



RESEARCH
PROGRAM ON
Forests, Trees and
Agroforestry



FTA Annual Report 2014



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Abbreviations

A4NH	CGIAR Research Program on Agriculture for Nutrition and Health	IPB	Bogor Agricultural University
AAS	CGIAR Research Program on Aquatic Agricultural Systems	IPCC	Intergovernmental Panel on Climate Change
ACM	Adaptive Collaborative Management	ISPO	Indonesian Sustainable Palm Oil
APFORGEN	Asia Pacific Forest Genetic Resources Program	ITTO	International Tropical Timber Organization
ASEAN	Association of Southeast Asian Nations	IUCN	International Union for Conservation of Nature
ATBC	Association for Tropical Biology&Conservation	IUFRO	International Union of Forest Research Organizations
CARE	Cooperative for Assistance and Relief Everywhere	LAMIL	Landscape Management for Improved Livelihoods
CATIE	Tropical Agriculture Research and Higher Education Center	LANDac	The Netherlands Academy for Land Governance
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security	LG-MSD	Land Governance Multi-stakeholder Dialogue
CF	Custodian Farmer	LUWES	Land-use planning for low-emission development strategies
CIFOR	Center for International Forestry Research	MAAP	The Monitoring of the Andean Amazon Project
CIRAD	Centre de coopération internationale en recherche agronomique pour le développement	MOU	Memorandum of Understanding
COGENT	Cocnut genetic resources for enhanced livelihoods	NGO	Non-governmental organization
COMIFAC	Central African Forest Commission	NRM	Natural resources management
CRA	Cocoa Research Association	PES	Payments for environmental services
CRC	Cocoa Research Centre	PIM	CGIAR Research Program on Policies, Institutions, and Markets
CRP	CGIAR Research Program	POWB	Program of Work and Budget
D.R.C.	Democratic Republic of the Congo	PRESA	Pro-poor Rewards for Environmental Services in Africa
DPRK	Democratic People's Republic of Korea	REDD+	Reduced emissions from deforestation and forest degradation

Drylands	CGIAR Research Program on Dryland Systems	REDD-ALERT	Reducing Emissions from Deforestation and Degradation through Alternative Landuses in Rainforests of the Tropics
EU	European Union	RSPO	Roundtable on Sustainable Palm Oil
EVD	Ebola Virus Disease	RUPES	Rewarding the Upland Poor for Environmental Services
FAO	Food and Agriculture Organization of the United Nations	SLM	Sloping Land Management
FAO COFO	Food and Agriculture Organization of the United Nations Committee on Forestry	SLO	CGIAR System Level Outcomes
FGR	Forest Genetic Resources	SRF	Strategic results framework
FSC	The Forest Stewardship Council	SWAMP	The Sustainable Wetlands Adaptation and Mitigation Project
FTA	CGIAR Research Program on Forest, Trees and Agroforestry	TFT	Tropical Fruit Trees
GEIRS	Gender Equality in Research Scale	ToC	Theory of Change
GFEP	Global Export Panel on Food Security	UNFCCC COP20	United Nations Framework Convention on Climate Change
GLF	Global Landscape Forum	UNFCCC SBSTA 40	The 40th session of the Subsidiary Body for Scientific and Technological Advice to the United Nations Framework Convention on Climate Change
GPA FGR	Sustainable Use and Development of Forest Genetic Resources	UNREDD	United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation
GSCC	Global Strategic Cacao Collection	USD	The United States dollar
GTPS	Brazilian Roundtable on Sustainable Livestock	W1/2	funds disbursed from Window 1 and Window 2 of the CGIAR Fund
ICHORD	Indonesian Center for Horticulture Research and Development	W3	funds disbursed from Window 3 of the CGIAR Fund
ICQCR	International Cocoa Quarantine Centre	WCF	World Cocoa Foundation
ICRAF	World Agroforestry Centre	WFP	United Nations World Food Programme
IDO	Intermediate Development Outcomes	WLE	CGIAR Research Program on Water, Land and Ecosystems
IEA	The CGIAR Independent Evaluation Arrangement	WWF	World Wildlife Fund
IFAD	International Fund for Agricultural Development		

FTA PERFORMANCE MONITORING REPORT FOR CALENDAR YEAR 2014

A. KEY MESSAGES

In 2014, significant senior management and researcher time was invested in the full independent evaluation of FTA (the first in the CGIAR) and the preparation of the 2015-2016 extension proposal. We received in May the results of the evaluation conducted by IEA, concluding that FTA had high relevance and emphasizing the need to continue funding the program while recommending a series of adjustments. FTA management developed a response to the evaluation, took these recommendations into account in the 2015-2016 extension proposal and started implementation during the second part of 2014 (see compliance with evaluation in Annex 6). Given the results of the evaluation, there has been no notable re-orientation of the CRP in 2014 but changes were planned for and explained in the extension proposal. We have continued improving our business processes with the development of an interactive FTA project database and monitoring tools that will allow us to develop a systematic approach to capturing, learning from, and communicating the evidence of our contributions, successes and failures (as discussed in 2013 Annual Report).

The ambition of “greening” the economy has become widely supported as a way to reconcile the SLO’s of the CGIAR SRF, and the Sustainable Development Goals. FTA scientists worked with national partners in Indonesia as part of a World Bank effort (parallel activities in Vietnam and the Philippines) to provide the most comprehensive and critical analysis to date of how ambitions relate to reality, and what steps the Government of Indonesia can take to create more synergy among policies that so far have been separately conceived. The review included rice as the primary staple and four globally traded commodities: rubber, coffee, cocoa and palm oil, of which Indonesia is among the top five global exporters. The analysis of these commodities brought to light that rural income based on tree crops exceeds the value of local food production and that common routes out of rural poverty imply a further specialization of landscapes focused on rice production, and those where export income is earned. This aligns with a recent analysis of tree cover transitions and food security in Southeast Asia and evidence for a role of tree cover in supporting dietary diversity, rather than staple food production. The FTA analysis contributed to the way the new government tries to improve on past performance and face the challenges in a more integrated way.

FAO’s first Report on the State of the World’s Forest Genetic Resources and associated Global Plan of Action for Conservation, Sustainable Use and Development of Forest Genetic Resources (GPA FGR) were published in 2014. Presented to the governments of the world, the 27 priority actions at the national, regional and international levels integrated issues, priorities and recommendations derived from FTA research (Appendix F, pages 33- 56). Building on this, representatives of the 14 countries of the Asia Pacific Forest Genetic Resources Network (APFORGEN) met in September to plan for implementation of the GPA FGR in Asia and the Pacific, defining action plans for three priority actions: mobilizing political and financial support for the implementation of the GPA FGR; developing conservation and sustainable use strategies for regionally important and threatened tree species; and strengthening tree seed programs to facilitate ecosystem restoration and support local livelihoods and climate change adaptation and mitigation.

FTA expenditure in 2014 was USD 81.9m. The expenditures were met 37% by funding from W1/2, 57% by funding from W3 and bilateral sources and the rest from Center/partner own sources. The partners’ shares in expenditures were: CIFOR, 42%; ICRAF, 41%; Bioversity, 7%; CIRAD, 2%; CIAT and CATIE, 1% each. This doesn’t take into account expenditures from CIRAD and CATIE for bilateral projects that were directly managed.

Personnel costs made up 41%, partnerships 27% and travel 9% of the expenditures. Flagship 1 was the largest project, making up 30% of the expenditures; Flagship 4 accounted for 27% and Flagships 2 and 3 expended about 16% each. Flagship 5 made up only 6% of the expenditure. CRP management and cross cutting themes (Gender, Sentinel Landscapes, communication) made 7% of the expenditures.

	Budget				2014 Actual Expenditure				Gender	
	Window1/ 2 Initial allocation	Window1/ 2 final allocation	W3 / Bilater al	TOTAL initial allocation	Windo w 1 & 2	Windo w 3 / Bilater al	Cente r Fund s	TOTAL	%	USD m
Bioversity	3,375	3,327	2,496	5,871	3,327	2,024	268	5,619	18 %	14,74 8
CIAT	754	721	420	1,174	751	327	-	1,078		
CIFOR	13,921	12,592	24,897	38,818	14,654	20,160	641	35,454		
ICRAF	10,026	9,144	27,076	37,102	9,376	23,797	2,286	35,459		
CATIE	440	437	1,508	1,948	438	-	1,442	1,880		
CIRAD	580	557	450	1,030	573	593		1,166		
Manageme nt	1,262	1,262			1,278			1,278		
TOTAL	30,358	28,039	56,848	87,206	30,396	46,900	4,638	81,934		

B. IMPACT PATHWAY AND INTERMEDIATE DEVELOPMENT OUTCOMES

We have continued to develop and refine our conceptual and practical understanding of FTA impact pathways, with a new overall Theory of Change (ToC) and with empirical analyses of project-level ToCs for long-term research in the Congo Basin (completed) and for the climate change mitigation research (ongoing).

The simplified FTA ToC has four impact pathways, with research contributing to change through: 1. International/intergovernmental policy; 2. National/sub-national governmental policy; 3. Organizational policy and practice; 4. Resource managers and enterprises, from smallholders to multinational companies. The ToC recognizes that FTA works within complex systems, with multiple actors and interactions, and substantial time lags. This is true whether the aim is to contribute to improved outcomes in an international policy process or to develop and support adoption of improved solutions for resource-poor farmers. The ToC reflects that FTA research aims to be relevant to real-world problems, rigorous and credible, and perceived by stakeholders as fair and legitimate. We work with partners to contribute at multiple levels, from defining, designing and implementing the research to helping to build research and development capacity and supporting the knowledge uptake process. There is attention to gender throughout the process, capacity development at all stages, and ongoing learning and adaptation. Specific ToCs at the project level elaborate key partners, pathways, and expected outcomes in detail as a support for planning and a tool for monitoring and evaluation.

In addition to simplifying our impact pathways, we also refined our IDOs. The table in Annex 7 shows the IDO indicators and aspirational targets in 2025.

C. PROGRESS ALONG THE IMPACT PATHWAY

C.1 PROGRESS TOWARDS OUTPUTS

Publications

In 2014, we reached a 96% compliance level with our POWB in terms of outputs (see Annex 2) and produced more than 700 publications, 51% of these open access (see Annex 3). We expect the open access proportion of 2014 publications to increase during the first semester of 2015 as there is always a time lag or an “embargo” delay between publication date and actual open access status. We expect to reach a level similar as for 2013 publications (87% open access). It is important to note in budgetary terms that realizing an 80% “gold” open access for our Thomson-ISI papers represents a cost of about USD 500,000 in publication fees. We are therefore going for a mixed “gold” and “green” open access approach combine with private archiving by lead authors. Some highlights, far from exhaustive, of significant publications produced in 2014 are provided below.

- A special issue of Agroforestry Systems including 13 papers on cocoa provides evidence that incorporating trees can sustain cocoa productivity, diversify livelihood options and improve food security. Critical consideration of the role of certification in securing market gains for smallholders was also covered. This is an important step in underpinning the promotion of more diverse and resilient cocoa production systems.
- A special issue of Forests, Trees and Livelihoods on forest and tree value chains includes six papers by FTA researchers exploring how forest and tree products contribute to people’s lives with goods and services, fulfilling basic subsistence needs for food, shelter, energy and health as well as being traded locally and globally. This included a new analysis of the gender implications of forest product value chains in the Congo Basin.
- A special issue of Forests on ‘Governing Forest Restoration: Social, Environmental and Institutional Dimensions’ integrates ten open access articles with insights into implementing forest landscape restoration across multiple scales, from research in Asia, Africa and Latin America.
- A special issue of Forest Ecology and Management, ‘Global Forest Genetic Resources: Taking Stock’, includes seven open access articles that document the importance of forest genetic resources, indicators for monitoring them, how forest management affects them, their use in agroforestry systems, and their importance for forest restoration and adaptation to climate change.
- A special issue of Current Opinion on Environmental Sustainability reviewed many aspects of agroforestry in Africa in the context of sustainable development goals, climate change adaptation and mitigation, gender aspects and the linkage of farmers to value chains.
- A special issue of Mitigation and Adaptation Options for Global Change compiled 18 papers resulting from the REDD-ALERT project with EU partners and national partners in Indonesia, Viet Nam, Cameroon and Peru on the institutional, economic, social and ecological aspects of REDD+ from local to national scales.
- A special issue of Climate Policy on Reducing Emissions from Deforestation and Forest Degradation provided a critical perspective and comparative study on progress towards readiness for REDD+ implementation in Indonesia, Viet Nam, Cameroon and Peru.
- A special issue of Ecology and Society on ‘REDD+ national policy networks: Information flows, influence and coalitions for change’ includes ten open-access articles with a unique analysis of seven country cases from our comparative study of REDD+ and provides evidence on how power, coalitions and interactions among actors in policy networks enable the transformational change required for an effective, efficient, and equitable national REDD+ design.
- A special issue of World Development on Forests, Livelihoods, and Conservation with 14 open access papers based on analyses of the Poverty and Environment Network database.
- Two major open access books ‘REDD+ on the ground’ and ‘Climate-Smart Landscapes: Multifunctionality in Practice’ were launched at Global Landscapes Forum in December in Lima.

Data repositories and databases

We continue improving and populating the [Landscape Portal](#), our online GIS platform, with a number of features for visualization, data management and spatial modelling. This provides users with a platform for visualizing and sharing spatial data and maps, as well as map stories.

The [Tropical Managed Forests Observatory](#) network consists now of 23 partner institutions in 15 countries, representing data from 490 permanent sample plots in the three major rainforest basins where forest dynamics have been monitored for several decades, to inform forest management to sustain production and environmental services.

We launched [tropiTree](#), an interactive open-access database, providing detailed information on more than 5000 genetic markers for 24 tree species important to smallholders, nine of African origin, five from Asia or Oceania, and nine from Latin America as well as one of multi-continental distribution.

We pursued the development of our [FTA](#), [CIFOR](#) and [ICRAF](#) open data repositories using the free Dataverse platform developed and maintained by the Harvard University

Tools

We continue improving [Terra-I](#), a platform that detects land-cover changes resulting from human activities in near real-time, producing updates every 16 days. It currently runs for the whole of Latin America and is being expanded over the next year to cover the entire tropics. Several major independent monitoring tools such as [Global Forest Watch](#), [InfoAmazonia](#), and [MAAP](#) use and came to Terra-I as a unique source of information.

The [SWAMP Toolbox](#) was soft-launched at Lima Global Landscape Forum in December by the Sustainable Wetlands Adaptation and Mitigation Project (SWAMP) and guides users in understanding the importance of wetlands ecosystems as carbon reservoirs for climate change adaptation and mitigation strategies. The scope of the toolbox ranges from global to national and local perspectives. We will continue to improve this toolbox in 2015.

Major events and outreach materials

A new [Forests, Trees and Agroforestry](#) hub website was developed. We are working at increasing the quantity and relevance of content coming from participating centers. CIFOR's website is now redirecting to the hub and a program-specific information page on CIFOR site is in progress. ICRAF and Bioversity both maintain CRP-FTA landing pages on their sites. We are also working with the CGIAR webmasters to share RSS feed systems for improved efficiencies.

Over the course of 2014 we produced more than 400 blog stories in four languages (English, French, Spanish, and Indonesian). FTA and the participating partners appeared in more than 2700 mainstream media hits. We are growing our social media presence making use of the major platforms: Facebook, Flickr, LinkedIn, SlideShare Twitter and YouTube (see Annex 2, output 6.8.3.3 for actual numbers).

FTA contributed significantly to many international events, including the following key events: World Congress on Agroforestry (Feb 10-14), The Forests Dialogue (Mar 16-19), Forests Asia Summit (May 5-6), UNFCCC SBSTA 40 (Jun 4-15), FAO COFO (Jun 23-27), Landscapes for People Food and Nature in Africa (Jul 1-3), ATBC 2014 (Jul 20-24), IUFRO World Congress (Oct 5-11), CGIAR Development Dialogues (Sep 25) and UNFCCC COP20 (Dec 1-12). In December, the 2014 Global Landscapes Forum at COP20 in Lima gathered over 1700 participants, 10 ministers including the former President of Mexico, and 95 organizations featuring FTA materials and branding. FTA publications were also distributed at more than 80 additional international events.

C.2 PROGRESS TOWARDS THE ACHIEVEMENT OF RESEARCH OUTCOMES AND IDOS

Our options by context approach is making a huge difference to how development partners operate in Eastern D. R. Congo, from promoting woodlots using three fast growing exotic species to identifying and promoting a diverse set of tree planting and management options– using over 50 tree species in various farm and landscape niches – with different options suiting women, men and indigenous people. By adopting the options by context approach, combining local and scientific knowledge, WWF has identified many tree planting options for various types of people and ecology including options for people displaced from the park who want meliferous trees that support their beekeeping and for women who want trees that quickly yield fruit that they can process into jam and market locally. We produced two videos documenting the usefulness of the options by context approach as it is being applied through the Africa Rising programme in Ethiopia and across the Sahel in partnership with Dryland Systems.

Our study on social impacts of certification helped support a WWF campaign in favor of FSC in the Congo basin. We demonstrated that the FSC certification – which ensures timber production meets higher standards than those required by national regulations – improved living and working conditions in certified companies. The results have received significant attention and been delivered around the world (Zeist, Paris, Berlin, Oslo, Seville, Brazzaville, Yaoundé, and Libreville) with FSC and WWF using the data to improve their current standards. To continue with our engagement vis-a-vis certification to improve forest management and its social outcomes, CIFOR became a member of the FSC national committees to adapt and discuss the FSC generic standards for Cameroon, Gabon and Brazzaville.

Our research on informal timber sectors revealed major challenges facing smallholders and small-scale chainsaw millers in Central Africa and Indonesia. We focused our attention on the challenges faced by the timber sector in meeting its obligations under the Voluntary Partnership Agreement – a mechanism to ensure that timber is harvested and exported legally to EU timber markets. Our recommendations have been reported to governments, civil society actors and producer organizations in Central Africa, with potential to reach about 71,000 timber operators involved in small-scale logging and milling, which contribute to the livelihoods of about 300,000 people. In Indonesia, the Ministry of Forestry made policy changes to accommodate local industry, and Berau District government requested input from FTA researchers in developing their local policy. Results were disseminated in an ITTO Newsletter in early 2014. Shortly thereafter the Ministry of Forestry extended the deadline for timber legality compliance for the small-scale sector and placed emphasis on group certification. In Indonesia, our work will benefit the small-scale logging sector that comprise about 500-700,000 family enterprises involving up to 2-2.5 million people about 90% of which operate outside of the VPA timber legality verification.

A collaborative framework agreement has been signed with the Peruvian Ministry of Environment for the implementation of and capacity support and training for a system to monitor deforestation. This has been achieved through providing open access to the Terra-I tool to the Peruvian Government. Terra-I Peru was officially launched in April 2014 and has since been used by the Peruvian government as an early warning system for land cover and land-use change in Peru. We have also worked with the Indonesian government on the design and adoption of the Indonesian National Carbon Accounting System (INCAS) to be implemented in 2015.

In June 2013, windblown smoke from fires in Sumatra, Indonesia, blanketed neighboring Singapore and Malaysia in a thick haze. Leveraging FTA experience and contacts in the area, we set out to determine the facts behind the fires and gathered as much objective information as possible, using drones, satellites, remote sensing and rainfall records. As soon the results were published in 2014, several decision makers, including the Minister of Environment of the Singaporean Government, the National Environment Agency of Singapore and prominent political actors in Indonesia used our work to promote the protection of peatlands against deforestation and fires. This also triggered the interest of a major donor to fund our work on the political economy of fires in Indonesia.

In 2014 the landscape scale was increasingly recognized by policymakers and donors as a relevant scale of intervention for achieving sustainable development goals. FTA contributed to the European Tropical Forest donor network providing an overview of lessons learned in development practice and a synthesis in the Landscapes for People Food and Nature partnership, that actively shares insights and results, including those of FTA, to a wide network of practitioners. The new Minister of Environment and Forestry of Indonesia asked FTA advice, on the basis of long-term learning landscape involvement by RUPES, on how to redesign and integrate the various existing laws and regulations on economic incentives for environmental

services, that involve government-to-government, government-to-private and private-to-private interactions, both inside and outside forests. Additionally a country and regional level synthesis of PES in the Lower Mekong is currently being used to guide donor policy on such schemes in the region.

Our research on the dynamics behind oil palm development and their impacts is increasingly useful to national strategies in countries where oil palm shows potential for expansion. We helped identify the strengths and weaknesses of the oil palm sector in Cameroon and Indonesia including the overlooked potential contribution of smallholders to the industry. Now, in collaboration with WWF, we are working with the Cameroon's Ministry of Agriculture and Rural Development to draft a sustainable strategy for oil palm that supports the role of smallholders in production and processing, and places attention on the adoption of international sustainability standards such as the ones produced by the Roundtable of Sustainable Palm Oil (RSPO). We are also assessing options for more sustainable oil palm expansion in Latin America, and engaging with grower associations and governments in policy debates such as in Brazil, Colombia and Peru. In Cameroon, small-scale oil palm growers involve 6,000 Smallholders and a total area under oil palm of 100,000 ha. In Indonesia, about 2.2 million registered smallholder families that contribute to almost 42% of total planted area with oil palm (3.8 million hectares) can benefit from more sustainable oil palm development. In contrast, the oil palm sector in Latin America is still expanding, and still a low number of smallholders are involved in the sector. In Brazil, smallholders comprise about 1,500 smallholders with an area of 15,000 hectares (7% of total planted area). In Colombia, about 3,700 farmers plant 31,800 hectares with oil palm (8% of total planted area), and about 2,500 smallholders hold an area of about 27,00 hectares in oil palm (45% of total planted area).

Building on ongoing FTA research, in 2014 we engaged 149 agriculture and forestry investors and 299 civil society, academic, and government stakeholders around innovative approaches to corporate governance and improved investment and business models to promote more inclusive and sustainable forestry and agricultural development. We convened a seminar with Dutch policy makers, NGO's, and banks in collaboration with the Dutch Ministry of Foreign Affairs. We contributed with analytical inputs to the LANDforum, a multi-stakeholder platform led by the Netherlands Academy for Land Governance (LANDac) aiming at promoting discussion on options for sustainable investment and business models, and in addition to inform the Land Governance Multi-stakeholder Dialogue (LG-MSD) in Netherlands. These activities helped influence key groups of investors and decision makers, in both producer and consumer countries, on investment options that support sustainable commodity supply while simultaneously providing ways out of poverty for the rural poor. We have also engaged other multi-stakeholder processes (e.g. RSPO) to support discussion on options for companies to embrace inclusive business models, and are contributing to working groups on sustainable oil palm in Indonesia (ISPO), and sustainable beef production in Brazil (GTPS). This is proving useful to support innovative thinking on ways to support sustainable commodity supply, a debate that is increasingly influenced by the corporate commitments to zero deforestation.

The COMIFAC and the Ministries of Forestry from D.R. Congo, Cameroon and Gabon participated in the development of policy guidelines to better address community needs for forest resources in the management of concessions, and COMIFAC is disseminating the ten policy briefs that were produced from FTA research carried out in those three countries over the past four years. These focus on the nutritional values of tree foods, the role of women in management and use of non-timber forest products, the availability of and access to non-timber resources around villages and in concessions, the effect of logging on the density and abundance of tree species producing food products and the economic importance of forest resources to local livelihoods.

Our work on synergies between mitigation and adaptation in the Congo Basin (COBAM) backstopped COMIFAC in its effort to adapt its Program to the new global political and environmental context by reviewing the COMIFAC Convergence Plan. This is a document of reference for the 10 Member States, technical and funding partners of the region. The new Plan (2015-2025) is built around 6 priority axes and 3 transversal axes. These replace the former 10 priority areas. The main Innovations are 1) the introduction of the fight against climate change and desertification as a priority axis, 2) the promotion of 'gender issues' to the rank of 'Values' or 'Principles'. It should be noted that Research for Development has become a transversal axis.

Thanks to our work on forest genetic resources, Indonesia's National Commission on Genetic Resources allocated funds to the conservation of genetic resources in 33 provinces to support ex situ and in situ/on-farm conservation and adopted the Custodian Farmer (CF) concept applied in FTA's Tropical Fruit Trees (TFT) project, selecting ten CFs in Bali. ICHORD (the horticulture research institute) has also allocated funds to maintaining and continuing the conservation activities in TFT sites in East Java, South Kalimantan and West Sumatra.

The first international consultation to discuss mechanisms to identify and communicate threats to cacao genetic resources developed recommendations for next steps and a proposal for action. A detailed costing study of the Global Strategic Cacao Collection (GSCC) was developed, including costs for conservation, germplasm evaluation, quarantine, virus-indexing, distribution and documentation and is being used by the CacaoNet Task Force on Sustainable Funding Mechanisms for Cacao Genetic Resources, made up of members from the private and public sectors, specifically Bioversity, Mars Inc., Mondelez International, Guittard Chocolate, CATIE, Cocoa Research Centre (CRC) Trinidad, Cocoa Research Association (CRA) UK Ltd, the University of Reading, the International Cocoa Quarantine Centre (ICQCR), UK and the World Cocoa Foundation (WCF). All documents that can be shared with the public are available on www.cacaonet.org.

Our work on tree cover and dietary quality contributed to a tangible outcome in the increasing recognition of the importance of forests and landscape level tree cover in securing dietary diversity, as a key contribution to nutritional security. To that end, we have engaged with the broader CGIAR and the wider NRM/agricultural community on the importance of forests and trees as both a contribution to dietary quality and for the provision of vital ecosystem services such as pollination, soil stabilization and climate regulation. This engagement included the preparation of a number of key background papers for the FAO-led process on Forests and Trees for Food Security and Nutrition. We have been instrumental to the work of the IUFRO Global Forest Expert Panel on Forests and Food Security and are current leading the High Level Expert Panel commissioned by the Committee on World Food Security on “Sustainable forest management and food and nutritional security”. FTA partners are now sought out for continued engagement in this field of expertise, changing the very dialogue related to integrated landscape approaches, as further evidenced by the CGIAR Development Dialogues, held in New York in September 2014.

C.3 PROGRESS TOWARDS IMPACT

In Peru, FTA scientists were involved in drafting a new regulation based on their research on sustainable timber production and marketing from agroforestry systems. Enacted in October 2014, the regulation meant that the forest law now includes associations of trees and crops as legitimate forms of agroforestry, allowing farmers to legally market timber from fallow plots. This policy change, affecting 4.5 million ha and benefiting well over a million people both men and women, will allow farmers to develop and profit from the timber value chain. (IDO 1,2,3 and 5).

In North Hwanghae Province, Democratic People's Republic of Korea (DPRK), the Ministry of Land and Environment Protection, the Swiss Agency for Development and Cooperation and the World Agroforestry Centre (ICRAF) implemented the Sloping Land Management (SLM) Program. After applying the methods of agroforestry and “the right crop for the right soil”, the previously bald and treeless slopes are now covered with orchards, woodlots, hedges and tree nurseries. Once degraded and eroded land has restored soil fertility where communities now grow corn, upland rice, potatoes and beans. Among a number of publications, this was documented in a book ‘Ten years of sloping land management’.

The first industrially marketed product from Allanblackia oil, Unilever's Becel Gold margarine, hit the Swedish supermarket shelves last fall. Our research on the domestication effort of Allanblackia seed, an ingredient for margarine, in Tanzania, Ghana and Nigeria, operates within the public-private 'Allanblackia partnership' and ensures that quality planting material is available to scale up farm production and for use in restoring degraded land. With several Allanblackia species on the IUCN endangered list, conservation objectives are also achieved by farmers’ planting of these trees. Around 10,000 rural people are currently involved in supplying the oil, nearly half of whom are women, but the partnership envisages this will rise to 100,000 by 2020, with households projected to gain an additional annual income of about 200 USD apiece. (IDO 2 and 3).

Findings from an FTA learning landscape in Sumatera (Indonesia) have led to the Indonesian state electricity company’s engaging in a payment for ecosystem services agreement with the local community. The agreement brought ten watershed areas of around 400,000 ha in total under the reach of the River Care program, which provides performance-based incentives for ecological restoration and reducing sediment loads. (IDO 3 and 6)

An ex-post impact assessment was carried out of the effects of a 5-year FTA research project on the conservation and enhanced use of fruit tree diversity in Central Asia. Analyses revealed that the project had resulted in both improved livelihoods and increased conservation and use of diversity. (IDO 2, 3, 4, 5 and 6).

An evaluation of the impact of FTA research in the Congo Basin has determined that the research, capacity development and outreach work contributed to changes in forestry policies and to sustainable forest management practices in the region. These changes would not have occurred without FTA research. Since 2004, the changes in policies and practices have led to the conservation of approximately 217,000 tons of carbon in Cameroon alone and about 730,000 tons of carbon sequestered in standing trees in the Congo Basin forests. (IDO 1, 5 and 6).

D. GENDER RESEARCH ACHIEVEMENTS

We continued our substantive achievements in understanding and addressing key institutional, cultural and attitudinal contexts that determine inequity across Flagships, through research activities within the cross-cutting theme on gender. A year-long gender research fellowship program related to forest and tree management and conservation brought into sharp focus the highly differentiated nature of knowledge, management and preferences between men and women. Five fellows mentored by FTA gender experts used participatory research approaches to generate insights within ongoing FTA projects from separate groups of men and women of different ages. This facilitated an interactive social learning process that helped to build the confidence and participation in decisionmaking of women and young men who do not typically play visible public roles. A field guide was published illustrating the use of Adaptive Collaborative Management –ACM- a collective problem-solving and management approach to facilitate gender-equitable negotiation and encourage the broader participation of women in decision making. These transformative techniques helped to create new spaces for women to participate and built understanding between women and men about the benefits of inclusive involvement in forest management. Other innovative approaches, including agent-based models and role-playing games were applied to study gendered behavior in land-use decisions and gendered dynamics that shape the multi-functionality of landscapes. A conceptual framework¹ was developed for a cross-theme global comparative study on gender and forest commodity value chains; the framework guided a review of secondary data on FTA value chains, generating relevant information on a) the nature of gender differences in FTA value chains, b) where these differences are concentrated, and c) the factors explaining the differences².

Our **gender integration team** was significantly strengthened during 2014 to eight members, six of whom are dedicated full-time to supporting the process and substance of gender integration at the different participating centers. This allowed us to make further progress in mainstreaming gender across our portfolio:

- **Capacity development in application of gender responsive methods and tools:** Four training events to develop capacities and awareness on gender methods and analysis were organized in Peru, Côte d'Ivoire, Kenya and Vietnam (68 FTA researchers). A user guide for researchers was produced with methods and tools for responsive participatory research adapted to to elicit gender specific information and to improve understanding of gender preferences and choices, as well as gendered impacts
- **Gender responsive monitoring and evaluation:** we developed the Gender Equality in Research Scale (GEIRS) in 2014. GEIRS is a monitoring and learning tool that aims to identify the distribution of FTA projects along a continuum of gender integration, from gender-uninformed to gender-sensitive. We will be rolling out GEIRS for the whole FTA portfolio during 2015 to give us a detailed overview of gender integration in research that will help identify weak areas and more efficiently direct support from the gender integration team.
- **Knowledge sharing, outreach and dissemination:** Gender sessions were organized i) at the IUFRO World Congress, in Salt Lake City (value chains, climate change & participation, tenure); ii) at the World Congress on Agroforestry, with gender-relevant papers to be included in a special journal issue on Gender and Agroforestry for publication in 2015. FTA gender-related research was also highlighted as a thematic focus during ICRAF's Science Week, Bioversity's Science Week and CIFOR's annual meeting.

¹ Concept Note. Gender and Forest, Tree and Agroforestry Value Chains: A Global Comparative Analysis

² M. Haverhals, V. Ingram, M. Elias, B. Basnett 2014. Gender and forest, tree and agroforestry value chains. Evidence from Literature

In terms of Gender in the work force, we aim at achieving parity in Centers' research/support staff involved in FTA. The current status is summarized below.

	Female	Male	TOTAL	F/M
Director/Team Leader	5	6	11	45%
Principal/Senior Scientist	11	19	30	37%
Scientist	15.5	23	38.5	40%
Post-doc / Research fellows	11	13	24	46%
Other scientific and support staff	54	80	134	40%
TOTAL FTA	96.5	141	237.5	41%

A full listing of gender research-related outputs is provided in Annex 4.

