural Resources and Environmental Governance Technical Assistance	IDA-H8510	5	June 6 2013

Annex A2. Prior actions and triggers

First Operation in a Programmatic Series

Prior actions from Legal Agreement	**Status**
Forestry:	
Made satisfactory progress in the negotiations with the European Union on a voluntary partnership agreement concerning the "Forest Law Enforcement, Governance and Trade" initiative, and has defined the elements of such agreement by December 2007.	Achieved
Submitted to the Cabinet a financial framework to ensure predictable and sustainable funding for the Recipient's Forestry Commission.	Achieved.
Mining:	
Prepared, through the Recipient's Minerals Commission, a proposal for new guidelines on social responsibility in mining activities, which takes into account *inter alia* experiences with alternative livelihood programs and community development schemes in the mining sector, for consultation with relevant stakeholders.	Achieved.
Prepared, through the Minerals Commission, and in consultation with relevant stakeholders: (a) a draft mining policy document to govern the Recipient's strategic directions in the mining sector over the short, medium and long term; and (b) draft regulations on royalty, compensation, health and safety and service companies, following the adoption of the Minerals and Mining Act of 2006 (Act 703).	Achieved.
Environment:	
Completed strategic environmental assessments in the energy and transport sectors.	Achieved.
Carried out an appraisal of the environmental impact assessment service delivery processes, and prepared revised environmental impact assessment guidelines for the general construction, health, mining, agriculture, energy, tourism, manufacturing and services and transport sectors.	Achieved.

Second Operation in a Programmatic Series

Prior actions from Legal Agreement	**Status**
Forestry:	
Signed a voluntary partnership agreement with the European Community concerning forest law enforcement, governance and trade, and submitted the said agreement to the Recipient's Parliament for ratification.	Achieved.
Implemented the Cabinet-approved financial framework for the Recipient's Forestry Commission in a manner satisfactory to the Association.	Implementation judged satisfactory by development partners, although the financial report used as the Means of Verification noted ongoing performance issues.
Mining:	
Undertaken consultations with mining communities, civil society and mining	Achieved.

companies on the content of guidelines on social responsibility in mining activities, and published a summary of the consultations.	
(a) established a multi-agency mining revenue task force including but not limited to the Recipient’s Minerals Commission, the Ministry of Lands and Natural Resources, the Internal Revenue Service and the Customs, Excise and Preventive Service; (b) adopted, through the said task force, an action plan to enhance mining sector revenue collection; and (c) piloted a fiscal model for one mine.	Achieved.
Environment:	
Prepared a draft national climate change adaptation strategy.	Achieved.
Prepared a strategic environmental assessment of the tourism sector, and conducted a review of the experience with strategic environmental assessments of different sectors completed to date.	Achieved.

Third Operation in a Programmatic Series

Prior actions from Legal Agreement	**Status**
Forestry:	
Commenced a pilot program of wood tracking systems to verify the origin of timber with at least three commercial companies that are involved in the harvesting, processing and export of timber, as a means of implementing the Voluntary Partnership Agreement.	Achieved.
Established procedures to improve transparency of disbursement of forestry revenue.	Achieved.
Mining:	
Prepared and issued satisfactory guidelines on social responsibility for mining activities.	Achieved. Guidelines are non-binding.
Commenced the implementation of the Mining Revenue Task Force action plan to improve mining sector revenue collection, management and transparency, including: (a) completion of a collaborative pilot audit by the Recipient’s Minerals Commission, the Internal Revenue Service and other relevant departments of at least one mine; and (b) application of a fiscal model to three mines.	Achieved.
Environment:	
Submitted a draft Strategic Environmental Assessment of the oil sector, satisfactory to the Association, and issued guidelines for environmentally responsible management of oil sector.	Achieved.

Source: World Bank 2011 (ICR).

