REQUEST FOR CEO ENDORSEMENT

PROJECT TYPE: FULL-SIZED PROJECT
TYPE OF TRUST FUND: GEF TRUST FUND

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PART I: PROJECT INFORMATION

Project Title: GLOBAL FOREST WATCH (GFW)			
Country(ies):	Georgia, Madagascar	GEF Project ID:[1]	5356
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01087
Other Executing Partner(s):	World Resources Institute, Ministry of Environment and Natural Resource Protection (MENRP) of Georgia, Ministry of Environment, Ecology and Forests (MEEF) of Madagascar	Submission Date:	May 25, 2015
GEF Focal Area (s):	Multi-focal area (BD, CC)	Project Duration(Months)	36 months
Name of Parent Program (if applicable): ➢ For SFM/REDD+ ☐ ➢ For SGP ☐ ➢ For PPP ☐		Project Agency Fee ($):	507,534

A. FOCAL AREA STRATEGY FRAMEWORK[2]

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount ($)	Cofinancing ($)
BD-2	Outcome 2.1 – Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation	Output 2. National and sub-national land use plans that incorporate biodiversity conservation and ecosystem services valuation.	GEF TF	1,780,822	6,300,000
LD-3	Outcome 3.1 enhanced cross-sector enabling environment for integrated landscape management	Output 3.1: Integrated land management plans developed and implemented	GEF TF	890,411	8,800,000
CCM-5	Outcome 5.1 Good management practices in LULUCF adopted both within forests and in the wider landscapes Outcome 5.3 GHG emissions avoided and carbon sequestered	NA	GEF TF	1,335,616	6,094,000
SFM/REDD+ - 1	Outcome 1.1 - Enhanced enabling environment within the forest sector and across sectors	NA	GEF TF	445,205	5,500,000
SFM/REDD+ -2	Outcome 2.1 Enhanced institutional capacity to account for GHG emissions reductions and increase in carbon stocks.	NA	GEF TF	890,411	1,200,000
		Total project costs		5,342,465	27,894,000

[1] Project ID number will be assigned by GEFSEC.
[2] Refer to the Focal Area Results Framework and LDCF/SCCF Framework when completing Table A.

B. PROJECT FRAMEWORK

Project Objective: To empower decision-makers in government, the private sector, and civil society with technology and information necessary to reduce deforestation and land degradation, combat illegal activities, and conserve biodiversity in pilot countries and on a global scale.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount ($)	Confirmed Cofinancing ($)
1. Application and enhancement of GFW in pilot countries	TA	Outcome 1.1 GFW is upgraded and applied on a global scale and in 2 pilot countries Madagascar and Georgia, supporting: (a) improved management of existing forest areas and conservation of biodiversity, (b) reforestation/ afforestation programmes, (c) improved control of deforestation on the ground and monitoring / protection of carbon stocks and (d) providing the information base for PES schemes (Payment for Ecosystem Services). Outcome 1.2 Government and non-government agencies in pilot countries adopt GFW as a critical information tool for collaborating on landscape-level, multi-sectoral initiatives	Output 1.1.1 Improved global- and regional-level data on GFW platform Output 1.1.2 Improved features and functionality on GFW global platform to support analysis, decision-making and action Output 1.1.3 Nationally validated data sets, including refined forest cover / change data and additional locally generated data layers, are available within pilot country sections of GFW Output 1.1.4 Enhanced management practices through national and field-level application ('use cases') of data and information generated and made available through national GFW views Output 1.1.5 Targeted awareness, capacity building and outreach effort focusing on governmental and non-governmental stakeholders in the pilot countries to support timely and wide-ranging system uptake Output 1.2.1 GFW demonstrated as a tool for integrating multiple biodiversity, carbon and land degradation considerations in support of landscape-level planning and management.	GEF TF	3,913,894	17,300,000
2. System uptake and replication	TA	Outcome 2.1: National-level users in multiple countries have enhanced opportunity to visualize and utilize country-specific data Outcome 2.2 Lessons learned and experience gained in target countries support	Output 2.1.1 Enhanced online GFW system to visualise and enable interpretation of country-relevant data. Output 2.2.1 Enhanced GFW uptake in target and other countries Output 2.2.2 Country-level and thematic analyses and sharing of lessons learned through implementation of use cases and other country-level co-operation Output 2.2.3 Policy and programme guidance	GEF TF	526,549	3,760,952

		the enhancement of the GFW platform to increase its relevance and utilization at scale by a range of stakeholders	based on GFW lessons learned			
3.Strengthening and sustaining the GFW partnership	TA	Outcome 3.1 The GFW partnership is strengthened, long-term financial sustainability is secured, and GFW is increasingly regarded as a transparent and credible monitoring and management tool in support of forest conservation and sustainable use	Output 3.1.1 Country-, regional- and global-level user networks established and strengthened Output 3.1.2 Sustainable financing plan for the GFW system developed in collaboration with public and private sector as well as CSOs Output 3.1.3 External and independent review and oversight mechanism established to guarantee highest degree of transparency and technical credibility	GEF TF	266,667	1,500,000
4. Private sector application to reduce deforestation in supply chains	TA	Outcome 4.1 National and global-level impacts of GFW on forest conservation are significantly enhanced through the adoption of the suite of tools/platforms as a supply chain management tool by the private sector	Output 4.1.1 Partnerships with selected private sector companies active in target commodity sectors in target countries and/or globally, to assess user needs and requirements and jointly explore the development of GFW-specific decision-support tools tailored to private sector operations, management systems, and covering various steps in commodity supply chains Output 4.1.2. An expanded and improved GFW Commodities application or suite of applications, providing enhanced datasets and management tools for companies trading in goods and services linked to deforestation Output 4.1.3 Broad, rapid uptake of GFW Commodities applications through partnership networks and specific promotion efforts.	GEF TF	380,952	4,000,000
			Subtotal		5,088,062	26,560,952
			Project management Cost (PMC)[3]	GEF TF	254,403	1,333,048
			Total project costs		5,342,465	27,894,000

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME ($)

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount ($)
CSO	WRI	Cash	6,000,000
National Government	Government (Georgia)	In-kind	2,000,000
National Government	Government (Madagascar)	In-kind	2,500,000

[3] PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

Bilateral Aid Agency (ies)	GIZ (Georgia)	In-kind	500,000
GEF Agency	UNEP/DEPI	In-kind	300,000
Private Sector	ESRI	In-kind	9,494,000
CSO	Transparent World	In-kind	7,100,000
Total Co-financing			27,894,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in $)		
				Grant Amount (a)	**Agency Fee** (b)[2]	**Total** c=a+b
UNEP	GEF TF	Land Degradation	Georgia	890,411	84,589	975,000
UNEP	GEF TF	Climate Change	Georgia	890,411	84,589	975,000
UNEP	GEF TF	Biodiversity	Madagascar	1,780,822	169,178	1,950,000
UNEP	GEF TF	Climate Change	Madagascar	445,205	42,294	487,499
UNEP	GEF TF	Multi-focal Areas	Global	1,335,616	126,884	1,426,500
Total Grant Resources				5,342,465	507,534	5,849,999

[1] In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

[2] Indicate fees related to this project.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount ($)	Cofinancing ($)	Project Total ($)
International Consultants	433,800	200,000	633,800
National/Local Consultants	220,000	100,000	320,000

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? NO

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF[4]

Further information about alignment of the project design with the original PIF is provided in Annex E of this CEO Endorsement Template.

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

N/A

A.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities. **N/A**

[4] For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question.

A.3 The GEF Agency's comparative advantage: **N/A**

A.4. The baseline project and the problem that it seeks to address: **N/A**

A. 5. Incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The baseline:

The project's global baseline is defined as the existing GFW platform, absent any changes or active support beyond bare maintenance. Thus, all global-level inputs designed to update and/or improve the site are considered as incremental.

At pilot country level, we assume that no special efforts are made to support uptake or remove associated barriers.

Under the above assumptions, GFW would of course remain a highly useful tool for global and national-level forest management. However, several persisting shortcomings would be apparent and would limit its potential effectiveness. These include the following:

- Absent country-level validation, there could be skepticism in some areas regarding the accuracy of the data on forest cover change;
- Deforestation of certain forest types, such as dry forest in Madagascar, and degradation of most forest types, would remain beyond the capacity of the system to pick up, given current resolutions;
- Lack of national-level data would limit the tool's potential effectiveness for many national and local level management challenges, including landscape-level management;
- Given limited governmental capacities, the risk of slow or even minimal uptake would remain in many countries, in many cases including simple lack of awareness of the system and its capabilities;
- The GFW partnership would face an uncertain future;
- There would be little active understanding of how GFW was working to improve forest sector outcomes around the world;
- GFW would provide only minimal support to carbon-based conservation efforts such as REDD+;
- Commodity-based uses of the system would remain limited.

The GEF Alternative:

Under the GEF alternative, incorporating substantial incremental co-financing support, the utility of the GFW platform would be greatly enhanced. More specifically:

- Country-level validation increases the perceived and actual accuracy of GFW data;
- Increasing use of high resolution data helps to resolve uncertainty, and better quantify, deforestation and degradation trends and improve the timeliness of associated alert systems;
- Incorporation of national data helps to create highly useful forest geoportals in pilot countries;
- Uptake in both pilot and target countries is speeded through active intervention and lesson learning / knowledge dissemination;

- Well understood examples are available of the potential and actual applications of GFW data to enhanced forest and land use management systems.
- Expanded and extended data sets make GFW an increasingly useful tool for forest carbon-related analyses and related planning / implementation;
- GFW becomes a go-to platform for companies, NGOs and civil society people interested in minimizing the impacts of increased commodity production on forest extent and condition.

Incremental benefit:

Implementation of the GEF-led alternative is expected to have a variety of important national- and global-level incremental benefits. These include:

- Reduced rates of deforestation and forest degradation in pilot and target countries, with a range of associated global benefits related to conserved biodiversity, reduced carbon emissions and reduced rates of land degradation (see results matrix and tracking tools for quantified estimates).

Improved long-term basis for science-based, inter-sectoral co-operation among government ministries and agencies representing productive, extractive and sustainable use / conservation interests, as well as private sector, civil society and academia.

The incremental costs and benefits of the proposed project are summarized in the following incremental cost matrix. The incremental cost of the project, USD$28,742,465 is required to achieve the project's global environmental benefits.

Of this amount USD$5,342,465 (representing 19% of the total) is being requested from GEF. The remaining amount of USD$23,400,000 (81%) of the total cost will come from the Governments of Georgia and Madagascar and other national and international donors. The figure includes both in-kind and cash contributions.

Baseline Scenario (Business As Usual)	**GEF Incremental Contribution** (what the GEF project will contribute)	**Key Outcomes expected with the Alternative Scenario** (BAU+GEF Increment)
Component 1. Application and enhancement of GFW in pilot countries GFW Alert System is set-up on a global scale operating different systems: cover change alerts with a resolution of 500 m every monthly in the humid tropics; annual worldwide data operating on 30 m resolution. The resources to enhance the alerts to 250 m and also operating outside the tropics, and to enhance precision in pilot countries, are not yet available	Accuracy and precision of change alerts and annual data of GFW is significantly enhanced in project pilot countries supported by ground truthing and crowdsourcing, and incorporating high resolution datasets specific for these countries. GFW is fully applied in the pilot countries, national professional capacity is developed, staff is trained on the use of GFW or local developed website that is operational also for off-line use in key agencies. Gathering and reaching consensus on key local datasets for integration into the system, and through this process also identifying and filling critical data gaps. Uniting local land cover and land use data with GFW's global monitoring data will add additional context and help local actors tell a more complete story with the data, which can be used to inform policy decisions and actions Wide range of stakeholders informed and	More precise and accurate land cover and cover change alerts and information operational on a global scale, and applied in selected pilot countries, supporting: (a) improved management of existing forest areas and conservation of biodiversity, (b) reforestation/afforestation programs, and (c) providing the information base for PES schemes (Payment for Ecosystem Services).