E. PARTNERSHIP BUILDING ACHIEVEMENTS

In 2014 we continued our main **research partnerships** and reinforced our strategic partnerships with ARI and Universities. These can be seen in the various research outputs presented in the Annex 2. In a workshop at CATIE, FTA scientists and partners re-evaluated the way the stock-based language of Natural, Human, Social, Financial and Built-up capitals can be reconciled with the flow-based concept of ecosystem services ('direct' and 'indirect'), and how these ideas are jointly applied in current understanding of landscapes and (sub)national green accounting. Further partnerships with national partners in Indonesia emerged in an analysis of what a Green Economy means for the five major agricultural commodities of Indonesia.

With the sentinel landscape initiative rolling out in five new landscapes FTA consolidated collaboration with more than 40 non-traditional partners, ensuring that our research is addressing the development needs of the various relevant stakeholders, from governments to indigenous representatives. Emphasis has been on capacity building towards measuring SDG's through data analysis workshops and field training. Key partners are leading all activities on the ground, including participatory stakeholder workshops.

We have increased our **cross-CRP** collaborations in many ways. With **PIM**, **WLE** and **FTA** regarding ecosystem services and the governance/institutional aspects of various forms of payments for ecosystem services, we identified key research questions in the domains of measurement and valuation of ES, the role of institutions in delivering those benefits and the various ways CGIAR centers and partners can support desirable change. With **CCAFS** we have initiated activities aimed at assessing public-private institutional arrangements to transition towards more sustainable supply chains with a focus on climate change mitigation. This work will contribute to aligning activities looking at sustainable beef production in Brazil and oil palm development in Indonesia, with potential to scale up policy and institutional innovations that result in better social and environmental impacts. In Burkina Faso, we are continuing our attempts to develop with **CCAFS**, **WLE** and **Drylands** a pilot implementation platform to jointly plan, monitor and learn from the CRPs' contributions to national development pathways. We participated in the regional planning processes of **Drylands** and **Humidtropics**, offering co-locations and contributions from Flagship1 regarding tree-based value chains and Flagship2 regarding conservation and improved use of cacao diversity and fruit trees in Central Asia. We continued our discussions with **PIM** about land tenure and rights and also with **WLE** co-financed a gender post-doctoral fellow (sponsored by the CO). We also teamed up with **Drylands** to develop communities of practice at various scales around the use of a research 'in' development approach to scale up agroforestry adoption. Further partnerships arose in the work on nutritional diversity and tree cover, with CIMMYT, **A4NH**, **AAAS**, World Fish, IPB and ICRAF with activities in priority field sites, and with IUFRO in the context of the Global Export Panel on Food Security (GFEP) process, that will be launched in May 2015 at the UNFF. In Nicaragua and Honduras CATIE is spearheading co-location of projects with both **Humidtropics** and **CCAFS**.

Our **private-public partnership** with **Unilever**, a key part of FTA's livelihood systems flagship, came to fruition in 2014 with the launch of the first product in Europe based on *Allanblackia* oil. The *Allanblackia* partnership, also involving IUCN and national bodies, has provided a model both for public-private partnerships and new tree domestication for the benefit of smallholders. On the back of this success FTA has developed a long term partnership with **Mars** that began with cocoa productivity in Cote d'Ivoire but is now expanding to sequencing African orphan crops, including the iconic baobab tree, within a large public-private consortium. Two new partnerships with the private sector were initiated in 2014, with **Clarins** to underpin the sustainable and equitable exploitation of plants in China for use in beauty products and with **Pioneer** on developing seed stocks for nitrogen fixing trees in southern Africa.

Regarding **boundary and implementing partners**, in 2014 we signed MOUs with UNREDD Vietnam to jointly implement activities in the Bac Kan province based in LUWES; and with the Peruvian Ministry of Environment. We established an international platform with IFAD, a national link to large IFAD/FAO/WFP investments in Kenya and NGO platforms on soil and water conservation in Mali, Niger, Ethiopia and Kenya involving World Vision, CARE and SahelEco. We have strengthened our links with the European Land Forum (promoted by the LANDac project at Utrecht University) to support the discussion on inclusive and sustainable business models that deliver improved social and economic benefits while reducing the pressure on natural resources based on key countries in sub-Saharan Africa, Latin America and Southeast Asia.

F. CAPACITY BUILDING

We carried out a wide range of capacity development activities related to our key research themes during 2014, including:

- a. developing capacities of the future research leaders through MSc and PhD programs, through hosting NARES partner scientists at FTA research locations, and through placing FTA visiting scientists at partner institutes (a total of 313 persons, 44% female);
- b. developing capacities of various innovation system actors through short training courses of varying durations and appropriate training materials with innovative delivery methods: 536 courses, 3% exclusively focused on women, 2% on men, the balance gender neutral - training an audience of 6792 people (37% women), and 607 training course materials produced and shared in 2014;
- c. holding knowledge sharing events for various global, regional, national and local academic and practice related partners: 513 events, 3% exclusively focused on women, 5% on men, the balance gender neutral – reaching an audience of 1,672 people (41% women);
- d. facilitating innovation platforms, such as CacaoNet and COGENT (global) and 10 Learning landscapes in the PRESA and RUPES networks in South East Asia and West and Central Africa.

The details of various capacity development outputs and outcomes are presented in Annex 5.

G. RISK MANAGEMENT

Risk 1: Uncertainty in and fractioning of W1/2 funding hinders delivery

In our 2013 annual report we warned about significant risks that uncertain or unstable W1/2 funding levels put us at risk of non-delivery or of creating significant opportunity costs. Unfortunately the year 2014 has exemplified the issue. We started the year with a financial plan based on a window 1/2 contribution of USD 29.8M but with a CRP officially ending end of June. We prepared in January, at the request of the Consortium Office, a POWB for the whole of 2014, including an additional 6 months of activity based on the financial plan and our estimate of bilateral and window 3 funding. Unfortunately this translated into protracted discussion of a so-called “6 month extension” with many backs and forths between the FTA lead center, management and CO about what was additional and about the budget in order to have our POWB accepted in June for the full year. We thought we had passed the worst. This was not the case and, like all the other CRPs, we were taken aback in October - after 10 month of operation and contracts with partners in place - when we were told that the W1/2 attribution would be USD 26.5M and not 29.8M. It was too late to modify the course of action or our commitments and as a result we ended up 2014 with a significant negative carry forward in 2015-2016. Although delivery has been only marginally hindered in 2014, this will have strong repercussions in our capacity to deliver in 2015 and 2016 (as funding gets even tighter).

Risk 2: Increased volatility and unrest in many countries of our active portfolio

The year 2014 has seen an increase in volatility and unrest around the world. This has affected FTA activities in some important countries (Cameroon, Central African Republic, DR Congo, Burkina Faso, Mali) by i) increasing potential risk to researchers, ii) making work more difficult or costly, or iii) rendering it impossible to travel to research sites.

Risk 3: Ebola outbreak

The 2014 outbreak of Ebola Virus Disease (EVD) affecting Guinea, Sierra Leone and Liberia put several staff at risk because some of the research they were conducting was located in the outbreak areas. Activities in these countries were immediately suspended and all staff were banned from travel or work in the affected areas. This created delays in the achievement of deliverables for the BioDev project as well as in the socio-economic survey for the ex-post impact assessment of the LAMIL project.

H. LESSONS LEARNED

Analysis of variance from what was planned:

i. Estimate the overall level of confidence/uncertainty of the indicators provided in Table 1.

We have confidence in the quantitative indicators. e.g. # of people trained. We have less confidence in other types of indicators, such as the # of policies influenced or some of the estimate about relative gender contribution. We continue to develop a systematic approach to collecting this and other types of performance indicators from across our portfolio.

ii. Description, if relevant, of research avenues that did not produce expected results, and description of actions taken by the CRP, such as new research directions pursued and their expected outputs and outcomes.

In the transition to the extension proposal some revisions in the agenda were made, although not all additional topics that the evaluation had recommended could be addressed. The research line that links dietary diversity to forest and tree cover, that was not in the original FTA design has come to fruition and has started to produce important insights and policy outcomes. Analysis of the way the hydrological cycle and specifically short-cycle rainfall are linked to (sub)-continental tree cover has opened new perspectives that will be more fully explored in the extension phase.

iii. Lessons learned by the CRP from its monitoring of the indicators and from its qualitative analyses of progress.

As indicated in 2013 annual report, we have introduced a range of knowledge uptake planning and monitoring approaches and tools across key portfolio elements. These include question-based approaches which allow multiple sources of evidence (e.g. digital stream, citations, network analysis, reports from the field) to inform performance rubrics. These tools have been made available to the teams and will be rolled out widely in the course of 2015-2016 if available funding permits.

I. CRP FINANCIAL REPORT

See series of “L” financial spreadsheets in Annex 8 at the end of this report

Annex 1: Indicator Table

CRPs concerned by this indicator	Indicator	Glossary/guidelines for defining and measuring the indicator, and description of what the CRP includes in the indicator measured, based upon the glossary	Deviation narrative (if actual is more than 10% away from target)	2014		2015	
				Target	Actual	Target	Actual
KNOWLEDGE, TOOLS, DATA							
All	1. Number of flagship “products” produced by CRP	<p>Includes but not limited to:</p> <ul style="list-style-type: none"> • Report on the State of the World’s Forest Genetic Resources (FGR); Global Plan of Action for Conservation, Sustainable Use and Development of FGR; Special issue of Forest Ecology and Management on FGR • Series of policy and infobriefs about the informal timber sector and EC Voluntary Partnership Agreements • Series of papers, blogs, policy briefs on issues affecting smallholder timber producers in the Peruvian Amazon • Paper, blogs and series of public events on the socio-economic impacts of certification in the Congo Basin • Series of papers on land governance, impacts of trade and investment, oil palm expansion, etc. in Indonesia, Laos, Brazil, Congo Basin • Series of papers and policy briefs on REDD+ policy context, benefit sharing and safeguards. • Special issue of Ecology and Society: ‘REDD+ national policy networks: Information flows, influence and coalitions for change’ includes 10 open-access articles with analysis of country cases from our comparative study of RE • Guiding principle for delivering coastal wetland carbon projects’ distils best practice principles for coastal wetland carbon projects, 		50	154	50	

		<ul style="list-style-type: none"> • Analysis and policy-dialogues on the socio-political, economic and environmental factors shaping large-scale investments in these countries around oil palm and sugarcane in Indonesia, Brazil, Mozambique, Tanzania • Key publication and media work on the dynamics of oil palm expansion, and their implications for economic growth and environment • Drafting of the national strategy for sustainable oil palm development in Cameroon • Evidence base for the integration of trees to sustain smallholder cocoa productivity • Book “REDD+ on the ground” analysis of 23 subnational REDD+ pilot initiatives in six countries (Brazil, Peru, Cameroon, Tanzania, Indonesia and Vietnam) launched at Global Landscapes Forum in December in Lima. • Gender explicit framework for forest and tree product value chain evaluation • Methodology for selecting fuelwood species across rainfall gradients • Multiple products promoting sustainable restoration of forest landscapes (special issue in Forests, nationwide assessment in Colombia, book co-published with FAO, events) • Book “Climate Smart Landscapes” - synthesis of the experience and literature on landscape multi-functionality – launched in GLF Lima • Set of 17 systematic review started on evidence-based forestry (2 completed, several protocol published) • Crowd sourcing development of the 20 most important questions in forestry • Series of papers, reports, blogs, events on the roles of forests and trees for food security and nutrition bringing forestry issues into the food security and nutrition realm • Framework for assessing food security from survey data, incorporating contributions from trees based on extensive published literature • Papers, blogs, events on links between climate, land use, fire and haze in South-East Asia 					
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		<ul style="list-style-type: none"> • Contribution to the IPCC report on wetlands (several associated scientific papers, blogs and events) • Framework for effective farmer to farmer extension • Agroforestry tree species switchboard – framework for accessing globally available information on trees from multiple sources • Refined research prioritization cycle based on gap analysis of option x context matrices • Framework for the use of conditionality to add spatially explicit reasoning to local knowledge representation 					
All	2. % of flagship products produced that have explicit target of women farmers/NRM managers	The complete list of gender related outputs/products is available in Annex 4 of the presents report: 8 journal articles, 3 Center’s publications, 2 book chapters, 5 policy briefs; 2 workshop reports; 35 blogs; 6 short films; 4 dedicated webpages		30%	38%	35%	
All	3. % of flagship products produced that have been assessed for likely gender-disaggregated impact	All our products, outputs derived from household or community surveys, interviews are gender disaggregated and follow the principles set by the Gender Integration Team. The percentage given is a low estimate based on the volume of projects that carry out this sort of sampling. Samples and protocols can be seen in our online data repositories (see section C1 of report) or on specific project webpages.		30%	30%	30%	
All	4. Number of ”tools” produced by CRP	Includes but not limited to: <ul style="list-style-type: none"> • Guidelines for optimizing combined production of brazil nut and timber in the Amazon region • Guidelines for sustaining food tree species in the Congo Basin • Tool to predict timber stock reconstitution based on regional data • Protocols for genetic monitoring and testing of biodiversity indicators in managed forest • Threat analysis methods for priority species in Burkina Faso • Modeled predictions of climate change impacts on selected priority species in LA • Threat analysis, genetic analysis and nutrient analysis that will contribute to future development of strategies 		7	56	14	

		<p>for the better conservation of genetic resources of three temperate fruit tree species in Central Asia</p> <ul style="list-style-type: none"> • Regional strategies for implementing the Global Plan of Action for Conservation and Use of Forest Genetic Resources • Forest Genetic Resources Training Guide case studies • Online Landscape Game (HP) • 14 Guidelines focused on: Propagation protocols for <i>Allanblackia</i>; Grafting protocols for Son Tra (<i>Docynia indica</i>); Integrated water management innovations in Rwanda and Tanzania; Conservation agriculture with trees; Extension approaches to rehabilitate small holder fruit agroforestry systems; The influence of biophysical and socio economic factors on fruit tree diversity; Leaf area index as an indicator of ecosystem services and management practices; Tradeoff analysis between crop intensification and ecosystem services in cocoa agroforestry systems; Safe movement of cocoa germplasm; Agroforestry options by context matrices for Vietnam, Peru, Kenya, the Sahel and Eastern DRC. • Characterization of species as alternatives for biofuel • Charcoal yield rate production for brick kilns. • Interactive Burundi vegetation map and tree species selection tool for Burundi • Spatial characterization of local knowledge • Training manuals on tenure rights and access to forests. • Training manual on farmer entrepreneurship 					
All	5. % of tools that have an explicit target of women farmers	All the tools derived from gender relevant research and projects consider both men and women. Specific examples can be found on the various Gender related webpages provided in Annex 4		40%	41%	20%	
All	6. % of tools assessed for likely gender-disaggregated impact	Whenever relevant all tools are assessed for likely gender disaggregated impact. It is therefore difficult to put a number in this or we can put 100%		50%	50%	50%	
All	7. Number of open access databases maintained by CRP	<p>We are currently managing:</p> <ul style="list-style-type: none"> • A major data/spatial Landscape Portal • Global online open data repositories for FTA (17 databases/datasets), CIFOR (13 databases/datasets), 		20	32	10	

		<p><u>ICRAF</u> (275 datasets –not counted as part of the Landscape Portal)</p> <ul style="list-style-type: none"> • Standalone interactive databases <ul style="list-style-type: none"> • <u>Agroforestry Species Switchboard</u>. • <u>tropiTree</u> <p>Various project databases/datasets (PEN data, MLA data, smallholder oil palm growers...) – not counted here</p>					
All	8. Total number of users of these open access databases	It is difficult to give a total number of users but as a first approximation we will use the number of downloads extracted from the open data repositories		500	9278	10000	
All	9. Number of publications in ISI journals produced by CRP	See the complete list of publication and the summary table in Annex 3		200	328	250	
1,2,3, 4, 6	10. Number of strategic value chains analyzed by CRP	<p>Oil palm (Indonesia, Colombia, Cameroon) Timber (Indonesia, Peru, Cameroon, DRC) Furniture (ASEAN) Beef (Brazil), Soy (Brazil, Mozambique) Sugarcane (Mozambique, Tanzania) Wood energy and charcoal (Kenya, Zambia, DR Congo, Burkina Faso) Avocado (Kenya) Bamboo (Ethiopia) Gums and resin (Ethiopia) Jatropha (Kenya, India) Cacao (Cote d'Ivoire) Bushmeat (Congo Basin, Amazon Basin, South-East Asia)</p> <p>Note also a special issue on ‘Forestry and tree products value chains’ in Forests, Trees and Livelihoods journal</p>		10	14	10	
1,5,6,7	11. Number of targeted agro-ecosystems analysed/characterised by CRP	<p>Humid rainforests (Amazon Basin, Meso-America, Congo Basin, South Asia, South-East Asia) × Low intensity management: timber, non-timber forest products, bushmeat</p>		10	19	15	

		<ul style="list-style-type: none"> × Swidden cultivation systems × Smallholder agroforestry systems: coffee, rubber, complex agroforests × High intensity management: oil palm, rubber, coffee, cocoa, fruit trees <p>Tropical Dry Forests (Sahel, East Africa, South Africa)</p> <ul style="list-style-type: none"> × Parklands: maize-millet, shea, fruit trees, food trees <p>Temperate Dry Forests (Central Asia)</p> <ul style="list-style-type: none"> × Fruit trees <p>Afromontane forests (Kenya, Rwanda, Burundi, East DRC, Uganda)</p> <ul style="list-style-type: none"> × Smallholder maize agroforestry 					
1,5,6,7	12. Estimated population of above-mentioned agro-ecosystems	Data extracted from the Population Reference Bureau database gives 2147 million rural people in the above-mentioned regions. Zomer et al (2014) found a tree cover >10% on more than 43% of agricultural land globally. We can therefore consider that the estimated number of rural people in our target agro-ecosystems is around 900 million		≈ 900 millions	≈ 900 millions	≈ 900 millions	
CAPACITY ENHANCEMENT AND INNOVATION PLATFORMS							
All	13. Number of trainees in short-term programs facilitated by CRP (male)	See capacity development section in the narrative, Annex 2 and Annex 5		2000	4252	2000	
All	14. Number of trainees in short-term programs facilitated by CRP (female)	See capacity development section in the narrative, Annex 2 and Annex 5		2000	2540	2000	
All	15. Number of trainees in long-term programs facilitated by CRP (male)	See capacity development section in the narrative, Annex 2 and Annex 5		50	185	100	
All	16. Number of trainees in long-term programs			50	138	100	

	facilitated by CRP (female)	See capacity development section in the narrative, Annex 2 and Annex 5				
1,5,6,7	17. Number of multi-stakeholder R4D innovation platforms established for the targeted agro-ecosystems by the CRPs	<p>Multi-stakeholder platforms</p> <ul style="list-style-type: none"> • Sustainable oil palm (East Kalimantan) • Beef production (Paragominas) • REDD+ (several countries) • CacaoNet • CoGENT • PRESA-RUPES (10 learning landscapes) 		25	20	20
TECHNOLOGIES / PRACTICE IN VARIOUS STAGES OF DEVELOPMENT						
All	18. Number of technologies/NRM practices under research in the CRP (Phase I)	<p>Include among others:</p> <ul style="list-style-type: none"> • Sustainable wild honey harvesting (Miombo Woodlands) • Seed collection, seedling production, planting; fruit trees (Central Asia) • Restoration of Mahogany Forests (Mexico) • Timber Tracking technologies - Global • Multiple use management (Brazil nut, Peru; bushmeat, Congo Basin, Amazon) • Conservation of genetic resources (Parkia biglobosa, Burkina Faso; Cariniana pyriformis, Colombia) • Management of trees in crop fields; on-farm fodder production; management of trees on sloping land and their use in soil erosion control; fertilizer tree technologies; indigenous fruit production (five species); propagation techniques (five species); rural resource centres as delivery mechanisms for tree germplasm; genetic improvement (three species); farmer managed natural regeneration; companion tree management in plantation tree-crops; barrier planting to control pest and disease spread; livelihood options for buffer zone management around protected areas • Co-management in HLG/Peat Protection Forest area with the local community through appropriate 		50	55	50

		<p>community forestry schemes in Tanjung Jagung Barat, Indonesia</p> <ul style="list-style-type: none"> • Communal (Council Forest) in Efoulan Municipality, South Province , Cameroon • PES community-based forest conservation, Ba Be and Na Ri Districts, Bac Kan Province, Vietnam • Cocoa intensification through tree improvement and domestication in Efoulan, Cameroon • Potential of Jelutung (<i>Dyera lowrii</i>) for agroforestry and for trade commodities in Tanjung Jabung Barat, Indonesia • Enhancing carbon stocks in land holdings (cacao and forests) in the Padre Abad District, Peru • Acacia-based woodlots and cassava/maize systems associated with fertilizing trees to increase both supply of fuel wood and agricultural productivity, DRC • Agroforestry systems on sloping land to replace maize monocropping, Ba Be and Na Ri Districts, Vietnam • Stove for charcoal, tank for water collection, bamboo for soil stabilization and agroforestry in Rwanda; • Cooking stove and agroforestry at Bukavu, Eastern DRC • Biochar, biofertilizers such as mycorrhize, stove and agroforestry at Lukolela, Equateur Province, DRC; • Agroforestry and community forestry at Yokadouma, Eastern Cameroon, and the same in Equatorial Guinea. 					
All	19. % of technologies under research that have an explicit target of women farmers	See indicator 2		50%			
All	20. % of technologies under research that have been assessed for likely gender-disaggregated impact	See indicator 3		50%			
1,5,6,7	21. Number of agro-ecosystems for which CRP has identified feasible approaches	Same as indicator 11					

	for improving ecosystem services and for establishing positive incentives for farmers to improve ecosystem functions as per the CRP's recommendations						
1,5,6,7	22. Number of people who will potentially benefit from plans, once finalised, for the scaling up of strategies	Includes: Around 50 million of rural population in Java, Sulawesi etc. who have teak and mahogany plantations Approx. 40 million if talking about the Congo Basin humid tropics, Approx. 900 million if considering all tropics in the world.		50 million	≈80 million	50 million	
All, except 2	23. Number of technologies /NRM practices field tested (phase II)	Our approach to scaling does not generally adopt a model of piloting and then scaling up but large N trials from the outset to address fine scale variation in context and a co-learning paradigm to refine. See indicator 18		20	55	20	
1,5,6,7	24. Number of agro-ecosystems for which innovations (technologies, policies, practices, integrative approaches) and options for improvement at system level have been developed and are being field tested (Phase II)	See explanation in indicator 23 and agroecosystems in indicator 11		20	28	20	
1,5,6,7	25. % of above innovations/approaches/options that are targeted at decreasing inequality between men and women	see indicator 19 Reported only for 5 agro-ecosystems from 2 projects		10%	35%	10%	

1,5,6,7	26. Number of published research outputs from CRP utilised in targeted agro-ecosystems	Data cannot be collected easily. We propose to use a proxy for the 2015 report by considering the number of times published research is cited in guidelines or said to be used by practitioners		N/A	N/A	20	
All, except 2	27. Number of technologies/NRM practices released by public and private sector partners globally (phase III)	Our approach to scaling does not generally adopt a model of piloting and then scaling up but large N trials from the outset to address fine scale variation in context and a co-learning paradigm to refine. See indicator 18 for details of where this approach is being applied Note however the launching of commercial products like the Gold Becel margarine based on research on Allanblackia		N/A	N/A	5	
POLICIES IN VARIOUS STAGES OF DEVELOPMENT							
All	28. Numbers of Policies/ Regulations/ Administrative Procedures Analyzed (Stage 1)	A great part of our work is about analyzing policies, their implementation, the resulting impacts, and the appropriation by various actors in order to build recommendations for improved policies or identify gaps and propose new policies (looking at public policies, regulations or other market based instruments). Among the main policies/instruments analyzed in 2014: <ul style="list-style-type: none"> • REDD+ and related policies in Brazil, Cameroon, India, Indonesia, Peru, Tanzania and Vietnam • Certification in the Congo Basin • Multiple use management Congo Basin and Peru • Mutual legal assistance to tackle forest-related crimes • Multilateral Environmental Agreements (UNFCCC, UNCBD, CITES) issues around sustainable use of wildlife, wildlife trafficking, landscape approach... • Corruption risks and natural resources, REDD+ • Agricultural investments and inclusive business models • Sustainable use and monitoring of wildlife (Peru, Ecuador, Colombia) 		40	≈100	40	

		<ul style="list-style-type: none"> • Tenure and rights related to the use of/access to forest resources 					
All	29. Number of policies / regulations / administrative procedures drafted and presented for public/stakeholder consultation (Stage 2)	<p>Among the policies/instruments that reach a drafting stage or consultation stages</p> <ul style="list-style-type: none"> • Fiscalization and control of timber harvesting in Madre de Dios (Peru) • Draft norms and regulation pertaining to Brazil nut harvesting and management in the context of the new Peruvian forestry law • Draft policies on zoning, land-use planning, forest management and allocation of rights to farmland and forest resources in Madre de Dios • EU policy on import of wild-sources <i>Prunus africana</i> bark • Hunting quotas for the state of Para and Amapa; development and implementation of a participatory bushmeat monitoring system for Brazilian district and provincial authorities • Inclusion of impact on road building on bushmeat and other resources in environmental impact assessment requirements in Ecuadorian Amazon • Changing deadline for timber legality compliance in Indonesia and options for group certification • REDD+ strategies in Tanzania and DR Congo • IPCC guidelines for wetlands • Adaptation of FSC generic standards for Cameroon, Gabon and Congo 		20	18	15	
All	30. Number of policies / regulations / administrative procedures presented for legislation(Stage 3)	<ul style="list-style-type: none"> • Adoption of the Indonesian National Carbon Accounting system (INCAS) • COMIFAC policy guidelines to better address community needs for forest resources in the management of concessions in Congo Basin 		5	2	5	
All	31. Number of policies / regulations / administrative procedures prepared	Articles of the Regulations of the Forest and Wildlife Law (No. 29763) in Peru that allow smallholder farmers to sell timber derived from naturally regenerated trees in fallow plots. This rests on a new definition of agroforestry published		N/A	1	2	

	passed/approved (Stage 4)	by the National Forest Service on the 29th of October 2014 (Resolución de Dirección Ejecutiva N. 065-2014-SERFOR DE), article 2.3 in the definition section.					
All	32. Number of policies / regulations / administrative procedures passed for which implementation has begun (Stage 5)			N/A	N/A	2	
OUTCOMES ON THE GROUND							
All	33. Number of hectares under improved technologies or management practices as a result of CRP research	<ul style="list-style-type: none"> Continuation of Farmer Managed Natural Regeneration in the Sahel and East Africa; Fertiliser trees in Southern Africa and fodder trees in East Africa (5 million ha) Logging concessions under forest management plan in Congo Basin (20 million ha) Area of the 23 REDD+ subnational initiatives under study in GCS REDD program (37 million ha) Change in the legal definition of agroforestry in Peru (4.5 million ha) 		No target given in 2013	≈65 million ha		
All	34. Number of farmers and others who have applied new technologies or management practices as a result of CRP research	<ul style="list-style-type: none"> Continuation of Farmer Managed Natural Regeneration in the Sahel and East Africa; Fertiliser trees in Southern Africa and fodder trees in East Africa (870,000 people) Change in the legal definition of agroforestry in Peru (over 1 million people) Allanblackia partnership (10,000 people) 		500,000	≈ 2 million		

Annex 2: Technical Progress Report 2014

The level of achievement is similar overall to levels reported in 2012 and 2013 but we are seeing an increasing number of activities delayed or dropped, in great part linked to funding uncertainties, lateness or cuts. Because we were only informed on the budget cuts in October 2014, the full effect of it has not been felt in 2014 and will mainly occur in 2015.

Flagship Project: Smallholder production systems and markets

Cluster Activities 6.1.1: Enhancing productivity and sustainability of smallholder forestry and agroforestry practices, including food security and nutritional benefits, through better management of production systems.

Output 6.1.1.1: Methods, approaches and databases for domestication and improvement of priority tree species developed.

Germplasm of priority tree species characterised and improved propagation methods developed.

Ofori, D.A., Munjuga, M., Jamnadass, R., et al (2014). Development of propagation protocols for *Allanblackia* species. Final report to Unilever, Pp 22; ISBN:978-92-9059-3652,

Anjarwalla, P., Mutuku, P. and Ofori D.A. (2014). Allanblackia meeting: Workshop Report, ICRAF headquarters, Nairobi, Kenya, 3rd -5th June 2014, 71pp,

Tsobeng, A., Asaah, E., and Tchoundjeu, Z. (2014). Comparative growth, flowering and fruiting of different propagule types of *Allanblackia floribunda* Oliver in Cameroon. Project report.

Ofori, D., Munjuga, M., Jamnadass, R. (2014). Tree crops development in Africa and Asia to benefit the poor -Allanblackia component, 2014 report to IFAD, 28pp.

Thesis on genetic diversity of *K. Senegalensis* successfully defended at the University of Queensland, Australia.

Thesis on *Khaya senegalensis* (Meliaceae), genetic variation, life history and conservation available.

Project report on *Sontra* parent trees recruitment for fruit production in Northwest Vietnam.