Annex B . Other Data

Annex B1: The Kasa Programme

Kasa ("speak out") is a sector-specific framework/platform for civil society organizations in the natural resource management and governance sector. Its goal is to strengthen civil society and media engagement and to advocate for equitable access, accountability and transparency in these sectors. Kasa does not do implementation directly, rather serving a coordination role and providing an organizing framework for civil society organizations[62] (CSO). It helps these agencies with communicating, coordinating, and collaborating with government agencies, and it undertakes capacity building activities within CSOs.

Kasa was established in 2008, initially with financial support from the Netherlands Embassy, and then with support from CARE International and ICCO. Supporters of Kasa argue that though there were other general CSO coordination mechanisms existing already (notably STAR-Ghana), that these focused primarily on health, education, and other sectors, and that there was a need for separate specific coordination support for the natural resource management sectors.

Kasa was not directly funded by the NREG program, and its existence cannot be directly attributed to the Bank financed program. Plans for a funding facility for civil society were described in all three program documents but did not eventuate. However, the NREG program contributed to changing the government willingness to engage with the NGO sector and served as a focal point for government NRM activities with which civil society could engage. Thus, the NREG program and Kasa initiative were highly complementary.

Kasa helped to coordinate NRM sector NGOs to provide a concerted message, which government would then take seriously. They help regional NGOs to engage at the national level.

A central part of this engagement has been through the annual Natural Resources and Environment Sector summits organized by the government under NREG to review progress in the NRM sectors. In the first summit in 2009, the role of civil society was largely to listen. But in later summits, CSOs had a more active role and more meaningful input, including multiple speaking slots. In part this occurred because Kasa was able to help CSOs to coordinate and organize prior to the summit, and so to engage more effectively with government. A key contribution has been a parallel review of the NRM sector written by Kasa secretariat with inputs from CSOs and presented at the summit.[63] These reviews have

[62] Civil society includes NGOs, community groups, traditional authorities, and others.

[63] For example, the 2012 review published by Kasa noted concerns on the uncertainty of the future of the NREG program because of a lack of donor support, and specific sectoral concerns in the forest sector (the failure of the government to increase stumpage fees, increasing use of salvage permits instead of timber utilization permits in forest reserves), mining sector (the burden of the registration process for small-scale miners and lack of viable sites), land sector (the acquisition of land for commercial purposes without adequate compensation and a lack of urban land use planning), fisheries sector (the absence of a Fisheries Impact Assessment), water sector (deteriorating water quality and lack of water supply), and

fed into government action plans. However, some NGO groups argued that many of the same complaints had been made year after year, and had not been addressed by government.

NRM sector experts interviewed by IEG in civil society and in government argued that Kasa had been an effective platform and a core reason behind the improving relationship between civil society and government agencies.

Annex B2: Kakum National Park

The Kakum Conservation Area (comprising Kakum National Park and Assin Attandanso Forest Reserve) is the most visited National Park in Ghana and the largest source of revenue from the wildlife sector, largely because of its relative proximity to Accra and other major cities and because of its high profile canopy walkway. The park is a source of significant biodiversity, including 40 species of larger mammals, 200 species of birds, and 400 species of butterflies. But isolation within the park means that there is not much genetic mixing and that long-term sustainability is thus threatened, especially for large animals like elephants. Park management are concerned that the fragmented nature of the park's forest (a fixed area surrounded by private property with little forest cover) will make it difficult for wildlife to adapt to climate change by migrating.

In the Kakum Area, NREG program funds enabled a number of activities and investments: park staff reported that 80 percent of the park's budget came from NREG or other donor programs.
Funding enabled an increase in the number of effective patrol days, from 5.98 days per month per staff in 2005 to 12.80 in 2008 and 17.5 in 2013 in a period where staff numbers have been roughly stable. Park staff argued that this had contributed to a decline in poaching, though formal data was not available. Investments in computers and GPS units enabled park staff to document the location of incidents (animal incursions, poaching, etc.) to allow for later analysis, so that patrols and other activities could be focused on high need areas.