Baseline Scenario (Business As Usual)	**GEF Incremental Contribution** (what the GEF project will contribute)	**Key Outcomes expected with the Alternative Scenario** (BAU+GEF Increment)
	engaged in the use of GFW as a management and awareness raising tool, from public, private, academic and CSO sectors in the pilot countries.	
Component 2. System uptake and replication GFW suite of tools and platform is set-up on a global scale, however further refinement including development of new tools and applications should be informed by needs and experiences at the country level. Country engagement with GFW is currently limited (Indonesia and Congo Basin).	Experience of enhanced GFW application in pilot countries is well documented and widely disseminated at national and global level, using a wide range of communication tools and involving the broadest range of stakeholders to support rapid uptake and broad use of GFW . Uptake nationally is strong and sustained through concerted communications efforts and direct engagement of many local users with the GFW partners. Improved understanding of country needs from pilot experiences will inform further development of the GFW platform (data, functionality, usability, apps), which will improve the overall local relevance of the platform and encourage further uptake and replication. Additional tailoring and feature development of the GFW global platform based on country needs and experiences will enhance relevance and uptake.	Lessons learned and experience gained in pilot countries support the more rapid and increased utilization of the GFW in other countries and globally, and by a wide range of stakeholders - as a new user-friendly and cost-effective forest information system to support forest conservation. Rates of forest loss and degradation are measurably reduced (*ref. table in section A.1.5, and more accurate estimates of greenhouse gas mitigation impacts to be developed during full project proposal preparation in detailed consultation with national experts and stakeholders*).
Component 3. Strengthening and sustaining the GFW partnership GFW was launched in February 2014. However there is a risk that the partnership is not sufficiently integrated and sustained.	The GEF incremental contribution will support the timely development and upgrading of GFW partnership to the level of an internationally-accepted, financially self-sufficient, and trusted tool that support enhanced management of forest resources, as well as facilitate reporting to various conventions, bi/multi-lateral partnerships and private sector frameworks such as forest certification, PES schemes, REDD+ MRV, etc.	The GFW partnership is strengthened, long-term financial sustainability is secured, and GFW is increasingly regarded as a transparent and credible monitoring and management tool in support of forest conservation and sustainable use for at least 10 years to come.
Component 4. Private Sector application to reduce deforestation in supply chains GFW has initiated engagement with private sector companies in the palm oil sector, however it requires additional resources to translate the tools and systems developed for palm oil to additional commodities, thereby increasing relevance to more countries	The GEF increment will specifically support engagement and joint work with private sector, complementing and benefiting from global partnerships. This will generate pilot examples and lessons that will be documented and applied on a global scale, through the GFW partnership.	The national and global impact on forest conservation is significantly enhanced through the adoption of the GFW system as a supply chain management tool by the private sector, and through greater transparency for all of those supply chains and their impacts.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

In addition to the risks identified at the PIF stage, additional risks have been identified. The updated table of risks is as follows:

Identified Risk and Level of risk likelihood/ severity	**Proposed risk management measures**
1. Complex coordination arrangements at the global scale and country level Level: L	This risk may negatively affect timely and effective implementation and will be mainly addressed by building upon the strengths of the established WRI and UNEP networks, using the existing GFW consultative and information sharing platforms to support a lean and effective Project Steering Committee including key global partners and representatives of the GFW pilot countries. WRI has 30 years of success managing complex partnerships.
2. Weak coordination among ministerial bodies and lack of support from national governments in pilot countries Level: M	Based on the lessons of other global/regional UNEP-implemented projects, it will be critical to foster national governments' ownership from the onset. Practical measures to pre-empt this risk will include the establishment of GFW coordination teams in each pilot country, comprised of both civil society and government personnel. Country teams will also be involved at the strategic level as members of the global GFW Steering Committee as the main project governance structure. To ensure sustainability, measures will be taken to ensure that the government and non-government partners are fully enabled to continue to take full advantage of the GFW after the project cycle has ended.
3. Sub-optimal capacity in pilot countries hampers sufficient uptake of the GFW Level: M	Existing gaps in capacity in pilot countries will be identified during the PPG phase of this project. A sound and well-designed capacity building program targeting government and non-government partners constitutes a critical element of the project, and will be essential for project success and as the basis for long-term sustainability. This will include enhanced networking among GFW practitioners at the global level. In addition, the strength of GFW is the ease of use and public, free availability of data. This will remove most barriers to broader use at national and global level, as the uptake of GFW will require minimal capacity and will thus be accessible to most stakeholders without the need for dedicated training.
4. Insufficient awareness of biodiversity conservation, land degradation and climate	With respect to biodiversity and climate change, several project partners in the WRI and UNEP networks are already quite active on addressing these issues and working collaboratively with the GFW pilot countries and globally through synergistic parallel projects. The project will build upon the above initiatives to support and enhance project

change issues Level: M	interventions in the pilot countries by highlighting the potential for GFW to improve livelihoods while reducing land degradation, supporting biodiversity conservation and contributing to climate change mitigation.
5. Political instability and potential social upheaval. Level L (Georgia) and H (Madagascar)	The socio-political situation in the pilot countries is not expected to hamper implementation of the project if appropriate mitigation measures are put in place (see also risks 2 and 3 above). The GFW is hugely beneficial to countries that are relatively well governed (such as Georgia) since they can rapidly take full advantage of, and embrace the capabilities of, the system. Countries that have a higher risk of slipping towards weaker governance or political instability (such as Madagascar in recent years) can also benefit from the continued transparency and flow of information provided by GFW2, even in the worst of times. The project will support a completely open design of the GFW global platform and the continued crowdsourcing and even potential whistleblower capabilities. Therefore it is expected that the very open and transparent nature of the GFW2 system, and the wide range of government and non-government stakeholders that will be able to access GFW2, will provide sufficient mitigation for this risk and ensure the impact and sustainability of project results, irrespective of evolving socio-political contexts in the pilot countries.
6. The needs and priorities of the more disadvantaged groups of society, including indigenous and women's groups are not adequately taken into account by the project Level: M	All aspects of the project's design, implementation strategy and monitoring and evaluation process will closely look at this important aspect and take this risk into account. This will inform the set-up of adequate stakeholder consultation and involvement mechanisms in pilot countries from project outset, with full support from all project partners, and under the auspices and supervision of UNEP as the GEF implementing agency. Continued and focused and well-targeted communication, consultation, education and involvement efforts with local community groups will be implemented in the pilot countries. A comprehensive and well-costed communication plan for each pilot country will be developed during the PPG and operationalised as a first step at the outset of the project to inform and engage national partners in the new GFW initiative and mitigate any risks of misunderstanding or conflict. The project will also place emphasis the generation of socio-economic benefits associated with the increased use and open access to a transparent GFW.
7. Key potential users do not trust GFW information. Level: L	GFW's core information will be neutral and objective, published only after thorough peer review, and vouched for through WRI's quality control process. Opinions and judgments based on the information will not form part of the core information available on GFW. Crowd-sourced information, for which WRI will not be able to apply in-depth quality control, will be clearly identified as such and WRI will not vouch for its quality. The GFW data sources, algorithms, partnerships and funding will all be open to scrutiny. As far as possible, open-source methods are being used. Raw datasets will be accessible and downloadable from the GFW platform enabling independent cross examination of the information. The present project incorporates support for thorough national-level systems for validating data. WRI will always encourage and welcome any corrections made to information. If any governments, companies or other organizations take issue with information available on GFW, they will be able to easily communicate those concerns with WRI via on online feedback mechanism or by contacting WRI. WRI in turn will respond quickly to assess and consider any concerns.WRI will ensure resources are available to travel to and engage directly with senior officials in governments or organizations that have concerns about GFW and would like to constructively engage. WRI will ensure that the information and services provided by GFW are complementary to those provided by others, e.g., the Forest Resources Assessment by FAO

A.7. Coordination with other relevant GEF financed initiatives: N/A

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation.

During the Project Preparation Grant (PPG), project formulation team members undertook extensive consultations with potential partners and actors to explore roles and inputs and ways of creating added value and synergies. A detailed description of the major stakeholder and partner groups identified for the project, including their participation in management and coordination, is presented below, as well as in the national GFW reports (see **Annexes 17** and **18**).

In the project pilot countries: the project will be coordinated at the national level by the Ministry of Environment Protection of Georgia, and by the Ministry of Environment and Forests of Madagascar. The involvement of project key stakeholders in the pilot countries will be coordinated by the above national coordinating bodies, and key stakeholders will include: Forestry Departments, Protected Areas Management Authorities, Law Enforcement authorities, environmental CSOs, local community groups living within and near forested areas and protected areas, academic and training institutions, and private sector (esp. sectors involved in forestry operations).

The project will also seek to engage directly with existing national FLEG / FLEGT programs (e.g. in Madagascar as well as with the MRV components of national REDD programs.

Key stakeholders and their participation in the project

Country / Global	Category of stakeholder	Specific stakeholders[5]	Association with / participation in project
Global	WRI		Executing agency
	Other GFW Partners	40+ organizations (see www.gfw.org for list)	Source of co-financing; beneficiaries, particularly from component 3 (strengthening the partnership)
	Government	Ministry of Environment and Natural Resources (MENR): Forest Policy Service	Executing partner; Co-ordinates use case implementation
		Ministry of Environment and Natural Resources (MENR): Service of climate change	Participates in use case (5)
		National Forest Agency	Participates in use cases (1,2,3,5,6)
		Agency of Protected Areas	Participates in use cases (1,2,3,4)
		Service of Biodiversity Protec	Participates in use cases (3,6)
		Adjara Autonomous Republic Forest Agency	Participates in use cases (1,2,6) Co-ordinates demonstration component

[5] See country reports for additional details re. many of these stakeholders and their roles.

Georgia		National environmental agency: Department of licensing	Participates in use case (1,5)
		Department of Environmental Supervision	Participates in use case (1)
		Environmental information and education centre	Participates in use cases (1, 4) Participates in execution of capacity building components
		Council of national security and crisis management	Participates in use case (2)
		Department of emergency management	Participates in use case (2)
		Local self-governance authorities	Participation in use cases, as and where appropriate (1)
	Bilateral donors	GIZ	Implementing co-financed activity
		Austria	Financing co-financed activity
	International projects and NGOs	Caucasus Environmental NGO Network (CENN) project: "Sustainable Forest Governance in Georgia: Strengthening Local and National Capacity and Developing Structured Dialogue"	Leads co-financed activity Participates in use case (1)
		Association Green Alternative	Participates in use case (1)
		ENVSEC project "Enhancing National Capacity on Fire Management and Wildfire Disaster Risk Reduction in the South Caucasus"	Participates in use case (2)
		ENPI East Countries FLEG II Program implemented by the World Bank in partnership with WWF and IUCN	Participates in use case (3,4)
		Caucasus Nature Fund	Participates in use case (4)
		WWF Caucasus and the Critical Ecosystem Partnership Fund (CEPF) a partnership for biodiversity conservation in the Caucasus Ecoregion	Participates in use case (4,6)
		UNDP-GEF Project on Machakhela Protected Area in Adjara	Participates in use case (4)
		Ministry of Environment, Ecology and Forests (MEEF): DGE, DGF, DCC	Executing partner for project implementation in Madagascar; Various DGs co-ordinate and/or participates in use case implementation
		Ministry of Environment, Ecology and Forests	Coordinated PPG phase; will house project co-