<http://aciarblogger.blogspot.com/2014/04/making-money-from-trees-in-vietnam.html>

	<p>http://www.sifi.se/nyheter/promising-prospects-for-agroforestry-in-vietnam/</p> <p>Asaah EK, Atone MB, Tsobeng AC, Nkeumoe F, Tchoundjeu Z. 2014. Do propagation methods affect tree growth and fruiting in <i>Dacryodes edulis</i> (G. Don) H.J. Lam? World Congress of Agroforestry, New Delhi 2014.</p> <p>Bekana, D., Kebede, T., Assefa, M. and Kassa, H. 2014. Analyses of Resins of <i>Boswellia</i> Species (<i>B. papyrifera</i> (Del.) Hochst., <i>B. neglecta</i> S. Moore, and <i>B. rivae</i> Engl.) from Northwestern, Southern, and Southeastern Ethiopia. ISRN Analytical Chemistry. Volume 2014, Article ID 374678, 9 pages. http://www.hindawi.com/journals/isrn.analytical.chemistry/2014/374678/</p>
<p>Domestication approaches, practices and methods evaluated and refined. West and Central Africa and Latin America.</p>	<p>Paper on fodder published; ICRAF Occasional paper no. 20. Bayala et al. 2014: A review of pasture and fodder production and productivity for small ruminants in the Sahel. Technical report available.</p> <p>http://www.researchgate.net/publication/262943657_A_review_of_pasture_and_fodder_production_and_productivity_for_small_ruminants_in_the_Sahel</p> <p>Makueti J. (2014). Breeding system of <i>Dacryodes edulis</i> (G. Dom) H.J. Lam: Implication for cultivars development, selective breeding, and conservation of genetic resources. PhD Thesis, University of Yaounde I, Cameroon</p> <p>Journal article submitted. Elomo C L, Nguenaye B, Tchoundjeu Z, Assah E., Avana M. L., , Tsobeng A., Bell M. J. and Nkeumoe F. Domestication of <i>Dacryodes edulis</i> by air layering. Submitted to "Bois et Forets des Tropiques"</p> <p>Daniel Ofori and Caleb Orwa (2014). ICRAF'S Tree domestication: observations and future directions. Report.</p> <p>Parveen Anjarwalla, Grace Koech and Daniel Ofori n(2014). Tree Domestication Workshop. Report.</p> <p>Dataverse platform studied and data bases on cocoa agroforestry in Central America located, evaluated and documented according to dataverse standards. Twenty databases already uploaded into dataverse and ready for public access. (CATIE)</p>
<p>Tree species for producing bioenergy in smallholder systems evaluated.</p>	<p>Sotelo-Montes et al. Growth and fuelwood properties of five tree and shrub species in the Sahelian and Sudanian ecozones of Mali: Relationships with mean annual rainfall and geographical coordinates. <i>New Forests</i></p> <p>http://link.springer.com/article/10.1007/s11056-013-9401-9</p> <p>Characterisation of species as alternatives for biofuel is in progress. Journal manuscript.</p> <p>http://blog.worldagroforestry.org/index.php/2014/10/09/sustainability-is-possible-with-biofuels/</p>

	<p>Charcoal production yield rate calculated for brick kilns in 1) Leon and 2) Chinandega, Nicaragua. The fieldwork and validation with charcoal producers in order to change technology was completed. Report of tools for yield rate production for brick kilns, CATIE.</p> <p>Miyuki Iiyama, Steven Franzel, Navin Sharma, Violet Mogaka, Jeremias Mowo, Ramni Jamnadass (2014). Retrospective: bottlenecks to Jatropha curcas bioenergy value-chain development in Africa – a Kenyan case. Knowledge for Development</p> <p>http://knowledge.cta.int/Dossiers/Commodities/Biofuels/Feature-articles/Retrospective-bottlenecks-to-Jatropha-curcas-bioenergy-value-chain-development-in-Africa-a-Kenyan-case</p> <p>Njenga M., Iiyama M., Dobie P, Jamnadass, R, Neufeldt H (2015). Making woodfuel sustainable. CBD CoP12</p> <p>http://www.slideshare.net/agroforestry/making-charcoal-use-sustainable-mary-njenga-icraf-cbd-cop12</p> <p>M. Njengaa, N. Karanjaa, H. Karlssonc, R. Jamnadassb, M. Iiyamab, J. Kithinjia, C. Sundberg (2014). Additional cooking fuel supply and reduced global warming potential from recycling charcoal dust into charcoal briquette in Kenya. Journal of Cleaner Production 81:81-88.</p> <p>http://www.sciencedirect.com/science/article/pii/S0959652614005861</p>
<p>Capacity in tree domestication and improvement within national systems strengthened.</p>	<p>Anthony A. Kimaro, Mathew Mpanda, Martha Swamila and Chrispinus D. Rubanza (2014). Africa RISING Progress Report, 13pp.</p> <p>Martha Swamila, Mathew Mpanda and Anthony Kimaro (2014). TRAN SEC, Innovating pro-poor strategies to safeguard food security using technology and knowledge transfer, BMBF GLOBE, Pp22 http://project2.zalf.de/trans-sec/public/</p> <p>Mukuralinda and. D. Ofori (2014) - Technical report.</p> <p>In Rwanda, Survey, data collection and analysis , were completed in Bugesera and Gishwati. 250 farmers were trained. A technical report and modules for training in English and local language were produced In Ethiopia, data collection and survey completed in 6 villages and 300 farmers and different stakeholders trained.</p> <p>Catacutan, D., Phi, H.H., Vu, T.P., Dam, V.B., Muchugi, A., Hoang, T.L. 2014. Call for a Tree Domestication Strategy in Vietnam. Policy Brief. Hanoi: World Agroforestry Centre (ICRAF) Vietnam. English version.</p>
<p>Output 6.1.1.2: Tree management options developed for forests and farms.</p>	

Use of trees within sustainable land management options developed and promoted

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<p>Management options for perennial tree crop agroforestry developed and promoted</p>	<p>Dumont, E. S., Gnahoua, G. M., Ohouo, L., Sinclair, F. L., & Vaast, P. (2014). Farmers in Cote d'Ivoire value integrating tree diversity in cocoa for the provision of ecosystem services. <i>Agroforestry Systems</i>, 1-20. http://link.springer.com/article/10.1007%2Fs10457-014-9679-4#page-1</p> <p>Marie-Vivien D., Garcia C.A., Kushalappa C.G., Vaast P. 2014. Trademarks, geographical indications and environmental labelling to promote biodiversity: The case of agroforestry coffee in India. <i>Development policy review</i>, 32 (4) : 379-398. http://dx.doi.org/10.1111/dpr.12060</p> <p>Taugourdeau S., Le Maire G., Avelino J., Jones R., Ramirez L.G., Jara Quesada M., Charbonnier F., Gómez-Delgado F., Harmand J.M., Rapidel B., Vaast P., Roupsard O. 2014. Leaf area index as an indicator of ecosystem services and management practices: An application for coffee agroforestry. <i>Agriculture Ecosystems and Environment</i>, 192 : 19-37. http://dx.doi.org/10.1016/j.agee.2014.03.042</p> <p>Caudill, S.A. Vaast, P. Husband, T.P. 2014. Assessment of small mammal diversity in coffee agroforestry in the Western Ghats, India <i>Agroforestry Systems</i> 88, 173–186 2014101 http://link.springer.com/article/10.1007%2Fs10457-013-9664-3</p>

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<p>Underlying principles for management of trees to improve soil health developed</p>	<p>Lelei D., Barrios E., Ayuke F., Karanja N., Shepherd, K., Sinclair, F. Assessing the influence of trees and soil properties on soil macrofauna diversity and spatial distribution in agricultural landscapes of Tanzania. Journal manuscript.</p> <p>Nyaga J., Barrios E., Muthuri C.W., Oborn I., Matiru V., Sinclair F. Exploring local knowledge and perceptions on indicators of soil quality and the contribution of agroforestry trees in smallholders maize production systems in Trans Nzoia County, Kenya. <i>Agriculture, Ecosystems and Environment</i> (in review).</p> <p>Kamau S., Barrios E., Karanja N., Ayuke F., Lehmann J. Influence of biochar derived from tree biomass on soil health. Journal manuscript.</p>
<p>Smallholder timber species and management options developed and promoted</p>	<p>Rohadi, Dede. Making timber plantation as attractive business to smallholders (Policy Brief, Final draft completed and being reviewed by project members and then proof read by CIFOR reviewer.</p> <p>Rohadi, Dede Evaluation of the dominant business models of CBCF being implemented by government and the private sector (Project Report submitted to ACIAR) Final Draft completed and being reviewed by project members. Planned to be published this year. Under review by ACIAR.</p> <p>Herawati, T and D. Rohadi Policies On Smallholder Timber Trade In Indonesia: Disparity between the Concepts, Practices and Impacts. Presented conference paper and to be submitted to <i>International Forestry Review</i>. Revision is in progress and planned to be submitted next year. Under review.</p> <p>El uso de pigue (<i>Piptocoma discolor</i>) por pequeños productores en Napo, Ecuador: Manejo sustentable de un especie pionera para medios de vida local. Gabriela Erazo, Juan Carlos Izurieta, Peter Cronkleton, Anne Larson and Louis Putzel. <i>CIFOR Brief</i>, No 24, November 2014. http://www.cifor.org/library/4424/el-uso-de-pigue-piptocoma-discolor-por-los-pequenos-productores-de-napo-ecuador-manejo-sostenible-de-una-especie-pionera-de-madera-para-los-medios-de-vida-loc</p>

	<p>Cronkleton, P. L. Putzel and Anne Larson. (in progress) Institutional adaptation in small-scale timber management systems in Peru and Ecuador. Prepared for Forest Policy and Economics. Under revision.</p>
<p>Modified fruit production systems evaluated</p>	<p>Katja Kehlenbeck, Clement Okia, Stepha McMullin, Loyce Jepkorir, James Ngulu, C Mutunga, A Gachuiiri, A Mbora, Iiyama M, Z Tchoundjeu, D Ojara, A Kalinganire, I Nyoka, S Mng’omba, R Jamnadass (2014). Potential of fruit trees in the drylands of Sub-Saharan Africa for food and nutrition security and income generation. 3rd World Congress on Agroforestry, New Delhi.</p> <p>Loyce Jepkorir, Joseph Wakibia, Stepha McMullin, Roeland Kindt, Katja Kehlenbeck (2014). On-farm fruit tree species richness and diversity and its influencing factors in Western Kenya. Tropentag Conference, Sep 2014, Prague</p> <p>Roshetko, JM, N Idris, P Purnomosidhi, T Zulfadhli, and J Tarigan. 2013. Farmer extension approach to rehabilitate smallholder fruit agroforestry systems: the “Nurseries of excellence (NOEL)” program in Aceh, Indonesia. Acta Hort. (ISHS) 975:649-656 http://www.actahort.org/books/975/975_81.htm</p> <p>Martin Wiehle, Sven Goenster, Jens Gebauer, Seifeldin Ali Mohamed, Andreas Buerkert, Katja Kehlenbeck (2014). Effects of transformation processes on plant species richness and diversity in homegardens of the Nuba Mountains, Sudan. <i>Agroforestry Systems</i> 88 (3): 539-562. http://link.springer.com/article/10.1007/s10457-014-9717-2</p> <p>Ken Njogu, Stepha McMullin, Parveen Anjarwalla, Roeland Kindt, Katja Kehlenbeck (2014). Influence of Biophysical and Socio-Economic Factors on Fruit Tree Diversity in Machakos County, Eastern Kenya. Tropentag, September 17-19, 2014, Prague, Czech Republic</p> <p>http://www.tropentag.de/2014/abstracts/links/Kehlenbeck_dcmf9zUm.pdf</p> <p>Letter of agreement developed between ICRAF and CATIE and Zona De Pueblos, Nicaragua</p>
<p>Output 6.1.1.3: Tools for matching tree species and management options to sites and circumstances developed and tested for use on smallholder farms and forests.</p>	
<p>Agroforestry options by context matrices developed for key scaling domains</p>	<p>La Nguyen (2014). Basic information for option x context study in three provinces in Northwest Vietnam. AFli Project Document. Guidelines.</p> <p>Robiglio, V, Dehu, C., Deheuvels, O and Sinclair F.L. (2014). Guidelines for incorporating an option x context approach for agroforestry development in the Peruvian Amazon. Presentation to a joint meeting of the Ministry of Environment and Ministry of Agriculture, Lima, Peru, 4th June, 2014</p>

	<p>Mary Crossland, Emilie Smith Dumont, Fergus Sinclair (2014) Report on the First Steps in Developing an Option by Context Matrix for the Kenyan drylands. Guidelines.</p> <p>Emilie Smith Dumont, Apollinaire Biloso, Claude Akalakou Development of Agroforestry Options by Context matrices in Eastern DRC Two workshop reports (2014) and a blog</p> <p>http://blog.cifor.org/25453/outside-a-national-park-agroforestry-helping-to-save-forests-inside-the-park#.VMX29Sz4bpI</p>
<p>Tree functional traits and their variability for key agroforestry species documented</p>	<p>Shem Kuyah, Ingrid Oborn, Anders Malmer, Mattias Jonsson, A Sigrun Dahlin, John Nyaga, Christine Magaju, Edmundo Barrios, Sara Namirembe, Catherine Muthuri, Ylva Nyberg, Fergus L Sinclair. Synergies and trade-offs amongst ecosystem services provided by trees in agricultural landscapes of Sub-Saharan Africa (submitted to Agriculture Ecosystem and Environment).</p> <p>http://wca2014.org/abstract/synergies-and-trade-offs-amongst-multiple-functions-of-trees-in-agricultural-landscapes/</p> <p>Kindt R, Ordonez J, Smith E, Orwa C, Mosoti B, John I, Harja D, Kehlenbeck K, Luedeling E, Lillesø J-P B, Munjuga M, Mwanzia L, Sinclair F, Graudal L and Jamnadass R. (2014). Agroforestry Species Switchboard 1.1.</p> <p>http://www.worldagroforestry.org/products/switchboard/index.php/name_like/Acacia/</p>
<p>Potential natural vegetation for Burundi mapped</p>	<p>Roeland Kindt (2014) Burundi vegetation map and associated species selection tool. Completed, in process of being incorporated in the VECEA platform.</p> <p>http://www.vegetationmap4africa.org/vegetation-map.aspx</p>
<p>Comparative analysis and synthesis of management options and approaches to their development</p>	<p>Cossio, Rosa, Mary Menton, and Anne Larson. Peter Cronkleton.2014. "Community forest management in the Peruvian Amazon." CIFOR Working Paper 136. Bogor: CIFOR.</p> <p>http://www.cifor.org/library/4426/community-forest-management-in-the-peruvian-amazon-a-literature-review/</p> <p>Cossio, Rosa, Mary Menton, Peter Cronkleton and Anne Larson. "Manejo forestal comunitario en la Amazonia peruana." Documento de trabajo 140. Bogor:CIFOR http://www.cifor.org/publications/pdf_files/WPapers/WP140Menton.pdf</p> <p>Yirgu, A., Gezahgne, A., Kassa, H. and Tsega M. 2014. Parasitic plant in natural <i>Boswellia papyrifera</i> stands at Humera, Northern Ethiopia. Journal of Forestry Research. December 2014, Volume 25, Issue 4, pp 923-928. http://link.springer.com/article/10.1007/s11676-014-0539-x.</p>

<p>Spatially targeted options for sustainable intensification of cocoa agroforests</p>		<p>Philippe Vaast and Eduardo Somarriba (2014) Trade-offs between crop intensification and ecosystem services: the role of agroforestry in cocoa cultivation <i>Agroforestry Systems</i> 88 (6), 947-956. http://link.springer.com/journal/10457/88/6/page/1</p> <p>Asscoiated blog http://blog.worldagroforestry.org/index.php/2014/12/11/how-many-trees-for-a-chocolate-fix/</p>
<p>Cluster Activities 6.1.2: Increasing income generation and market integration for smallholders through utilisation of forestry and agroforestry options.</p>		
<p>Output 6.1.2.1: Tools and strategies for value chain analysis and development including certification and enterprise developed.</p>		
<p>Structure and performance analysis of AFTP market information system.</p>		<p>Chiatoh, M., Gyau, A. and Ongla, J (In review): Review of agricultural market information systems; key lessons learnt in Sub-Saharan Africa. <i>Development in Practice</i>.</p> <p>Chiatoh, M and Bradley, S. (2014): Understanding Agricultural Marketing Information Systems in Ghana. Consultancy report submitted to the <i>International Food Policy Research Institute</i></p> <p>Msc Thesis was defended by Maryben Kuo Chiatoh at the University of Dschang in Cameroon. Title: A REVIEW OF MARKET INFORMATION SYSTEMS AND KEY LESSONS FROM CASE STUDIES IN SUB SAHARAN AFRICA</p>
<p>Guidelines for the establishment of value chain approaches that integrate the marginalised groups such as women into agricultural commodity markets.</p>		<p>Synthesis paper (ICRAF). First draft of the guide is complete. The focus of this activity is analysing how women can be integrated into agricultural markets with example from the avocado value chain in Kenya. A journal article (see below) has been accepted for publication.</p> <p>Mwambi M., Oduol J., Mshenga P. and S. Mwanarusi S. (in press). Does contract farming improve smallholder farmers' income? The case of avocado farming in Kenya. <i>Journal of Agribusiness in Developing and Emerging Economies</i> (in press)</p>
<p>Improved rapid appraisal tools for faster and more effective assessment of constraints and opportunities.</p>		<p>Tools have been developed and their documentation is in progress.</p>
<p>Testing of the certification model for produce from cultivars of indigenous fruit trees in West and Central Africa.</p>		<p>Criteria and indicators have been developed for certification schemes in West and Central Africa and their documentation is in progress.</p>

<p>Africa synthesis on value chains for NTFPs, fuelwoods and charcoal.</p>	<p>Special issue on Forest and "Tree Product Value Chains" in Forests, Trees and Livelihoods http://www.tandfonline.com/sci-hub.org/toc/tftl20/23/1-2#U-I3IPI5O (Includes 6 articles co-authored by CIFOR or ICRAF scientists)</p> <p>This is the editorial from the publication listed above. Ingram V., Levang P. and Cronkleton P., Editorial: "Forest product value chains" Forest Trees and Livelihoods - Special issue: Forest product value chains. issue 23(1-2)</p> <p>http://www.cifor.org/library/4523/forest-and-tree-product-value-chains/?pub=4523</p> <p>Schure, J., V. Ingram, B. Arts, P. Levang and E. Mvula-Mampasi (2014), Institutions and access to woodfuel commerce in the Democratic Republic of Congo, Forest Policy and Economics, doi: http://dx.doi.org/10.1016/j.forpol.2014.06.010 The article is published online : http://authors.elsevier.com/sd/article/S1389934114001361</p> <p>http://www.sciencedirect.com/science/article/pii/S1389934114001361</p> <p>Mekonnen, Z. Worku, A., Yohannes, T., Alebachew, M., Teketay, D. and Kassa, H. 2014. Bamboo Resources in Ethiopia: Their value chain and contribution to livelihoods. <i>Ethnobotany Research & Applications</i> 12:511-524 (2014).</p> <p>http://www.ethnobotanyjournal.org/vol12/i1547-3465-12-511.pdf</p> <p>Gebreu, Y., Ewnetu, Z., Kassa, H. and Padoch, C. 2014. Determinants of farmers' participation in the collection of gums and resins from dry forests and analysis of the marketing channels in northwestern and southern Ethiopia. <i>Forest, Tress and Livelihoods</i> . 2014. Vol. 23 Nos. 1-2, 54-66, http://dx.doi.org/10.1080/14728028.2013.875278</p>
<p>Approaches to adding value to native cacao diversity evaluated. South America</p>	<p>Technical Guidelines for the safe movement of cacao germplasm.</p> <p>http://www.biodiversityinternational.org/uploads/tx_news/Technical_guidelines_for_the_safe_movement_of_cacao_germplasm_Revised_1807.pdf</p> <p>Thesis: Ouedraogo A. 2015. Formation du prix du bois-énergie et Gestion durable des ressources: Expérience des chantiers forestiers Aménagés (CAF) de Cassou.</p> <p>Wood fuel price formation and sustainable resource management: Experience from the Chantier d'Aménagement Forestier (CAF) of Cassou.</p>

<p>Priority setting and market analysis of companion tree crops in Agroforestry in DGIS countries.</p>		<p>Market analysis report. Rapid Economic and Market Assessment of Agroforestry Options in Ethiopia: A Case study of Jeldu, Diga and Fogera Districts.</p> <p>Prioritization and Rapid Market Appraisal for Agroforestry Tree Products in East and West Shewa Zones of Ethiopia</p> <p>Draft of journal article and market analysis report:</p> <p>Gyau A., Muthuri, C and Franzel, S (2013): Unraveling the potential of underutilized species for poverty alleviation. The case of Catha Edulis in Ethiopia. Paper presented in the 4th International Conference of the African Association of Agricultural Economists.</p> <p>http://ageconsearch.umn.edu/bitstream/160549/2/Amos%20Gyau.pdf</p>
<p>Baseline Study on Fairtrade Certified Cocoa Producer Organisation's in Cote d'Ivoire and Ghana.</p>		<p>Reconnaissance visits were made to Ghana (March 2014) and Cote d'Ivoire (June 2014) during which key stakeholders were contacted and context analysis was advanced. Data collection tools have been elaborated for household and cooperative surveys which have been discussed with and endorsed by Fairtrade Africa, along with an indicator list for the baseline surveys and future impact assessment. (Bioversity)</p>
<p>Sustainable global platform for identifying, promoting and rewarding diversity of cocoa origins and flavours.</p>		<p>Increased overall participation in the CoEx programme, increased interest from the producing countries and from the industry to support the programme. CoEx-PIC workshop report and 122 individual feedback reports to sample providers. Revised technical guidelines available in 3 languages (English, French and Spanish). All technical guidelines and data forms can be downloaded from the website at: www.cocoaofexcellence.org</p>
<p>Output 6.1.2.2: Extension approaches for agroforestry interventions and alternatives evaluated and frameworks for their application developed</p>		
<p>Effectiveness of farmer-to-farmer extension approaches assessed.</p>		<p>Kundhlande G, Franzel S, Simpson B. Gausi E. 2014. Farmer-to-farmer extension approach in Malawi: A survey of organizations using the approach ICRAF Working Paper No. 183. Nairobi, World Agroforestry Centre.</p> <p>DOI: http://dx.doi.org/10.5716/WP14384.PDF</p> <p>http://www.worldagroforestry.org/downloads/publications/pdfs/WP14391.PDF</p>
<p>Assessment of institutionalization of extension in Dairy Farmers Business Associations. East Africa.</p>		<p>F Luyayi, E Karanja, E Ngocho, J Oduol, J Muriuki (2014). FARMERS TRAINING ENTREPRENEURSHIP MANUAL.</p> <p>http://www.worldagroforestry.org/sites/default/files/Entrepreneurship%20manual%20NEW.pdf</p> <p>Assessment of institutionalization moved to 2015 due to budgetary challenges at the end of the year.</p>

Global synthesis of fodder shrubs practices.	Steven Franzel, Sammy Carsan, Ben Lukuyu, Judith Sinja, Charles Wambugu, Fodder trees for improving livestock productivity and smallholder livelihoods in Africa, Current Opinion in Environmental Sustainability, Volume 6, February 2014, Pages 98-103, ISSN 1877-3435, http://dx.doi.org/10.1016/j.cosust.2013.11.008 . http://www.sciencedirect.com/science/article/pii/S1877343513001565
Explaining investments in sustainable land management: The role of various income sources in the smallholder farming systems of western Kenya.	Explaining investments in sustainable land management: The role of various income sources in the smallholder farming systems of western Kenya. Conference proceedings. http://ageconsearch.umn.edu/bitstream/161275/2/Joseph%20Tanui,%20Rolf%20Groeneveld%20et%20al.pdf
A Framework for analyzing the capacity needs of Grassroots Rural Institutions in East Africa.	A Framework for analyzing the capacity needs of Grassroots Rural Institutions in East Africa. A guide and policy brief http://worldagroforestry.org/sites/default/files/Assessing%20Capacity%20Needs%20and%20Strategy%20Development%20for%20Grassroots%20Rural%20Institutions-%20A%20Guide%20For%20Facilitators_0.pdf ; http://worldagroforestry.org/sites/default/files/Strengthening%20Rural%20Institutions-%20Policy%20Brief.pdf
Fostering collective action at landscape level: success factors of smallholder innovation platforms in East Africa.	Fostering collective action at landscape level: success factors of smallholder innovation platforms in East Africa. http://internationalscholarsjournals.org/journal/ijaerd/articles/fostering-collective-action
Evaluation of agroforestry Farmer Field School on agroforestry garden management in Sulawesi, Indonesia.	Evaluation of agroforestry Farmer Field School on agroforestry garden management in Sulawesi, Indonesia. Report available. To be published as an ICRAF working paper. Read a blog about the Farmers' school here. http://www.worldagroforestry.org/newsroom/highlights/sharing-knowledge-agroforestry-farmers'-field-school
Comparative analysis of the effectiveness of farmer to farmer extension in Kenya, Uganda and Rwanda.	Comparative analysis of the effectiveness of farmer to farmer extension in Kenya, Uganda and Rwanda. Analysis completed. Journal paper submitted to International Journal of Agricultural Sustainability

Effectiveness and efficiency of extension approaches on dissemination of agriculture technologies indicative of conservation agriculture with trees in Machakos, Kenya.	Effectiveness and efficiency of extension approaches on dissemination of agriculture technologies indicative of conservation agriculture with trees in Machakos, Kenya. A working paper. In press as an ICRAF working paper.
Assessment of how impact of innovative extension approaches varies by commodity, by land use system and by social setting.	<p>E Kiptot, S Franzel (2014). Voluntarism as an investment in human, social and financial capital: evidence from a farmer-to-farmer extension program in Kenya</p> <p>Agriculture and Human Values 31 (2), 231-243</p> <p>http://link.springer.com/article/10.1007/s10460-013-9463-5</p> <p>Kiptot, E. (2014). Beyond the Pilot Sites: Can Knowledge-Intensive Technologies Diffuse Spontaneously? In: Challenges and Opportunities for Agricultural Intensification of the Humid Highland Systems of Sub-Saharan Africa, 2014, pp 357-369</p> <p>http://link.springer.com/chapter/10.1007/978-3-319-07662-1_27</p>
Output 6.1.2.3: Tree seed and seedling supply systems analysed and guidelines for their improvement within public and private sectors developed.	
Models of sustainable quality tree seed and seedling supply systems for agroforestry species developed and promoted.	<p>Vu VT, Doan DL, Nguyen TH, Dumas-Johansen MK, Hoang MH, Roshetko JM (2014) Cơ hội và thách thức của hệ thống vườn ươm cấp nông hộ ở tỉnh Sơn La và Miền núi phía Bắc Việt Nam (Challenges and opportunities for the system of small-scale nurseries in Sơn La province and Vietnam's northern mountain region). Vietnam Journal of Forest Sciences 1/2014: 3163–3172. http://vafs.gov.vn/en/2014/05/vietnam-journal-of-forest-science-number-1-2014/</p> <p>Ha Van Tiep and Bui Chinh Nghia. 2014. Hướng dẫn kỹ thuật ghép son tra (Son tra grafting technique guide book). Guidebook, Agroforestry for livelihood of smallholder farmers in Northwest Vietnam (AFLI) project. World Agroforestry Centre</p> <p>Kỹ thuật ghép son tra (Son tra grafting technique). Based on Guide book. Agroforestry for livelihood of smallholder farmers in Northwest Vietnam (AFLI) project. World Agroforestry Centre</p> <p>Irawan US, Purwanto E., 2014. White Jabon (<i>Anthocephalus cadamba</i>) and Red Jabon (<i>Anthocephalus macrophyllus</i>) for community land rehabilitation: improving local propagation efforts. <i>Agriculture Science</i> (submitted). Target met. Article published. http://blog.worldagroforestry.org/index.php/2014/11/09/pure-soil-the-best-medium-to-germinate-jabon-seeds-in/</p> <p># Three logbooks have been developed, printed and distributed to farmers in Tanzania for activities in Kolero, in the southern part of Uluguru Mountains, # Report on tree seeds and seedlings supply systems in Mbarali Tanzania</p>

	<p>Takoutsing B., Tchoundjeu Z., Degrande A., Asaah E. and Tsobeng A. 2014. Scaling-up Sustainable Land Management Practices through the Concept of the Rural Resource Centre: Reconciling Farmers' Interests with Research Agendas. Journal of Agricultural Education and Extension iFirst 1–21; #Tsobeng, Asaah and Tchoundjeu.2014. Facilitating Allanblackia integration in farming system in Cameroon using RRC approach. Contribution of ICRAF-WCA/HT to “Fruit for Africa” project report, 4 p.</p>
<p>Means of selecting appropriate models for seed and seedling systems for different settings developed and tested for both high-value and high-volume species. West Africa, Central and South America, Southeast Asia.</p>	<p>Nyoka BI, Roshetko J, Jamnadass R, Muriuki J, Kalinganire A, Lillesø J-P B, Beedy T and Cornelius J. 2014. Tree seed and seedling supply systems: a review of the Asia, Africa, and Latin America models. Small-scale Forestry. DOI 10.1007/s11842-014-9280-8 http://download.springer.com/static/pdf/655/art%253A10.1007%252Fs11842-014-9280-8.pdf?auth66=1422609880_a2b151a60d5b20a0237b78d0f9f10f7f&ext=.pdf</p> <p>The review of cacao propagation methodologies raised several issues to be urgently addressed including an inventory of proven planting materials and appropriate propagation and multiplication technologies. This was discussed during the recent World Cocoa Conference in Amsterdam 9-13 June and Bioversity is developing the proposal for research to be complete.</p>
<p>Cluster Activities 6.1.3: Improving policies and institutions to enhance social assets and secure rights to forests, trees and land</p>	
<p>Output 6.1.3.1: Review of policies, laws and regulations affecting smallholder and community access and use of forest and tree resources.</p>	
<p>Analysis of policies and regulations influencing the development of smallholder friendly palm oil development</p>	<p>Nkongho RN, Feintrenie L, and Levang P, 2014. Strengths and weaknesses of the smallholder oil palm sector in Cameroon. <i>OCL</i>: 21(2). D208</p> <p>http://publications.cirad.fr/une_notice.php?dk=572922</p> <p>Nkongho RN, Feintrenie L and Levang P, 2014. <i>The non-industrial palm oil sector in Cameroon</i>. Working Paper 139. Bogor, Indonesia: CIFOR.</p> <p>http://www.cifor.org/publications/pdf_files/WPapers/WPaper139Nkongho.pdf</p> <p>Ndjogui TE, Nkongho RN, Rafflegeau S, Feintrenie L et Levang P. 2014. <i>Historique du secteur palmier a huile au Cameroun</i>. Document occasionnel 109. CIFOR, Bogor, Indonesie.</p> <p>http://www.cifor.org/publications/pdf_files/OccPapers/OP-109.pdf</p>
<p>Analysis of how national policies that influence in migration, urbanization and remittances and their</p>	<p>Basnett, Bimbika Sijapati. Gender, Migration and Forest Governance: Lessons from Nepal. (working paper). Still in progress</p> <p>'Trends in Migration, Urbanization, and Remittances and their Effects on Tropical Forests and Forest-Dependent Communities', by</p>

<p>consequences for forest dependent rural people.</p>	<p>Susanna Hecht [completed draft, currently being edited for publication. complete 2014, aim to publish early 2015</p> <p>'External incomes and Amazonian forest outcomes: Drawing insights for REDD+'; by Rachel Carmenta (CIFOR), Anastasia Yang, Ramadhani Achdiawan (CIFOR), Luke Parry (Lancaster Environment Centre, Lancaster University). In progress aim to submit to journal for July 2015</p>
<p>Analyses of conflicting interest of forest land and resources and development of improved institutions to manage them. West and Central Africa.</p>	<p>Yatich T, Kalinganire A, Weber J.C, Alinon K, Dakouo J.M, Samake O and Sangare S. 2014. How do Forestry Codes affect access, use and management of protected indigenous tree species: Evidence from West African Sahel. Occasional Paper No.15 Nairobi: World Agroforestry Centre.</p> <p>http://www.worldagroforestry.org/downloads/publications/PDFs/OP17680.PDF</p>
<p>Analysis of policies and regulations that influence benefits from NTFPs produced by smallholders.</p>	<p>Kassie, G. T., Kassa, H., Padoch, C., Abebaw, D., Limenih, M., & Teka, W. (2014). Resource entitlement and welfare among resettlers in the dry forest frontiers of northwestern Ethiopia. <i>The Journal of Rural and Community Development</i>, 9(2), 81-102</p> <p>http://jrcc.ca/include/getdoc.php?id=2025&article=958&mode=pdf</p> <p>Gender implications of forest product value chains in the Congo Basin. Ingram, V., Schure, J., Tieguhong, J.C., Ndoye, O., Awonon, A. and Iponga, D.M. 2014. <i>Forest, Trees and Livelihoods</i>, DOI: 10.1080/14728028.2014.887610</p> <p>http://www.tandfonline.com/doi/abs/10.1080/14728028.2014.887610?tokenDomain=eprints&tokenAccess=tsJtsA7k8zTThwAtqzDq&forwardService=showFullText&doi=10.1080%2F14728028.2014.887610&journalCode=tftl20#.VMpHfMs5CUk</p> <p>F. J. Muafor FJ, Levang P, and Le Gall P, 2014. A Crispy Delicacy: Augosoma Beetle as Alternative Source of Protein in East Cameroon. <i>International Journal of Biodiversity</i> (Article ID 214071, 7 pages). http://dx.doi.org/10.1155/2014/214071</p> <p>http://dx.doi.org/10.1155/2014/214071 Not originally planned</p> <p>O. Tataw "BUSH MANGO (<i>Irvingia</i> spp.): EVOLUTION IN RESOURCE AVAILABILITY AND MARKET CHAINS IN THE SOUTHWEST REGION OF CAMEROON" resubmitted with minor revisions to <i>Forests, Trees and Livelihoods</i>.</p> <p>Wynberg R, Laird S, van Niekerk J, Kozanayi W. In Press. Formalization of the Natural Product Trade in Southern in Africa: Unintended Consequences and Policy Blurring in Biotrade and Bioprospecting. <i>Society and Natural Resources</i>.</p> <p>Belcher, Brian, Ramadhani Achdiawan, and Sonya Dewi. "Forest-Based Livelihoods Strategies Conditioned by Market Remoteness and Forest Proximity in Jharkhand, India." <i>World Development</i> 66 (2015): 269-279.</p>