Investments in park facilities (particularly creation of new campsites) have contributed to rising visitor numbers: visitors to Kakum increased from roughly 7,000 in 2007 to roughly 17,000 in 2012. 60-70 percent of visitors are Ghanaian, while the remainder are international (a survey carried out under an EU project reported that roughly 70 percent of all international tourists to Ghana visited Kakum). Park revenue has increased over time, driven by the increase in visitor numbers and a 2013 revision of park fees, to a total of 1.2 million GHS in 2012 (though half of this shared with the park trust).

Invasions of farms and cocoa plantations in by elephants (and the associated crop damage) are a source of conflict in adjacent communities. Under NREG, park staff scaled up previously piloted community training programs aimed at informing communities of prevention measures which can discourage elephants from intruding; under the program

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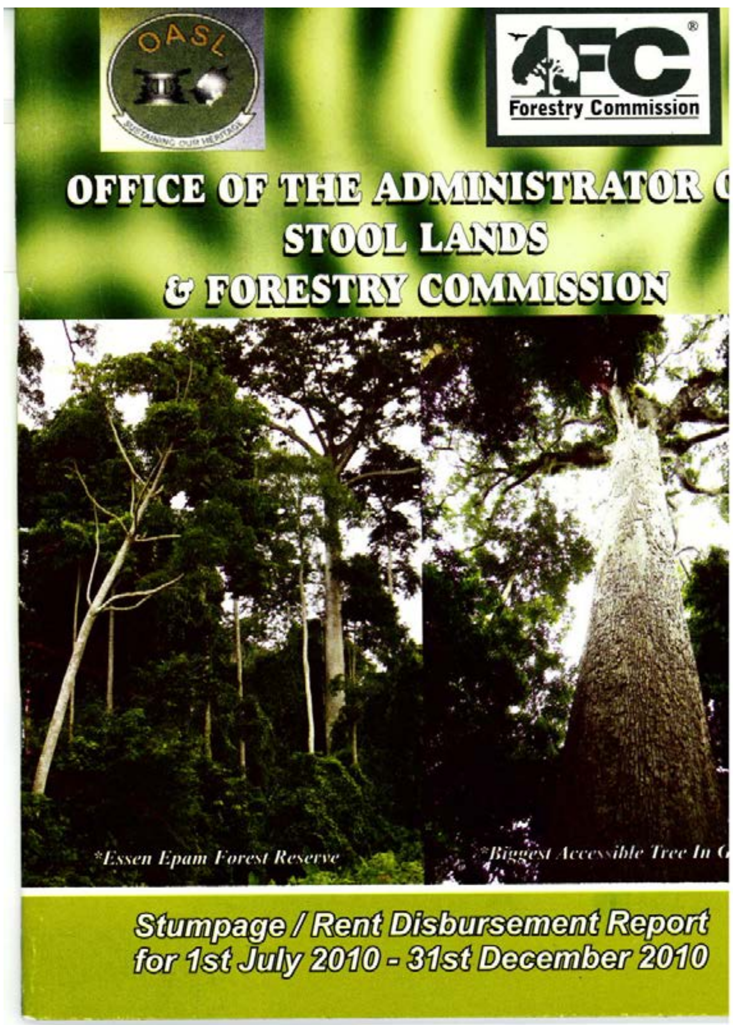
environment sector (poor waste management, the lack of an SEA for some policies, and the delays in completion of a national climate change policy) (Kasa 2012).

farmers were trained in measures to reduce incursions across most of the 52 communities on the park fringe. Park staff reported that following this training there had been a 30 percent reduction in the number of one elephant incursion over the course of the program.

However, wildlife experts argued that while Kakum is relatively well resourced, other parks receive very small budgets, and are heavily reliant on donor funds. Kakum is atypical of wildlife areas in Ghana, as it is the most visited and best resourced national park, and many facilities are run by a separate trust, which was established with a US$2 million grant from development partners. Maintenance of some key facilities (such as the visitor center) are carried out under this trust, and not directly through the park budget.