Madagascar	Government	(MEEF): Climate Change Department	ordination unit
		ONE	Provide data to support the development of project documentation. Provide information on its lessons learned, and expressed its needs as regards the integration of GFW into its work Participates in use cases (3,5,6) Participates in data sharing and validation, etc. (Output 1.1.3)
		State Ministry in charge of Infrastructures, Equipment and Landscape Development	Participates in use cases (5,6,7)
		DGF/SAPM	Participates in use cases (1.6)
		DGF/SGBDF: **Forest Database Management Office**	Provide data to support the development of project documentation. Provide information on the current status of forest ecosystem in Madagascar Participates in use cases (1,2)
		DGEF/DVRF	Participates in use cases (2,8)
		DGF/DREF	Participates in use cases (1,2,3,4,8)
		DGF/REDD+ Project	Participates in use cases (3)
		MinEnergie and Mines	Participates in use cases (5)
		MinAgri (BVPI-Environmental body)	Participates in use cases (6,7)
		Min water	Participates in use cases (7)
		COBA	Participates in use cases (2,3,4,6,8)
		MNP	Participates in use cases (1,4)
	Bilateral donors / projects	Project (GIZ – CIRAD – Intercooperation- JICA- USAID	Participates in use cases (2,4,6,7,8)
		CTD	Participates in use cases (1-7)
		UNDP	Participates in use cases (1,2)
		FAO	Participates in use cases (8)
		National Observatory of the Environment and the Forest sector (ONESF)	Provide data; Provide information on its lessons learned, and expressed its needs as regards the integration of GFW into its work
		Association of Networks of Environmental Information Systems (ARSIE)	Provide data; Provide information on its lessons learned, and expressed its needs as regards the

	NGOs / civil society		integration of GFW into its work
		The Foibe Tao-tsari-tany malagasy	Provide data; Provide information on its lessons learned, and expressed its needs as regards the integration of GFW into its work
		Universities: IOGA (Institut et observatoire de la Geophysique d'Antananarivo), ESSA-Forets (Ecole Superieure des Sciences Agronomiques), Faculte des Sciences	Promote research on remote sensing technology and its applicability to the natural resources management, on the applicability of GFW as a tool for monitoring natural resources in Madagascar
		Civil society	Civil society contributes to policy debates and fight against corruption. They are effective advocates for forests and are the ones who can mobilize public opinion on the action against deforestation.
		WWF	Participate in use cases (1,2,3,4,6,7)
		WCS	
		CI	
		Fanamby	
		Blue venture	
		GoodPlanet	
		Asity	
		ETC Terra	
		PHCF	

B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

GFW will offer cost-savings to both governments and civil society as a result of free access to data, analytical tools, and sheer processing power. It also offers cost savings in terms of increased efficiency of monitoring and enforcement efforts. These benefits are quite tangible.

Somewhat less tangible is GFW's contribution to the democratization of information and how this empowers civil society, grassroots groups, and communities to participate in forest decision-making processes that affect them, including benefit sharing. This includes:

- Strengthening power and influence of civil society
- Empowering law enforcement to reduce illegal logging, illegal wood production activities, etc.
- Transparency through freedom of access to information.

All these improve government accountability to protect social and economic benefits to citizens.

Socio-economic benefits will derive from changes in management brought about or otherwise enabled through the use of GFW and more particularly, from the transformation of information into action. Such changes will be directly supported via two mechanisms: use cases and landscape level demonstrations. Socio-economic benefits will be more concentrated in use case areas—Adjara in Georgia and Boeny in Madagascar—but will also extend throughout each country's forested areas. Socio-economic benefits will include the following:

- *Landscape-level demos*: Benefits associated with integrated, participatory, landscape-level forest and land use management including:

    - Optimization of land/resource use allocation will be facilitated by intersectoral land-use planning that is transparent and based on access to high quality information regarding trade-offs in land-use choices - guaranteeing less impact on natural systems and higher long-term productivity of ecosystem functions (land, water, biodiversity), increased production of goods and services and improvement in livelihoods.

    - Multi-stakeholder participation in land-use planning and resource allocation will facilitate the needs and rights of local communities being taken into account and greater benefits from the land and natural resources accruing to local stakeholders.

- *Use cases*: Socio-economic benefits associated with pilot country use cases overall are expected to include:

    - Transparency in forest land-use allocation, forest cover and forest change will promote a more level playing field for non-governmental entities, facilitating empowerment of communities to be able to exercise their rights over forest-based natural resources and to participate in decisions affecting local land-use and development;
    - Access to improved information on land-use allocation, forest cover and forest change will enable CSOs and communities to better monitor use of forest resources by the government, private sector or other actors – ensuring better accountability;
    - Through improved access to forest information, coupled with improved capacity to apply this information to action, local communities will be better equipped to defend their lands against unwanted encroachment or appropriation by another party;
    - Local communities will be better able to sustainably management their forest resources, facilitated by locally tailored GFW tools and capacity to use them;
    - Improved conservation of riparian forests and overall improved watershed management will primarily benefit poorer members of society through increased access to water resources.

    Potential socio-economic benefits associated with specific use cases include the following:

    - Protected area management: Assessing and detecting threats to protected areas by fire or deforestation coupled with improved law enforcement keeps ecosystems functioning in protected areas, which will enable flow of ecosystem services which are inputs into household production and thus an important asset held by the rural poor. Healthy functioning ecosystem will also help maintain tourism which will create additional income streams in the region.
    - Production forest management: By assessing current levels of logging and deforestation, production can be better regulated at a lower cost of access to information; production forests can be certified and get higher prices for their products,.
    - Forest fire alert systems: Early detection of potentially large forest fires can prevent or mitigate possible loss of lives and livelihoods thereby enhance livelihood security.
    - Forest assessment, inventory and monitoring: Clear understanding of forest types, and their rate of change is major input for land use planning and forest planning to enhance resilience and ensure long-term income and ecosystem services for creating wealth and enhancing human well-being.

- Forest carbon analysis and management: the possibility to quantify carbon is a first step to monitor, report, and verify carbon stocks of forest which may lead and access international or national funds to keep forests and reward communities for their efforts to sustainably manage forest
- Restoration: Measuring restored / reforested land can help to quantify carbon and ecosystem benefits; by introducing trees into the landscape, agricultural production can be improved which will enhance food security and carbon finance may be obtained for local communities.

B.3. Explain how cost-effectiveness is reflected in the project design:

Among the most significant and transformative aspects of GFW is its ability to redefine the cost effectiveness of forest monitoring efforts. By providing deforestation-based alerts, which can be used to greatly enhance the targeting of forest monitoring efforts, GFW represents a major advance in the application of technology to forest management—one which will inevitably deliver significant cost savings. Evidence of this comes from the case of Brazil, whose experience with use of a precursor national-level, satellite-based system has been credited with major reductions in monitoring cost, together with greatly enhanced effectiveness.

Expanding the enhanced GFW approach to countries around the world has the potential to generate significant environmental economic benefits associated with more sustainable forest management. Together with reduced monitoring costs, this represents a win-win situation of substantial proportions. This will be further enhanced by the development of a sustainable financing plan (see Output 3.1.2) for continued management and improvement of the system.

C. DESCRIBE THE BUDGETED M &E PLAN:

The monitoring and evaluation process is expected to be a key component of each outcome area, within the project, based on a three-year implementation plan. Monitoring and Evaluation (M&E) will be conducted utilising the results-based management approach. The Results Framework provides performance and impact indicators for project implementation along with corresponding means of verification. M&E will be an on-going process and is based on the following strategic directions:

- An effective coordinating mechanism with roles and responsibilities clearly defined and under the aegis of World Resources Institute (WRI), which has lead responsibility for overall project execution.
- The monitoring and evaluation process is participatory, consultative and aimed at ensuring delivery of project outputs and achievement of associated defined targets. Evaluation will be based on the status of implementation, through identification of gaps, and the measurement of impacts and level of success in the application of best practices.

UNEP will be responsible for managing the mid-term review/evaluation and the terminal evaluation. The Project Manager and partners will participate actively in the process.

The project will be reviewed or evaluated at mid-term (tentatively in mm/yy as indicated in the project milestones). The purpose of the Mid-Term Review (MTR) or Mid-Term Evaluation (MTE) is to provide an independent assessment of project performance at mid-term, to analyze whether the project is on track, what problems and challenges the project is encountering, and which corrective actions are required so that the project can achieve its intended outcomes by project completion in the most efficient and sustainable way. In addition, it will verify information gathered through the GEF tracking tools. [Note: For a short duration project, PIR will serve as the project Mid-Term Review (MTR

The project Steering Committee will participate in the MTR or MTE and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented. An MTR is managed by the UNEP Task Manager. An MTE is managed by the Evaluation Office (EO) of UNEP. The EO will determine whether an MTE is required or an MTR is sufficient.

An independent terminal evaluation (TE) will take place at the end of project implementation. The EO will be responsible for the TE and liaise with the UNEP Task Manager throughout the process. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes:

i. to provide evidence of results to meet accountability requirements, and

ii. to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP and executing partners.

While a TE should review use of project funds against budget, it would be the role of a financial audit to assess probity (i.e. correctness, integrity etc.) of expenditure and transactions.

The TE report will be sent to project stakeholders for comments. Formal comments on the report will be shared by the EO in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six point rating scheme. The final determination of project ratings will be made by the EO when the report is finalised. The evaluation report will be publically disclosed and will be followed by a recommendation compliance process.

The direct costs of reviews and evaluations will be charged against the project evaluation budget.

The M&E plan includes an inception workshop and report, project implementation reviews, quarterly and annual review reports, and mid-term and final evaluations. The following sections outline the principal components of the M&E plan and M&E activities. The M&E plan for the project will be presented and finalized in an Inception report following a collective fine-tuning of indicators, means of verification, and the full definition of implementation arrangements related to executing partners and project staff.

The indicative Monitoring and Evaluation Work Plan is provided in Table 1 below.

Type of M&E Activity	Responsible Parties	Time Frame	Costing
Project Inception Workshop and Report	• National Project Director • Project Coordinator/PCU • UNEP	Within first two months of Project start up	Total: $30,000
Measurement of Means of Verification of Project results (outcome indicators and GEF tracking tools, including baseline data)	• Project Steering Committee / National Project Director will oversee the hiring of specific studies and institutions/ agencies, and delegate responsibilities to relevant executing partners and /or Project Technical Committee	Start, mid and end of Project (during evaluation cycle); and annually.	Total: $29,403

Type of M&E Activity	Responsible Parties	Time Frame	Costing
	members • National Project Director • Project Coordinator • PIU		
Measurement of Means of Verification for Project Progress (progress and performance indicators)	• Oversight by National Project Director • Project Coordinator • PSC and IPTC	Annually prior to ARR/PIR and as defined in annual work plans	Total: $20,000
Annual Risk Review (ARR) and Project Implementation Report (PIR)	• Project Director • Project Coordinator • PSC/	Annually	None
Periodic Status/Progress Reports to UNEP	• National Project Director • Project Coordinator •	Semi-annual/Quarterly	None
Project Steering Committee (PSC) meetings	• National Project Director • Project Coordinator • PSC members • UNEP (annually)	Annually	Total: $45,000
Reports of PSC meetings	• National Project Director • Project Coordinator	Semi-annually	None
Mid-term Review/ Evaluation	• National Project Director • PSC • UNEP Task Manager • National and External Consultants	At the mid-point of Project implementation	Total: $40,000
Terminal Evaluation	• UNEP Evaluation Office • National Project Director • PSC • UNEP Task Manager • External Consultants (i.e. evaluation team)	At least 3 months before the end of Project implementation	Total: $40,000
Audits	• Government Accounting Department • National Project Director • Project Executing Agency	Annually	Total: $10,000
Project Final Report	• National Project Director • Project Coordinator • PSC	Within 2 months of Project completion	None
Co-Financing Report	• National Project Director • Project Coordinator • PSC	Within 1 month of PIR reporting period	None
Field Visits	• National Project Director • Project Coordinator • PSC • Representatives of Executing partners • UNEP	As appropriate	Total: $20,000

Type of M&E Activity	Responsible Parties	Time Frame	Costing
Publications of Lessons Learned and other Project Documents	• National Project Director • Project Coordinator • Project Executing Agency	Annually, part of semi-annual reports and Project Final Report	Total: $20,000
Total M&E Plan Cost			**$254,403**

The key indicators according to which M&E will take place are presented in the results framework (Annex 4).