	<p>Blackie R, Baldauf C, Gautier D, Gumbo D, Kassa H, Parthasarathy N, Paumgarten F, Sola P, Pulla S, Waeber P and Sunderland T. 2014. Tropical dry forests: The state of global knowledge and recommendations for future research. Discussion Paper. Bogor, Indonesia: CIFOR.</p> <p>http://books.google.com.pe/books?hl=en&lr=&id=ybvHBQAAQBAJ&oi=fnd&pg=PP5&dq=Tropical+dry+forests:+The+state+of+global+knowledge+and+recommendations+for+future+research.&ots=I4T4cd48aU&sig=m7jfaKSQd7W39fdAWSvK0GgJXgA#v=onepage&q=Tropical%20dry%20forests%3A%20The%20state%20of%20global%20knowledge%20and%20recommendations%20for%20future%20research.&f=false</p> <p>http://www.cifor.org/publications/pdf_files/WPapers/DPBlackie1401.pdf</p> <p>Bekele. M. and Kassa, H. 2014. Governance challenges of dry woodlands. In: Reflections on Development in Ethiopia: New Trends, Sustainability and Challenges. In: Dessalegne Rahmato, Mehret Ayenew, Asnake Kifle and Birgit Habrermann (Eds.). pp. 269-285. ISBN:978-99944-50-52-7.</p> <p>http://www.mdpi.com/1999-4907/5/8/1896</p> <p>Worku, A.G., Pretzsch, J., Kassa, H. and Teketay, D. 2014. Socio-Ecological Significance of Collection and Marketing of Ancient Forest Commodities: The Case of Myrrh and Opoponax in the Dryland Areas of Southeastern Ethiopia. In: Tropentag 2014. International Research on Food Security, Natural Resource Management and Rural Development. Bridging the gap between increasing knowledge and decreasing resources. Book of abstracts. Editor: Eric Tielkes. pp 425</p> <p>http://www.tropentag.de/2014/abstracts/links/Gizaw_JpIkGeHF.pdf</p> <p>Achdiawan, R, 2014. Rattan resource scarcity as a consequence of unsustainable development and national strategy: case study in West Kutai, East Kalimantan, Indonesia. Proceeding, Published; Adaptation in Forest Management Under Changing Framework Condition. IUFRO Conference Research Group 3.08 & 4.05 (Published in proceedings but not available on line yet)</p>
<p>Main obstacles and opportunities in current national policies and legislation for sustainable delivery of quality fruit tree germplasm to smallholder farmers identified.</p>	<p>Lua HT, Roshetko JM, Catacutan D, Duc L. 2014. Policy constraints and opportunities for sustainable delivery of quality fruit-tree germplasm to smallholder farmers in Vietnam. Journal manuscript.</p>
<p>Territorialisation processes and transfer of authority.</p>	<p>Anne M Larson, Fernanda Soto, Edda Moreno Blanco, Dennis Mairena A., Eileen Mairena Cunningham and Jadder Mendoza-Lewis. ACCEPTED, NEW TITLE "The Challenge of "Territory": Weaving the Social Fabric of Indigenous Communities in Nicaragua's Northern Caribbean Autonomous Region." Bulletin of Latin American Studies.</p>

	<p>Kelly A, Peluso N. In Press. <i>Frontiers of Commodification: State lands and their formalization</i>. Society and Natural Resources.</p> <p>Lemenih, M and Kassa, H. 2014. Re-greening Ethiopia: History, Challenges and Lessons. <i>Forests</i> 2014, 5, 1896-1909; doi:10.3390/f5081896. http://www.mdpi.com/1999-4907/5/8/1896/htm</p> <p>Larson, A., P. Cronkleton, and J. Pulhin. (in progress). "Formalizing indigenous commons: The role of 'authority' in the formation of territories in Nicaragua, Bolivia and the Philippines." paper submitted to <i>World Development</i>. "Resubmitted with minor revisions.</p>
<p>Synthesis analysis of constraints, barriers and access rights, and identify AF research strategies.</p>	<p>Common deliverable with above output. Yatich T, Kalinganire A, Weber J.C, Alinon K, Dakouo J.M, Samake O and Sangare S. 2014. How do Forestry Codes affect access, use and management of protected indigenous tree species: Evidence from West African Sahel. Occasional Paper No.15 Nairobi: World Agroforestry Centre.</p>
<p>Synthesis of key policy issues for addressing forest development in support of smallholders and communities.</p>	<p>Larson, A. (in oress). <i>Tenure Rights and Access to Forests: A Training Manual for CIFOR Researchers Part II. Methods and Tools</i>. CIFOR</p> <p>Putzel L, Kelly A, Cerutti P, Artati Y. In Press. <i>Formalization as development in land and natural resources policy</i>. Society and Natural Resources.</p> <p>http://www1.cifor.org/fileadmin/subsites/proformal/PDF/Report_Formalization_natural_resource.pdf</p> <p>Mary Menton and Peter Cronkleton., <i>The forgotten majority? Peruvian smallholders at the farm-forest interface</i>. POLEX blog on smallholder issues in Peru.</p> <p>http://blog.cifor.org/22766/the-forgotten-majority-peruvian-smallholders-at-the-farm-forest-interface#.VLAh68s5CUk</p> <p>http://peoplefoodandnature.org/blog/the-forgotten-majority-peruvian-smallholders-at-the-farm-forest-interface/</p> <p>Worku, A. Preszsch, J., Kassa, H. and Auch, E. 2014. The significance of dry forest income for livelihood resilience: The case of the pastoralists and agro-pastoralists in the drylands of southeastern Ethiopia. <i>Forest Policy and Economics - ScienceDirect.com</i>. Volume 41, April 2014, Pages 51-59. Available online at</p> <p>http://www.sciencedirect.com/science/article/pii/S1389934114000033</p> <p>Video for television show <i>AmbienTV</i>, done by Peru's MINAM.</p> <p>https://www.youtube.com/embed/6EjluD9jbxw?rel=0&wmode=transparent?utm_source=CIFOR%20Website&utm_medium=Footer&utm_campaign=Sister%20site</p>

	<p>Bekele. M. Kassa, H. and Padoch, C. (In press). Diminishing status of land rights of communities in dry lowland areas and their implications: the case of Ethiopia. In: Forest Tenure in the Drylands: The Human Dimensions of Vulnerability in Asia and Africa. Bose, P and Vandijk H. (eds.). In press.</p> <p>Cronkleton, P. and A. Larson (Accepted, in press) Formalization and Collective Appropriation of Space on Forest Frontiers: Comparing communal and individual property systems in the Peruvian and Ecuadoran Amazon. Submitted for special issue on formalization in Society and Natural Resources.</p>
<p>Data collection for global analysis of smallholder and community forestry initiatives.</p>	<p>Book chapter: Cronkleton, Peter. 2014. Examining the role of property rights and forest policy in forest governance." In Barnes, Grenville, and Brian Child, eds. Adaptive Cross-scalar Governance of Natural Resources.: 35. Routledge</p>
<p>Reformed policy and legislation and capacity building for sustainable charcoal production and trade.</p>	<p>An approach to promote REDD+ compatible wood-fuel value chains. 2014. Schure, J., Dkamela, G. P., Van der Goes, A. and McNally, R. 2014. SNV REDD+ Energy and Agriculture Programme.</p> <p>http://scholar.google.com.pe/scholar?q=An+approach+to+promote+REDD%2B+compatible+wood-fuel+value+chains.&btnG=&hl=en&as_sdt=0%2C5</p> <p>Producing woodfuel for urban centers in the Democratic Republic of Congo: a path out of poverty for rural households? Schure, J., Levang, P. and Wiersum, K.F. 2014. World Development, DOI: http://dx.doi.org/10.1016/j.worlddev.2014.03.013</p> <p>Thesis: Sibiri B. 2015. Diagnostic du modèle de Chantier d'Aménagement Forestier au Burkina Faso : Cas du CAF de Cassou. University of Ouagadougou.</p> <p>Diagnosis of the "Chantier d'Amenagement Forestier" (CAF) model in Burkina Faso: Case study for the Cassou CAF.</p> <p>Woodfuel for urban markets in the Congo Basin: a livelihood perspective. Schure, J. 2014. Doctoral dissertation. University of Wageningen, Wageningen. http://accept.library.wur.nl/WebQuery/wda/2048558</p>
<p>Impact of national policies on the management of hilly and mountainous landscapes in Asia analyzed.</p>	<p>Bennett, Xie, Hogarth, Peng and Putzel 2014 'Household Delivery of Forest Ecosystem Services under China's Conversion of Cropland to Forest Program - Do Local Institutions Matter?'. Forests Forests 2014, 5(9), 2345-2376; doi:10.3390/f5092345</p> <p>http://www.mdpi.com/1999-4907/5/9/2345/htm</p> <p>Gutierrez Rodriguez, Hogarth, Zhou, Putzel, and Xie. (Accepted, in press) ocioeconomic and environmental outcomes has China's Conversion of Cropland to Forest Program had on human populations and land resources during its first 15 years? A systematic map protocol? The Journal of Environmental Evidence.</p>

	<p>Accepted by The Journal of Environmental Evidence. (In Press)</p> <p>Discussion Forum at Forests Asia 2014 This pannel included CIFOR and ICRAF staff plus partners.</p> <p>http://www.cifor.org/forestsasia/video-fa-2014-day-1-discussion-forum-sloping-lands-transition/</p>
Output 6.1.3.2: Frameworks and tools developed to support negotiating use of land and trees across differing knowledge systems.	
Assessment of the value of local knowledge in improving food security in Eastern Africa.	<p>Seline S. Meijer, Delia Catacutan, Oluyede C. Ajayi Gudeta W. Sileshi & Maarten Nieuwenhuis (published online May2014). The role of knowledge, attitudes and perceptions in the uptake of agricultural and agroforestry innovations among smallholder farmers in sub-Saharan Africa. <i>International Journal of Agricultural Sustainability</i></p> <p>http://www.tandfonline.com/doi/abs/10.1080/14735903.2014.912493#.VNZafCe5YeI</p> <p>Malesu, M., De Leeuw, J. and Oduor A. 2014. Water harvesting experiences from the southern and eastern Africa rainwater network. 2014. <i>Journal of Southeast University (English Edition)</i> 06/2014; Volumn: 30(Issue: 2014 2):Page: 186-191. DOI: 10.3969/j.issn.1003-7985.2014.02.009 link: http://www.researchgate.net/publication/263938577_Water_harvesting_experiences_from_the_southern_and_eastern_Africa_rain_water_network</p>
Validation of methods for incorporating local knowledge about land cover dynamics in scientific assessments of impacts of land use change on a range of ecosystem services.	<p>Pagella TF and Sinclair FL (2014). Development and use of a new typology of mapping tools to assess their fitness for supporting management of ecosystem service provision. <i>Landscape Ecology</i> 29(3): 383-399.</p> <p>http://link.springer.com/article/10.1007%2Fs10980-013-9983-9</p> <p>A Kuria, G Lamond, T Pagella, A Gebrekirstos, K Hadgu, F Sinclair The role of local knowledge for assessing sustainable intensification options in tree-crop-livestock mixed farming systems in the Ethiopian Highlands</p> <p>http://scholar.google.com/citations?view_op=view_citation&hl=en&user=8IKLALAAAAAJ&sortBy=pubdate&citation_for_view=8IKLALAAAAAJ:O0nohqN1r9EC</p>
Cluster Activities 6.1.4: Impact model	
Output 6.1.4.1: Impact model developed and tested.	
Analysis and documentation of impacts of IAR4D. East Africa.	<p>Iiyama M^{*.1}, Derero A², Kelemu K², Muthuri C¹, Kinuthia R¹, Ayenkulu E¹, Kiptot E¹, Hadgu K¹, Mowo J¹, Sinclair F¹ (2014). Understanding patterns of tree adoption on farms through characterization: A case study of semi-arid and sub-humid agroecosystems of Ethiopia. <i>Journal Manuscript</i></p>

Baseline survey analysis on biocarbon project.	Scott Bode, Mike Balinga, Frank Place , Amara Keita. OVERVIEW OF DESIGN FOR EX-POST IMPACT ASSESSMENT OF THE LANDSCAPE MANGEMENT FOR IMPROVED LIVELIHOODS PROGRAM Ex-post Impact Assessment (EpIA).
Flagship Project: Management and conservation of forest and tree resources	
Cluster Activities 6.2.1: Diversified Forest Management (DFM)	
Output 6.2.1.2: Ecological, genetic and socioeconomic knowledge for DFM	
Regional assessment of forest harvesting and recovery of timber, biodiversity in the Amazon and South east Asia	Manuscript in internal revision, submission date to Science Magazine planned end of January
Two scientific papers on optimizing timber and Brazil nut harvesting in the Peruvian Amazon	In review in two international journals: Biotropica and Forest Ecology and Management
Assessment of the role of NTFP for subsistence and cash income in the Congo Basin	<p>One synthetic report over 3 countries ready. Two papers submitted, one draft ready, one MSc thesis under way. Next step: policy recommendations to facilitate the multiple use of forest resources.</p> <p>P Levang, G Lescuyer, D Noubissi, Ce Dehu & L</p> <p>Broussolle (2015): Does gathering really pay? Case studies from forest areas of the East and Southregions of Cameroon; Forests, Trees and Livelihoods, DOI: .1080/14728028.2014.1000980</p> <p>To link to this article: http://dx.doi.org/10.1080/14728028.2014.1000980</p>
Assessment of local socio-economic impacts of FSC certification	<p>One occasional paper and one article published.</p> <p>http://assets.worldwildlife.org/publications/674/files/original/CIFOR_FSC_Social_Impact_Study_-_Full_Report.pdf?1396829697</p> <p>http://www.cifor.org/library/4504/what-is-the-role-for-forest-certification-in-improving-relationships-between-logging-companies-and-communities-lessons-from-fsc-in-cameroon/</p>

<p>Identifications of hurdles to Multiple Forest Management in the logging concessions of the Congo Basin</p>	<p>The publication was submitted to Forest, Ecology and Management.</p>
<p>Survey of knowledge about sustaining genetic diversity of dipterocarp species in logged forests</p>	<p>Scientific review and a factsheet published. http://www.sciencedirect.com/science/article/pii/S037811271300813X</p>
<p>Ecological, genetic and nutritional evaluations of key forest resources providing food security in the Congo Basin developed and documented</p>	<p>Data collected in three countries and analyzed.</p> <p>3 publications submitted to journals; one accepted, 2 in revision</p> <p>Drafts of additional articles being developed.</p> <ol style="list-style-type: none"> 1. Nutrient quality, bioactive compounds of the tropical rain forest fruits <i>Baillonella toxisperma</i>, <i>Trichoschypa abut</i> and <i>Pentaclethra macrophylla</i> from Cameroon. <i>Journal of Food Science and Nutrition</i>. Accepted with minor comments 2. Obtaining forest foods from timber trees in Cameroon: How far do people walk to collect fruits and caterpillars?" Submitted to <i>Forests, Trees and Livelihoods</i>, revisions pending 3. Knowledge, attitudes, and practices related to perceived nutrition and health benefits of forest foods in Cameroon. Submitted to the <i>Journal of Food, Agriculture and Environment</i>.
<p>Central American network for long-term research on dynamics of natural production forests formally constituted</p>	<p>Contacts with leaders of national networks in Central America have been made and concrete interest identified in Guatemala, Honduras and Costa Rica. A regional workshop has been implemented in September 2014 in CATIE, at which researchers from TMFO were also present. Progress in the formation of a regional network and its integration with TMFO was elaborated at the workshop.</p> <p>Workshop report (Taller intercambio_experiencias_redes_ILP)</p>
<p>2 Regional workshops of TmFo (Tropical America and Central Africa)</p>	<p>Three workshops held; one in Macapa, one in Kuala Lumpur, and one in Africa held in October 2014.</p>

<p>Elaboration and dissemination of mahogany yield tables and broadleaf forest data management software</p>	<p>In November 2013 a workshop entitled "Systematization of the usage of the national volume table for mahogany" was carried out in Guatemala. 21 foresters involved in management activities took part, from CONAP, INAB and forest concessions. The development of the tables and the functioning of Veritas software were explained. Tables were made available to foresters for use in the development of annual operating plans in the concessions of the Peten Department.</p> <p>Final report and a guide to use VERITAS available in Spanish (Instrucciones VERITAS)</p>
<p>Rapid Ecological Assessment of Mahogany conservation status, and study of socio economic and environmental viability of forest concessions of Maya Biosphere Reserve</p>	<p>Fieldwork finalized on the conservation status assessment (mahogany, cedar, manchiche, pucte, santa maria) as of June 30. Data collected for 230 transects in eight concessions. Analysis and write-up in July-September, dissemination of results to stakeholders in October.</p> <p>Draft document (Assessment of the conservation status of Big-leaf mahogany, Spanish cedar, and three secondary timber species populations in the forestry concessions of the Maya Biosphere Reserve, Peten, Guatemala) PDF document</p>
<p>Assessment of gendered knowledge, management skills and priorities in research project locations related to forest resources</p>	<p>Fieldwork has been completed. A week-long (2-6 June) writeshop has been held to advance the data analysis and initiate the writing of scientific articles. Five posters have been produced.</p> <p>http://www.biodiversityinternational.org/news/detail/non-timber-forest-products-the-way-forward-for-rural-women/</p> <p>http://www.biodiversityinternational.org/news/detail/how-gender-specific-knowledge-is-inspiring-change-in-kyrgyzstans-walnut-forests/</p> <p>http://www.biodiversityinternational.org/news/detail/voices-from-the-rainforest/</p> <p>http://www.biodiversityinternational.org/e-library/publications/detail/making-research-gender-responsive-in-burkina-faso-diary-of-a-shea-tree/</p> <p>http://www.biodiversityinternational.org/e-library/publications/detail/making-research-gender-responsive-in-india-native-fruit-trees-of-life/</p>
<p>Analysis of the performance of the local development fund (FDL) as an instrument for</p>	<p>This activity is postponed to 2015.</p>

benefit sharing between concessions and communities	
Review of key gender issues related to dry forests	Occasional paper entitled, "The gender box: A framework for analysing gender roles in forest management", published. http://www.cifor.org/publications/pdf_files/OccPapers/OP-82.pdf The paper has been also accepted for the International Forestry Review special issue on dry forests.
Analysis of conflicts between companies and communities	The activity is ongoing in 2015.
Output 6.2.1.3: Guidelines, practices, tools and approaches for diversified forest and woodland management that take into account trade-offs	
Gender-sensitive guidelines and strategies for conservation and management of priority species, developed in collaboration with local communities and pilot-tested in Niassa Reserve	Demonstrations were made of nondestructive honey harvesting practices and honey hunting groups were revisited a year later and were found to be using the new techniques. Guidelines still being developed for the reserve management, while posters and powerpoint slides are developed for use of Reserve management in English and Portuguese; and posters developed and translated into Portuguese and two indigenous languages to be distributed to communities in the reserve.
Guidelines for sustaining non-timber resources for communities near concessions	Scientific papers being drafted; 10 policy briefs developed and distributed by COMIFAC, integrating guidelines and policy messages developed jointly between researchers and policymakers. Research methods manual published.
Management recommendations for optimizing timber and Brazil nut harvesting in the Peruvian Amazon	Two scientific papers being drafted and to be submitted before 31 December 2014 but contingent on the acceptance of the peer reviewed papers mentioned above
Approaches and tools to address wildlife management concerns in production forests	Two occasional papers that review the global and regional literature on sustainable bushmeat procurement. http://www.cifor.org/publications/pdf_files/OccPapers

		Three publications in refereed journals addressing the role of bushmeat in societies that are experiencing nutrition and income transitions. In preparation
DNA and isotope tool for tracking timber to address illegal logging		<p>Second prototype is being improved with monthly feedback from the database working group selected among the steering committee members.</p> <p>http://www.globaltimbertrackingnetwork.org/resources/newsletters/newsletter/gttn-newsletter/</p> <p>The database structure is developed with a high degree of functionality. Few data are currently available to populate the database, but when the SNPs data are made available by the concurrent German/ITTO project, they can be incorporated into the database</p> <p>Standards and guidelines for the identification of species and origin of wood are published</p> <p>10 documents available at: http://www.globaltimbertrackingnetwork.org/resources/gttn-documents/</p> <p>2 Newsletters available at : http://www.globaltimbertrackingnetwork.org/resources/newsletters/newsletter/gttn-newsletter/</p>
Output 6.2.1.4: Policy recommendations for DFM		
Policy recommendations to promote Multiple Forest Management for logging concessions in the Congo Basin		<p>10 Policy briefs promoting Multiple Forest Management in the Congo Basin.</p> <p>Reported also above under 2.1.1. Published on the Bioversity International website.</p>
Country-specific baseline studies for a global comparative research on the effectiveness of tropical forest certification		<p>All baseline studies completed. Writing and publishing has started during the last quarter of 2014.</p> <p>In preparation for Occasional Papers.</p>

Output 6.2.1.5: Awareness of and capacity for DFM improved through training tools, extension materials, demonstration sites and dissemination	
Gender fellowship(s) and training to enhance scientists' ability to conduct gender-relevant research and produce gender products	<p>Five Fellows from Africa and Asia have been trained and closely supervised, including during their fieldwork. A week-long closing writeshop has been held to support them in analysing their data and writing up their findings into scientific articles. Five blogs have been produced and the Fellows' experiences have been documented through video and interviews.</p> <p>http://www.biodiversityinternational.org/news/detail/native-fruit-trees-of-life/</p> <p>http://www.biodiversityinternational.org/e-library/publications/detail/making-research-gender-responsive-in-kyrgyzstan-gendered-access-and-practices-in-kyrgyzstans-wal/</p> <p>http://www.biodiversityinternational.org/e-library/publications/detail/making-research-gender-responsive-in-burkina-faso-diary-of-a-shea-tree/</p> <p>http://www.biodiversityinternational.org/e-library/publications/detail/making-research-gender-responsive-in-cameroon-non-timber-forest-products-the-way-forward-for-rural/</p> <p>http://www.biodiversityinternational.org/e-library/publications/detail/making-research-gender-responsive-in-malaysia-voices-from-the-rainforest/</p> <p>The fellowships officially ended in June 2014. Fellows had abstracts accepted for ESEE Conference on Education and Extension; one of them will attend the conference.</p> <p>DynAffFor sites selected and mapped http://www.dynaffor.org/localisation-des-sites</p>
Training course on forestry research methods for natural forest management	<p>This has to be cancelled as all the private timber concessions in the region where the course was to be carried out did not harvest timber during 2014 so access was not possible.</p>
A set of 40 draft modules to train forestry undergraduates on multiple forest use with emphasis on the neotropics.	<p>Working paper containing all modules for discussion at forestry educators workshop (Nov. 2014) is being finalized and edited. From the set of 40 modules a regional workshop was held to prioritize the production of 12 modules during 2015.</p>

Cluster Activities 6.2.2: Tree Genetic Resources (TGR)

Output 6.2.2.1: Approaches for characterizing and prioritizing species and populations for conservation and use developed and applied

<p>Online database of simple sequence repeat markers for 24 tree species important to smallholders</p>	<p>Database has been completed and manuscript was submitted. Database will be made open access once manuscript has been accepted for publication.</p> <p>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4099372/</p> <p>Article describing the database: Russell JR, Hedley PE, Cardle L, Dancey S, Morris J, Booth A, Odee D, Mwaura L, Omondi W, Angaine P, Machua J, Muchugi A, Milne I, Kindt R, Jamnadass R, Dawson IK (2014) tropiTree: an NGS-based EST-SSR resource for 24 tropical tree species. PLoS ONE, 9, e102502. doi:10.1371/journal.pone.0102502.</p> <p>Online database available at http://ics.hutton.ac.uk/tropiTree/</p> <p>Article: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4099372/</p>
<p>Concept paper on integrated response package to threats to agroforestry genetic resources, including outline concept notes for pilot projects (i.e. interventions for specific populations or species)</p>	<p>Major project proposal (= project document) around this theme has been prepared and was submitted for approval.</p>
<p>Assess the cacao genetic diversity conserved in ex situ collections and identification of gaps.</p>	<p>Preparation work carried out in assessing the total diversity conserved ex situ and its availability status in publicly available collections such as the 2 international collections at CATIE and CRC (Trinidad).</p> <p>The status of ex situ conservation of cacao genetic resources has been assessed during the development of the Global Strategy for Cacao Genetic Resources and has been reviewed during International Workshop on the Development of the Global Strategic Cacao Collection (GSCC), 22-24 October 2014, Trinidad, Jointly organized with the Cocoa Research Centre (CRC) of the University of the West Indies in Trinidad and Tobago</p> <p>The CacaoNet GSCC workshop report is available in the CacaoNet website: www.cacaonet.org</p>

<p>Genetic and phenotypic characterization of the high value timber tree abarco (<i>Cariniana pyriformis</i>)</p>	<p>There was some delay in obtaining permissions for exporting plant material outside of Colombia, leading to delay in genetic analysis.</p> <p>10 sites sampled across the remaining distribution range of the species (both sides of the Andes), resulting in 217 adults and 57 juveniles; - all trees found at all sites georeferenced to assess population demographics; >50 circular 50m2 plots established around a selection of trees in which all plants dbh>1cm measured and identified to quantify and qualify phytosociological characteristics of abarco habitat; - wood cores of 217 trees collected to determine wood density and bark thickness; representative samples of fruits collected to characterize phenotypic variability; - mycorrhiza samples of 81 trees collected to determine the degree of association; project partner (Forestpa) is additionally sponsoring a study to determine the scientific names of the two species identified; 87 soil samples collected (physico-chemical analyses); branch material of 141 elite trees collected for vegetative propagation. Rooting experiments subcontracted to a national university (who had published a protocol for in vitro propagation of the species) who have carried out numerous experiments to develop a protocol to trigger rooting in cuttings, but with very limited success so far; only one individual has started rooting. This process has taken many months, but given the disappointing results we have decided to establish an orchard of the elite material through the use of grafting instead of of clonal garden established through cuttings. This is being financed by our partner Forestpa.</p> <p>We are in the process of genetic characterization of all collected material: o Since no genetic markers existed for this species, we are developing them; DNA samples sent to a commercial lab in France who provided a list of >1500 potential primers. The permits to export this material took a bit longer than expected, leading to some delay in the characterization process; many different options explored to identify the protocol to extract good quality DNA of the collected material; This has now been fine-tuned and is working well; currently carrying out tests to verify which of the selected primers (~50) are polymorphic and amplify; Once this process is finished samples to be sent to Cornell for genetic characterization (March at the latest); The results returned by Cornell will have to be interpreted which may take two more months;</p> <p>We have two master students working on the project: one on the genetic characterization (Selene Alarcon) and one on the phytosociological, morphological and other diversity aspects (Camilo Jaramillo); - We are currently analyzing the data already available, but need also the genetic data for the planned publication(s); - Once the grafting protocol is considered to be working well, we aim to apply for a follow-up project (ITTO small grants) to further the study of vegetative propagation though cuttings or the use of in vitro techniques; establish seed orchards/clonal gardens along environmental gradients and carry out a characterization of wood anatomical traits (based on the collected wood cores)</p>
<p>Coconut: Videoguidelines on <i>ex situ</i> field characterization</p>	<p>Only some of the footage has been captured. Output to be realigned in line with SC recommendations (due Dec 2015).</p>
<p>Output 6.2.2.2: Value and status of priority tree species understood and documented</p>	

<p>Assessing the status of cacao landraces and traditional varieties in Upper Amazon and Mesoamerica and development of scientific methodologies to assess the impact of genetic erosion of on-farm genetic diversity.</p>	<p>An assessment of the conservation status of cacao landraces and traditional varieties in the Americas (Central and South America and the Caribbean) was presented during the CacaoNet International Workshop on On-farm Conservation of Cacao Genetic Diversity, 26-28 October 2014 at Guapiles, Costa Rica, jointly organized between Bioversity and CATIE. The workshop discussed the methodologies and approaches and information systems supporting the decision-making process, considering the socio-economic, scientific and organisational and political aspects. The workshop presented a partial status and made recommendations for the next steps of assessing the impact of genetic erosion of on-farm diversity and determining the potential role of on-farm conservation in complementarity with ex situ conservation. A completed status is planned by mid 2015 with information from few additional countries.</p> <p>The CacaoNet on-farm conservation workshop is available on the CacaoNet website: www.cacaonet.org</p>
<p>Establishing mechanism to identify and communicate threats to cacao genetic resources (vulnerability and erosion) at national and international level</p>	<p>Mechanism to identify and communicate threats to cacao genetic resources was discussed during the CacaoNet International Workshop on On-farm Conservation of Cacao Genetic Diversity, 26-28 October 2014 at Guapiles, Costa Rica, jointly organized between Bioversity and CATIE. The workshop made recommendations for the next steps and proposal for action. The development of specific country guidelines will be the next steps from his important first international consultation on the subject.</p> <p>The CacaoNet on-farm conservation workshop is available on the CacaoNet website: www.cacaonet.org</p>
<p>Threat analysis methods and modeling tools for priority tree species- Latin America</p>	<p>Three projects are engaged in this (Latin America, Central Asia and Burkina Faso). All are on track.</p> <p>In Latin America, threat analysis has been updated, including climate change, using updated approaches, but not posted online due to residual bugs. Expected to be online in early 2015.</p> <p>Central Asia, new approaches to evaluating and mapping threats are being developed and tested. Will be ready to be shared by the end of 2015.</p> <p>Burkina Faso, see 2.2.2. below, milestone 'Map and publish...'</p>
<p>Species and variety distribution mapping of priority species under participatory</p>	<p>Seven species have been targeted to start the activity (Cameroon: <i>Dacryodes edulis</i>, <i>Pausinystalia yohimbe</i>, <i>Baillonella toxisperma</i>, <i>Garcinia lucida</i>, <i>Allanblackia floribund</i>, Nigeria: <i>Chrysophyllum albidum</i> and DRC: <i>Nephelium lappaceum</i> and <i>Dacryodes edulis</i>).</p>

<p>domestication in African Humid Tropics (Central Africa)</p>	<p>The GPS coordinates of several populations have been collected. Threats to their populations have been studied for the Cameroonian species.</p> <p>In Cameroon, in addition to <i>Pausinystalia yohimbe</i>, <i>Baillonella toxisperma</i>, <i>Garcinia lucida</i> and <i>Allanblackia floribunda</i> data on threats and phenotypic variations of <i>Dacryodes macrophylla</i> were collected in August following different ecosystems under different level of pressure. Two drafts papers (on <i>Baillonella toxisperma</i>, <i>P. yohimbe</i> and <i>G. lucida</i>) are currently under the second round of internal review. Two other papers are being drafted (<i>A. floribunda</i> and <i>Dacryodes macrophylla</i>). One MSc thesis (on <i>A. floribunda</i>) has been submitted and its defence is planned for next couple of months. In DRC, fruits traits of <i>D. edulis</i> were collected and computed. The manuscript is being designed. Data was collected within various populations in three ecozones (Forest, transition and savannah). Thus, among the five draft papers, two are under review and the remaining will be submitted for review soon. Maps will be drawn for each species according to fruit traits variation.</p>
<p>Map the distribution and prevalence of the Grevillea canker disease in east Africa</p>	<p>Information on prevalence of Grevillea canker has been collated by a transect study in Kenya; details with collaboration with the Kenya Forestry Research Institute finalized in August.</p> <p>Transect survey in Kenya is nearing completion, and collaborative link with KEFRI has been established</p>
<p>Map and publish the distribution and possible threats of climate change on distribution of 10+ food tree species in Burkina Faso</p>	<p>The draft maps of species distribution are available. They will be validated through expert consultation before publishing - expected in the first half of 2015.</p> <p>Genetic Resources, Diversity, Conservation and Utilization Session II, pp. 44-75. Proceeding of a National Seminar on Underutilized Fruits, 1-3 December 2014, India -- showcasing many of the results of the Bioversity project on Tropical Fruit Trees</p>
<p>Complete and publish ensemble suitability modelling for tree crop species in the Asian Highlands (<i>Juglans regia</i>, <i>Camellia</i> spp (<i>sinensis</i>, <i>assamica</i>, <i>taliensis</i>), <i>Scleropyrum wallichianum</i>)</p>	<p>Analysis is complete. Draft manuscript is ready.</p> <p>Publications from 2013 ensemble suitability modeling using the same methods (http://dx.doi.org/10.1016/j.ecolmodel.2014.03.003; another article: Separation of the bioclimatic spaces of Himalayan tree rhododendron species predicted by ensemble suitability models has been published by Global Ecology and Conservation.</p> <p>Draft article is ready: Sailesh Ranjitkar, Nani Maiya Sujakhu, Yang Lu, Mingcheng Wang, Qing Wang, Jun He, Peter Mortimer, Robert Zomer, Jianchu Xu and Roeland Kindt. Selecting agroforestry species for future climate in Yunnan, eastern Himalayas. The article will be adjusted to include analysis of novel future climates and submitted in the first quarter of 2015.</p> <p>S Ranjitkar, R Kindt, NM Sujakhu, R Hart, W Guo, X Yang, KK Shrestha, ... 2014. Separation of the bioclimatic spaces of Himalayan tree rhododendron species predicted by ensemble suitability models. <i>Global Ecology and Conservation</i> 1, 2-12. 2014. URL http://www.sciencedirect.com/science/article/pii/S2351989414000067</p> <p>2. Publications from 2013 ensemble suitability</p>

		modelling using the same methods (http://dx.doi.org/10.1016/j.ecolmodel.2014.03.003 ; http://www.sciencedirect.com/science/article/pii/S0304380014001276
Output 6.2.2.3: Effective, efficient and equitable genetic conservation strategies developed and their complementarity understood		
Approaches and protocols to improve in situ and ex situ conservation of <i>Cariniana pyriformis</i>		<p>There was some delay in obtaining permissions for exporting plant material outside of Colombia, leading to delay in genetic analysis and the establishment of protocols for in situ prioritization. There has also been some delay in establishing protocols for vegetative propagation, resulting in a delay in the development of protocols for ex situ conservation.</p> <p>10 sites sampled across the remaining distribution range of the species (both sides of the Andes), resulting in 217 adults and 57 juveniles; - all trees found at all sites georeferenced to assess population demographics; >50 circular 50m2 plots established around a selection of trees in which all plants dbh>1cm measured and identified to quantify and qualify phytosociological characteristics of abarco habitat; - wood cores of 217 trees collected to determine wood density and bark thickness; representative samples of fruits collected to characterize phenotypic variability; - mycorrhiza samples of 81 trees collected to determine the degree of association; project partner (Forestpa) is additionally sponsoring a study to determine the scientific names of the two species identified; 87 soil samples collected (physico-chemical analyses); branch material of 141 elite trees collected for vegetative propagation. Rooting experiments subcontracted to a national university (who had published a protocol for in vitro propagation of the species) who have carried out numerous experiments to develop a protocol to trigger rooting in cuttings, but with very limited success so far; only one individual has started rooting. This process has taken many months, but given the disappointing results we have decided to establish an orchard of the elite material through the use of grafting instead of of clonal garden established through cuttings. This is being financed by our partner Forestpa.</p> <p>Once the grafting protocol is considered to be working well, we aim to apply for a follow-up project (ITTO small grants) to further the study of vegetative propagation though cuttings or the use of in vitro techniques; establish seed orchards/clonal gardens along environmental gradients</p>
Guidelines on sharing coconut germplasm		Technical guidelines for the safe movement and duplication of Coconut (<i>Cocos nucifera</i> L.) germplasm using embryo culture transfer protocols published on COGENT website- pending final review by TRUST: http://www.cogentnetwork.org/manuals-and-handbooks
Paper on Phytoplasma diseases threatening coconut genebank in PNG		<p>Reconnaissance mission completed and report submitted. Paper being drafted.</p> <p>LoA signed with CIRAD for finalizing the paper to incorporate further findings from other studies implemented over the period (due May 2015).</p>
Output 6.2.2.4: Information, tools, awareness, capacity, networks, collaboration and policies to translate knowledge and strategies into conservation and better use of TGR		