Annex B3: Forestry royalties distribution report

Sample of forestry royalty distribution report cover:



Sample page from forestry royalty distribution report:

PAYMENT OF ROYALTIES / RENT TO DISTRICT ASSEMBLIES, TRADITIONAL COUNCILS & STOOLS, 01/07/2010 - 31/12/2010 (ON-RESERVES)

BRONG AHAFO REGION

DISTRICT	DISTRICT ASSEM.	AMOUNT	TRAD. COUNCIL	AMOUNT	STOOL NAME	AMOUNT
GOASO	ASUNAFO NORTH.	34,963.44	MIM	12,713.99	MIM/AKWABOA	15,892.45
	ASUNAFO NORTH.	6,258.71	AKRODIE	2,275.89	AKRODIE	2,844.87
	ASUNAFO SOUTH	1,067.72	KUKUOM	388.26	SAWERESO/ABUOM	485.33
	ASUNAFO NORTH /SOUTH	1,264.73	AKRODIE/KUKUOM	459.90	AKRODIE	574.88
	ASUNAFO NORTH/ASUTIFI	3,994.16	MIM/KENYASI	1,452.42	MIM/KENYASI	1,815.53
	ASUNAFO NORTH/SOUTH	3,613.50	MIM/KENYASI	1,314.00	MIM/KENYASI	1,642.50
	ASUNAFO NORTH/SOUTH	1,324.22	KUKUOM/SANKORE/AKRODIE	481.53	SANKORE/KWAPONG/AKRODIE	601.92
	ASUNAFO SOUTH	268.79	SANKORE/KWAPONG	97.74	SANKORE/KWAPONG	122.18
TOTAL FOR GOASO		**52,755.27**		**19,183.73**		**23,979.66**
DORMAA						
	DORMAA	25,932.32	DORMAA	9,429.93	DORMAA	11,787.41
TOTAL FOR DORMAA		**25,932.32**		**9,429.93**		**11,787.41**
SUNYANI						
	ASUTIFI	4,170.21	KENYANSI	1,516.44	KENYANSI	1,895.56
	DORMAA EAST	2,191.73	DORMAA	796.99	DORMAA	996.24
TOTAL FOR SUNYANI		**6,361.94**		**2,313.43**		**2,891.80**
KINTAMPO	KINTAMPO SOUTH	580.39	NKORANZA	211.05	NKORANZA	263.82
TOTAL FOR KINTAMPO		**580.39**		**211.05**		**263.82**
BECHEM						
	TANO NORTH	3,262.73	BOMAA	1,186.45	DORMAA AHENKRO	1,483.06
TOTAL FOR BECHEM		**3,262.73**		**1,186.45**		**1,483.06**
GRAND TOTAL FOR BRONG AHAFO		**88,892.65**		**32,324.59**		**40,405.75**

Annex C. List of Persons Met

Government ministries:

Mr. Franklin Ashiadey, Ministry of Finance, Director, Coordinator NREG Technical Committee
Mr. Fredua Agyeman, Ministry of Environment, Science, Technology and Innovation, Director, Environment
Mr. Joseph Osikawan, Ministry of Lands and Natural Resources
Mr. Tabi Agyarko, Ministry of Lands and Natural Resources, Principal Planning Officer/M&E Coordinator

Forestry Commission:

Mr. Oppon Sasu, Head Donor Relations/Projects
Mr. Ralphael Yeboah, Forest Services Division, Executive Director
Mr. Ben Donkor, Timber Industry Development Division, Director
Mr. Nana Kofi Adu-Nsiah, Wildlife Division, Director
Mr. Issah Mahama, Wildlife Division, Business Planning Manager
Mr. Chris Beeko, Timber Validation Department, Director
Mr. Andy Osei Okrah, Human Resources, Director
Mr. Robert K. Bamfo, Climate Change, Head
Mr. Yaw Kwakye, Climate Change Unit, Manager
Mr. Charles Dei-Amoah, Timber Rights Administration Unit
Mr. Robert Nyarkoh, Finance and Administration
Mr. Adu Mintaph, Information and Communication Technology
Mr. Kenneth Mbroh, Corporate Planning/Donor Relations Officer
Mrs. Lydia Opoku, Forest Services Division, Regional Manager Western Region
Other Western Region and District staff.
Mr. Enoch Ashay, Kakum National Park

Minerals Commission:

Mr. Richard Kofi Afenu, Manager, Sectoral Policy & Planning
Mr. Jerry Ahadjie, Principal Sectoral Policy and Planning Officer
Mr. Steven K. Agbo, Senior Social Scientist
Mr. Bernard Ntibrey, District Manager, Tarkwa

Environmental Protection Agency:
Mr. Samuel E.K. Anku, Deputy Executive Director
Ms. Christine Okae Asare, Director, SEA/Legal
Ms. Audrey Quarcoo
Mr. George Diawuoh, Western Region
Dr. Lawrence Akoto, Principal Programme Officer, Western Region
Afuah Prempeh, Western Region
Hareem Seidu, Western Region
Lawrence Akoto, Western Region

World Bank staff:

Yusupha B. Crookes, Country Director
Mr. Sayad Waqar Haider, Sector Leader
Jean-Christophe Carret, Sector Leader
John W. Fraser Stewart, Senior Natural Resources Management Specialist
Martin Fodor, Senior Environmental Specialist

Development partners:

Mr. Bart Missine, Delegation of the European Union to Ghana, Head of Infrastructure and Sustainable Development Section
Mr. Harry van Dijk, Embassy of the Kingdom of the Netherlands, Deputy Head of Mission/Head of Cooperation
Mr. Xavier Muron, Agence Française de Developpement, Deputy Resident Manager
Ms. Priscillia Morisset, Agence Française de Developpement, Project Officer, Agriculture, Rural Development & Environment
Mr. Vincent Langdon-Morris, DFID
Mr. Sean Doolan, DFID
Ms. Wilma van Esch, Embassy of the Kingdom of the Netherlands

Other stakeholders and technical experts

Professor Alfred Oteng-Yeboah, Department of Botany, University of Ghana
Dr. Erasmus H. Owusu, Senior Lecturer, Department of Animal Biology & Conservation Science, University of Ghana
Mr. Zakaria Yakubu, Care International in Ghana, Programme Coordinator, Kasa/Civil Society & Governance
Mr. Samuel Nketiah, Programme Director, Tropenbos International
Dr. Steve Manteaw, Campaign Coordinator, ISODEC, Publish What You Pay
Mr. George Awudi, Friends of the Earth Ghana
Mr. Ahmed D. Natogmah, Ghana Chamber of Mines, Director Public Affairs & Environment
Mr. Sulemanu Koney, Ghana Chamber of Mines, Director Analysis, Research & Finance
Mr. Emmanuel Doni-Kwame, Ghana Domestic Lumber Traders Association, Managing Director
Mr. Elijah Yaw Danso, PAB Development Consultants Ltd, Director
Ms. Claire Brogan, IDL Consultants
Mr Shakeb Afsah, Consultant
Mr. Kwame Mensah, WERENGO
Mr. Wisdom Quaiku, UCSOND
Mr. Stephen Kankam, Hen Mpoano (Our Coast)
Mr. Jerry Affum Offei, Conservation Foundation
Mr. Kwamera Brokye, Social Development Partners
Mr. Kyei Kwawo Yamoah, Friends of the Nation
Community leaders at an undisclosed mining community in Western Region.
Mr. John Nkoah, Area Council Chairman, Simpa