A Project Inception Workshop (IW) will be held within the first three (3) months of start-up with the PCU, Project Steering Committee (PSC), UNEP, WRI, country-level executing partners and other implementation partners, and co-financing partners, as appropriate. A fundamental objective of this IW will be to help the project implementation partners to renew and elaborate commitment to the project goal and objectives, as well as to finalize preparation of the first annual work plan on the basis of the results framework. This will include reviewing the results framework (indicators, means of verification, and assumptions), adding additional detail as needed, and on the basis of this exercise, drafting the Annual Work Plan (AWP) with more precise and measurable performance indicators, and in a manner consistent with the expected Project outcomes. The workshop will also be used to define specific targets that are aligned to BD, SFM, and SLM Tracking Tools and for the first-year implementation progress indicators, together with their means of verification.

Day-to-day monitoring of implementation progress will be the responsibility of the National Project Coordinator based on the project's AWP and its indicators. The National Project Coordinator will inform the UNEP-GEF and the Lead Executing Partner of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion. The National Project Coordinator will fine-tune the progress and performance/impact indicators of the Project in consultation with the IPTC, as well as develop specific targets for the first-year implementation progress indicators together with their means of verification. These will be used to assess whether implementation is proceeding at the intended rate and in the right direction and will form part of the AWP. Targets and indicators for subsequent years will be defined annually as part of the internal evaluation and planning processes undertaken by the PCU.

Periodic monitoring of implementation progress will be undertaken by the PSC through quarterly meetings of the PSC, IPTC, Lead Implementation Agency and the PIU, or more frequently as deemed necessary. This will allow parties to take stock of and to troubleshoot any problems pertaining to the Project in a timely fashion to ensure the timely implementation of activities. The PIU under the guidance of the PSC, and in conjunction with other members of the IPTC, will, as appropriate, conduct yearly field visits to assess the impact of implementation on the ground, particularly with regard to the tangible interventions. Field Visit Reports will be prepared by PIU, and circulated no less than one month after the visit(s).

Annual monitoring will occur through the PSC Reviews. The Project will be subject to reviews by the PSC at least once every year. The first such meeting will be held within the first twelve (12) months of the start of full implementation. The National Project Coordinator will prepare an Annual Project Report (APR) and submit it to PSC at least two weeks prior to the review, for the review and comments of the PSC/IPTC.

The Terminal Review will be held in the last month before the Project National Project Coordinator is responsible for preparing the Terminal Report and submitting it to the PSC. It shall be prepared in draft at least two months in advance of the PSC Review meeting. The terminal review will consider the implementation of the Project as a whole, paying particular attention to whether the Project had achieved its stated goals and objectives and contributed to the broader

objectives of the Forestry Department and wider national development objectives. It will act as a vehicle through which lessons learned and any actions that are still necessary can be captured for further replication at the community, national and regional level, particularly in relation to sustainability of the outcomes from Project interventions.

The National Project Coordinator in conjunction with the executing partners will be responsible for the preparation and submission of the following reports that will form part of the monitoring process. An Inception Report (IR), which will be prepared immediately following the launching of the Project. It will include a detailed First Year/AWP divided in quarterly timeframes detailing the activities and progress indicators that will guide implementation during the first year of the project. An Annual Project report (APR) will be prepared on an annual basis prior to the PSC Review, to reflect progress achieved in meeting the AWP.

A Periodic Implementation Review (PIR) Report emanating from the process of Project implementation review is the main vehicle for extracting lessons learned. The PIR can be prepared any time during the year and ideally prior to the PSC review. Quarterly Progress Reports outlining main updates in project progress will be provided to the PSC by the National Project Coordinator. Progress made shall be monitored based on the Enhanced Results Based Management Platform and the risk log will be regularly updated based on the initial risk analysis included in the Inception Report.

The Results Framework is provided at Appendix 4. The mid-term targets for these indicators will be established and confirmed during the Inception Workshop.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S) :): (Please attach the Operational Focal Point endorsement letter(s) with this form. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE
Nino Tkhilava	Head, Department of Environmental Policy and International Relations	MINISTRY OF ENVIRONMENT PROTECTION OF GEORGIA	MARCH/14/ 2013
Ralalaharisoa Christine Edmée	General Director of Environment	MINISTRY OF ENVIRONMENT AND FORESTS	MARCH/18/ 2013

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date *(Month, day, year)*	Project Contact Person	Telephone	Email Address
Brennan Van Dyke, Director, GEF Coordination Office, UNEP		May 25, 2015	Ersin Esen Task Manager	+254 20 762 4731	Ersin.Esen@unep.org

ANNEX A: PROJECT RESULTS FRAMEWORK

Project Strategy	Indicators	Baseline	Mid Term Targets	End of Project Targets	Sources of Verification	Risk and Assumptions
Project objective: Empower decision-makers in government, the private sector, and civil society with technology and information necessary to reduce deforestation and land degradation, combat illegal activities, and conserve biodiversity in pilot countries and on a global scale.	Deforestation rates in target countries.	Georgia: FAO rate (2000-2010): 3000 ha/yr. Hansen rate (accessed via GFW) (2001-2012): 710 ha/yr gross tree cover loss Madagascar: FAO rate (2000-2010): 57,000 ha/yr. Hansen rate (accessed via GFW) (2001-2012): 110,697 ha/yr gross tree cover loss	712,283 t CO2e	1,424,565 CO2e	GFW platform	WRI work might not contribute to forest change immediately or within the life of the program.
	Spatial & temporal coverage (data resolution and frequency) of tree cover loss and gain data	30 meter resolution with annual updates for the entire world. 500 meter resolution with monthly updates for humid tropical forest biomes.	30 meter "as it happens" system 250 meter / monthly for pan-tropics	10 meter / weekly updates for the world. <10 meter resolution on as needed basis for identified priority areas	GFW platform	Risk: Availability and prohibitive cost of satellite imagery Assumption: Technology will continue to advance and become more accessible and affordable
	Number of unique visitors of GFW platform	456,062	800,000	1,100,000	GFW platform	
Component 1: Application and enhancement of GFW globally and in pilot countries						
Outcomes	*Global*					
	New / enhanced GFW data sets and global	3 land cover change alert system of various spatial and temporal	Addition of Terra-i system	Multi-sensor, multi-input algorithms, integrating high	GFW website, data layers description	

Project Strategy	Indicators	Baseline	Mid Term Targets	End of Project Targets	Sources of Verification	Risk and Assumptions
Outcome 1.1: GFW is upgraded and applied on a global scale and in two pilot countries Madagascar and Georgia, supporting: (a) improved management of existing forest areas and conservation of biodiversity, (b) reforestation/ afforestation programmes, (c) improved control of deforestation on the ground and monitoring / protection of carbon stocks and (d) providing the information base for PES schemes (Payment for Ecosystem Services).	alerts	resolutions, all relying on medium-resolution imagery	Upgrade of FORMA system to 250 meters As-it-happens Landsat system from UMD Ensemble algorithm combining existing systems	resolution satellite imagery among other data streams.		
	GFW features and functionality: Crowd-sourcing and related Web 2.0 features	Minimal crowd-sourcing functionality Limited analytical tools	Mobile app enabling people on the ground to access and submit data to GFW Tailored analytical tools through specialized apps for commodities, biodiversity, and climate	At least 3 unique crowdsourcing applications At least 8 specialized apps for conducting customized analysis	GFW Platform, website analytics, user surveys	Identification of incentives to encourage wide participation in and contribution to the GFW platform.
	Number of datasets integrated within GFW website	61	91	106	GFW platform	Lack of transparency and data disclosure by governments and companies
	Pilot countries					
	Widespread and easy availability of nationally validated data sets of highly relevant to sustainable forest management	GFW has made historic and near-real time information on forest cover change widely and easily accessible, but at a resolution that is not sufficient to track deforestation in certain forest types or	Use of higher resolution data has been demonstrated in pilot countries and integrated within national forest geo-portals	Pilot countries decide on protocols and systems for acquisition and use of higher resolution satellite data for forest management		

Project Strategy	Indicators	Baseline	Mid Term Targets	End of Project Targets	Sources of Verification	Risk and Assumptions
		degradation				
		Country-specific datasets are scattered and mostly unavailable	Identification of existing relevant data sets and progress towards making them available	Forest geo-portals make available national data sets in conjunction with and connected to GFW global system		
	Forest and land use management practices across multiple land use types	Information about forest cover and associated change is poorly utilized in areas such as protected areas management, fire control	Entry points for use of GFW data have been identified for multiple management processes	Routine use of GFW data within multiple management processes	Project reports	
	Awareness and capacity levels	Limited awareness of GFW system	Increasing awareness and use in management	Widespread awareness and use in management	Project reports	
Output 1.1.1 Improved global- and regional-level data on GFW platform Output 1.1.2 Improved features and functionality on GFW global platform to support analysis, decision-making and action Output 1.1.3 Nationally						

Project Strategy	Indicators	Baseline	Mid Term Targets	End of Project Targets	Sources of Verification	Risk and Assumptions
validated data sets, including refined forest cover / change data and additional locally generated data layers, are available within pilot country sections of GFW Output 1.1.4 Enhanced management practices through national and field-level application ('use cases') of data and information generated and made available through national GFW views Output 1.1.5 Targeted awareness, capacity building and outreach effort focusing on governmental and non-governmental stakeholders in the pilot countries to support timely and wide-ranging system uptake						

Project Strategy	Indicators	Baseline	Mid Term Targets	End of Project Targets	Sources of Verification	Risk and Assumptions
Outcome 1.2: Government and non-government agencies in pilot countries adopt GFW as a critical information tool for collaborating on landscape-level, multi-sectoral initiatives	Integration of forest biodiversity, carbon and land degradation considerations within landscape-level planning and management	Little or no experience integrating biodiversity, carbon and land degradation considerations into land use planning, zoning and/or management at any level (landscape or otherwise)	One large-scale landscape (> 1 million ha) in each pilot country has begun to integrate GFW as a tool for inter-sectoral co-operation and planning	One large-scale landscape (> 1 million ha) in each pilot country has completed a planning exercise using GFW as a tool for inter-sectoral co-operation and planning	Project reports	
Output 1.2.1 GFW demonstrated as a tool for integrating multiple biodiversity, carbon and land degradation considerations in support of landscape-level planning and management.						
Component 2: System uptake and replication						
Outcome 2.1: National-level users in multiple countries have enhanced opportunity to visualize and utilize country-specific data	National-level enrichment of GFW platform	Limited ability to access and view national-level data	GFW platform has been partly enhanced to optimize national-level uses	Full range of enhancements optimize national-level uses	GFW platform	
Output 2.1.1 Enhanced online GFW system to visualise and enable interpretation of country-relevant data.						
Outcome 2.2 Lessons learned and experience	Level of uptake / use	Awareness of and use of GFW in target countries	100% increase in access to GFW site	200% increase in access to GFW site	GFW platform use	

Project Strategy	Indicators	Baseline	Mid Term Targets	End of Project Targets	Sources of Verification	Risk and Assumptions
gained in target countries support the enhancement of the GFW platform to increase its relevance and utilization at scale by a range of stakeholders	in target countries	is extremely limited 617 unique visitors from Madagascar, 635 from Georgia	from target countries 5 analytic cases produced in each country	from target countries 10 analytic cases produced in each country	statistics	
Output 2.2.1 Enhanced GFW uptake in target and other countries Output 2.2.2 Country-level and thematic analyses and sharing of lessons learned through implementation of use cases and other country-level co-operation Output 2.2.3 Policy and programme guidance based on GFW lessons learned						
Component 3: Strengthening and sustaining the GFW partnership						
Outcome 3.1 The GFW partnership is strengthened, long-term financial sustainability is secured, and GFW is increasingly regarded as a transparent and	Breadth of GFW membership	High percentage of western donors, companies	Increasingly broad membership	Membership of the GFW is broad, diverse, and effective for achieving GFW's objectives.	Partners' meeting reports	