<p>Validate the utility of the VECEA maps for predicting future species and vegetation cover through species-distribution extrapolation to the Last Glacial Maximum and comparison with evolutionary signals in genetic data sets (East and Southern Africa)</p>	<p>Past climate change modelling has been completed; article to be drafted in second half of 2014.</p> <p>Most statistical analyses have now been completed. Article will be submitted in first quarter of 2015 when formal statistical tests that compare the genetic distance versus travel time comparisons across studies and climates have been finalized</p>
<p>Comprehensive tree seed source directory for eastern and southern Africa</p>	<p>Tables and figures summarizing the seed sources and their performance of the major species in southern Africa are complete. Work is still in progress to complete the list for eastern Africa. Progress remains on track.</p> <p>Tables and figures summarizing the seed sources and their performance of the major species in southern Africa are complete. Report is almost complete.</p>
<p>Costing study of the Global Strategic Cacao Collection (GSCC) with associated services</p>	<p>A detailed costing study of the Global Strategic Cacao Collection (GSCC) with conservation costs and associated services such as germplasm evaluation, quarantine, virus-indexing, distribution and documentation has been developed. The study is being used by the CacaoNet Task Force on Sustainable Funding Mechanisms for Cacao Genetic Resources look at the funding needs and mechanisms for the long-term conservation and use of the GSCC. The Funding Task Force includes the following members: Bioversity, Mars Inc., Mondelez, Guittard Chocolate, CATIE, CRC, CRA Uk Ltd. And the International Cocoa Quarantine Centre Reading UK. The detailed GSCC costing study needs to be carefully used and is not intended to be a public document until the donors have approved it.</p> <p>A summary of the costing is accessible in the Global Cacao Strategy available on the CacaoNet website.</p>
<p>Fund-raising strategy and dialogues with donors to secure funding for the Global Strategy for the Conservation and Use of Cacao Genetic Resources</p>	<p>Fund-raising strategy currently being discussed and dialogues with potential donors initiated.</p> <p>Bioversity coordinates a CacaoNet Task Force on Sustainable Funding Mechanisms for Cacao Genetic Resources to explores options of funding mechanisms and governance and formulates recommendations for wider consultation through CacaoNet and the WCF partnership meetings, on the funding needs and mechanisms for the long-term conservation and use of the GSCC. The Task Force partners are from the private and public sector of cocoa production and research. The members are: Bioversity, Mars Inc., Mondelez International, Guittard Chocolate, CATIE, Cocoa Research Centre (CRC) Trinidad, Cocoa Research Association (CRA) Uk Ltd,</p>

	<p>the University of Reading and the International Cocoa Quarantine Centre (ICQCR), UK and the World Cocoa Foundations (WCF). The first step of the funding strategy is a communication strategy which resulted in background papers, articles published in a number of newspapers and materials presented at a number of international conferences such as the 2nd World Cocoa Conference June 2014 and 2 International Cocoa Workshops in Trinidad and in Costa Rica in October 2014. The Task Force funding strategy is based on the Global Strategic Cacao Collection (GSCC) costing study recently completed to approach potential donors. CacaoNet has been called to partner with major industry initiatives such as the WCF CocoaAction addressing the urgent need to develop varieties resistant to the devastating CSSV in West Africa. The Task Force fundraising strategy documents are internal for the time being as they contain detailed costing information from the collections at CATIE and CRC not available publicly</p>
<p>Agreement on the development of a network to facilitate the safe movement of cacao germplasm</p>	<p>Preparation work carried out in advance of the International Workshop on the Development of the Global Strategic Cacao Collection (GSCC) at the Cocoa Research Centre, Trinidad and Tobago, October 2014.</p> <p>Bioversity coordinated the revision of the CacaoNet Technical Guidelines for the safe movement of cacao germplasm (End MJ, Daymond AJ, Hadley P, editors. 2014.) which contain policy recommendations. The guidelines are available on the CacaoNet and Bioversity websites and printed versions have been distributed to the main cocoa research centres. Discussions took place with the representatives of the Regional Cocoa Breeders groups in 2014 regarding strengthening the safe movement of germplasm to increase use in the breeding programmes. This was also part of the Bioversity/CacaoNet International Workshop in October 2014 in Trinidad. A detailed costing of the distribution of materials including the operation of the International Cocoa Quarantine Centre in the UK was carried out in 2014 and included in the GSCC costing study. Agreement on a network for the safe movement of CSSV resistant materials will be established by mid 2015.</p> <p>Safemovement guidelines available on the CacaoNet website at: www.cacaonet.org and Bioversity websites: http://www.bioversityinternational.org/e-library/publications/detail/technical-guidelines-for-the-safe-movement-of-cacao-germplasm-1/</p>
<p>Agreements on implementation of global coconut GR strategy and coconut research agenda</p>	<p>The COGENT SC meeting was held at the CRI, Sri Lanka 13-16 July 2014, agreements were reached by the Steering Committee, and 8 recommendations endorsed relating to the finalization of the global strategy, and its implementation over the next decade.</p> <p>http://www.cogentnetwork.org/ (see news)</p> <p>Based on SC recommendations, further expert consultations have secured technical consensus for three chapters of the strategy document (electronic copy of full document and hard copy of brochure due July).</p>

	http://www.cogentnetwork.org/ (see news)
Formal launch of COGENT International Thematic action Groups	<p>The ITAGS were formally launched at the 2014 COGENT SC meeting. Agreements were made regarding changes to ITAG number, structure and objectives. The Secretariat is still soliciting leadership for three of the ITAGs. 6 ITAGs have been launched. 5 genebank curators will automatically be members of the ex situ ITAG. Leaders will be changed biennially and co-opted in each ITAG. It is proposed that COGENT produces an Annual Report including research ideas and activities from each ITAG. It is agreed that ITAGs may include staff from APCC where appropriate.</p> <p>Remaining ITAG leaders yet to be confirmed (by July)</p>
Videos on in situ conservation, plantation management and controlled pollination	<p>Most of the footage has been captured and material being edited for one video series (Controlled Hand Pollination).</p> <p>Video on Controlled Pollination well advanced. Finalization and production of 12 short 'sub' videos by July 2015. Status of other videos similar to that of output 2.2.1 (few film footage available); needs to be adjusted in line with SC priorities defined in the July 2014 meeting</p>
Special issue in Forest Ecology and Management on FGR	<p>Several articles have been published or accepted for publication; expected to be completed and on-line within 6 weeks.</p> <p>http://www.sciencedirect.com/science/article/pii/S0378112714002825 http://www.sciencedirect.com/science/article/pii/S037811271400231X</p> <p>The special issue of Forest Ecology and Management (Vol 333) has been published with 8 articles, including 6 co-authored by Bioversity scientists. All articles are open-access.</p> <p>http://www.sciencedirect.com/science/journal/03781127/333</p>
Forrest Genetic Resources training guide, case studies, courses and fellowships	<p>A module has been completed with two case studies, and uploaded; ASO fellow completing project this year and a second one nearing completion.</p> <p>http://forest-genetic-resources-training-guide.bioversityinternational.org/module-3-seed-supply-chain/</p> <p>Module three has been translated into Spanish and French, awaiting final changes and pending incorporation of final changes will be uploaded to the website; one case study in Module 4 was completed, awaiting layout for uploading. An ASO fellow completed her fellowship and submitted report; another is nearing completion and a new fellow has been selected.</p> <p>Training provided at 3 separate regional Capacity-building workshop on ecosystem conservation and restoration to support achievement of the CBD Aichi Biodiversity Targets:</p>

	<p>28 April - 2 May 2014 - Jambi, Indonesia</p> <p>2 - 6 June 2014 - Isle of Vilm, Germany</p> <p>25 - 28 August 2014 - San Jose, Costa Rica</p> <p>In October Bioversity (Michele Bozzano) contributed to the "Restoring Forests" conference (14-16 October - Lafayette, Indiana, USA)</p> <p>An ASO fellow completed her fellowship and submitted report; another is nearing completion and a new fellow has been selected.</p>
<p>Output 6.2.2.5: Selection and promotion of priority germplasm for use in other activities and themes (Pipeline)</p>	
<p>Methodology and standards for evaluation of cacao for key cacao agronomic traits of importance to the men and women farmers available for training and capacity building.</p>	<p>Preparation work carried out in advance of the International Workshop on the Development of the Global Strategic Cacao Collection (GSCC) at the Cocoa Research Centre, Trinidad and Tobago, October 2014.</p> <p>CacaoNet and INGENIC organized a side-event on the CGIAR's Integrated Breeding Platform (IBP) and the Breeding Management System (BMS) and its potential value to cacao breeders and geneticists during the International Plant & Animal Genome XXIII (PAG) meeting January 2015 in San Diego. In preparation several discussions took place in 2014 between CacaoNet and the Regional Cocoa Breeders group. A first draft cocoa ontology was developed and the cocoa breeders made a number of recommendations on the priorities and process for strengthening the evaluation of key traits and most importantly on sharing the information. The adoption of one common tool such as the IBP/BMS seems to present many advantages. It was also agreed that a first focus on cocoa swollen shoot virus CSSV is strategic toward developing tools and linking to important initiatives such as CocoaAction for support. The methodologies and standards for evaluating CSSV are being compiled and will be available by mid 2015.</p>
<p>Cluster Activities 6.2.3: Forest Restoration</p>	
<p>Output 6.2.3.1: Ecological, genetic and socioeconomic knowledge for forest restoration</p>	
<p>Paper on status, trends, gaps and lessons learned on ecosystem restoration in Colombia</p>	<p>Article "La restauracion ecologica en Colombia: Tendencias, necesidades y oportunidades" published.</p> <p>http://www.cifor.org/library/4519/la-restauracion-ecologica-en-colombia-tendencias-necesidades-y-oportunidades/</p>

<p>Report on reforestation in Uganda--Lessons learned from the Saw Log Production Grant Scheme</p>		<p>Paper submitted to international journal currently undergoing second revision.</p>
<p>Info brief on drylands restoration in East Africa (with particular focus on charcoal species</p>		<p>Brief on 'Achieving sustainable charcoal in Kenya: Harnessing the opportunities for cross-sectoral integration' published. http://www.sei-international.org/publications?pid=2542</p> <ol style="list-style-type: none"> 1. Iiyama M, Chenevoy A, Otieno E, Kinyanjui T, Ndegwa G, Vandenabeele J, Njenga M, Johnson O. (2014) Achieving sustainable charcoal in Kenya Harnessing the opportunities for cross-sectoral integration. ICRAF-SEI Technical Brief. 2. Anne Nyambane, Mary Njenga, Phaniel Oballa, Peris Mugo, Caroline Ochieng, Oliver Johnson and Miyuki Iiyama (May, 2014). Sustainable firewood access and utilization. Achieving cross-sectoral integration in Kenya. Technical Brief. World Agroforestry Centre (ICRAF) and Stockholm Environment Institute (SEI). 3. Iiyama M, Njenga M, De Leeuw J, Wagura J, Syano N, Gama B, Kimaro A, Neufeldt H, Dobie P, and Jamnadass R.(2014) Woodfuel. In De Leeuw, J., Njenga, M., Wagner, B. and Iiyama, M. (Eds.). Treesilience: An assessment of the resilience provided by trees in the drylands of Eastern Africa. Nairobi, ICRAF Nairobi, Kenya. pp 65-68. 4. Oliver Johnson, Phosiso Sola, Faith Odongo, Evans Kituyi, Mary Njenga and Miyuki Iiyama (May 2014) Sustainable energy from trees. Adopting an integrated approach to biomass energy. Policy Brief. World Agroforestry Centre (ICRAF) and Stockholm Environment Institute (SEI). -- Website: http://www.sei-international.org/mediamanager/documents/Publications/ICRAF-SEI-2014-techbrief-Sustainable-charcoal.pdf
<p>Output 6.2.3.2: Guidelines, practices, tools and approaches for forest restoration</p>		
<p>Subplenary session on silviculture for forest restoration at 2014 IUFRO World Congress</p>		<p>The proposal for the session was accepted and it will be carried out at the Congress in October. Finegan is co-organizer with Byung Bae Park (Korea Forest Research Institute, Republic of Korea) and Palle Madsen (University of Copenhagen, Denmark).</p> <p>A session in the IUFRO congress was organised in Session B-07A & B (210A & B) Silvicultural Practices To Facilitate Forest Restoration Tuesday 7. Oct 2014</p>

Restoration of degraded mining sites in China with indigenous and exotic species		<p>Field sampling and greenhouse experiment on suitability of indigenous and exotic tree species in restoration of mining land completed.</p> <p>There was need to get some additional lab results for the samples from the field and the harvested greenhouse experiment; the report will be finalized in March 2015.</p>
Guidelines for practitioners on genetic considerations in forest ecosystem restoration		<p>Delayed due to delays in release of related Thematic Study. Planned for 2015. http://www.fao.org/publications/card/en/c/4f411455-6411-4319-8336-e49fab43c416/</p>
Output 6.2.3.3: Policy options to stimulate diverse, effective and equitable forest restoration		
Output 6.2.3.4: Awareness and capacity improved through the development of training tools, extension materials, demonstration sites and dissemination		
Synthesis of state of knowledge integrated and issues in Forest Restoration		<p>Book published online.</p> <p>http://www.fao.org/3/a-i3938e.pdf</p> <p>Journal article published and available through link below:</p> <p>Thomas, E., Jalonen, R., Loo, J., Boshier, D., Gallo, L., Cavers, S., Bordacs, S., Smith, P., Bozzano, M., 2014. Genetic considerations in ecosystem restoration using native tree species. <i>For. Ecol. Manage.</i> 333, 66-75.</p> <p>http://www.sciencedirect.com/science/article/pii/S0378112714004356</p> <p>Hard copy also now available and 1000 copies printed for distribution to key events and partners. Further funding needed to support distribution.</p>
Flagship Project: Landscape Management for environmental services, biodiversity conservation and livelihoods		
Cluster Activities 6.3.1: Understanding patterns and drivers of forest (tree cover) transition in decline and restoration phases		
Output 6.3.1.1: Empirical data sets of quantitative and qualitative tree cover transitions across major eco-climatic zones		

<p>Cross-site test of SL Hypothesis1. Tree cover in landscapes changes in quality, quantity and pattern in non-linear fashion; depending on the operational forest definition used, tree cover transitions at certain scales show a 'forest transition graph of decline followed by recovery (basic forest transition hypothesis)</p>	<p>Data set:</p> <ul style="list-style-type: none"> - Database of Tree cover transition and its drivers across Lower Mekong, Indonesia and Malaysia in the past twenty years for 1990s, 2000s and 2010s for the first iteration. Technical report is on progress. - Dataset of biophysical and socio-economic baseline of sentinel landscapes Peru, Brazil, Bolivia, Nicaragua, and Honduras Sentinel Landscape. <ul style="list-style-type: none"> - On progress: two sites (Cassou and Kongoussi) in Burkina Faso have been completely surveyed. The working papers are being finalized. Sites in Ghana are scheduled to be completed by March 2015. Likewise, wet chemistry data from Burkina Faso sites are available <p>Publications:</p> <ul style="list-style-type: none"> - Zhuoqing L, Xu JC, Shilpakar RL and Ma X. 2014. Mapping wetland cover in the greater Himalayan region: a hybrid method combining multispectral and ecological characteristics. Environmental Earth Sciences. 71. (3)P. 1083-1094.
<p>a) Study the impacts of large mammals on forest regeneration;</p> <p>b) Soil assessment under tree cover transition;</p> <p>c) Data Integration for REDD+ in Asia;</p>	<p>Dataset:</p> <p>Dataset on recensus of Exclosure plots to study the impacts of large mammals on forest regeneration and Soil assessment under tree cover transition in Seram are in progress.</p> <p>Publications:</p> <p>Hudson et al. 2014. The PREDICTS database: a global database of how local terrestrial biodiversity responds to humn impacts. Ecology and Evolution 4: 4701-4735.</p> <ul style="list-style-type: none"> - Betbeder J., Laumonier Y., Danan Hadi and V Gond 2014. Mapping wetlands in Kapuas Hulu district, West Kalimantan, using multi-sensor approach. Working Paper XXX. Bogor, Indonesia: CIFOR. In press. - Boulogne, M. et al. 2014. Mapping of forest ecosystem of central Seram, Maluku, Indonesia. Working Paper XXX. Bogor, Indonesia: CIFOR. In press.

<p>d) Analysis of shifting cultivation</p>	<ul style="list-style-type: none"> - Stas, S., Laumonier, Y. 2014. Above-ground biomass and carbon stocks in a secondary forest in comparison with adjacent primary forest on limestone in Seram, the Moluccas, Indonesia. Working Paper XXX. Bogor, Indonesia: CIFOR. In press. - Edith, W., Laumonier, Y. 2014. Traditional knowledge, perceptions and forest condition in a Dayak Mentebah community, West Kalimantan, Indonesia. Working Paper XXX. Bogor, Indonesia: CIFOR. In press. - Day et al. 2013. Tree species diversity and above ground biomass in Central African rainforests. Environmental Conservation. http://journals.cambridge.org/download.php?file=%2FENC%2FS0376892913000295a.pdf&code=07223cfd2a27e643f111c69b82140018 - Budiharta et al. 2014. Estimating the aboveground biomass of Bornean forest. Biotropica 46: 507-511 - Budiharta et al. 2014 Restoring degraded tropical forests for carbon and biodiversity. Environmetnal Research Letters 9: 114020 - Ickowitz et al. Agriculture and Deforestation in the Democratic Republic of Congo: A Synthesis of the Current State of Knowledge. Report for USAID (in press)
<p>Cross-site test of SL Hypothesis1. Tree cover in landscapes changes in quality, quantity and pattern in non-linear fashion; depending on the operational forest definition used, tree cover transitions at certain scales show a 'forest transition graph of decline</p>	<p>All field work for SL-HN socioeconomic base line has been done, the dases has been sent to Nairobi and completed all the process of data checking and validation, final version of the data base is catalogued and stored</p>

followed by recovery (basic forest transition hypothesis)	
Output 6.3.1.2: Empirical data on changes in spatial pattern of tree cover within landscapes in relation to segregation/ integration of functions	
Cross-site test of SL Hypothesis2. Tree cover transitions in time can be understood as the resultant of time-variant processes, with increases in human population density linked to decrease of natural forest cover, and increases in HDI linked to increases in tree cover (population density and welfare hypothesis).	<p>Presentation of Pan Tropical analysis of patterns and drivers of land use/cover changes (Cameroon, Peru, Indonesia) is replaced by a keynote speech in GLP. Pptx is available for sharing. Comparable data between Cameroon, Peru and Indonesia are limited, but what are available have been compiled.</p> <p>Dataset:</p> <p>Database set for Mekong, Indonesia and Malaysia for 1990s, 2000s and 2010s and two watersheds in Peru</p> <p>Publications:</p> <p>De Leeuw, J., Shee, A., Vrieling, A., Atzberger, C. 2014. A review of the potential of remote sensing in support of insurances. <i>Remote Sensing</i>.</p> <p>Duguma, L.A., Alemagi, D. 2014. Drivers of forest cover changes. In: Minang, P.A., van Noordwijk M., Kahurani, E (eds). <i>Partnership in the Tropical Forest Margins - A 20- Year Journey in Search of Alternatives to Slash-and-Burn</i>. The World Agroforestry Centre, Nairobi, Kenya, pp. 23-29</p> <p>Fraye J, Sun Z, Muller D, Munroe DK and Xu JC. 2014. Analyzing the drivers of tree planting in Yunnan, China, with Bayesian networks. <i>Land Use Policy</i>. 36. : P. 248- 258.</p> <p>Kai Z, Woan TS, Jie L, Goodale E, Kitajima K, et al. 2014. Shifting Baselines on a Tropical Forest Frontier: Extirpations Drive Declines in Local Ecological Knowledge. <i>PLoS ONE</i> 9(1): e86598. doi:10.1371/journal.pone.0086598</p> <p>Tanui, J. Groeneveld, R. Klomp, J. Mowo, J. van Ierland, E.C. 2013 Explaining investments in sustainable land management: the role of various income sources in the smallholder farming systems of western Kenya Invited paper presented at the 4th International Conference of Agricultural Economists, September 22-25, 2013, Hammamet, Tunisia Association of African Economists 29p 2013511</p> <p>van Noordwijk, M. and G.B. Villamor. 2014. Tree cover transitions in tropical landscapes: hypotheses and cross-continental synthesis. <i>GLPnews</i>, 10: 33-37. (Open Access)</p> <p>Zhang K, Woan TS, Li J, Goodale E, Kitajima K, et al. 2014. Shifting Baselines on a Tropical Forest Frontier: Extirpations Drive Declines in Local Ecological Knowledge. <i>PLoS ONE</i> 9(1): e86598. doi:10.1371/journal.pone.0086598</p>

<p>Cross-site test of SL Hypothesis2. Tree cover transitions in time can be understood as the resultant of time-variant processes, with increases in human population density linked to decrease of natural forest cover, and increases in HDI linked to increases in tree cover (population density and welfare hypothesis)</p>	<p>Contracts for vulnerability analysis and land use mapping for the Trifinio landscape are in place to complete product by April 2015.</p>
<p>Output 6.3.1.3: Methods for monitoring and quantifying tree cover refined and linked to data uncertainty</p>	
<p>Cross-site test of spatial forest transition hypothesis (SL Hypothesis3)</p>	<p>Publications:</p> <ul style="list-style-type: none"> - Report on Project Report on Time-series land uses, and threats to them, identified for participating communities -Lusiana B, van Noordwijk M, Johana F, Galudra G, Suyanto, Cadisch G. 2014. Implications of uncertainty and scale in carbon emission estimates on locally appropriate designs to reduce emissions from deforestation and degradation (REDD+). <i>Mitigation and Adaptation Strategies for Global Change</i>: 19(6): 757-772.
<p>MRV framework defined based on data certainty and database modelling the dynamics of land use change at several PEN sites</p>	<p>Publications:</p> <ul style="list-style-type: none"> - Stas, S., Laumonier, Y. 2014. Above-ground biomass and carbon stocks in a secondary forest in comparison with adjacent primary forest on limestone in Seram, the Moluccas, Indonesia. Working Paper XXX. Bogor, Indonesia: CIFOR. In press. - Day et al. [in press] Zambia Country Profile: Monitoring, reporting and verification for REDD+. CIFOR Occasional Paper. - Day et al. 2014. Zambia Country Profile: Monitoring, reporting and verification for REDD+. CIFOR Occasional Paper 113.

<p>Cross-site test of spatial forest transition hypothesis (SL Hypothesis3)</p>	<p>Tool for fast and accurate inventory of trees and forest patches in farms. Next step: A student from the University of Narino, Colombia has been assigned to explore the hardware and software availability, capabilities, costs, etc. of drone technology that could be used to aid in the inventory of trees and forest patches in farms and other spaces in the landscape. A preliminary report is available in Spanish. We see a lot of difficulties in using this technology in Central America for the lack of legislation and regulation concerning the commercial (or research) use of this technology. It has potential for inventory of trees within the limits of large cattle or coffee farms. It is faster at this moment to relay in remote sensing, accurate technology for tree inventory, for instance, rapid eye imagery.</p>
<p>Output 6.3.1.4: Proximate and ultimate drivers of land use and tree cover change: inference from spatial patterns, macro-economic statistics and bottom-up driver info</p>	
<p>Cross-site test of SL Hypothesis4. Institutional change from a 'forest' to an 'agrarian' regime of tenure and control is essential for the transition from decline towards increase of tree cover to occur (agroforestation or tenurial reform hypothesis)</p>	<p>Database:</p> <p>The web-based-database of Pan-tropical spatial characterization of Agroforestry is completed</p> <p>Publications:</p> <ul style="list-style-type: none"> - Mulyoutami E, Wahyuni ES, Kolopaking ML. 2014. Mengurai Jaringan Migrasi: Kajian Komunitas Petani Migran Bugis di Sulawesi Tenggara. Jurnal Kependudukan Indonesia (Vol 9 No 1). LIPI) - He J. 2014. Governing forest restoration: Local case studies of sloping land conversion program in Southwest China, Forest Policy and Economics. DOI: 10.1016/j.forpol.2014.05.004 (http://www.sciencedirect.com/science/article/pii/S1389934114000720) - Sreekar, R., Zhang, K., Xu, J., and Harrison, R.D.* (in press) Another empty forest: Considering the conservation value of a recently established nature reserve in SW China. PlosOne. - Harrison R.D., Swinfield T. (in press) Restoration of logged humid tropical forests: An experimental programme. Tropical Conservation Science. - I ndrawan M, Yabe M, Nomura H and Harrison R. 2014. Deconstructing satoyama - The socio-ecological landscape in Japan. Ecological Engineering 64: 77-84. (http://www.sciencedirect.com/science/article/pii/S0925857413005387)." - Governing Forest Restoration: local cases studies of Sloping Land Conversion Program in Southwest China - http://www.sciencedirect.com/science/article/pii/S1389934114000720 - Emptying the forest: Considering the conservation value of a recently established nature reserve in SW China (57)-accepted - Degraded forest represent a huge, underappreciated opportunity for conservation (comment)-submitted

	<p>- Deconstructing satoyama - The socio-economic landscape in Japan.</p> <p>http://www.sciencedirect.com/science/article/pii/S0925857413005387</p> <p>In progress: Analysis of drivers/levers land use changes in two watersheds of Ucayali and Case study on cash crops as major drivers for land use change in Cote d'Ivoire</p>
<p>Cross-site test of SL Hypothesis4. Institutional change from a 'forest' to an 'agrarian' regime of tenure and control is essential for the transition from decline towards increase of tree cover to occur (agroforestation or tenurial reform hypothesis)</p>	<p>Initial reports on Analytical work on the direct and underlying causes of deforestation and forest degradation and on illegal logging and relate trade in the Trifinio Landscape have been delivered and are currently being validated and improved</p>
<p>Output 6.3.1.5: Policy levers and negotiation opportunities to influence drivers of tree cover transitions, rehabilitation and/or agroforestry transformation</p>	
<p>Impact study of existing improved land management institutions in national context</p>	<p>MOU with the Ministry of Environment in Ucayali and ICRAF has been signed, MOU with the Forestry Service is under designed, continuous backstopping of national level and regional level activities and advisory support provided when requested by partners. PPTs presentations and national and regional level trainings organized or attended as trainers.</p> <p>Research report on Impact study of existing improved land tenure and other land management institutions in national context in Cameroon is completed.</p> <p>Publications:</p> <p>He J, Lang R and Xu J. 2014. Local Dynamics Driving Forest Transition: Insights from Upland Villages in Southwest China. <i>Forests</i> 5, no. 2: 214-233. (http://www.mdpi.com/1999-4907/5/2/214)</p> <p>- Muller D, Sun ZL, Vongvisouk T, Pflugmacher D, Xu JC, Mertz O. 2014. Regime shifts limit the predictability of land-system change. <i>Global Environmental Change</i> 28 (2014): 75-83. (http://dx.doi.org/10.1016/j.gloenvcha.2014.06.003)</p>
<p>Global Dry Forests, highlighting issues of drivers of change, governance, livelihoods, food security and adaptation</p>	<p>Publications:</p> <p>Special Issue of the <i>International Forestry Review</i> on "Global dry forests: gaps and opportunities" is currently in review. Publication expected April 2015.</p>

Edith, W., Laumonier, Y. 2014. Traditional knowledge, perceptions and forest condition in a Dayak Mentebah community, West Kalimantan, Indonesia. Working Paper XXX. Bogor, Indonesia: CIFOR. In press.

Law et al. 2014. Ecosystem services from a degraded peatland of Central Kalimantan: implications for policy, planning and management. *Ecological Applications* 25: 70-87

Cluster Activities 6.3.2: Understanding consequences of tree cover transition for livelihoods, environmental goods and services & adaptive policy

Output 6.3.2.1: Tools for and case studies of quantifying buffering of water flows and other hydrological ES linked to tree cover (quantity, quality, pattern) and agriculture

Cross-site test of SL Hypothesis7. Land use types that are part of the tree cover transition differ in effectiveness of 'provisioning' and 'environment-al' goods and services, labor absorption and profitability (tradeoff hypothesis, ASB Matrix)

Tools:

- Prototype on land-use planning tool (LUMENS) has been developed, data collection and manuscripts are in progress (one is accepted in ETFRN).
- Under the Smart Tree-Invest Project, field visit and compilation of secondary data to determine landscape clusters, regional training on Capacity Strengthening Approach to Vulnerability Assessment (CaSAVA) tool, revisions and modifications of tool to adapt local contexts in Philippines, Vietnam and Indonesia is completed.

Publications:

- Ma X, Yandong H, Xu JC, van Noordwijk M and Lu X. 2014. Spatial and temporal variation in rainfall erosivity in a Himalayan watershed. *Catena*. 121. : P. 248-259. (<http://www.sciencedirect.com/science/article/pii/S0341816214001520>)
- Ma X, Lu X, van Noordwijk M, Li JT and Xu JC. 2014. Attribution of climate change, vegetation restoration, and engineering measures to the reduction of suspended sediment in the Kejie catchment, southwest China. *Hydrology and Earth System Sciences*. 18. : P. 1979-1994. (http://www.worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=JA0578-14)
- Malesu, M.M., de Leeuw, J. and Oduor, A., 2014. Water harvesting experiences from the southern and eastern Africa rainwater network. *Journal of Southeast University (English Edition)*, 30 (2): 186-191.
- Tanika L, Pawitan H, van Noordwijk M and Zulkarnain MT. 2013. Dampak Perubahan Tutupan Lahan Dan Iklim Terhadap Fungsi Hidrologi Daerah Aliran Sungai Konaweha Hulu. *Jurnal Sumber Daya Air*. 9. (2)P. 155-168.