Project Strategy	Indicators	Baseline	Mid Term Targets	End of Project Targets	Sources of Verification	Risk and Assumptions
credible monitoring and management tool in support of forest conservation and sustainable use	Sustainable financing of GFW	No plan	Plan is under discussion, with several underlying studies implemented	Plan is adopted by majority of GFW Partners	Partners' meeting report	
Output 3.1.1 Country-, regional- and global-level user networks established and strengthened Output 3.1.2 Sustainable financing plan for the GFW system developed in collaboration with public and private sector as well as CSOs Output 3.1.3 External and independent review and oversight mechanism established to guarantee highest degree of transparency and technical credibility						
Component 4: Private sector application to reduce deforestation in key commodity sector supply chains						
Outcome 4.1: National and global-level impacts of GFW on	Number of GFW-Commodities endorsements or recommendations	0	5	10	Project reports	*Assumption*: Private sector will view GFW Commodities as an unbiased source of

Project Strategy	Indicators	Baseline	Mid Term Targets	End of Project Targets	Sources of Verification	Risk and Assumptions
forest conservation are significantly enhanced through the adoption of the suite of tools/platforms as a supply chain management tool by the private sector	made by target commodity sector leverage points (e.g. TFA2020, CGF, RSPO)					information and do not attempt to undermine its validity as such
	Number of private sector entities that have used GEF to improve their capacity to eliminate deforestation from their commodity supply chains	0	15	25	Project reports and associated surveys	
	Number of corporate standards, strategies, plans, or regulations addressing deforestation or compliance with sustainability commitments officially proposed, adopted, or implemented as a result of GFW assistance	0	3	6	Project reports and associated surveys	
Output 4.1.1 Partnerships with selected private sector companies active in target commodity sectors in target countries and/or globally, to assess user needs and requirements						

Project Strategy	Indicators	Baseline	Mid Term Targets	End of Project Targets	Sources of Verification	Risk and Assumptions
and jointly explore the development of GFW-specific decision-support tools tailored to private sector operations, management systems, and covering various steps in commodity supply chains Output 4.1.2. An expanded and improved GFW Commodities application or suite of applications, providing enhanced datasets and management tools for companies trading in goods and services linked to deforestation Output 4.1.3 Broad, rapid uptake of GFW Commodities applications through partnership networks and specific promotion efforts.						

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

1.A GEF Secretariat comments

Comments	Responses	Pro-doc page ref.
4. Explanation stating that the project will increase transparency and access to information is appreciated. Processes through which this ability and information will be actually utilized and put into action resulting in reduction in threats to forests needs to be specified and developed.	GFW is fundamentally a tool for increasing transparency and access to information about forests and, in particular, deforestation. GFW partners are convinced that the lack of such transparency has been a major barrier to improving forest management and to bringing down levels of deforestation worldwide. GFW brings dramatic increases in the speed and breadth with which information about deforestation events can circulate. In addition to enhancing GFW's already significant global impact on forest sector transparency, the project will directly target enhanced transparency and information access within pilot countries through dissemination, awareness raising, support to analytics, use cases and encouragement of cross-sectoral data platforms and data sharing.	p.32, 39-43
5. Please state what objectives 1, 2, 3 etc. are in the National Communication of Georgia and specify how project activities directly contribute towards these priorities. In case of Madagascar, please identify project activities that will directly contribute towards Madagascar's priority of Strengthening National Forest Programmes (NFP) through afforestation or reforestation. Please substantiate these alignments with respect to GHG emission goals of the countries.	The project will contribute as follows to specific objectives identified in Georgia's national communication: 1 – Recognition of climate change problem as one of the priorities by government of Georgia: The project will help raise awareness and understanding re. role of forests as part of climate mitigation approach 3 – Local capacity building in Georgia for the efficient implementation of UNFCCC principles and participation in global processes: Capacity building within MoENRP and other partners 5 – Periodic conduct of national GHG inventory: Analysis and assessment of trends for key GHG sources; improvement of data archiving and presentation system 6 – Development and improvement of separate elements of GHG inventory: Improved activity data and emissions factors for forest sectors 24 – Education, training and raising public awareness: Increased awareness and capacities related to LULUCF sector. In Madagascar, the project will: • Support improved land-use planning, appropriate siting of areas for afforestation/reforestation; • Monitor forest gain or regrowth to determine impact of afforestation/reforestation;	p. 53-55
6. In Madagascar, please elaborate on the information systems the existing forest and carbon related projects have been using and identify their shortcomings in gathering accurate information and also identify the limitations of the existing projects to reduce the threats of deforestation.	Existing projects have benefitted from baseline efforts to map deforestation trends in the country. However, such information has remained difficult for non-experts to access and analyze. By encouraging uptake of GFW within multiple areas of sectoral management, GFW will provide a common and easily shared source of data and analysis. In addition, current systems have limited ability to capture deforestation taking place within less dense, dry forests of Eastern Madagascar, where the project will demonstrate the use of high-resolution satellite imagery to identify and prioritize actions related to past and ongoing deforestation. We can also probably add that the existing systems and monitoring of forest change are only done every few years – which is often too late to address illegal forest clearing.	p. 154-165
7. By CEO Endorsement full details are expected on how the project will use the information	The project's support to uptake of GWF within two pilot countries – Georgia and Madagascar – is largely oriented towards ensuring that deforestation and degradation are addressed in a more effective and timely manner. In addition to capacity building and awareness raising efforts, a series of 'use cases' will be	p. 24, 27-29, 33-37, 42-43

Comments	Responses	Pro-doc page ref.
generated to address deforestation and forest degradation on the ground. Additionally 1) clear details of how GFW will be used through the project to estimate and monitor carbon stocks in the forests in the specific target areas, 2) further information on the selection of ICT infrastructure, 3) fully developed estimates of the expected reduction in deforestation and carbon emissions due to application of GFW, 4) engagement with the private sector needs to be clarified further with identification of types of partners and their roles needs to be provided.	implemented in each country. These have been designed to target key management processes that have the potential, given the removal of information barriers, to substantially affect rates of deforestation and degradation. Re. specific points: 1) GFW is currently developing systems for estimating and monitoring carbon stocks globally. Two new carbon stock datasets will be added to the GFW platform in early 2015, one at 30 m resolution for the pantropics (relevant for Madagascar) and one at 100 m resolution for the world (relevant for both Madagascar and Georgia). The level of spatial detail in these maps will allow the estimation of carbon stocks and monitoring of emissions in specific target areas. In addition, GFW is in the process of developing a new application called GFW Climate, designed to help countries track carbon emissions and removals from forest change. The application will provide analysis functions that will facilitate the estimation and monitoring of carbon stocks and carbon stock changes in specific areas of interest as indicated by the user and identify forests at risk for future deforestation. 2) Through this project, GFW data and data driven analyses will be fully integrated into national mapping, monitoring and reporting systems around forests, to ensure information on deforestation and forest degradation is communicated through official channels. In addition, WRI will work with partners to address specific applications of GFW with respect to deforestation and forest degradation through the identified use cases. 3) Historical emissions estimates for Madagascar for 2001-2012, using the latest available data from Hansen and Baccini et al. (30 m resolution carbon stock map) are **45 million t CO2/yr**. Historical emissions estimates for Georgia for 2001-2012 using the latest available data from Hansen and FAO carbon stock information are **0.2 million t CO2/yr**. (Note: Target emission reductions at landscape demonstration site and national levels remain under discussion) 4) Component 4 provides additional details.	
8. Complete details on how GFW will be used for on the ground conservation and management of forests in each country and how this is expected to support ongoing activities. Additionally further refinement is expected on quantification of Global Environmental Benefits (GEBs) related to BD, CC and LD. It is expected that GHG related benefits are based on the deforestation that may be reduced in the target sites and not simply on the assumptions of the use of the GFW countrywide.	Section 3.1 of the project document provides details of the project's global environmental benefits. As noted, GFW will support on-the-ground conservation and management of forests in each pilot country in particular through a series of use cases designed to integrate enhanced data and information throughout multiple management processes. The project for the most part emphasizes national level, country-wide and systemic processes as opposed to site-level demonstrations. This was considered a more cost effective use of GEF resources, given the economies of scale associated with supporting enhancement of information management processes at multiple sites, e.g. throughout national-level protected area systems, as opposed to more deliberate, site-level demonstrations. Thus, the majority of calculated deforestation and emissions reductions are based on national-level estimates. An exception to the above is the support being provided to a single demonstration landscape within each country. These are: Adjara in Georgia and Boeny in Madagascar. For these demonstration landscapes, more detailed calculations are being produced; these reflect the assumption that the incremental support targeting these landscapes will have a concomitant incremental benefit in terms of deforestation and emissions reduction in these landscapes.	p. 33-35, 39-43, 123-145, 165-190
11. At time of CEO Endorsement	Section B.1 above provides details of liaison and partnerships at national level. This includes supporting	

Comments	Responses	Pro-doc page ref.
full details of how GFW2.0 is integrated with national structures and how GFW2.0 will liaise with national and sub-national partners. Additional detail will also be expected on how the project will mitigate the risks anticipated due to the political conditions in Madagascar and how the encouragement of transparency and use of information to reduce deforestation will foster the necessary strong institutional framework at local and national level.	integrated and specialized data management committees which will help bring together data from multiple sectors within newly established national-level platforms. Use case design has also carefully identified affected stakeholders and their design has reflected consultations with these stakeholders during the PPG.	
12. Full details of how the project is integrated into national and regional initiatives are required.	See national reports (Annexes 17 and 18)	p. 112-196
Clearer details of the integration of GFW2.0 into landscape level planning and how this will be implemented are expected.	As noted above, landscape level demonstrations have been developed for each pilot country. These include support for integrating / mainstreaming newly derived forest-related insights into broader planning processes.	p. 42-43
USA: The United States requests to review this project again prior to CEO endorsement. While we support the project's intentions to build an open access platform for promoting sustainable forest management, prior to CEO endorsement we ask for an explanation of how the concerns raised in the STAP's request for major revision have been addressed. In particular, we would like to see greater evidence that the technology will work within the project's time frame. We would also like a clearer explanation of the rationale for the choice of pilot countries.	• STAP: Responses to STAP concerns are provided below. • Technology: To a large extent, and with unexpected speed following the STAP approval and CEO Endorsement, the GFW technology has already proven itself, particularly at global level. And while a major portion of the project consists precisely in demonstrating and testing uptake methods and multiple uses at country level, few remaining aspects of that process pose significant technological challenge. Technical challenges at present are focused much more on ensuring appropriate data and data products to be able to address specific national forest management issues in Georgia and Madagascar. Additionally, given the low and/or land of internet connectivity in many areas (particularly Madagascar), targeted solutions will be implemented within the project (benefiting from technological advances through GFW experiences underway, particularly in other forested regions of Africa. • Choice of pilot countries: See response to STAP review below.	p. 23-26

1.B GEFSec comments of 28 April 2015

Comment	Responses	Location of changes made
7. Are the components, outcomes and outputs in the project framework (Table B) clear, sound and appropriately detailed? (a) The removal of the PIF Outcomes 1.1 a-d removes the clarity on the outcomes that could be expected from the project and the achievement of GEBs in the two countries. The lists of Use Cases are extensive and provide a much broader use of topics and potential users but none are definite outcomes or commitments for the project to deliver. (b) The links to GEBs such as landscapes integrating BD issues, GHG emissions are less clear as it is not the functioning of GFW per se but its incorporation and use that will lead to these. Please reinstate this link. (c) Private sector involvement at global level is largely related to global commodities. Neither Georgia nor Madagascar is involved in these commodities to any extent. What is planned at national level?	(a) & (b) - Outcomes 1.1 a-d have been added to the results framework. A new table has been added to the section on global environmental benefits which draws clear connections among the above sub-outcomes, use cases and GEBs, respectively. (c) While commodities such as palm oil, pulp/paper, soy and beef, combined, are responsible for the majority of commodity-driven deforestation globally, they are not significant drivers in either Georgia or Madagascar. At the national level in the two pilot countries, private sector engagement will be focused on the sectors that have the greatest impact on forests. In Madagascar, activities will focus on the timber and mining sectors (notably through use cases 2, 3, 5 and 8). In Georgia, activities will focus on the timber sector (notably through use cases 1, 3, and 5). In addition to working with the private sector to reduce commodity-related deforestation and forest degradation, GFW will work with actors at the national and global level to put in place methods and tools to ensure transparent and standardized reporting of forest carbon – reducing barriers to entry for both the supply and demand side in an eventual carbon market.	UNEP prodoc: p. 33-37, Tables 6 and 7, page 40 and Appendix 4: Results Framework UNEP prodoc, p.51
8. (a) Are global environmental/ adaptation benefits identified? (b) Is the description of the incremental/additional reasoning sound and appropriate? See Q7 above, the links between project activities and securing GEBs on the ground should be highlighted.	See previous response	See previous response
9. Is there a clear description of: a) the socio-economic benefits, including gender dimensions, to be delivered by the project, and b) how will the delivery of such benefits support the achievement of incremental/ additional benefits? While it is accepted the socio-economic benefits of GFW at a national level are difficult to estimate, the ProDoc and	Discussion of socio-economic benefits associated with implementation of use cases and work in demonstration landscapes has been added to the discussion of incremental benefits	UNEP pro-doc, p.61-62

Comment	Responses	Location of changes made
CEO Endorsement give very little detail. What are the likely benefits in the identified landscapes of Adjara and Boeny?		
16. Is the GEF funding and cofinancing as indicated in Table B appropriate and adequate to achieve the expected outcomes and outputs? Co-finance has dropped to 41% of that identified at PIF. Please provide reason for marked reduction and that proposals are still viable with reduced co-finance levels.	A significant portion of the decline in cofinancing as compared with the PIF estimates was actually invested during the course of the PPG. Thus, some US$13 million was invested as follows: USAID – $2.1 million NORAD – $6.8 milllion DFID – $4.0 million Moore – $0.1 million **TOTAL – $13.0 million** Beyond that, the project maintains a healthy ratio of more than 5:1 co-financing: GEF financing Regarding the planned cofinancing from Congo Basin countries, WRI-GFW is currently active in implementing national level GFW activities across six countries in the Congo Basin. At the time of the PIF submission, it was expected that WRI would leverage co-financing from these countries for the GEF funded GFW activities in Madagascar and Georgia. However, since the submission of the PIF, WRI and partners in the Congo Basin have begun pursuing GEF-funding under phase 6, to support scaling-up of current GFW activities across Central Africa. The originally proposed Congo Basin co-financing has thus been reoriented to the pursuit of GEF funding for Central Africa.	NA
17. At PIF: Is the indicated amount and composition of co-financing as indicated in Table C adequate? Is the amount that the Agency bringing to the project in line with its role? At CEO endorsement: Has cofinancing been confirmed? Please provide supporting confirmation for co-finance from Madagascar National Parks as has been provided from the Finnish Association for Nature Conservation.	Co-financing letter of Madagascar National Parks has been provided in Appendix 11 of the Prodoc.	See Appendix 11 of the Prodoc.
21. Have the appropriate Tracking Tools been included with information for all relevant indicators, as applicable? Please forward the TTs in spreadsheet format.	Appropriate tracking tools have been included in the spreadsheet format	See Appendix 14.

2. STAP review comments2. STAP review comments and responses

A. Comments from STAP review of PIF, 8 May 2013

Comments from STAP review of PIF	Response to STAP review of PIF (shared with STAP in December 2014)
(1) The technology. Although there are few details in the PIF, the principal technological aspect of the project is to convert the GFW2.0 Alert System from a 300 meter resolution to 50 meters by changing remote sensing source. There is no analysis as to how or why this change could or will bring about better NDVI data and be able to provide more timely information. It is acknowledged in the risk analysis (Section A3) that there is some "technology development risk" attendant in Component 1. To deal with this risk, it is proposed to "formalize and strengthen the GFW2.0 partnership and establish mechanisms to conduct due diligence on technology aspects". STAP is unconvinced that the technological risk is small, and also that limitation in the technology is a legitimate item of 'risk'. There needs to be some credible scientific support, preferably with independent verification, that the proposed system will work. At a minimum, it would be useful to see references from the copious literature on remote sensing applications in forestry management. It is noted that a risk to the project is that the development of the technology will fail. STAP understands the concept of risks' in this case as to be outside the control of the project to be legitimate. There are further technological aspects that the project will need to address including the links between the basic data on change in vegetation and the Alert System including how this will translate to SMS and other means of information transfer. If the project proceeds, these technological aspects will all need to be described. The 'due diligence' process will need to be better articulated, including how the partners involved in technology development will be incentivized to deliver a practical and workable system. Experience in other GEF projects suggests that these aspects are often underestimated in their complexity and difficulty, and that failure here would undermine the entire project.	The large majority of technological risk has been overcome during the PPG Phase. The system has been launched and the following forest change information is currently available on the GFW Platform: • Global Forest Change data (gain and loss), with loss data produced annually, at 30m resolution (citation: Hansen, M. C., P. V. Potapov, R. Moore, M. Hancher, S. A. Turubanova, A. Tyukavina, D. Thau, S. V. Stehman, S. J. Goetz, T. R. Loveland, A. Kommareddy, A. Egorov, L. Chini, C. O. Justice, and J. R. G. Townshend. 2013. "High-Resolution Global Maps of 21st-Century Forest Cover Change." Science 342 (15 November): 850–53.) • Forest change alerts (FORMA) for the humid tropics, produced monthly, at 500m (citation here: https://s3.amazonaws.com/gfw-files/Hammer+et+al+2014.pdf) • Global forest extent from year 2000, at 30m resolution (citation: Hansen, M. C., P. V. Potapov, R. Moore, M. Hancher, S. A. Turubanova, A. Tyukavina, D. Thau, S. V. Stehman, S. J. Goetz, T. R. Loveland, A. Kommareddy, A. Egorov, L. Chini, C. O. Justice, and J. R. G. Townshend. 2013. "High-Resolution Global Maps of 21st-Century Forest Cover Change." Science 342 (15 November): 850–53.) The following summarizes outstanding technical challenges and the project's approach to resolving them: • *Need for higher resolution of alert data to better respond to small scale clearing of forests (more typical of forest use in Madagascar and Georgia)*: WRI is working on upgrades to FORMA, which include improving the resolution to 250 × 250 meters, and expanding coverage to tropical dry forest and eventually to other biomes across the global scale. Additionally, a Landsat-based, 30m Alert methodology is currently being developed. The 30m Alert data will be monthly, but only available for areas where cloud free images (pixels) were available for that time period. • *Communicating between mobile technology and GFW platform*: With co-financing support, WRI and GFW partners will continue their work developing "smart" and "dumb" phone based applications to enable communication of forest change information to interested parties, while also allowing for the sending of field-based information through these same channels. • *Need for higher resolution data on forest change*: WRI and GFW partners have developed crowd-sourcing-based methodology to use high-resolution satellite imagery to tackle forest fires in Indonesia. WRI envisions implementing a similar approach to better equip pilot country actors to better tackle illegal logging events in areas known to be high threat (see use cases).
(2) Information provision leads to change in behavior. The proposal cites three cases from Brazil to support the hypothesis that provision of information on deforestation and change in vegetation status will force change in behavior of forest users and spur sustainable forest management. Two of these cases appear to be reliant on the close involvement of the media. It is clear that greater transparency in issues such as deforestation does indeed lead to change in behavior, but often that change is merely to transfer pressure to other areas where governance arrangements	• Clearly, information is not enough, but needs to be accompanied by appropriate levers, awareness and capacity building. Acknowledgement of this fact is found throughout the document and is inherent in the project design and its very existence. In particular, pilot country activities are designed, first, to ensure uptake and integration with national level forest information management systems and (2) practical, multi-sectoral demonstrations ('use cases') of how information can and must be transformed into action. Landscape-level demonstrations will encourage the incorporation of information into planning.

Comments from STAP review of PIF	Response to STAP review of PIF (shared with STAP in December 2014)
are less effective. Indeed, forest governance is crucial in controlling deforestation: see Maguire, R. (2013) Global Forest Governance: Legal concepts and policy trends. Edward Elgar, London ISBN 978 0 85793 606 6	
(3) Practical in application. One of the peculiarities in the current proposal is the choice of pilot countries (Georgia and Madagascar) in which to develop and test GFW2.0. It is unclear how experience in these very particular cases would render GFW2.0 appealing to other countries, thereby achieving what the proposal hopes to be a global platform. "Rapid uptake" is mentioned but without saying how this will be achieved other than through a partnership. The PIF claims significant advantages from the GFW2.0, such as "reduced enforcement cost", "more effective advocacy", "increased accountability" and "enhanced effectiveness of law enforcement". No evidence is advanced for these claims, other than a passing mention that WRI has "successfully shown how the system can operate in six countries of the Congo Basin". This raises the additional question as to why not use these countries as the pilot, building on successful application.	• Pilot country selection was conditioned by the limited GEF allocations towards the end of the GEF 5 cycle. There appears to be interest on the part of several additional countries, including within the Congo Basin, to work with GFW during GEF 6. • Nevertheless, the present pilot countries are expected to make excellent demonstrations for many countries, including those facing very different scale and nature of deforestation challenges. Many of the principles being demonstrated, including development of national platforms, landscape-level demonstrations and use case implementation, are considered of highly generalizable interest. In addition, experience from other 'target' countries where GWF partners will be encouraging uptake with co-financing support, will be fully integrated into the overall project's lesson-learning efforts. • WRI's experience in developing national-level forest management and monitoring systems in the Congo Basin has greatly enabled cost reduction, increased efficiency, in terms of the development and implementation of such systems and related forest management processes in Georgia and Madagascar. • The PPG has identified important information-related barriers to better forest management and reduced deforestation, to be tackled through various means, including a series of multi-sectoral use cases. Use cases will look carefully at factors such as reduced enforcement cost and other criteria mentioned by the reviewer in order to clearly demonstrate the cost effectiveness of the GWF approach.
(4) Cost-efficiency. There is brief mention that the Congo Basin application mentioned above is done at "low cost". There does not appear to be any provision in the project to assess costs and undertake simple CBA or other measures that would indicate that forest monitoring is economically feasible and really does lead to sustainable and cost-effective savings.	• GFW leverages datasets and methodologies that have broad coverage, yet are locally relevant, thus significantly reducing the costs for any national or sub-national entity to conduct remotely-based forest monitoring (in many cases, there is no additional cost to applying the global datasets and applications to national context). • To be able to respond appropriately to national level forest monitoring needs, it will likely be necessary to develop or refine global applications and datasets. Development of national applications and datasets for Georgia and Madagascar will benefit significantly in cost savings due to GFW's (ongoing) development of similar applications across the Congo Basin and Indonesia. • As noted above, the project will support cost effectiveness assessments, particularly as part of its support to use cases.
In making its Major Revision advice, STAP is mindful that while Global Forest Watch certainly has very important objectives which definitely need to be addressed as part of KM systems to support the global deforestation challenge, the risks attendant in any one proposal with technology that is untested in its application to deliver real change are great. Evidence needs to be assembled, however, that the proposed way forward is workable, practical, sustainable, cost-effective and attractive.	• Most of the concerns surrounding the technical aspects of GFW have greatly diminished since the launch of the platform in April 2014. Risks associated with information to action remain relevant; however, the project's emphasis on a use case approach is expected to greatly reduce such risks, while developing evidence to support key contentions such as that of enhanced cost effectiveness.