Cross-site test of SL Hypothesis7. Land use types that are part of the tree cover transition differ in effectiveness

The area of Penas Blancas (protected and surrounding area) has been selected as pilot for the importance of ecosystem services for the population, the area has been mapping and delimited. Master degree thesis can be found in: http://biblioteca.catie.ac.cr/index.php?option=com_wrapper&Itemid=72 –

<p>of 'provisioning' and 'environment-al' goods and services, labour absorption and profitability (tradeoff hypothesis, ASB Matrix)</p>	
<p>Output 6.3.2.2: Tools for and case studies of understanding biodiversity-based environmental services across stages of tree cover transition, incl. pollination, dispersal</p>	
<p>The links between forests and ecosystem services for agriculture</p>	<p>Publications:</p> <ul style="list-style-type: none"> - Foli et al. 2014. Exploring the dynamics between forests, ecosystem services and food production: A systematic review protocol. Environmental Evidence. http://www.environmentalevidencejournal.org/content/pdf/2047-2382-3-15.pdf - Edwards et al. 2014. Maintaining ecosystem function and services in logged tropical forests. Trends in Ecology and Evolution 29: 511-520. - Meijaard et al 2014. What scope for certifying forest ecosystem services? Ecosystem Services 7: 160-166. - Abram et al. 2014. Spatially explicit perceptions of ecosystem services and land cover change in forests regions of Borneo. Ecosystem Services 7: 116-127
<p>Cross-site test of SL Hypothesis8. Tree cover of all types and in all stages is positively associated with buffer functions in an ecological, social and economic sense, with the spatial pattern and degree of integration linked to human resilience and adaptive capacity in the face of climate and market variability (integration, buffer and resiliency hypothesis)</p>	<p>Publications:</p> <p>Zhuangfang Y, Cannon CH, Chen J, Ye C and Swetnam RD. 2014. Developing indicators of economic value and biodiversity loss for rubber plantations in Xishuangbanna, southwest China: A case study from Menglun township. Ecological Indicators. 36. : P. 788-797. (http://www.worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=JA0529-14)</p> <ul style="list-style-type: none"> - Lam TY, Fletcher C, Ramage BS, Doll HM, Joann CL, Nur-Zati AM, Butod E, Kassim AR, Harrison RD and Potts MD. 2014. Using Habitat Characteristics to Predict Faunal Diversity in Tropical Production Forests. BIOTROPICA. 46. (1)P. 50-57. (http://www.worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=JA0536-14)

- Wickham JD, Harrison RD, Lu W, Guo Z, Millar JG, Hanks LM and Chen Y. 2014. Generic Lures Attract Cerambycid Beetles in a Tropical Montane Rain Forest in Southern China. *Journal of Economic Entomology* 107(1):259-267. (http://www.worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=JA0544-14)

- De Leeuw J.M., Said, M.Y., Kifugo, S., Oguto, J.O., Osano, P. and De Leeuw J., 2014. Spatial variation in the willingness to accept payment for conservation of a migratory wildlife corridor in the Athi-Kaputiei Plains, Kenya. *Ecosystem Services* 8: 16-24 (<http://www.sciencedirect.com/science/article/pii/S2212041614000047#>)

- Lam TY, Fletcher C, Ramage BS, Doll HM, Joann CL, Nur-Zati AM, Butod E, Kassim AR, Harrison RD and Potts MD. 2014. Using Habitat Characteristics to Predict Faunal Diversity in Tropical Production Forests. *BIOTROPICA*. 46. (1)P. 50-57.

- Wickham JD, Harrison RD, Lu W, Guo Z, Millar JG, Hanks LM and Chen Y. 2014. Generic Lures Attract Cerambycid Beetles in a Tropical Montane Rain Forest in Southern China. *Journal of Economic Entomology* 107(1):259-267.

- Zhuangfang Y, Cannon CH, Chen J, Ye C and Swetnam RD. 2014. Developing indicators of economic value and biodiversity loss for rubber plantations in Xishuangbanna, southwest China: A case study from Menglun township. *Ecological Indicators*. 36. : P. 788-797

- Roeder M., McLeish M., Beckschaefer P., Blecourt M., Paudel E., Harrison R. D., Slik F. (2014) Phylogenetic clustering increases with succession for lianas in a Chinese tropical montane rain forest. *Ecography* DOI:10.1111/ecog.01051.

- Sreekar, R., Huang, G., Zhao, J-B., Pasion, B.O., Yasuda, M., Zhang, K., Peabotuwage, I., Wang, X., Quan, R-C., Slik, J.W.F., Corlett, R.T., Goodale, E., The use of species-area relationships to partition the effects of deforestation and hunting on bird extirpations in a fragmented landscape. Harrison, R.D. *Diversity and Distributions*: DOI: 10.1111/ddi.12292

Output 6.3.2.3: Not just carbon? Quantified tradeoffs between C stocks and other environmental services across tree cover transitions

Evaluation of agroforests diversification to improve farmers income and carbon storage and understand the causal links between a farming system and its changes over time, with environmental services' provision

Tools:

Field visit and compilation of secondary data to determine landscape clusters, regional training on Capacity Strengthening Approach to Vulnerability Assessment (CaSAVA) tool, revisions and modifications of tool to adapt local contexts, i.e. key informant interview and focus group discussions flow and topic. Field visit reports in the forms of powerpoint presentations, while final report is in draft.

Publications:

Cavanaugh, K.C., Gosnell, J.S., Davis, S.L., Ahumada, J., Boundja, P., Clark, D.B., Mugerwa, B., Jansen, P.A., O'Brien, T.G., Rovero, F., Sheil, D., Vasquez, R., Andelman, S.J. 2014 Carbon storage in tropical forests correlates with taxonomic diversity and functional dominance on a global scale. *Global Ecology and Biogeography* 23 (5) . DOI: 10.1111/geb.12143

Lasco RD, Delfino RJ, Catacutan D, Simelton E and Wilson DM. 2014. Climate risk adaptation by smallholder farmers: the roles of trees and agroforestry. In: Mbow C, Neufeldt H, Minang PA, Luedeling E and Kowero G,eds. *Current Opinion in Environmental Sustainability*. 6. : P. 83-88. URL

Minang PA, Duguma LA, Bernard F, Mertz O and van Noordwijk M. 2014. Prospects for agroforestry in REDD+ landscapes in Africa. In: Mbow C, Neufeldt H, Minang PA, Luedeling E and Kowero G,(eds). *Current Opinion in Environmental Sustainability*. 6. : P. 78-82. URL

(http://www.worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=JA0510-14)

Skidmore S, Santos P, and Leimona B. 2014. Targeting REDD+: An Empirical Analysis of Carbon Sequestration in Indonesia. *World Development* Vol. 64, pp. 781-790.

Output 6.3.2.4: Gender, age and wealth-specific appreciation of tree cover transitions in relation to demographic transitions and development context

Cross-site test of SL Hypothesis9. Appreciation of tree cover and its associated ecosystem services varies with gender, wealth, cultural backgrounds, ecological knowledge and exposure to extreme events, leading to

Tools:

Socio-economic household survey have been conducted in Indonesia, Philippines, and Vietnam, and TOR for gender specialist to support the refinement of Gender and Livelihood FGD guidelines of CaSAVA is ready.

Publications

- Villamor GB, van Noordwijk M, Djanibekov U, Chiong-Javier ME and Catacutan D. 2014. Gender differences in land-use decisions: shaping multifunctional landscapes?. In: Mbow C, Neufeldt H, Minang PA, Luedeling E and Kowero G,(eds).

<p>diversity of opinion and preferences for status quo and possible changes in tree cover ('diversity of stakes' hypothesis; includes gender specificity)</p>	<p>Current Opinion in Environmental Sustainability. 6. : P. 128-133. http://www.worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=JA0511-14</p> <p>- Katel ON, Pradhan S and Schmidt-Vogt D. 2014. A survey of livestock losses caused by Asiatic wild dogs, leopards and tigers, and of the impact of predation on the livelihood of farmers in Bhutan. Wildlife Research. 41(4): 300-310. www.publish.csiro.au/journals/wr</p>
<p>a) Governance mechanisms affecting land and natural resource planning processes are gender inclusive;</p> <p>b) Toolbox and guidelines on simple ways to assess local impact of changes</p>	<p>Publications:</p> <p>Colfer C. J. P., Alcorn, J.B., Russell, D. 2014. Swidden and fallows: reflections on the global and local values of 'Slash and Burn'. In: Malcolm F. Cairns Shifting cultivation and environmental change: indigenous people, agriculture and forest conservation. Routledge , London, UK .</p> <p>Colfer C. J. P., Minarchek, R.D., Cairns, M.F., Aier, A., Doolittle, A., Mashman, V., Odame, H.H., Roberts, M., Robinson, K., van Esterik, P. 2014. Gender analysis and indigenous fallow management In: Malcolm F. Cairns Shifting cultivation and environmental change: indigenous people, agriculture and forest conservation. Routledge , London, UK.</p> <p>Colfer et al. ""On the Balance of Power in Household Decision-Making: Encouraging News on Gender in Southern Sulawesi"</p> <p>Colfer et al. 2014. Preparing the Ground for Better Landscape Governance: Gendered Realities in Southern Sulawesi. Forests Trees and Livelihoods 24: 1-25</p>
<p>Output 6.3.2.5: Tested tools and governance mechanisms for adaptive landscape management of ecology-economics tradeoffs including performance-based incentive systems</p>	
<p>Cross-site test of SL Hypothesis10. Feedback mechanisms from beneficiaries of (certain types of) tree cover to the drivers/agents can take multiple forms (rules, incentives, suasion, investment in value chains and technology) and needs to be evaluated in the interaction between instruments rather than as specifically</p>	<p>Reports:</p> <p>Eco-Certification reports of oil palm, rubber, coffee, cacao is completed and will be continued for journal manuscripts in 2015-2016</p> <p>Tools:</p> <p>Beta version of LUMENS software is produced and testing processes are currently on progress in total of 10 regencies across Jambi, South Sumatra, Papua and East Kalimantan. Series of training and capacity development process has been conducted to working groups at 10 regencies. Data collection on Regional Social Accounting Matrix (SAM) has been completed for 3 regencies in Jambi and 3 regencies in Papua</p>

targeted approaches ('no silver bullet' hypothesis)

Policy Brief:

- Dewi S, Johana F, Ekadinata A and Agung P. 2014. Perencanaan penggunaan lahan untuk strategi pembangunan rendah emisi (Land-use planning for low-emission development strategies/LUWES). Brief No. 38. Bogor, Indonesia. World Agroforestry Centre (ICRAF) Southeast Asia Regional Program. 6 p.
- Dewi S, Ekadinata A, Indiarto D, Nugraha A and van Noordwijk M. 2015. Negotiation support tools to enhance multifunctioning landscapes. In: Minang PA, van Noordwijk M, Freeman OE, Mbow C, de Leeuw J and Catacutan D,(eds). Climate-Smart Landscapes: Multifunctionality In Practice. . Nairobi, Kenya. World Agroforestry Centre (ICRAF). P. 243-255
- Dewi S, Ekadinata A, Indiarto D, Nugraha A and van Noordwijk M. 2014. Empowering local stakeholders for planning, Indonesia. In: Towards Productive Landscapes. . Wageningen, the Netherlands. Tropenbos International, Wageningen, the Netherlands. P. 7 (ETFRN NEWS Edition 56) (<http://www.etfrn.org/publications/towards+productive+landscapes> and <http://www.etfrn.org/file.php/290/3.2dewi-ekadinata-indiar-to-nugraha-noordwijk.pdf>)
- Alemagi, D., Duguma, L.A., Minang, P.A, Feudjio, M., Tchoundjeu, Z., 2014. Intensification of Cocoa Agroforestry systems as a REDD+ strategy in Cameroon: Hurdles, Motivations, and Challenges. International Journal of Agricultural Sustainability, In press. (<http://dx.doi.org/10.1080/14735903.2014.940705>)
- Alemagi, D., Minang, P., Feudjio, M., Duguma, L., 2014. REDD+ readiness process in Cameroon: An analysis of multi-stakeholder perspectives. Climate Policy, In press (<http://www.tandfonline.com/action/showAxaArticles?journalCode=tcpo20#.U8vWMkA3SK8>)
- Mbow C, van Noordwijk M, Luedeling E, Neufeldt H and Kowero G. 2014. Agroforestry solutions to address food security and climate change challenges in Africa. In: Mbow C, Neufeldt H, Minang PA, Luedeling E and Kowero G,(eds). Current Opinion in Environmental Sustainability. 6. : P. 61-67. (http://www.worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=JA0509-14)
- van Noordwijk M, Matthews RB, Agus F, Farmer J, Verchot L, Hergoualc'h K, Persch S, Tata HL, Lusiana B, Widayati A and Dewi S. 2014. Mud, muddle and models in the knowledge value-chain to action on tropical peatland conservation. Mitigation and Adaptation Strategies for Global Change. DOI: 10.1007/s11027-014-9576-1 (<http://link.springer.com/article/10.1007/s11027-014-9576-1>)
- van Noordwijk M, Namirembe S, Catacutan D, Williamson D and Gebrekirstos A. 2014. Pricing rainbow, green, blue and grey water: tree cover and geopolitics of climatic teleconnections. In: Mbow C, Neufeldt H, Minang PA, Luedeling E and Kowero G,(eds). Current Opinion in Environmental Sustainability. 6. : P. 41-47. URL (http://www.worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=JA0507-14)

	<ul style="list-style-type: none"> - Zomer RJ, Trabucco A, Wang M, Lang R, Huafang C, Metzger MJ, Smajgl A, Beckschafer P and Xu JC. 2014. Environmental stratification to model climate change impacts on biodiversity and rubber production in Xishuangbanna, Yunnan, China. <i>Biological Conservation</i>. 170. : P. 264-273. (http://www.worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=JA0561-14) - Xu JC, Grumbineb RE, Beckschaferca P. 2014. Landscape transformation through the use of ecological and socioeconomic indicators in Xishuangbanna, Southwest China, Mekong Region. <i>Ecological Indicators</i> 36 (2014): 749- 756. (http://dx.doi.org/10.1016/j.ecolind.2012.08.023) - Qi SS, Dai ZC, Miao SL, Zhai DL, Si CC, Huang P, Wang RP, Du DL. 2014. Light limitation and litter of an invasive clonal plant, <i>Wedelia trilobata</i>, inhibit its seedling recruitment. <i>Annals of Botany</i> 114 (2): 425-433. doi:10.1093/aob/mcu075 (http://aob.oxfordjournals.org/content/114/2/425.full) An assessment of the resilience provided by trees in the drylands of Eastern Africa) - De Leeuw, J., Njenga, M., Wagner, B. and Iiyama, M., 2014. Treesilience. An assessment of the resilience provided by trees in the drylands of Eastern Africa. <i>World Agroforestry Centre (ICRAF), Nairobi</i>, 166 pp. (http://www.worldagroforestry.org/downloads/publications/PDFs/B17611.PDF) - Carsten H. Richter, Jianchu Xu. Opportunities and Challenges of the Ecosystem Approach (accepted by Futures)
<p>a) Understanding the modes of and conditions for upscaling PES;</p> <p>b) Collaborative assessment and analysis of land tenure arrangements for landuse planning</p>	<p>Publications:</p> <p>Khalumba, M., T. Wunscher, S. Wunder, M. Budenbender, and K. Holm-Muller. 2014**. Combining auctions and performance-based payments in a forest enrichment field trial in Western Kenya. <i>Conservation Biology</i> 28 (3):861-866</p> <p>Fripp, E. 2014. <i>Payments for Ecosystem Services (PES): A Practical Guide to Assessing the Feasibility of PES Projects</i>. Bogor, Indonesia: CIFOR. In press.</p> <ul style="list-style-type: none"> - Durey & Mwangi. 2014. Land use planning in the Moluccas: what of tenure security? Working Paper 143, CIFOR, Bogor, Indonesia - Country reports for Laos, Thailand, Vietnam and Cambodia completed. Synthesis of lessons learned currently in press. Workshop held in November 2014 in Hanoi.
<p>Cross-site test of SL Hypothesis10. Feedback mechanisms from beneficiaries of (certain types of) tree cover to</p>	<p>The proposal to support a negotiation table for the science, development and education sectors linked to rural development was readily accepted by various relevant stakeholders in Nicaragua. Other organizations (such as CIAT-Humidtropics) have similar initiatives and we have all agreed to cooperate and pool resources to increase impact of this Table. A symposium-workshop to articulate science-development-education on rural development in Nicaragua will take place end of Septembere 2014 in</p>

<p>the drivers/agents can take multiple forms (rules, incentives, suasion, investment in value chains and technology) and needs to be evaluated in the interaction between instruments rather than as specifically targeted approaches ('no silver bullet' hypothesis)</p>	<p>Managua. Agreement with MAPNoruega, a major CATIE R&D project operating in the NHSL, to support the local platform of GESCOM in Nicacentral, concerted the support and implement of territorial Nicacentral research agenda. Meeting with main scientific stakeholders in Nicaragua has been done, and agreement to start a national platform in September has been conducted.</p>
<p>Output 6.3.2.6: Policies for the agriculture-forestry interface and strategies for sustaining food security, ecological functionality and rural development in multi-use landscape mosaics</p>	
<p>Global Comparative study on Swiddens in Poverty Alleviation, Climate and Environmental Services</p>	<p>Smallholder deforestation, agroforestry and reforestation - combined analysis of the new forest code, agricultural and land policy that influence forest conversion processes at the forest frontier. Article on Notions of Justice in Payment for Ecosystem Service: insight from Sloping Land Conversion Program in Yunnan is in progress.</p> <p>Policy Brief:</p> <p>Tanui, J. Mesi, W. Gacho, L. Bwire, D. Kimaiyo, J. Otiende, V. Bourne, M. Mowo, J. 2014 Strategies for effective capacity building of grassroots communities ICRAF Policy brief no. 21 Nairobi, Kenya World Agroforestry Center (ICRAF) 4p 2014131 (http://www.worldagroforestry.org/downloads/publications/PDFs/BR14131.PDF)</p> <p>Publications:</p> <ul style="list-style-type: none"> - Tanui, J. Groeneveld, R.A. Klomp, J. Mowo, J.G. van Ierland, E.C. 2014 Climate change and investments in sustainable land management: a commentary on the role of various income sources in the smallholder farming systems of western Kenya Harvard College Review of Environment and Society Spring 2014 p.15-16 2014107 (http://www.hcs.harvard.edu/~res/2014/05/climate-change-and-investments-in-sustainable-land-management/) - Tukahirwa, J.M.B Mowo, J. Tanui, J. Kamugisha, R. Masuki, K. 2013 Scaling sustainable land management innovations: the African highland initiative devolution model African Crop Science Society 21(3) p705-722 2013272 (http://www.ajol.info/index.php/acsj/article/view/98442)
<p>Linking food security and migration; and tropical landscapes with global policy forum</p>	<p>Field work and report has been completed.</p> <p>Publication:</p>

		Babigumira et al. 2014. Forest clearing in rural livelihoods: household level global comparative evidence. World Development. http://www.sciencedirect.com/science/article/pii/S0305750X14000680
Cluster Activities 6.3.3: Actively learning landscapes where innovative response and policy options are being tested		
Output 6.3.3.1: Network of 'active learning landscapes' on RES/PES mechanisms maintained and enhanced		
Learning landscape on PES scheme and commodity study		<p>Database eco-certification: draft of case studies and commodity database under the learning and sentinel site networks for understanding the problem cycles of commodity management and its certification process (timber, cocoa, coffee, rubber, and palm oil) report are completed.</p> <p>Report:</p> <p>Active learning on fair and effective RES scheme through applying auction method: FGD, training to NGO, develop criteria for group selection, individual auctions, Report from Rekonvasi Bhumi.</p>
Output 6.3.3.2: Synthesis from action research sites, identifying principles, methods and processes for advancing conservation, use rights and livelihood values		
Socio-economic considerations for land use planning and review of 'alternative livelihoods' projects		<p>Publications:</p> <ul style="list-style-type: none"> - Yuliani et al. Problem-solving vs appreciative inquiry approaches in community-based conservation. Forest, Trees and Livelihoods. In press in 2014. - Roe et al. 2014. Are alternative livelihood projects effective at reducing local threats to specified elements of biodiversity and/or improving or maintaining the conservation status of those elements? A systematic review protocol. Environmental Evidence. 3: 6. http://www.environmentalevidencejournal.org/content/pdf/2047-2382-3-6.pdf
Base line of governance in model forests initiatives, using the standard, previously developed from CATIE research and validated by the MF stakeholders, established.		Standard has been validated for forest models, Terms of reference for implementation in Reventazon has been written.
Output 6.3.3.3: Identification of improved modalities and approaches to effectively support conservation in forest landscape mosaics		

Strategies and permanent systems of governance effectiveness monitoring, evaluation and improvement in Model Forest territories, based on base line analysis, designed.		Analisis of differents types of governance including monitoring and evaluation has been conducted in some model forest. Journal Article is in Progress
Analysis of requirements for building functional landscapes and institutions in dry forests and woodlands		Balinga et al.[in review] Institutionalizing participatory natural resource management in the Republic of Guinea's Fouta Djallon Plateau. International Forestry Review.
Output 6.3.3.4: Participatory models for reserve management: resource use rights, threats to targeted species, guidelines for monitoring		
Guidelines and best practice for linking great apes, conservation and livelihoods: south-south collaboration and learning on oil palm expansion		Redford, K., D. Roe & T. Sunderland. 2013. Best practice in linking conservation and poverty alleviation: the case of great apes. IIED Discussion Paper No. 11. http://povertyandconservation.info/sites/default/files/Best%20practice%20apes%20and%20poverty_Final.pdf
Participatory management model of protected areas and conservation guidelines of some threatened species		The journal articles have been completed and are now under review
Output 6.3.3.5: Impact studies testing assumptions of the CRP6,3 theory of change and output-outcome-impact pathways		
Impact studies testing assumptions of the CRP6.3 theory of change and output-outcome-impact pathways		A monitoring and evaluation system for Climate Smart territory has been disegend and it is ruuning in both key territoris (Trifino and Nicacentral). Journal article is in progress.
Cluster Activities 6.3.4: Integration into relevant policies of the contribution FT&A make at landscape level to food security across forest transition stages		
Output 6.3.4.1: Engaging partners and policy makers for integration of environment, agriculture and nutrition		

Capacity of stakeholders participatory development actions, including agreements on rights and tenure, NRM instruments and policies improved	<p>Event:</p> <p>Many conferences etc. attended (First Global Conference on Food Security; Conference on Forests, Trees and Nutrition, regional workshop on food security southern Africa; A4NH workshops in Washington, Forests Asia etc).</p> <ul style="list-style-type: none"> - CIFOR has made great inroads with food security and nutrition agenda, and is often invited to external meetings and other fora. <p>Publications:</p> <p>Cosiaux, A. 2014. Local uses of tree species and contribution of mixed tree gardens to livelihoods in Saleman : Village near Manusela National Park, Seram Island, Maluku (Indonesia). CIFOR Working Paper No. 137. Bogor, Center for International Forestry Research (CIFOR)</p> <ul style="list-style-type: none"> - Ducos, L., Laumonier, Y., Purwanto, Y. 2014. Importance of the traditional land use and land tenure systems of Waraka, Seram Island, Maluku. Working Paper XXX. Bogor, Indonesia: CIFOR. In press.
Characterizing and measuring Climate Smart Territories in Nicaragua	Characterizing of Penas Blancas in Nicaragua SLNH has been conducted as pilot climate smart territory, (GIS-Map)
Output 6.3.4.2: Gaps in understanding the role of forest-based ecosystem services for agriculture identified	
Systematic review protocol published	Foli et al. 2014. Exploring the dynamics between forests, ecosystem services and food production: A systematic review protocol. Environmental Evidence. http://www.environmentalevidencejournal.org/content/pdf/2047-2382-3-15.pdf
Output 6.3.4.3: Impacts on smallholder agriculture and environment of agri-business expansion evaluated	
Review paper of oil palm expansion in Cameroon	Working paper in press
Output 6.3.4.4: Investigating relationship between tree cover and diets and nutrition	
Output 6.3.4.5: Assessment of landscape configurations functional for integrating environmental and agricultural benefits	
Output 6.3.4.6: Understanding broader social context (gender) impact on forests and food security	

Paper on gender, food security and nutrition	<p>Publications:</p> <ul style="list-style-type: none"> - Shattuck and Asher [in review] Forests, food security, and nutrition: What's Gender got to do with it? Food security
Quantifying and assessing the contribution of forest and agroforestry systems in family farming to improve food security at the household level.	<p>A thesis to quantifying and assessing the contribution of forest and agroforestry systems has finished in Nicentral. Master degree thesis can be found in: http://biblioteca.catie.ac.cr/index.php?option=com_wrapper&Itemid=72</p>
Flagship Project: Climate change adaptation and mitigation	
Cluster Activities 6.4.1: Harnessing forest, trees and agroforestry for climate change mitigation	
Output 6.4.1.1: Informing international and national policy processes on mitigation	
Improved understanding of barriers and constraints for effective, efficient, and equitable REDD+ policy design and implementation at subnational, national and international levels	<p>The following papers are published:</p> <ul style="list-style-type: none"> - Luttrell C, Resosudarmo IAP, Muharrom E, Brockhaus M and Seymour F. 2014. The political context of REDD+ in Indonesia: Constituencies for change. <i>Environmental Science & Policy</i> 35:67- 75. - Korhonen-Kurki K, Sehring J, Brockhaus M and Di Gregorio M. 2014. Enabling factors for establishing REDD+ in a context of weak governance. <i>Climate Policy</i> 14(2):167-186. <p>Published the following papers in <i>Ecology & Society</i> as part of a special issue "REDD+ national policy networks: information flows, influence and coalitions for change":</p> <ul style="list-style-type: none"> - Moeliono M, Gallemore C, Santoso L, Brockhaus M and Di Gregorio M. 2014. Information Networks and Power: Confronting the 'wicked problem' of REDD+ in Indonesia. <i>Ecology and Society</i> 19(2):9. - Pham TT, Di Gregorio M, Carmenta R, Brockhaus M and Le D. 2014. The REDD+ Policy arena in Vietnam: participation of policy actors. <i>Ecology and Society</i> 19(2):22. - Gallemore C, Prasti R and Moeliono M. 2014. Discursive Barriers and Cross-scale Forest Governance in Central Kalimantan, Indonesia. <i>Ecology and Society</i> 19(2):18. - Rantala S and Di Gregorio M. 2014. Multistakeholder environmental governance in action: REDD+ discourse coalitions in Tanzania. <i>Ecology and Society</i> 19(2):66.

	<p>- Babon A, McIntyre D, Gallemore C, Gowae G, Carmenta R, Di Gregorio M and Brockhaus M. 2014. Advocacy coalitions, REDD+, and forest governance in Papua New Guinea: How likely is transformational change? Ecology and Society 19(3):16.</p> <p>- Brockhaus M and Di Gregorio M. 2014. National REDD+ policy networks: From cooperation to conflict. Ecology and Society 19 (4): 14.</p> <p>Database and data set are developed and maintained. In addition, an introduction for the mentioned special issues was also published (Brockhaus, M., Di Gregorio, M. and R. Carmenta, 2014).</p> <p>All papers can be found in: http://www.ecologyandsociety.org/issues/view.php?sf=97.</p> <p>Three blog stories have been prepared in cooperation with ICG to promote the special issue.</p>
<p>Capacity support and training for readiness at national and subnational level</p>	<p>Cameroon, Indonesia and Peru have all continued to work with their respective Ministry of Environments backstopping REDD+ and NAMA processes.</p>
<p>Analysis of the policy and institutional environment for private sector involvement in sustainable landscapes</p>	<p>Bernard, F. Minang, P.A. Adkins, B. Freund, J.T. 2014 REDD+ projects and national-level readiness processes: a case study from Kenya. Climate Policy 14 (6) 788-800 [http://bit.ly/1jrGxhI]</p> <p>Namirembe S and Bernard F. Private sector engagement in landscape based approaches – lessons from cases in East Africa in Climate-Smart Landscapes: Multifunctionality in Practice. Edited by Peter A. Minang, Meine van Noordwijk, Olivia E. Freeman, Cheikh Mbow, Jan de Leeuw, Delia Catacutan*</p> <p>The Munden Project has been working on looking at the potential of private sector investment in the Cameroon, Indonesia, and Vietnam landscapes.</p> <p>Project activities and accomplishments in 2014 include:</p> <ol style="list-style-type: none"> (1) Building financial models for each of the countries, identifying possible areas to improve value chains and to attract private sector investment in each of the respective landscapes. (2) Surveying the investment environment and financial infrastructure in each of the countries to identify potential sustainable land use investment instruments/finance related to each of the countries' landscapes and specific incentives. This project activity is still ongoing, but nearing finalization.