B. STAP review of draft CEO Endorsement request and project document, 21 Dec 2014

Comments from STAP review of draft CEO Endorsement request and project document	Response to STAP review of draft CEO Endorsement request and project document	Page ref.
(1) *The technology*. The STAP thanks the proposers for the detailed response to its concerns that the technology works, primarily through the papers cited that are accessible on the GFW web-site. There is still no independent verification, even though the *Science* paper will have been peer-reviewed. Indeed a commentary on the paper by Tropek and colleagues specifically states: "We show that their product does not distinguish tropical forests from plantations and even herbaceous crops, which leads to a substantial underestimate of forest loss and compromises its value for local policy decisions."[6] The STAP is still of the view that not only should elements of risk in the technology be acknowledged in the proposal but also that a more candid analysis be given, showing both the strengths and weaknesses of the product.	The STAP requests a more candid analysis of the strengths and weaknesses of the tree cover loss products on GFW (UMD, FORMA, SAD, etc.). **Key strengths** include the spatial resolution (up to 30m), frequency update (up to every 16 days), and geographic coverage (pan-tropical to global) of the data, which represent groundbreaking advances in forest monitoring capabilities worldwide. **Key weaknesses** include lack of differentiation between different types of tree cover loss (e.g. loss of plantations versus natural forests), incomplete understanding of accuracy across different geographies, inadequate spatial resolution to detect small-scale forest change, and inadequate temporal resolution to enable preventative action. **WRI believes that these weaknesses can be overcome incrementally over the next 3 years using improved technologies and methods**. Nevertheless, the possibility that these weaknesses may persist has been added to the risk analysis under 'technological risks.' The proposed GEF project—including both GEF-financed and co-financed elements—will support the strengthening of the technology and enhanced accuracy of the system. In particular, GFW partners are committed to a continuous process to verify and improve systems for detecting tree cover loss and gain. At the global level, GFW partners are exploring **multiple approaches to improve the accuracy and precision of global forest monitoring systems**, which will also address the challenges raised in the STAP review: 1) Global validation studies of all tree cover loss products using higher resolution imagery (2015) 2) Continued enhancements to existing algorithms based on validation results (ongoing) 3) Pursuit of additional datasets that can be combined with the UMD data to provide context about tree cover type, e.g. data layers showing locations of primary forests versus tree plantations (ongoing) 4) Exploration of new sources of remote sensing data (Sentinel-2, SkyBox, Digital Globe, etc.) and new computational methods (e.g. artificial intelligence) to create the next generation of change detection algorithms (five year timeframe) In order to build local ownership and trust in these data products, it is also **critical for independent validation to be carried out nationally by local stakeholders**. This project will support the Governments of Georgia and Madagascar to conduct independent validation of the global tree cover loss products in their countries. They will also be empowered to customize global algorithms to create a more accurate national product. Furthermore, the project will enable Georgia and Madagascar to conduct policy-relevant analyses using the global tree cover loss data in combination with their own local data. For example, a researcher from the Ministry of Forestry in Indonesia recently combined UMD tree cover loss data with Indonesian primary forest data to estimate annual loss of primary forest starting in 2000.	Pro-doc: Table 9, p. 51 (Risks 7 & 8); Pro-doc: Output 1.1.1 descrip-tion (p. 37)

[6] Tropek, R. et al (2014) Comment on "High-resolution global maps of 21st-century forest cover change" *Science* 30 May 2014: Vol. 344 no. 6187 p. 981. DOI: 10.1126/science.1248753

Comments from STAP review of draft CEO Endorsement request and project document	Response to STAP review of draft CEO Endorsement request and project document	Page ref.
(2) *Information provision leads to change in behaviour*. The proponents respond to STAP's comments by stating that the project includes awareness and capacity-building at national level. This is, however, to misunderstand the thrust of STAP's concerns: i.e. that 'change' will occur. Awareness and capacity-building are perfectly legitimate project *activities*. Change in behaviour is an *outcome* of activities. STAP suggests that the proponents either develop a robust 'theory of change' for the project[7] or plot out 'uptake pathways' whereby project outputs are intended to be taken up by various users and the evidence of their acceptability is included[8]. The STAP also identified the issue of forest governance which was inadequately dealt with in the PIF and which will be crucial to whether the project outputs will lead to change in behaviour. STAP is pleased that the word 'governance' appears 62 times in the ProDoc; yet there is no project Component or activity that appears unequivocally to integrate issues of governance with the provision of local or national information on deforestation.	A critical assumption of the GFW initiative is that good information is a vital but not sufficient input to better decision-making about natural resource management. **GFW's theory of change involves three components**. This change theory underlies the entire GFW initiative as well as this project. **First**, GFW aims to promote radical transparency by dramatically improving the availability and accessibility of timely, precise, and accurate information and analysis concerning the status of forest landscapes worldwide. Transparency is a core principle of good governance and a critical enabling factor to improve accountability and coordination within governments. **Second**, GFW works with government, corporate, and civil society partners to identify and test opportunities to apply data in ways that support decision-making and improve on-the-ground implementation. The "use cases" proposed in this ProDoc will be the primary vehicle to apply GFW data directly in the context of relevant policy and implementation issues in Georgia and Madagascar. WRI is also working closely with the Governments of Cameroon, Central African Republic, Democratic Republic of Congo, Equatorial Guinea, Gabon, Liberia and Republic of Congo to develop and apply nationally calibrated applications and datasets, powered by global GFW data. Through the analysis of these and other use cases being pursued by GFW globally (e.g. GFW Commodities), the project will create a strong case and a set of practical tools for changing business-as-usual practices. Part of the analysis under relevant use cases will involve the identification of target uptake pathways and related indicators. **Third**, GFW seeks opportunities to replicate successful use cases regionally and globally to achieve impact at scale. The GFW partnership, which now includes over 60 organizations and companies, will provide a critical vehicle for replication and scaling. In addition, all GFW data and web-tools are open source, which enables anyone to apply or build from GFW resources. GFW is building a global network and community of practice through our online platform and global outreach strategies, which will enable good ideas to "go viral". GFW does not propose to resolve all governance challenges in each country, but it can make significant contributions with respect to transparency and related tools to support greater government accountability, sector coordination, and civil society participation. GFW will seek to identify and collaborate with relevant initiatives in each country to seek a more holistic, long-term approach to improving the multiple dimensions of governance.	Pro-doc: Project Rationale (p.32)
(3) *Practical in application*. The proponents of GFW offer four bullet-point responses to STAP's concerns about choice of pilot countries and generalizability of experiences to other countries for practical application. The first point is that GEF only offers limited funding: this is not a legitimate response in that it fails to	GFW is pursuing pilot activities and partnerships in over a dozen countries worldwide, including Mexico, Colombia, Peru, Brazil, and Liberia, six countries in Central Africa, Indonesia, Cambodia, Myanmar, Canada, and Russia. GEF financing is enabling GFW to add Madagascar and Georgia to this growing list, each of them representing a distinct forested ecosystem and socio-economic context not present in the other GFW pilot countries. While Madagascar is unique in many ways, lessons learned	Pro-doc: Table 9, p. 52

[7] See Vogel, I. 2012. Review of the use of 'Theory of Change' in international development: review report. DFID, London, 83pp -

[8] A thoughtful analysis of 'uptake pathways' relevant to renewable natural resources is by Henderson, J.S and Burn, R.W. (2003) Uptake pathways: the potential of Bayesian belief networks to assist the management, monitoring and evaluation of development-orientated research. *Agricultural Systems* 79: 3-15.

Comments from STAP review of draft CEO Endorsement request and project document	Response to STAP review of draft CEO Endorsement request and project document	Page ref.
identify why these two very particular pilot country situations are the best for further uptake of project outputs by other countries. The second point is that generalizability will be possible but no evidence is advanced for this in the text of either the ProDoc or CEO Endorsement request. The third and fourth response points appear to relate to issues of cost and cost-effectiveness and do not appear relevant to STAP's stated concerns. It is accepted that each country – Georgia and Madagascar – separately have compelling needs for the sort of product offered by the GFW. There are, however, very particular issues related to deforestation in Georgia and Madagascar which would seem to render them almost impossible to be generalizable to uptake of the technology, tools and methodologies to other countries. The STAP agrees with the comment of the US member of the GEF Council: "We would like a clearer explanation of the rationale for the choice of pilot countries."[9]	from piloting GFW here will certainly inform improved application of methods, tools and approaches from Southern Africa to Australia. GFW's application in Georgia will likewise inform improved methods, datasets and approaches for the Caucuses countries, Turkey, etc. Otherwise, the rather distinct socio-economic and ecological circumstances facing these countries in this sense add to the incremental logic supporting their inclusion. Through these national engagements and partnerships, the project aims to: • Better understand country needs in order to enhance GFW's growing suite of data and tools and to ensure that these are highly relevant and practical for national-level use. • Identify replicable and scalable "use cases" related to the application of GFW data and tools. The extent to which these use cases will be generalizable will depend on the nature of the use case itself, as well as the degree to which various countries share similar ecological and socio-economic contexts. • Raise the global bar concerning transparency and data disclosure by creating friendly competition between countries. We have seen this model work very successfully through our work to promote land use allocation transparency in Central Africa.	
(4) *Cost-efficiency.* The proposers put forward an argument that GFW may access datasets more cheaply than national entities because similar accessing is being undertaken for other countries, presumably implying that there is a lower unit-cost for bulk accessing. Georgia and Madagascar will therefore benefit from cheaper access to datasets and methodologies. A brief mention is also made in the Responses to Comments at Annex B of the CEO Endorsement request that the project will support cost effectiveness assessments. STAP is disappointed at this response. First, it confuses 'cost' with 'cost-efficiency'. An assessment of cost-effectiveness takes the benefits arising from the activities of the program as a given and asks whether these could have been produced at a lower cost compared with alternatives.[10] Secondly, it identifies a further problem already mentioned above under 'generic issues': where the datasets and methodologies for the project will be held and how national access will be made available without having to negotiate through a third party.	The previous response did indeed focus on the various ways in which the GFW approach creates cost saving for countries seeking to use remote sensing to assess levels and trends in deforestation. Compared to analogous approaches in which an individual country would 'start from scratch', it is estimated that the baseline information and knowledge provided free of charge by the GFW system represents a 50-75% reduction in costs. This represents a first and highly positive example of relative cost effectiveness based on the use of generic global-level information, supported by national-level refinement and validation. In addition, the cost effectiveness of the GFW-based approach should be evident from the extensive savings in enforcement costs that a data-driven approach enables. Relatively costly site visits can now be preceded and selected based on up-to-date deforestation data and alerts. Depending on country circumstance, this benefit may be expected to reduce monitoring and enforcement costs by 50-75% or more. And this is just one benefit of the system. Others, for example, those associated with enhanced planning due to better data, are also likely to be substantial. Re. the second issue raised here, GFW follows an open data and open source policy. GFW data is freely accessible for visualization, analysis, and download via the GFW website and open data portal. Furthermore, the GFW website including an open source Application Programming Interface (API) and client libraries, which allows anyone to pull GFW data directly into external websites and databases. Thus, any country is able to directly access GFW data without negotiating through a third party. This	Pro-doc: Table 9, p. 52

[9] The STAP understands that the choice of countries is pragmatic, rather than logical. Georgia and Madagascar have funding allocations available for the project, whereas other countries that may be more suitable do not. Nevertheless, the STAP would like to see a more convincing rationale for the two countries and how then the technology development employing remote sensing archive data and new sources will then be 'rolled out' to other countries.