	<p>(3) Work has started on developing a performance reporting and verification system to evaluate sustainable land use performance to help guide good investment decisions.</p>
<p>Science-policy dialogues in side-events at international sessions such as Business for Environment, UNFCCC or other COP and SBSTA; national policy events on landscape approach</p>	<p>Launch of the book Climate-Smart Landscapes: Multifunctionality in Practice + side event on REDD+ Readiness at the Global Landscapes Forum at the UNFCCC COP 20.</p> <p>ASB's work over the past 20 years highlighted at both the World Congress on Agroforestry, Delhi in February and ICRAF's Science Week, Nairobi in September.</p> <p>A scientific side session was held at IUFRO, Salt Lake City in October titled: From understanding drivers to gaining leverage at the tropical forest margins: 20 years of ASB Partnership. This side session showcased significant findings and H12 concepts developed under the REALU and SECURED projects</p> <p>Presentation on the "Low emission development strategies in Africa: A landscape perspective" was made at World Bank Workshop on Low Emission Development in Africa held in Addis Ababa, Ethiopia in August 2014.</p>
<p>Incentive scheme designs that could promote landscape approaches developed</p>	<p>Cameroon, Indonesia, Peru and Vietnam have continued to develop their respective incentives. Progress in 2014 includes:</p> <ol style="list-style-type: none"> (1) Analysis of options for emissions reductions under sustainable forest management, further development of a PDD for the Ayos council based on the LUWES framework, and a follow-up training on tree domestication and improvement in Cameroon (2) Further work on getting the approval for the community-based forest permit (HKm) including the completion of participatory mapping, engaging in capacity development activities within the peat agroforestry areas (including a hosted workshop on jelutong), and training on cultivation and tapping techniques for jelutong in Indonesia (3) Further development of the cooperative tree nursery and development of a decision matrix for smallholders to become engaged in certified emission reduction activities in Peru; (4) Completion of agroforestry models and mapping and valuing trees outside of the forest in Vietnam. <p>A Scoping Report on the potential of including agroforestry in REDD+ focusing on the woodfuel dynamics in the Kinshasa, DRC landscape was completed. Based upon the findings of the report, agroforestry scenarios are being developed to assess the potential contribution of these systems for producing woodfuel and carbon sequestration within a REDD+ framework. Soil carbon analyses are also being conducted by INERA in different agroforestry systems.</p> <p>Scenario development for different agroforestry systems in both Cameroon (cocoa agroforestry) and the DRC (woodfuel, timber and fruit agroforestry) are in progress comparing production, economic, carbon sequestration, and in the case of Cameroon, biodiversity functions</p>

Evidence on how much development intervention can contribute to carbon sequestration at farm/landscape levels	On schedule for publication. Student working on drafting papers for journal submission based on the primary data collected within DGIS site.
Implementation of and capacity support and training for deforestation and vegetation monitoring system for the Peruvian Government	Officially Terra-I is within Geoserver (http://geoservidor.minam.gob.pe/intro/); this site directs visitors to Terra-I site
Low emissions development strategies for 2 Latin American countries	<p>The report and policy note for Colombia is online and a paper was submitted to World Development. A draft of the paper for Panama has been developed and will be submitted to a special issue on landscape approaches of a internationally refereed journal.</p> <p>http://www.ifpri.org/blog/collaboration-helps-colombia-adapt-climate-change</p> <p>http://ebrary.ifpri.org/cdm/singleitem/collection/p15738coll2/id/128679/rec/6</p> <p>De Pinto, Alessandro; Haruna, Akiko; Creamer, Bernardo; Hyman, Glenn; Li, Man; Kwon, Ho-Young; Valencia Garcia, Jhon Brayan; Castro Coca, Alejandro; Tapasco, Jeimar; Jesus David, Martinez; Jesus David, Hoyos. 2014. Low Emission Development Strategies for Agriculture and Other Land Uses: The Case of Colombia. Technical Report. CIAT. CCAFS. USAID. IFPRI</p>
Improved knowledge sharing across and analytical capacity building of national and subnational project partners	<p>(1) April 2014 workshop and training with project partners in Ouagadougou, Burkina Faso</p> <p>(2) Sehring J, Korhonen-Kurki K and Brockhaus M. 2013. Qualitative Comparative Analysis (QCA): An application to compare national REDD+ policy processes. Working Paper 121. Bogor, Indonesia: CIFOR.</p> <p>(3) Project document converted into working paper: Di Gregorio, M., Brockhaus, M., Cronin, T., Muharrom, E., Mardiah, S., & Santoso, L. (2014). SRI PAPERS. University of Leeds and CIFOR.</p>
Improved understanding of opportunities and barriers to implementation of effective, efficient and equitable REDD+ benefit sharing mechanisms	<p>Policy briefs:</p> <ul style="list-style-type: none"> - Lessons for Benefit Sharing from PES (http://www.cifor.org/publications/pdf_files/infobrief/4488-infobrief.pdf) - Conditional Cash Transfers (http://www.cifor.org/publications/pdf_files/infobrief/5197-infobrief.pdf)

	<p>- Lessons from local environmental funds with indigenous peoples in Brazil (http://www.cifor.org/publications/pdf_files/infobrief/5198-infobrief.pdf).</p> <p>Project documents: series of powerpoint presentations of research results given at a panel discussion in ISEE 2014; side event EU Pavilion during COP 20.</p> <p>Journal articles:</p> <p>- Pham TT, Moeliono M, Brockhaus M, Le DN, Wong GY and Le TM. 2014. Local Preferences and Strategies for Effective, Efficient, and Equitable Distribution of PES Revenues in Vietnam: Lessons for REDD+. <i>Human Ecology</i> 42(6): 885-899. DOI: 10.1007/s10745-014-9703-3</p> <p>- Luttrell C, Loft L, Gebara FM, Kweka D, Brockhaus M, Angelsen A and Sunderlin WD. 2013. Who Should Benefit from REDD+? Rationales and Realities. <i>Ecology and Society</i> 18(4): 52.</p>
Improved understanding of national-local and local-national actor dynamics in the context of REDD+ projects	Journal article will be submitted to <i>International Journal of the Commons</i> by year end.
Consolidated knowledge on the distribution of powers and responsibilities between levels of government and between sectors	<p>One legal study on the distribution of land use powers in Peru in press;</p> <p>One brief on land use decision making in Indonesia (http://www.cifor.org/publications/pdf_files/infobrief/5200-infobrief.pdf);</p> <p>One brief on benefit sharing and land use initiatives in Peru (http://www.cifor.org/publications/pdf_files/infobrief/5201-infobrief.pdf).</p>
Improved understanding of the governance of MRV	<p>Journal paper submitted:</p> <p>De Sassi C, Joseph S, Bos A, Duchelle A, Ravikumar A, Herold M. Towards integrated monitoring of REDD+. Submitted to <i>Current Opinion in Environmental Sustainability</i>.</p>

Better information on implementation of FLEGT across levels	Lessons from VPAs for REDD+ benefit sharing by Cecilia Luttrell, Emily Fripp and Liz Betser. CIFOR Infobrief. 2015 in press.
Output 6.4.1.2: Informing subnational and local initiatives on mitigation	
Assessment of challenges and options for effectiveness, efficiency, equity at REDD+ sub-national initiative sites	<p>Sunderlin William D., Andini Desita Ekaputri, Erin O. Sills, Amy E. Duchelle, Demetrius Kweka , Rachael Diprose, Nike Doggart, Steve Ball, Rebeca Lima, Adrian Enright, JorgeTorres, Herlina Hartanto, and AngelicaToniolo. 2014. The challenge of establishing REDD+ on the ground: Insights from 23 subnational initiatives in six countries. Occasional Paper 104. Bogor, Indonesia: Center for International Forestry Research. http://www.cifor.org/publications/pdf_files/occpapers/op-104.pdf</p> <p>In addition, one ISI journal article has been submitted to Environmental Conservation on the following manuscript: Sunderlin, William D., Erin O. Sills, Amy E. Duchelle, Andini Desita Ekaputri, Demetrius Kweka, Maria Angelica Toniolo, Steve Ball, Nike Doggart, Christy Desta Pratama, Jorge Torres Padilla, Adrian Enright, and Robert Mike Otsyina. REDD+ at a critical juncture: The Limits of polycentric climate governance.</p>
Increased awareness among policy makers and planners about the opportunities and challenges of landscape approaches to emission reduction	<p>2 Policy Briefs</p> <p>Participation in UNFCCC side-events and other interational meetings</p> <p>3 Books: The ASB policy brief book Partnership in the Tropical Forest Margins - A 20- Year Journey in Search of Alternatives to Slash-and-Burn; Climate-smart landscapes: multifunctionality in practice; Negotiation-support toolkit for learning landscapes</p>
Improve the conservation and sustainable use of forest and woodland resources under likely climate change	<p>Three survey reports produced including perceived governance, environment and livelihoods outcomes of co-management from an ex-post evaluation of LAMIL project in Guinea.</p> <p>Review the Chantier d'Aménagement Forestier (CAF) model in Burkina Faso still under way</p> <p>Report of country profile for Burkina Faso on REDD+ and synergies between adaptation and mitigation (under review)</p>
Extending vegetation and deforestation monitoring system to pan tropics with coverage for one Sentinel Landscape in Africa and one Sentinel Landscape in Asia.	<p>Reports for this work will be completed by the end of the year.</p> <p>http://www.ciatnews.cgiar.org/2014/12/10/cutting-down-on-amazon-deforestation-watch-think-and-act/</p> <p>http://www.wri.org/blog/2014/12/monitoring-forest-change-latin-america-terra-i</p> <p>http://dapa.ciat.cgiar.org/new-remote-sensing-developments-for-forest-monitoring-at-global-landscapes-forum/</p>

		<p>Reymondin, L; Coca, A; Arango, D; Jarvis, A; Navarrete, C; Suding, P; Watkins, G. 2014. Potential Impact of Road Projects on Habitat Loss and Greenhouse Gas Emissions in Guyana from 2012 to 2022. Published technical note by Inter-American Development Bank (IDB). 45p.</p> <p>http://publications.iadb.org/handle/11319/6369?scope=123456789/11&thumbnail=false&rpp=5&page=1&group_by=none&etal=0&filtertype_0=author&filter_0=Reymondin%2C+Louis&filter_relational_operator_0=equals</p>
Evaluation of strategies to reduce emissions from land-use change for 2 subnational regions in Latin America		<p>Policy brief and data set completed; internal report for Colombia completed; draft report for Peru completed.</p> <p>http://www.asb.cgiar.org/policy-brief/planning-low-emissions-development-ucayali-peru</p>
Improved understanding of 3E in REDD+ demonstration activities		<p>Data set on before-after/control intervention at 22 sites, 150 villages, 4,200 households. We are nearing completion of data collection. Data set on cost effectiveness of REDD+ at six sites. We have completed the work at four of six sites.</p>
Improved understanding of poverty reduction, governance co-benefits in REDD+ demonstration activities		<p>Data set on before-after/control intervention at 22 sites, 150 villages, 4,200 households. We are nearing completion of data collection.</p>
Adoption of low carbon emission policies at landscape and national scales		<p>Peru: carbon data base completed (590 carbon data sets); land-use scenarios in two field sites completed - Indonesia - field campaign and analysis planned for Sept.-Dec. 2014.</p>
Ecosystem services, nutrition and food security dynamics in the lowland neotropical forest margins		<p>This is the ASSETS project, a bilateral project funded by DFID in Ucayali, Peruvian Amazon. Will be delivered by the end of the year.</p>
Improved capacity to monitor governance at the sub-national level		<p>Ravikumar A, Gonzales Tovar J, Kowler L, and Larson A. 2014. Workshop facilitation guide: Building Future Scenarios Governance, Land Use, and Carbon Management at the Landscape Scale. Center for International Forestry Research, Indonesia and Viikki Tropical Resources Institute, University of Helsinki, Finland. [http://www.cifor.org/publications/pdf_files/Books/BRavikumar1401.pdf]</p> <p>Four workshops completed (2 Peru and 2 Indonesia); Workshop reports completed for all workshops;</p>

<p>Improved understanding of issues related to multilevel governance and benefit sharing across regions, with sub-national actors aware of the multilevel governance issues at the landscape level in their and other regions</p>	<p>Three sub-national multilevel governance studies completed (internal project documents).</p>
<p>Output 6.4.1.3: Best-practice methods for mitigation</p>	
<p>Compilation of existing methods and tools and development of new guidelines that promote landscape approaches for emission reduction and livelihood improvement</p>	<p>3 books published</p> <p>(1) On Climate Smart Landscapes: http://asb.cgiar.org/climate-smart-landscapes/</p> <p>(2) A compendium and summary of ASB's work over the past 20 years: http://asb.cgiar.org/book/partnership-tropical-forest-margins-20-year-journey-search-alternatives-slash-and-burn</p> <p>(3) A compilation of tools for negotiation support in learning landscapes: http://asb.cgiar.org/book/negotiation-support-toolkit-learning-landscapes</p> <p>Work initiated in Cameroon, Peru and Indonesia.</p>
<p>Papers, reports and policy briefs on application of landscape approaches and associated frameworks, methods and tools</p>	<p>Creation of a comprehensive global dataset and initiation of the modelling process completed as part of the development of a new approach for understanding drivers of deforestation through pathway analysis. This work is being complemented through a drivers network analysis in Indonesia. Building on the pathway analysis work an analytical framework for identifying levers of change is also being developed.</p> <p>In 2014, about 46 publications recorded so far:</p> <p>About 29 journal articles;</p> <p>3 books;</p> <p>6 book chapters;</p> <p>1 brochure;</p>

	<p>1 feature policy article;</p> <p>2 policy briefs; and</p> <p>6 working papers</p> <p>2 Special issues on REDD+</p> <p>A special issue of ‘mitigation and adaptation strategies for climate change’ (part open access) - 17 articles</p> <p>http://link.springer.com/journal/11027/19/6/page/1</p> <p>A special issue of ‘Climate Policy’ (open access) - 7 articles</p> <p>http://www.tandfonline.com/toc/tcpo20/14/6#.VKKZZsADA</p>
Guide on approaches for integrating and nesting policies and strategies across scales	Completed background analysis of scale implications on nesting of emission reduction variables, with ongoing exploration of application in Indonesia.
Strategies and institutional frameworks to facilitate the nesting approaches	<p>Cameroon has continued their work to develop a harmonized land cover legend including a stakeholder meeting held in July 2014;</p> <p>Indonesia has completed a background analysis of scale implications on nesting of emission reduction variables with pilot application ongoing</p> <p>Peru has worked on a Territorial NAMAs framework in collaboration with the Rainforest Alliance, Ecofys and GIZ; and</p> <p>Vietnam is in the process of completing a survey on REDD+ projects in Vietnam as well as completed the design of a REDD+ risk assessment tool which is currently being piloted</p>
At least one case study on nesting approaches at provincial level in Indonesia	Completed background analysis of scale implications on nesting of emission reduction variables, with ongoing exploration of application in Indonesia.
Assess institutional capacity to understand why capacity remains low among technical services in case study countries, and determine how capacity-	Milestone completed for 2014; deliverable will be early 2015 [pending to FAO FRA publication]. This is global study, not in specific country.

building efforts can be made more effective	
Continue work on the "Stepwise approach" for setting reference emissions levels (REs) (developed under Phase I of the project), particularly Steps 2 and 3 for setting RL/REs at different scales and understand the links between national and sub-national REs	Guideline already published in 2012. Database maintained.
Comparative analysis of references levels and methods for developing them	Milestone completed for 2014; Database maintained.
Develop driver-specific recommendations for an integrated approach to MRV systems and work on monitoring concepts for various drivers of deforestation and forest degradation.	Milestone completed for 2014; paper was submitted, but it requires major revisions. Will be submitted in 2015.
Assessment of MRV capacity of non-Annex 1 countries	Database maintained.
Improved methods for setting reference emissions levels	Indonesia has submitted the REL.

Improved understanding of multilevel governance institutions at the sub-national level	Future scenarios workshop facilitation and methodology published online; Multilevel governance theory and research methods package in press; Interactive infographic on multilevel governance published online.
Cluster Activities 6.4.2: Enhancing climate change adaptation through forests, trees and agroforestry	
Output 6.4.2.1: Informing international and national policy processes on adaptation	
Analyses of the woodfuel value chain in Africa (systematic review)	COSUST paper published - http://www.sciencedirect.com/science/article/pii/S1877343513001966 ; FTA woodfuel review - systematic review protocol being developed.
Baseline characterization of farm households in Ucayali	Update report and short description of activities conducted. Data Base completed. Update report and short description of activities conducted.
Assess biophysical vulnerability under future CC scenarios of a minimum of 3 crops (two commodities + one for local consumption) and associated trees species managed in smallholder systems	GeoDB for Maps of CC scenarios on at least one identified crop and one tree species; Short Narrative.
Local Ecological Knowledge (LEK) on management for resilience of Farming Systems and Trees (or shrubs/grass in case of Silvopastoral systems- here called Agroforestry Species) perceptions of CC change, shocks /hazards	Scoping study report and database. Agro-Ecological-Knowledge tool (AKT), local knowledge data base for at least one community documented, and list of species and practices (per gender if the case) in Spanish, available .
Inform national (Kenyan and Ugandan) processes under way	Abwoli Y Banana, Patrick Byakagaba, Aaron JM Russell, Daniel Waiswa and Allan Bomuhangi. 2014. A review of Uganda's national policies relevant to climate change adaptation and mitigation Insights from Mount Elgon. Working Paper 157. CIFOR, Bogor. http://www.cifor.org/publications/pdf_files/WPapers/WP157Russell.pdf

for development of climate change adaptation and mitigation strategies, policies and institutions	Paul O Ongugo, David Langat, Vincent O Oeba, James M Kimondo, Benjamin Owuor, Jane Njuguna, George Okwaro and Aaron JM Russell. 2014. A review of Kenya's national policies relevant to climate change adaptation and mitigation Insights from Mount Elgon. Working Paper 155. CIFOR, Bogor. http://www.cifor.org/publications/pdf_files/WPapers/WP155Russell.pdf
Output 6.4.2.2: Informing subnational and local initiatives on adaptation	
Develop an open-source and interactive modelling and mapping system based on niche modelling and climate analogues to predict future shifts of suitable cultivation zones for agroforestry tree species (including selected varieties of commercialized species) under different CC scenarios.	Models have been calibrated and projections for IPCC AR5 have been finalized. Results will be compared with suitability modeling based on rainfall and temperature ranges documented in ECOCROP, a new comparison introduced as point-based suitability modelling is strongly biased towards known presence locations.
Analysis of vulnerability with a multiple stressor perspective	The data analysis took more time than expected due to the complexity of data related to vulnerability analysis.
Output 6.4.2.3: Best-practice methods for adaptation	
Review and synthesize available information on local adaptive strategies and coping responses of small holder farmers in Southeast Asian watersheds	Two papers published in peer-reviewed journals: <ol style="list-style-type: none"> (1) Lasco, R D, RJP. Delfino, and and MLO Espaldon. 2014. Agroforestry systems: helping smallholders adapt to climate risks while mitigating climate change. WIREs Climate Change 2014. doi: 10.1002/wcc.301 (2) Lasco RD, RJP Delfino, DC Catacutan, ES Simelton, and DM Wilson. 2014. Climate risk adaptation by smallholder farmers: the roles of trees and agroforestry. Current Opinion in Environmental Sustainability 2014, 6:83-8.
Document and assess local adaptive strategies and coping responses of small holder farmers in target watersheds	Elisabeth Simelton. Trees and agroforestry for coping with extreme weather events - experiences from northern and central Viet Nam. PPT for the presentation of updates; including the maps of the HH data set in the Philippines

Assess the role of trees and agroforestry in enhancing the resilience of small holder farmers in SE Asian watersheds	Webblog (http://www.worldagroforestrycentre.org/newsroom/highlights/toolkit-training-climate-change-talks-farmers)
Reconstruct long term climate data during the past ca. 100 years by tree-ring analyses including the wood parameters ring width, maximum latewood wood density, and stable carbon and oxygen isotope variations in wood cellulose	According to the plan tree ring measurement from the sahel region in Burkina Faso is done. The next step will be data analysis and writing.
Determine which tree species are most suitable to cope with future climatic conditions	Gebre Kirstos et al 2014: Responses of <i>Dobera glabra</i> and eight co-occurring species to drought and salinity stress at a Savanna- scrub ecotone: implications in the face of climate change <i>Open Journal of Forestry</i> 4 (4) p327-337 2014223 http://bit.ly/1w04v06
Tree laboratory in Nairobi established- to develop capacity building of National research organizations and Universities to understand the impacts of climate variability on African species	The laboratory was established in 2013 and it was a huge success. http://www.worldagroforestry.org/research/climate_change/projects/dendrochronology-lab In 2014 Aster Gebre Kirstos recieved an Award
Analyse the adaptation of people to climate change in East Africa: Ecosystem services, risk reduction and human well-being	Report: Climate change impacts on ecosystems of Mt. Elgon (attached); two paper drafts submitted.
Develop an algorithm to support the development of a tool for remote sensing above-ground biomass and carbon assessment in complex landscapes, and implement a web version tool of the algorithm created.	Beta version tested using multispectral image data from several different satellite sensors.

<p>Synthesis of four years experiences on enhancing livelihoods and carbon finance through emission reduction and carbon sequestration activities in four ecologies of India</p>	<p>It has been completed and the report has been printed and distributed.</p>
<p>Analysis and synthesis of selected climate smart agricultural practices with focus on livestock and fodder systems in Rajasthan</p>	<p>The data has been analyzed and the report is being written. It will be completed before the year end. Completed; The report is being finalized for printing.</p>
<p>Tools and methods for assessing vulnerability and planning adaptation with local communities</p>	<p>CRiSTAL Forests [http://www.cifor.org/cristal-forests/]: A tool to assess vulnerability and plan adaptation finalised 5 tool and user manual and a webpage developed to host the tool:</p> <ul style="list-style-type: none"> - http://www.cifor.org/fileadmin/subsites/cristal-forests/doc/Testing_CRiSTAL-Forest_East_Africa.pdf - http://www.cifor.org/fileadmin/subsites/cristal-forests/doc/CRiSTAL-Forest_tool_West_Africa_Coping_adaptive.pdf - http://www.cifor.org/fileadmin/subsites/cristal-forests/doc/Testing_CRiSTAL-Forest_tool_West_Africa.pdf - http://www.cifor.org/fileadmin/subsites/cristal-forests/doc/CRiSTAL-Forest_test_West_Africa.pdf - http://www.cifor.org/fileadmin/subsites/cristal-forests/doc/CRiSTAL_Forests_User_Manual.pdf
<p>Analysis of relations between climate variability, fire and forest management</p>	<p>Gaveau, D.L.A. et al. Major atmospheric emissions from peat fires in Southeast Asia during non-drought years: evidence from the 2013 Sumatran fires. <i>Sci. Rep.</i> 4, 6112; DOI:10.1038/srep06112 (2014).</p> <p>Gaveau DLA, Sloan S, Molidena E, Yaen H, Sheil D, et al. (2014) Four Decades of Forest Persistence, Clearance and Logging on Borneo. <i>PLoS ONE</i> 9(7): e101654. doi:10.1371/journal.pone.0101654.</p> <p>“This second paper is a background paper mapping forty years of deforestation and logging on Borneo. The data are made available online at this URL: http://gislab.cifor.cgiar.org/wm/borneo/”</p>

Cluster Activities 6.4.3: Understanding the role of forests, trees and agroforestry in achieving synergies between climate change mitigation and adaptation	
Output 6.4.3.1: Informing international and national policy processes related to adaptation-mitigation synergies	
Designing framework for analyzing adaptation-mitigation linkages in policies	<p>Duguma, L. A., Wambugu, S. W., Minang, P. A. and van Noordwijk, M. (2014), A systematic analysis of enabling conditions for synergy between climate change mitigation and adaptation measures in developing countries. <i>Environmental Science & Policy</i>, Vol. 42, pp. 138-148.</p> <p>Duguma, L. A., Minang, P. A. and van Noordwijk, M. (2014), <i>Climate Change Mitigation and Adaptation in the Land Use Sector: From Complementarity to Synergy</i>. <i>Environmental Management</i>, pp. 1-13.</p>
Analysis of policy processes related to adaptation, mitigation and forests in the Congo Basin	<p>5 outputs:</p> <ol style="list-style-type: none"> 1) Felicien Kengoum, 2014. Politiques d'adaptation et d'attenuation en RDC Pistes pour des synergies 2) Tiani AM, Bele MY and Sonwa DJ (2014). "What are we talking about? The state of perceptions and knowledge on REDD+ and adaptation to climate change in Central Africa." <i>Climate and Development</i>(ahead-of-print): 1-12. 3) Somorin OA, Visseren-Hamakers IJ, Arts B, Sonwa DJ and Tiani A-M (2014). "REDD+ policy strategy in Cameroon: Actors, institutions and governance." <i>Environmental Science & Policy</i> 35(0): 87-97. 4) C. Pavageau, Louis Bernard 2014. Implementing REDD+ and adaptation in the Congo Basin. Review of projects and initiatives 5) Chia EL, Somorin OA, Sonwa DJ, Bele YM and Tiani MA (2014). "Forest-climate nexus: linking adaptation and mitigation in Cameroon's climate policy process." <i>Climate and Development</i> 7(1): 85-96. DOI: 10.1080/17565529.2014.918867.
Assess "locational"/site biophysical vulnerability or landscape level vulnerability (risks of fire spread, of flooding etc, defined by the location, also in relation to biophysical suitability and by trajectories of land use change, deforestation and land degradation)	Spatial database and short narrative

Develop the integration of climate change in national agroforestry policy in India		The policy document has been prepared, finalized and approved by the government. It is being applied now.
Devise adaptation and mitigation options to reduce vulnerability and enhance the adaptive capacity across WCA		<p>Data collected, analyzed and reported from the field upon a household surveys and focus group discussions (FGD) conducted in Burkina and Cote d'ivoire</p> <p>Questionnaires developed base on the climate change resilience indicators document available.</p>
Improved awareness on the opportunities and approaches to linking adaptation (A) and mitigation (M) in policies		Database of policy documents and actors completed.
Output 6.4.3.2: Informing subnational and local initiatives related to adaptation-mitigation synergies		
Analysis of livelihoods and governance structures in selected REDD+ and adaptation projects, particularly the role of forests in livelihoods and adaptation in Central Africa		<p>11 outputs in 2014:</p> <ol style="list-style-type: none"> 1) Gross-Camp ND, Few R and Martin A (2014). Environmental change, forests and rural communities in three African countries. DEV Working paper series. University of East Anglia. Norwich, United Kingdom. Working paper 47: 30. 2) Bele MY, Sonwa DJ and Tiani AM (2014). "Local Communities Vulnerability to Climate Change and Adaptation Strategies in Bukavu in DR Congo." The Journal of Environment & Development 23: 331. 3) Gross-Camp N, Few R and Martin A (2014). Forest Livelihoods and Responses to Environmental Change in the Congo Basin: a situational analysis. DEV Reports and policy papers. University of East Anglia. Norwich, United Kingdom. Policy Paper 11: 47. 4) Few R, Gross-Camp ND and Martin A (2014). Vulnerability, adaptation and mitigation in the forests of the Congo Basin: a critical investigation. DEV Working paper series. University of East Anglia. Norwich, United Kingdom. Working paper 48: 30. 5) Sindemo G and Sufo-Kankeu R (2014). Foret communautaire et agroforesterie pour le stockage du carbone et l'adaptation au changement climatique dans la TNS (CAPV_2C). Bogor, Indonesia, Center for International Forestry Research (CIFOR): 4. (French) 6) Muley-Byayuwa A and Cheteu LB (2014). Agroforesterie et gestion durable des ressources naturelles pour l'attenuation et l'adaptation dans l'hinterland du Parc National de Kahuzi- Biega en RDC. Bogor, Indonesia, Center for International Forestry Research (CIFOR): 4. (French)

	<p>7) Obiang-Mbomio DO and Perez-Teran AS (2014). Community forest and agroforestry for climate change adaptation and mitigation in the Monte Alen landscape. Bogor, Indonesia, Center for International Forestry Research (CIFOR): 4p. (English)</p> <p>8) Obiang-Mbomio D and Perez-Teran AS (2014). Agroforesteria y bosques comunales para la adaptacion al cambio climatico y su mitigacion en el paisaje del Monte Alen. Bogor, Indonesia, Center for International Forestry Research (CIFOR): 4p. (Spanish)</p> <p>9) Mukakamari D and Cheteu LB (2014). Foresterie a base communautaire pour l'attenuation et l'adaptation dans la zone du Parc National des Volcans (PNV) au Rwanda (COBAM-ARECO). Bogor, Indonesia, Center for International Forestry Research (CIFOR): 4p. (French)</p> <p>10) ARECO, 2014 Imihindagurikire y'ibihe n'amashyamba mu Kibaya cya Congo: Umushinga COBAM mu Rwanda (kinyarwanda) Kugabanya no guhangana n'ingaruka z'imihindagurikire y'ibihe muri Afurika yo hagati</p> <p>11) Monnerat M and Tchatchou B (2014). Foresterie urbaine et agroforesterie pour l'adaptation et l'attenuation a Lukolela. Bogor, Indonesia, Center for International Forestry Research (CIFOR): 4p. (French)</p>
Understand the links between local livelihoods and climate	Data collected, analyzed and reported from the field upon a household surveys and focus group discussions conducted in Burkina and Cote d'ivoire.
Evaluate needs for community-level adaptive capacity	Community-level adaptive capacities documented in the FGD report. Training for data collectors
Output 6.4.3.3: Best-practice methods related to adaptation-mitigation synergies	
Best practices (e.g., combining scientific modeling and participatory assessment) for defining and analyzing future scenarios and pathways for M&A	<p>7 outputs in 2014:</p> <p>1) Anne Marie Tiani, Monica Coll Besa, Tahia Devisscher, Charlotte Pavageau, Ruth Butterfield, Sukaina Bharwani, Yousoufa Bele Mekou. 2014 Assessing current social vulnerability: a participatory methodology</p> <p>2) Perez-Tera AS, Chia EL, Sufo-Kankeu R, Tchatchou B et Tiani AM. (2014). "Manuel pour les facilitateurs des groupes de discussion: Guide pour les outils d'approche rurale participative" Mars 2014. CIFOR CARO</p> <p>3) Tchatchou B. (2014) "Manuel de formacion de encuestadores" Noviembre 2014 (Espanol)</p> <p>4) Equipe COBAM (2014) "Questionnaire menage" Mars 2014 (Francais) 11p</p> <p>5) Equipe COBAM (2014) "Cuestionario de hogar" Noviembre 2014 (Espanol) 11p</p> <p>6) Gross-Camp ND, Few R, Martin A. (2014) "Phase 3 Methods Manual: Community Visioning and Scenario Analysis" University of East Anglia. June 2014</p>

	7) Sufo, R, Tiani, AM, 2014. Guide de cartographie participative geo-referencee.
Conduct coordinated action research, in accordance with a time-bound plan, on non-food or multiple use biofuel crops that can be grown on degraded lands, including under saline conditions, along the entire value chain, in a partnership model.	Pilots initiated in India and Brazil through partnerships with University of Agricultural Science - Bangalore, JNKVV Jabalpur, DPDKV Akola and Embrapa.
Support local energy provision and offer policy options to governments that would like to undertake biofuel production without compromising food security	<p>Policy analysis carried out through an intern10 villages in Karnataka identified and survey in final stages</p> <p>Multiple indigenous tree species assembled, nursery technique established, being field tested;</p> <p>Two partners (UAS Bangalore and JNKVV Jabalpur) selected to carry out the work</p> <p>Seed shell of pongamia being tested for briquettes</p> <p>Methods optimized and oil expelling machine with single phase developed</p> <p>Breeding work on Jatropha to produced non-toxic varieties in final stages with JNKVV, Jabalpur</p> <p>Initiated and will be progressed further under Biofuel project funded by IFAD</p> <p>Two side events organized: at Bonn during UNFCCC and during WCA.</p> <p>Several publications (see list below)</p> <p>-Annual report for 2012 but none yet for 2013. Final report due.</p> <p>-Agronomic booklets ready in local language - to be translated in English</p> <p>Ready in local language</p>
Disseminate knowledge and provide options to IFAD to mainstream biofuels as an instrument of agricultural	Miyuki Iiyama, Steven Franzel, Navin Sharma, Violet Mogaka, Jeremias Mowo, Ramni Jamnadass (2014). Retrospective on the hype: bottlenecks for Jatropha curcas bioenergy value chain development in Africa - A Kenyan case. CTA's Knowledge for Development website http://knowledge.cta.int/Dossiers/CTA-and-S-T/Selected-publications/Retrospective-bottlenecks-to-Jatropha-curcas-bioenergy-value-chain-development-in-Africa-a-Kenyan-case

development operations where possible	<p>Wouter MJ Achten, Navin Sharma, Bart Muys , Erik Mathijs and Paul Vantomme (2014). Opportunities and constraints of promoting new tree crops - lessons learned from Jatropha. Sustainability 2014, 6, 3213-3231; doi:10.3390/su6063213</p> <p>Balakrishna Gowda, Prasanna KT and Navin Sharma (2014). Tree Borne Oil Seed Crops - A Step Towards Building Energy Security In Rural India. Abstract - World Congress on Agroforestry, New Delhi, 10-14 February 2014. wca2014-1633</p> <p>Philip Dobie and Navin Sharma (2014). Trees as a Global Source of Energy: from fuelwood and charcoal to pyrolysis-driven electricity generation and biofuels. Abstract - World Congress on Agroforestry, New Delhi, 10-14 February 2014. wca2014-2082</p> <p>Miyuki Iiyama , Steve Franzel, Navin Sharma , Violet Moraa, Jeremias Mowo and Ramni Jamnadass (2014). Retrospective on the hype: bottlenecks for jatropha bioenergy value chain development in Africa. Abstract - World Congress on Agroforestry, New Delhi, 10-14 February 2014. wca2014-1484</p> <p>Navin Sharma (2014). Climate change and biofuels - current status and way forward. In: climate change impacts and adaptations for food and environmental security "Sustaining Agriculture Under Changing Climate". Editors : Prof. H.P.M. Gunasena, Dr. H.A.J. Gunathilake, Dr. J.M.D.T. Everard, Dr. C.S. Ranasinghe, Dr. A.D. Nainanayake. Published by: Coconut Research Institute of Sri Lanka, Ministry of Environment and Renewable Energy, Sri Lanka, World Agroforestry Centre, Regional Office, New Delhi, India</p>
Assessment of cooperatives' and producer associations' strategies for coping with CC impact and opportunities	<p>Scoping study on collective strategies (cooperatives/producers associations for cacao and oil palm) for coping with CC. Interim report on methodology and preliminary focus group results.</p>
Improve fuel wood use efficiency and develop sustainable wood energy systems.	<p>Training of national staff in Burkina Faso and Sierra Leone about above-ground biomass assessment</p> <p>Monitoring guidelines for measurement of aboveground biomass, woody species diversity and fuel wood stocks for landscapes</p> <p>Revised project document produced</p>
Develop effective and cost efficient carbon monitoring, reporting and verification systems that can enable smallholder villages to access carbon markets.	<p>Soil from Burkina Faso and above-ground biomass data from Burkina Faso and Sierra Leone</p> <p>Pre-processing of lidar data completed and analysis in progress</p> <p>Training of national staff in Burkina Faso and Sierra Leone about above-ground biomass assessment</p> <p>Monitoring guidelines for measurement of aboveground biomass, woody species diversity and fuel wood stocks for landscapes</p>