[10] World Bank Source Book, Chapter 11 *Efficiency or Cost-Effectiveness?*

Comments from STAP review of draft CEO Endorsement request and project document	Response to STAP review of draft CEO Endorsement request and project document	Page ref.
	project aims to provide technical support to the governments of Madagascar and Georgia to enable them to validate, enhance, interpret, and apply GFW data (and underlying methods) to local policy issues.	
The *Risk Analysis* sections in both the Pro-Doc and the CEO Endorsement request are almost identical to that appearing in the PIF at Section A3 in April 2013. The only substantive difference now is the inclusion of a seventh risk that "Key potential users do not trust GFW information". STAP makes the following general points on the risk analysis: - It is unfortunate that, even though STAP has identified several risk areas for the project, the Risk Analysis has not been revised between the PIF and full Pro-Doc. Risk analysis is the "use of rational methods for dealing with an uncertain future"[11] and needs to be taken seriously. - The new risk added is not a legitimate risk. Risks are those factors outside the control of the project and hence beyond mitigation by project activities. The "trusting of GFW information" by stakeholders and users must be an intrinsic part of the project and should be accommodated in Component 2 – system uptake and replication. It is unacceptable to develop a system that has not been thoroughly tested for acceptability by users. Top-down imposition of technical solutions simply does not work; experience over many decades has shown that such imposition leads to project failure.[12]	In light of this comment, as well as remaining comments presented in the second STAP review, the project's risk analysis has been revised to include the following additional risks and mitigating measures. The risks include: • Persisting technological challenge makes data unreliable or insufficiently accurate to suit envisaged purposes • Despite enhanced transparency generated by GFW, governance issues and/or lack of political will limit uptake and on-the-ground impacts • Replicability is limited by distinctive nature of pilot countries • GFW proves to be insufficiently cost effective in certain uses and contexts - The system was tested and disseminated at national level during the PPG. During the full project, additional efforts will be made to ensure both the reliability and widespread acceptance of the system. This will be further enabled by the process by which national-level data is incorporated; ground testing is undertaken, etc.	Pro-doc: Risk analysis (p.50-52)
The second generic issue concerns the access to data and survey methodology, both the remote sensing and ancillary information that is needed to carry out the surveys at country level. Partly this is also an issue of building the capacity to manage and analyse the data at national level. STAP understands that the raw data at various levels of resolution are held in a WRI archive which is made available to any country that requests the information. This should be made clear in the project documents. However, a missing element in the proposal to date is a clear direction on capacity building and technology transfer so that the data may in practice be used and national entities have the knowledge and skills to undertake analyses themselves without having a 'gate-keeper' in WRI to access the technology. Neither UNEP nor the GEF should support a project that effectively renders access controlled by a third party to what should be public goods. This	Please see explanation above concerning open access to GFW data and technology. In no way will WRI serve as a gatekeeper controlling access to these resources. A core component of this project is to build the capacity of government and other local stakeholder to make practical use of this data, including through transfer of knowledge, skills, and technology. Key capacities include: • Capacities to carry out national independent validation of global tree cover loss products • Capacities to customize global methods for tree cover loss detection to create more accurate and appropriate national data products • Capacities to generate and aggregate national and subnational datasets pertaining to forest landscapes • Capacities manage data in a centralized digital repository and make data accessible to the public. • Capacities to analyze complex data to generate policy-relevant insights.	Pro-doc: Risk analysis (p.50)

[11] Suter, G.W. 2007. *Ecological Risk Assessment*. CRC Press, Boca Raton, p3.

[12] "The most critical issue with international development is getting the right resources to where they are needed most and ensuring those resources are being integrated in a sustainable manner. The greatest failure of international development to this day is the wasting of resources due to a lack of comprehensive knowledge of the realities on the ground." [Source: "Why Grassroots Development?" *The Foundation for Sustainable Development*]

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issue of 'ownership' of the project, its methodologies and outputs is recognised elsewhere to be important: "it will be critical to foster national governments' ownership from the onset." (Risk 2, p.8 CEO Endorsement request) The technology training, access mechanisms to the data and guarantees as to 'ownership' for this need to be made specific in the project documents.		

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[13]

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG Grant Approved at PIF: **$136,987**			
Project Preparation Activities Implemented	***GEF/LDCF/SCCF/NPIF Amount ($)***		
	Budgeted Amount	***Amount Spent to date***	***Amount Committed***
PPG Lead Consultant including travel	$56,100	$56,100	--
3 PPG National Coordinators (Georgia & Madagascar)	$21,000	$21,000	--
Logistics and reporting costs	$9,000	$9,000	--
Meetings and Workshops (incl. travel for UNEP PPG Team)	$50,887	$50,887	--
Total	$136,987	$136,987	--

[13] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used**)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

NA

ENT OF THE PROJECT DESIGN WITH THE ORIGINAL PIF:

ect title remains as originally proposed at the PIF stage

At the PIF stage, the Project Objective was: Develop and apply innovative GFW technology that will contribute to reducing land degradation, reducing illegal activities and supporting biodiversity conservation in the pilot countries, as well as on a global *orsement Stage, the Project Objective is:* To empower decision-makers in government, the private sector, and civil society with tion necessary to reduce deforestation and land degradation, combat illegal activities, and conserve biodiversity in pilot countries he main rationale of the slightly reformulated Project Objective was to ensure a focus on empowerment of national stakeholders as fact that majority of the 'development' of GFW technology had now been completed.

onent Titles: Component 1 title has been slightly changed (see below).

F Stage	**Component Title at CEO Endorsement Stage**	**Explanation**
ncement of GFW 2.0	1. Application and enhancement of GFW in pilot countries	2.0 has been dropped from the name of the platform
plication	*No changes*	
taining the GFW	*No changes*	
tion to reduce hains	*No changes*	

comes and outputs have been realigned significantly compared to what was originally proposed in the PIF to better align them to

	Outcome at CEO Endorsement Stage	**Explanation**
rnment agencies in pilot countries using borative Sustainable Management rs, at the local and national scale	1.2 Government and non-government agencies in pilot countries adopt GFW as a critical information tool for collaborating on landscape-level, multi-sectoral initiatives	The outcome description was reworded for clarity
rience gained in pilot countries support e GFW 2.0 globally, and by a wide range r-friendly and cost effective alert and forest conservation	Outcome 2.1: National-level users in multiple countries have enhanced opportunity to visualize and utilize country-specific data	The outcome has been added to reflect the importance of country-specific modifications
	Outcome 2.2 Lessons learned and experience gained in target countries support the enhancement of the GFW platform to increase its relevance and utilization at scale by a range of stakeholders	The outcome description was revised to better reflect the current baseline situation and the fact that a broader range of 'target' countries would provide lessons learned and experience
rengthened, long-term financial	*No changes*	*NA*

Outcome at PIF Stage	Outcome at CEO Endorsement Stage	Explanation
of forest conservation and sustainable use		
4.1 The national and global impact on forest conservation is significantly enhanced through the adoption of the GFW 2.0 system as a monitoring tool by the private sector	National and global-level impacts of GFW on forest conservation are significantly enhanced through the adoption of the suite of tools/ platforms as a supply chain management tool by the private sector	The outcome description was reworded for clarity

Output at PIF Stage	Output at CEO Endorsement Stage	Explanation
1.1.1 Innovative, peer reviewed, validated and calibrated algorithms and cloud-computing system generating 30m resolution forest cover change information and alerts across all types of forests, in near-real time.	1.1.1 Improved global- and regional-level data on GFW platform	System already up and running during PPG; improved and expanded data will come during full project
1.1.2 Easy-to-use, free-of-charge, online "near real- time" alert and monitoring system to support: increased rapid response capacity of forestry law enforcement and PA management agencies; increased cost-effectiveness of law enforcement activities on the ground; more effective advocacy, linked to increased accessibility of information for all stakeholders; increased accountability, linked to more transparent performance monitoring – all leading to improved control of deforestation on the ground and better monitoring/protection of carbon stocks.	1.1.2 Improved features and functionality on GFW global platform to support analysis, decision-making and action	This output expanded from alert system to cover a range of functionalities and features in global system
	1.1.4 Enhanced management practices through national and field-level application ('use cases') of data and information generated and made available through national GFW views	National-level items from PIF output 1.1.2 are covered here
1.1.3 Ground-thruthing and field testing in 2 countries and in-country refinement of the methodology using initial standardised approaches developed by the GFW 2.0 partnership	1.1.3 Nationally validated data sets, including refined forest cover / change data and additional locally generated data layers, are available within pilot country sections of GFW	Importance of national-level validation recognized during PPG; wording revised accordingly
1.1.4 Target end users trained and capable of using and promoting innovative ways to apply GFW 2.0 alert systems to support forest conservation and sustainable management	1.1.5 Targeted awareness, capacity building and outreach effort focusing on governmental and non-governmental stakeholders in the pilot countries to support timely and wide-ranging system uptake	Wording of output revised and broadened
1.1.5 Integration of the near-real time alert system from pilot countries, into the GFW 2.0 global on-line platform	*NA*	This system being developed now at global level, will be tested in pilot and other target countries
1.1.6 Targeted outreach effort focusing on governmental and non-governmental stakeholders in the pilot countries to support timely and wide-ranging system uptake	*NA*	Covered under new 1.1.5
1.2.1 in pilot countries (and particularly in the context of Georgia), GFW2.0 is adopted and its use demonstrated as a forest management tool to support (a) the development and implementation of cross-sectoral integrated land use management plans and (b) the development of innovative policies that integrate the perspectives of multiple Forest users (including i.e. forestry, tourism, agriculture, watershed management, water resources management, energy / power generation, local community interests, etc.)	1.2.1 GFW demonstrated as a tool for integrating multiple biodiversity, carbon and land degradation considerations in support of landscape-level planning and management.	Wording of output revised and broadened to cover various landscape-level concerns

Output at PIF Stage	Output at CEO Endorsement Stage	Explanation
2.1.1 Analytical 'white papers' produced for each country participating in initial testing and application (Component 1), to (a) guide policy makers in addressing drivers of deforestation and forest degradation (b) emphasize the cost effectiveness and impact of the Alert System, (c) analyze the impact on the country's forest resources and natural capital and (d) underline the importance of up-taking the system for enhanced transparency and better governance	Output 2.2.2 Country-level and thematic analyses and sharing of lessons learned through implementation of use cases and other country-level co-operation	Wording simplified; essence carried over into output description
2.1.2 Policy guidelines based on lessons learned from Component 1 are produced in soft and hard format and are widely disseminated to governments, CBD, UNFCCC, UNCCD, CSOs and private sector (using a wide range of modern communication tools and strategies)	Output 2.2.3 Policy and programme guidance based on GFW lessons learned	Wording simplified; essence carried over into output description
2.1.3 Simple GFW 2.0 user manual and guidelines are produced, translated in multiple languages, and made freely available on-line	Output 2.1.1 Enhanced online GFW system to visualise and enable interpretation of country-relevant data.	Output description broadened
3.1.1 User networks established in pilot countries first, and gradually expanded globally, with civil society coalitions engaged and supported in the focus countries and connected with the global GFW2.0 network, to ensure broad understanding and application of the information for improved forest management.	3.1.1 Country-, regional- and global-level user networks established and strengthened	Wording simplified; essence carried over into output description
3.1.2 Sustainable financing plan for the GFW 2.0 system developed in collaboration with public and private sector as well as CSOs.	3.1.2 Sustainable financing plan for the GFW system developed in collaboration with public and private sector as well as CSOs	Ref. to version 2.0 removed
3.1.3 External and independent review and oversight mechanism established to guarantee highest degree of transparency and technical credibility	*No change*	*NA*
4.1.1 Partnership established with selected private sector companies active in pilot countries and/or globally, to assess user needs and requirements, and jointly explore the development of GFW 2.0 Specific Decision- Support tools tailored to PS operations, management systems, and covering various steps in range of commodity supply chains	4.1.1 Partnerships with selected private sector companies active in target commodity sectors in target countries and/or globally, to assess user needs and requirements and jointly explore the development of GFW-specific decision-support tools tailored to private sector operations, management systems, and covering various steps in commodity supply chains	Wording revised to reflect GFW emphasis on key commodity sectors as well as developments during the PPG.
4.1.2. Specific management tools for investors and private companies trading in forest ecosystem services and goods are developed	4.1.2. An expanded and improved GFW Commodities application or suite of applications, providing enhanced datasets and management tools for companies trading in goods and services linked to deforestation	Wording revised to reflect GFW emphasis on key commodity sectors as well as developments during the PPG.
4.1.3 GFW 2.0 Tools for private sector widely promoted within private sector's relevant conventions and specific communication channels, supporting rapid global uptake	4.1.3 Broad, rapid uptake of GFW Commodities applications through partnership networks and specific promotion efforts.	Wording revised to reflect GFW emphasis on key commodity sectors as well as developments during the PPG.