Improved knowledge and methods related to analyzing the vulnerability of communities dependent on forests		Tool and report completed (IISD and CIFOR (2013), CRiSTAL Forests User's Manual: Community-based Risk Screening Tool - Adaptation and Livelihoods Focus on Forests and Ecosystems. Manitoba, Canada: IISD, CIFOR.
		Case studies on CRiSTAL Forests.
Improved knowledge on the integration of adaptation and mitigation in projects.		Dataset of projects and paper (Kongsager R., Locatelli B., Chazarin F. Synergies between adaptation and mitigation in agriculture and forestry: An assessment of project portfolios. Submitted)
Flagship Project: Impacts of trade and investment on forests and people		
Cluster Activities 6.5.1: Finance, investment and business models		
Output 6.5.1.1: Analysis of the large-scale land-based investments and factors shaping business models in 3 select landscapes in Mozambique, East Kalimantan and the State of Para in Brazil		
Inventory of large-scale investments and datasets with information from secondary sources and company questionnaires completed for select landscapes		Datasets have been completed.
Analysis of the socio-political, economic and environmental factors shaping large-scale investments in food, fibre and energy in select landscapes		Three working papers are under development. Due to expanded scope the delivery date has been moved to Q1 2015.
Assessment of the factors shaping financial flows and commodity investments and their interactions with REDD+		The report has been completed:

implementation in Southeast Asia		<p>M. Dwyer. Trying to Follow the Money :Possibilities and Limits of Investor Transparency in Southeast Asia's Rush for 'Available' Land.</p>
Analysis of the main trends of oil palm development in global value chains and main organizational changes in plantation firms in Malaysia		<p>A paper on multifunctional dimension of Malaysia oil Palm farming has developed into a book chapter.</p> <p>Working Paper on a methodological framework to analyse Malaysia Oil Palm Industry going global is in progress</p> <p>A working paper on public & private regulation of palm oil and biofuel industry in Malaysia is still in progress.</p>
Output 6.5.1.2: Analysis of the impacts associated with large-scale land investments for oil palm, rubber and other agro-industrial commodities in forest conversion and people's livelihoods in Southeast Asia (Laos and East Kalimantan, Indonesia) and Central Africa (Cameroon, Gabon and DRC), including consideration of specific gender impacts		
Comparative analysis on the expansion of oil palm production under different institutional and geographical contexts in five countries		<p>4 country paper have been combined in one CIFOR Occasional Paper which address oil palm development in 7 countries, which is currently in press:</p> <p>Potter, L. (in press) Managing oil palm landscapes: A seven-country survey of the modern palm oil industry in Southeast Asia, Latin America and West Africa. CIFOR, Bogor, Indonesia / Lesley Potter</p>
Assessment of the impact of oil palm production on women and men using a gender and value chain analysis in select cases		<p>Report in Cameroon is done (Carmen Wandja "Gender and oil palm in Cameroon: management of oil palm plantations as a means of economic development for women. Evidence from Ngwei and Dibombari subdivisions in the Littoral Region").</p> <p>Report in Indonesia is completed: Tania Murray Li. 2014. Social Impacts of Oil Palm; A gendered perspective from West Kalimantan.</p>
Analysis of prospective evolution of oil palm production and business models in Indonesia and Cameroon, and		<p>One working paper, one occasional paper, one report and two journal articles have been published</p> <p>Working paper: http://www.cifor.org/library/4859/the-non-industrial-palm-oil-sector-in-cameroon/</p> <p>. http://www.cifor.org/library/4505/strengths-and-weaknesses-of-the-smallholder-oil-palm-sector-in-cameroon/</p>

implications for forests and people's livelihoods	<p>In Cameroon 3 Participatory Prospective Analysis reports have been distributed to participants of 3 workshops. A MSc thesis by Sadou Haman Djouma will be defended in January 2015.</p> <p>Working paper: http://www.cifor.org/library/4859/the-non-industrial-palm-oil-sector-in-cameroon/</p> <p>http://www.cifor.org/library/4505/strengths-and-weaknesses-of-the-smallholder-oil-palm-sector-in-cameroon/</p>
Analysis on agro-industrial land-based investments in Central Africa, deals negotiation, and their consequences on access to land by local communities	<p>Dataset and maps completed and up-dated. Communication at the World Bank Conference done (March 2014). Draft chapter in the book 'State of the forest</p>
Analysis of investments in rubber production and interactions with REDD+ in Laos, and the emerging challenges and opportunities	<p>Dataset is completed based on secondary interviews.</p> <p>Publication is completed: M. Dwyer and M. Ingalls. REDD+ at the Crossroads: Choices and Tradeoffs for 2015-2020 in Laos</p>
Assessment of land based investment in East Kalimantan and Papua in Indonesia and implications for low carbon development	<p>The spatial dataset for land investments is complete; HH surveys are completed and database for that particular component is being built.</p> <p>A paper on the impacts of oil palm plantations on forests and people in Papua is published (http://www.cifor.org/library/5349/the-impacts-of-oil-palm-plantations-on-forests-and-people-in-papua-a-case-study-from-boven-digoel-district/)</p> <p>A working paper on the national level is in print: Anne Casson, Yohanes I Ketut Deddy Muliastira, Krystof Obidzinski. Land Investment and Green Development Policy In Indonesia - Narrowing the Gap</p>
Output 6.5.1.3: Options of furniture value chains in Indonesia and associated business models that deliver improved social and environmental benefits	
Analysis of the dynamics of log supply and value chain in Indonesia	<p>The report on the log supply and value chain in Indonesia is ready.</p>

<p>Analysis of the dynamics and structure of furniture value chain in selected ASEAN countries.</p>		<p>Report on Systematic review of furniture value chain in selected ASEAN countries is ready.</p> <p>Paper on company-community partnerships is published in 'Journal of Sustainable Forestry' titled "Communicative Action to Level the Playing Field in Forest Plantations in Indonesia" http://www.tandfonline.com/loi/wjsf20. Its blog entitled "New tactic eased conflict over Indonesian plantation use, research shows" at http://blog.cifor.org/22522/new-tactic-eased-conflict-over-indonesian-plantation-use-research-shows#.U_GC-aaKCUk</p> <p>Published in 'Journal of Sustainable Forestry' titled "Communicative Action to Level the Playing Field in Forest Plantations in Indonesia" http://www.tandfonline.com/loi/wjsf20. Its blog entitled "New tactic eased conflict over Indonesian plantation use, research shows" at http://blog.cifor.org/22522/new-tactic-eased-conflict-over-indonesian-plantation-use-research-shows#.U_GC-aaKCUk</p>
<p>Annotated bibliography of literature regarding outcomes of different business models and methodological approaches for assessing the same completed</p>		<p>A systematic map protocol has been accepted for publication and is awaiting publication online: http://biomedcentral.spiglobal.com/authorproofs/bmcproofs/journal/BEA/141121115243/4749679641291224_Formatted.pdf</p> <p>Methodological document has been finalized and tested. I is now being used in research.</p>
<p>Cluster Activities 6.5.2: Governance Systems and Mechanisms</p>		
<p>Output 6.5.2.1: Lessons learned on the effectiveness of market driven processes and international sustainability initiatives such as FSC and its potential for certification of ecosystem services in Congo, Gabon and Indonesia</p>		
<p>Analysis on the social impacts of FSC certification in the Congo basin</p>		<p>Report published and disseminated. Article presented at Leuven Conference, now undergoing review by co-authors.</p>
<p>Political-economic analysis on barriers and opportunities for FSC certification, and its effectiveness, in select countries</p>		<p>All reports completed. Indonesia and Peru undergoing revision as OPs. Congo basin to remain as a report.</p> <p>Additionally two journal article are being developed. Both are due early 2015.</p>
<p>Assessment of environmental and social outcomes from certification of ecosystem services</p>		<p>Tool and publication: A report completed that includes impacts evaluation methodology. Working with FSC to develop further guidance on impact evaluation of ES certification in 2015.</p> <p>Database: Concept broadened to cover the whole project instead of just monitoring resulting in an article based on mid-term review report. Article completed.</p>

<p>Analysis of different business model options, their components and relation to standards as well as conditions that affect the models</p>	<p>Two reports have been completed:</p> <p>Report on different business model options, their components and relation to standards as well as conditions that affect the models.</p> <p>Report analyzing the conditions for ES markets in relation to certification with a particular focus on ES bundles.</p>
<p>Output 6.5.2.2: Analysis of policy regulations for promoting: (1) The transition to low carbon agriculture in 3 countries in East Africa (Tanzania, Zambia and Mozambique); (2) Options for managing impacts of agricultural expansion in forests (e.g. green municipalities in the State of Para, Brazil); (3) Broader adoption of an integrated law enforcements to deal with environmental crime</p>	
<p>Analysis of the opportunities and limits of the Green Municipality initiative in sustainable land use and clean supply chains in the Amazon, with emphasis in Paragominas</p>	<p>All the data collection has been finished and the mathematical model has been corrected. A paper has been submitted for the Climate Smart conference (2015, march). And a paper has been submitted to the review Fourrages</p> <p>2 papers were presented at Resilience2014 conference. Data collection on the initiatives linked with soybean, wood and charcoal chains in the Green Municipalities context has been performed in August and November 2014</p> <p>Documents, interviews and websites consulted evidence rather limited Brazilian agribusiness investment in Africa. No specific interesting case study i Africa for 2016</p>
<p>Analysis of enabling legal frameworks for low-carbon agriculture in select countries in Eastern Africa</p>	<p>Final draft Zambia, Tanzania and Mozambique country studies and Synthesis under final IDLO review prior to ICG copy-editing and formatting. Presentations at WB Law, Justice and Development conference, Washington 20-22 October 2014.</p> <p>Two country reports are completed as CIFOR working papers.</p> <p>Indonesian report: http://www.cifor.org/library/5434/large-scale-plantations-bioenergy-developments-and-land-use-change-in-indonesia/</p> <p>Brazil report: http://www.cifor.org/library/5435/land-use-trends-and-environmental-governance-policies-in-brazil-paths-forward-for-sustainability Additionally a report on Principle available international policy measurements, strategies to stop or to reduce ILUC globally and analysis of its efficiencies is completed.</p>

<p>ILEA policy briefs and draft training materials developed and established network</p>	<p>The network is growing and we have several novel partners within Indonesian government, including Min. Finance, BPK and KPK, who are interested in getting more involved with our work.</p> <p>Training materials have been exclude from the deliverable based on stakeholder consultations.</p> <p>Project document was completed as internal document.</p> <p>The InfoBrief on Mutual Legal Assistance is publised and is being disseminated. The InfoBrief on Customer Due Diligence is awaiting "no surprises" review, but is otherwise ready to go to press. The primer on investigative audits was not considered helpful to our boundary partners, and has been replaced with an increased focus on environmental valuation and criminal prosecutions of environmental damages. An additional InfoBrief on this topic is in draft.</p> <p>Mutual Legal Assistance: http://www.cifor.org/library/5050/mutual-legal-assistance-to-strengthen-indonesia-asean-forest-governance/</p>
<p>Analysis of the effectiveness of Integrated Law Enforcement (ILEA) on addressing environmental crimes</p>	<p>Working Paper 80: "Preventing the risk of corruption in REDD+ in Indonesia" is completed. Printing will be done by U4/ACRC</p> <p>Additionally a journal article entitled "Sustainability through liability" is in draft, in cooperation with the Environmental Law Institute. This considers how natural resource damages are being integrated into environmental litigation in tropical countries</p>
<p>Report on methods to calculate state losses in the forestry sector and policy recommendations</p>	<p>Infobrief is completed:</p> <p>Environmental valuation in Indonesia InfoBrief: http://www.cifor.org/library/5288/environmental-valuation-in-indonesia-implication-for-forest-policy-legal-liability-and-state-losses-estimates/</p>
<p>Output 6.5.2.3: A framework and case studies, with emphasis on oil palm, on the role of corporate initiatives in supporting sustainable production in Indonesia, Malaysia and Singapore</p>	
<p>Analysis on corporate sector governance and its role in adoption of environmentally and socially responsible standards by palm oil growers with emphasis in Malaysia and Indonesia</p>	<p>All data has been collected and recorded. The dataset contains confidential information and hence cannot be made available publically.</p> <p>Internal draft report on innovative corporate sustainability iniativies and mechanisms for responsible investment is done. Not to be published</p> <p>Working paper presenting case studies illustrating range of adoption of corporate governance has been expanded compared to initial scope and is in progress to be completed in 201</p>

<p>Analysis exploring commonalities and differences of corporate strategies, structures and behaviors in select cases of corporations in the food and timber sectors</p>		<p>The data set on corporate strategies is completed.</p> <p>Typology of the corporate structures and analytical tool are completed.</p> <p>The review of corporate communications and engagements and of business practices and operations are completed: (Norfaryanti K, Roda J.M.,Tobias R.,2014. A brief report on ownership structure of agro timber companies in Malaysia, INTROP-UPM, 28 p.)</p>
<p>Comparative analysis of Vale corporate social responsibility (CSR) policies and practices, and their local implications in four select countries</p>		<p>An agreement was concluded with Vale headquarters in Brazil. Primary data collection has been performed in New Caledonia, Eastern Amazon and Mozambique. The Indonesian case study had to be removed .In Mozambique the team from UEM encountered difficulties, the elections did not facilitate the fieldwork and Vale in Mozambique has fired some of his manpower. In new Caledonia the environmental accident hindered also some interviews. However the final report for these two cases studies will be available soon, allowing to perform the comparative analysis</p>
<p>Flagship Project: Gender integration team</p>		
<p>Cluster Activities 6.6.1: Generate an understanding of key institutional, cultural and attitudinal contexts that entrench inequity across a relevant set of issue areas in the Flagships; Identify policies, technologies and practices that will enhance gender equity in the access, use and management of forests and trees, and the distribution of associated benefits; and offer guidance on how to avoid or mitigate negative impacts associated with relevant processes at multiple levels.</p>		
<p>Output 6.6.1.1: Capacity building of scientists and partners in gender concepts, frameworks and methods</p>		
<p>Gender training workshop, with in-depth focus on specific topic/themes according to demand</p>		<p>Workshop proceeding is available.</p>
<p>Database of gender experts for CRP6</p>		<p>Discussion about linking this with Consortium wide effort.</p>
<p>Gender awareness and analyses training in LA</p>		<p>Three trainings on gender awareness, methods and analysis organized in LA region (Peru), West Africa (ICRAF-Abidjan, Côte d'Ivoire) and Hanoi, Vietnam</p> <p>48 scientists and researchers trained</p>

		http://www.worldagroforestry.org/crp6/gender/news
Student fellowship on gendered impacts of tribal tenure reform in India		CIFOR/CRP FTA working paper is delayed due to student on maternity leave.
Targeted support and mentoring for project teams, gender fellows and partners		Gender-responsive socio-economic component developed for two new large-scale Theme 2 projects
Gender Research Fellowship Programme		Five fellows trained in gender-responsive participatory methods in Bioversity http://www.bioversityinternational.org/capacity-strengthening/fellows-gallery/fellows-category/?tx_news_pi1%5BoverwriteDemand%5D%5Bcategories%5D=146&cHash=9f001a47a9ba70e3bd7854552304f335
Gender training modules		Audio-visual gender learning platform developed to train forest scientists to carry out gender-responsive research 2 films produced; platform being further developed
Gender session at Science Week		80 scientists exposed to gender-responsive research considerations
Workshop on 'Mix Research Methods Integrating Gender' in Latin America.		10 participants from 7 countries participated in this event. Full draft paper submission is under review. http://www.slideshare.net/CIAT/land-tenure-access-and-social-diversity-in-latin-america
Training on 'Gender and Participatory Approach: From Inception to Impact' for CIAT staff and CRP FTA Gender scientists in Africa		20 participants from diverse disciplines representing various FTA Centers, CGIAR Research Programs and regional partners http://dapa.ciat.cgiar.org/gender-diversity-in-research-cycle-purabi-bose/
Capacity Building 'How Gender could be Inclusive in your work? Communicating Women's Empowerment' for CIAT staff (management)		This activity was combined with the above mentioned training on 'Gender and Participatory Approach: From Inception to Impact' and invited the staff to join the event. http://dapa.ciat.cgiar.org/gender-diversity-in-research-cycle-purabi-bose/

Trainer for Dejusticia's environmental advocates on FTA agenda- forest tenure and gender		<p>Participation in the 2nd Annual Global Action-Research Workshop for Young Global South Human Rights Advocates, Leticia from 24-30/08 to share participatory action research in land tenure and forest rights. http://www.dejusticia.org/#!/actividad/2087</p> <p>The plan is to be a mentor to a few of the participants who will be working on texts for publication on forest/land rights during six-months following the workshop.</p>
Output 6.6.1.2: Sex-disaggregated data & gender analysis, which includes initiating and supporting both cross-theme and cross-CRP research on sentinel landscapes		
CGAIR research project on the role of gender norms in agricultural and NRM innovation		CIFOR is participating in the global study with a case study on gender and oil palm in Indonesia. Multi-year study, data analysis is ongoing.
Targeted support to specific projects within component 1 to strengthen collection, analysis and reporting of gender disaggregated data		Data collection is completed. Data is being analyzed. Project document on "Migration, Remittance and Forests" available
Targeted support to specific projects within component 5 to strengthen collection, analysis and reporting of gender disaggregated data		One CIFOR occasional paper on social impacts of oil palm: a gendered perspective from West Kalimantan to be released next week
Targetted support to specific projects within component 4 to strenghten collection, analysis and reporting of gender disaggregated data		2 journal manuscripts on gender and climate change to be submitted in March/April
Targeted support to specific projects within component 3 to strengthen collection, analysis and reporting of gender disaggregated data		Paper that examines the experienced involvement of women and men in decision-making in management of natural resources within the household submitted to World Development

Development of gender modules for sentinel landscapes and collection and analysis of gender disaggregated data in targetted SL		The methodological suggestions made by the gender team were unfortunately not adopted, mainly because of budget constraints. The only provision that was made to account for differences between men and women was to have an equal representation of woman and man respondents. GIT is currently supporting sentinel landscape team on demand
Gender and food security systematic review		Systematic review on how do gender disparities in access to and use of forest assets affect household food and nutrition security. Multi-year study ongoing
Cross-theme research on gender and value chains		<p>Concept Note completed</p> <p>CIFOR working paper synthesizing systematic review will be released soon</p> <p>Literature review on gender and FTA value chains nearly complete</p> <p>Brief on gender and FTA value chains completed (posted at http://www.bioversityinternational.org/research-portfolio/forests/gender-responsive-forestry-research/)</p>
Closing write-shop for Gender Research Fellowship Programme		http://www.bioversityinternational.org/news/detail/a-year-of-gender-responsive-participatory-research/
Gender research fellowships		<p>Data analysis for comparative research completed, manuscripts prepared for submission.</p> <p>http://www.bioversityinternational.org/news/detail/a-year-of-gender-responsive-participatory-research/</p> <p>http://www.bioversityinternational.org/news/detail/voices-from-the-rainforest/ ;</p> <p>http://www.bioversityinternational.org/news/detail/how-gender-specific-knowledge-is-inspiring-change-in-kyrgyzstans-walnut-forests/ ; http://www.bioversityinternational.org/news/detail/diary-of-a-shea-tree/ ;</p> <p>http://www.bioversityinternational.org/news/detail/native-fruit-trees-of-life/ ;</p> <p>http://www.bioversityinternational.org/news/detail/non-timber-forest-products-the-way-forward-for-rural-women</p>
CGIAR-wide Global Study on the role of gender norms in agricultural and NRM innovation		<p>Bioversity is participating in the global study with a case study on Study site identified, partners short-listed forest management in Kirgizstan. Multi-year study.</p> <p>Study site identified, LOA signed, partners trained, tool translated into Russian, fieldwork planned in March 201</p>

Development of gender-responsive component on institutional analysis for sentinel landscapes		Development of gender-responsive component on institutional analysis for sentinel landscapes. Concept note developed and widely endorsed in FTA; will be discussed at FTA management meeting in March
Initiate research project on gender mainstreaming in forestry ministries in ASEAN		This was an exploratory activity but collaboration did not materialize
Gender and food security systematic review		Systematic review on how do gender disparities in access to and use of forest assets affect household food and nutrition security. Multi-year study ongoing
Maintain database : Gender research in FTA components; Relevant gender data sets; Gender research methods; Gender research indicators; others		Updated database is available in ICRAF's website http://worldagroforestry.org/crp6/gender/research-methods-gender http://worldagroforestry.org/crp6/gender/indicators http://worldagroforestry.org/crp6/gender/gender-research-deliverables
Identification of key/critical gender research in agroforestry		List of research topics has been identified and submitted request for support to ICRAF Senior Leadership Team
Continuous support for proposal writing/gender integration in current projects, gender analysis and publication Editorial		2 journal articles published from Indonesia and 1 manuscript being prepared for Vietnam. 1 guideline for integrating gender dimensions in research cycle including proposal development is soon to be published Continuous participation in proposal development exchanges
Generate support for, develop and begin implementation of strategic gender research across components focused on priority topics (a gender flagship) eg value chains		Cross center proposal submitted for sentinel landscapes call "Empowering women in value chains for forest, tree and agroforestry products: A cross landscape assessment of gender relations and their implications for gender equity" Gender, agroforestry and sustainable development day at ICRAF Science Week

Techniques (guidelines) for gender analysis of Socio-Economic and Institutional Mapping data		CIAT focal point advised the SL team and gave feedback on indicators for gender inclusion. The initial activity was not achieved due to lack of coordination between the focal point and the SL team. However Bioversity took over the task and developed a concept note for developing a gender-responsive component on institutional analysis for sentinel landscapes (activity has been reported above)
Output 6.6.1.3: Adaptive learning and development and implementation of M & E plan		
Monitoring and evaluation plan for CRP6		Report produced, gender marker tool under development and currently recruiting consultants to operationalize the M&E plan
Gender evaluation of Home Gardens project in Nepal		http://www.bioversityinternational.org/news/detail/evolution-of-gender-relations-among-nepalese-farmers/
Support for community-based self-monitoring and evaluation in gender and tenure project in Uganda and Nicaragua		ACM guide for facilitating gender equitable negotiation has been finalized for publication.
Adoption process and operationalization of gender M&E (in conjunction with FTA gender M&E)		Process is on-going
Development of gender mainstreaming guide		First draft developed and reviewed by ICRAF-GIT
Gender mainstreaming and research strengthening in LA region		Ongoing discussions to involve 1 site in LA to the global gender x land use study that is already initiated in Asia and Africa
Output 6.6.1.4: Knowledge sharing, including synthesis of lessons across specified themes of forest use and management, climate change and value chains		
Session and presentation at World Congress on		http://www.bioversityinternational.org/index.php?id=244&utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+BioversityInternational-LatestPublications+%28Bioversity+International+-+Latest+publications%29&tx_news_pi1%5Bnews%5D=4481&cHash=6208d17064519c38df388b41ce013bd5

Agroforestry (WCA) (Gender and agroforestry panel) in India	
Review and analysis of gender aspects in one research area	Draft submitted to International Forestry Review, paper being revised
Community of practice on gender-responsive research in Bioversity FGR, CRP FTA	Terms of reference under development
3 gender technical sessions at IUFRO 2014	Proceedings of the workshop to be published as a joint FTA product
Analysis of gender-specific appreciation of multifunctional landscapes	On-going data collection in Africa; publication plan developed
Gender session at the 3rd World Agroforestry Congress	On the process of preparing for the Special journal issue after successful gender session at the WAC
Participation in gender session re: IUFRO conference	Submitted a paper for oral presentation
Gender, agroforestry and sustainable development day at ICRAF's Science Week 2014	Scheduled for September 10/2014 and completed.
Organizing Panel "Impact and Tenure Arrangements on Forests, Livelihoods and Gender Dynamics' at IUFRO Gender and Forest Tenure, USA (2014)	Technical panel will have eight high level international scientist working on land tenure and gender issues.
Sharing knowledge at National Forum on Women's Access and	The meeting was well organized. A follow-up gender and forest rights workshop is planned to mentor the global south students and practitioners for next year.

Impact of the Forest Rights in India		
Joint international policy meeting on Indigenous Women, Forests and Value Chains in Latin America		Impact is that Peruvian Environment Ministry have recognised our policy recommendations and will do uptake during COP20 meeting. COP20 Indigenous Women, Lima. The output was key policy recommendations on collective land rights and climate change with gender focus. http://www.rightsandresources.org/event/international-indigenous-womens-forum-land-and-climate-change-challenges-and-opportunities-towards-cop20/
Output 6.6.1.5: Communications, Outreach, Dissemination, including global events jointly organized with partners; gender communications strategy developed for FTA		
FTA-gender newsletter		Newsletter published on International Women's Day http://www.cifor.org/fileadmin/subsites/CRP/newsletter/news_update_March_2014_FTA.html
Documentation and communication of gender analysis approaches and research findings		http://www.biodiversityinternational.org/research-portfolio/forests/gender-responsive-forestry-research/
Communication strategy for CRP FTA		Work is in progress
Improve gender website and introduce gender cafe on the website to promote dialogue and interaction among scientists, partners and stakeholders		
Quarterly e-newsletter		GIT is in the process of revising purpose, contents and structure of the newsletter
Translation, production and distribution of publications		Gender box being translated. Gender strategy at a glance has been translated into French, Spanish and Bahasa Indonesia

Gender cafe at CIFOR annual meeting		Currently being organized. Includes posters and presentations by scientists and research portfolio directors
Maintenance of Gender page at ICRAF website		http://www.worldagroforestry.org/crp6/gender
Video production on women in agroforestry		Photo essay completed instead of a video
Photo competition with stories on FTA through Gender lens		Ebook link will be available after the IUFRO book launch October 2014
Flagship Project: Sentinel landscape		
Cluster Activities 6.7.1: Create long-term socio-ecological research sites for CRP6 with a commitment from donors to fund such work and commitment from CRP6 scientists and management to engage in long term work to accumulate data, comparisons and experiences.		
Output 6.7.1.1: A network of priority landscapes selected.		
Final set of priority landscapes selected		<p>Nicaragua/Honduras</p> <p>Completed six months of field data collection to completed and improve base line data bases developed in late 2013. Data entry, revision, edition and final acceptance completed.</p> <p>18 legacy data sets compiled and archived http://thedata.harvard.edu/dvn/dv/N-H-SL</p> <p>126 spatial datasets compiled and archived http://thedata.harvard.edu/dvn/dv/SL</p> <p>Soil samples sent to Nairobi for laboratory analysis. Lab analysis in process; final reports not yet available.</p> <p>A finer grain selection of sentinel sites along the NHSL is required. For instance the most intensive farming landscapes at higher altitude (around Matagalpa and Jinotega) are not included in current study blocks. A second study block should be added to include a middle level of intensification (e.g. around Rancho Grande - Waslala) to more smoothly trace the land use intensification gradient in the NHSL than current trace with only two points in Nicaragua.</p> <p>CATIE agroforestry data bases in (http://thedata.harvard.edu/dvn/dv/CATIE).</p> <p>WASL</p>

Database of ongoing CGIAR projects in Burkina Faso including descriptors, outcomes, contact persons and details and field sites compiled and shared with CCAFS. Data base extension under way to include projects of partners including government and NGOs that are addressing common similar outcomes to FTA. Thematic maps of all identified sites available and shared with partners on request.

TmFO

TmFO currently comprises 24 experimental sites located in 9 countries across three main regions: Amazon Basin (11 sites, 5 countries); Congo Basin (6 sites, 2 countries); and Southeast Asia (7 sites, 2 countries). A total of 921 ha of tropical managed forests spread over 481 permanent sample plots (PSP) are inventoried

One more experimental site in Peru from IIAP including 9 plots, 1 ha each

Mekong

Upper Mekong site selected as final SL boundary

Revised regional land use map completed for region using RapidEye imagery. This has been uploaded to Geoportal since March 2013

Legacy datasets complied

4 sentinel sites selected for implementation of core methodology: Menglaxiang (Xishuangbanna, China); Philahouana (Oudomxay, Laos); Kreung (Chiangrai, Thailand), Bulang (Xishuangbanna, China)

IMSAO

4 regions in the Western Amazon identified, across Peru, Bolivia and Brazil , boundaries of SL confirmed

3 sentinel sites selected: Peru: Ucayali, Madre de Dios; Bolivia: Pando.

Inventory of available spatial data and statistic was completed and actual collection of files has started. 100% Completed for Ucayali; 80% Madre De Dios

Compilation of Database of ongoing projects including descriptors, outcomes, contact persons details and field sites has started.

Spatial datasets for Ucayali, Madre de Dios, and Pando. General layers of Ucayali and Madre de Dios have been uploaded to the Landscapes Portal.

	<p>CAFHUT</p> <p>Final boundary of the SL has been agreed</p> <p>Proposed sentinel sites visited and ranked by the team; four final sentinel sites selected Bokito (Caemroon), Ayos (Cameroon), Lomie/Kongo and Mintom (Cameroon)</p> <p>Western Ghats</p> <p>Database on trees in agroforestry systems (CIRAD) has been archived and shared on Dataverse - dx.doi.org/doi:10.7910/DVN/24138</p> <p>List of available datasets compiled.</p> <p>Final SL boundary confirmed and 4 sentinel sites selected with partners (Kodagu, BRT Hills, Nilgiris and Waynad)</p> <p>Oil Palm</p> <p>7 focal countries selected: Indonesia; Malaysia, Cameroon, Nigeria, Colombia, Peru, Brazil.</p> <p>Inventory of available spatial data and statistics completed for the seven landscapes.</p> <p>Central Asia</p> <p>Boundary of proposed SL has been agreed</p> <p>Available digitized data identified and/or assembled</p>
<p>Output 6.7.1.2: Platform for data archiving and data sharing provided and necessary policies and guidelines in place.</p>	
<p>OAI-PMH compliant repositories established and used by sentinel landscape partners</p>	<p>Development of protocols and guidelines for Data Archiving</p> <p>Method Group: Guidelines for the use of the GeoPortal were also developed and posted on http://gsl.worldagroforestry.org/?q=node/251 . These will be updated as V3 of the GeoPortal and was rolled out in January, 2014.</p> <p>Development of the Landscapes Portal (http://landscapeportal.org). This platform extends the GeoPortal to include "map stories" and has a wide range of functionality that will enable SL teams to conduct analysis of land health indices online tools</p> <p>Method overview revised and circulated to SL coordinators</p>

Nicaragua/Honduras:

Data sharing guidelines for legacy Data in progress

TmFO:

Metadata table for the Amazon Basin which is the basis for an analysis of the impact of logging on biomass recovery in the Amazon Basin, produced and shared amongst the TmFO network.

Metadata table for South east Asia started and finalized in 2014 for the assessment of the impact of logging on timber and biomass recovery

Finalization of the metadata table for the Amazon basin including 11 sites

Western Ghats

Central data repository for the Western Ghats Sentinel Landscape created and share among all partners.

Rules and policy on data sharing and ownership negotiated and agreed upon.

Data Management Support to all landscape teams

Method Group: Backstopping on data entry provided to Teams in Nicaragua/Honduras and BurkinaFaso/Mali

Quick user guide on CSPro translated into Spanish (Jenny Ordonez)

Mobile data entry forms developed (Cybertracker and ODK) and shared with WASL team.

All survey tools translated into Chinese, Lao, and Thai.

Translated mobile data entry form created for Mekong and implemented in Menglaxiang.

Five survey tools translated into French (WASL).

Data sharing platforms established for 8 landscape teams: Oil Palm - <http://dx.doi.org/10.7910/DVN/24143>

Burkina Faso/Mali/Ghana - <http://dx.doi.org/10.7910/DVN/24118>

Nicaragua/Honduras - <http://dx.doi.org/10.7910/DVN/24119>

Western Ghats - <http://dx.doi.org/10.7910/DVN/24138>

	<p>CAFHUT - http://dx.doi.org/10.7910/DVN/24137</p> <p>Western Amazon - http://dx.doi.org/10.7910/DVN/24136</p> <p>Mekong - http://dx.doi.org/10.7910/DVN/24135</p> <p>Borneo/Sumatra - http://dx.doi.org/10.7910/DVN/24134</p> <p>Nicaragua – Honduras</p> <p>Norvin Sepulveda traveled to Peru, in order to participate in the selection of sites in a workshop where it was shared not only the methodology, but also the experiences and lessons learned in NHSL.</p> <p>Norvin Sepulveda and Noel Ulloa technical assistant, traveled to Peru, in order to teach the methodology, the experiences and lesson learned in the application of the LDSF (Land Degradation Survey Framework). Local staff of NGOs, CGIAR centres (5 from Madre de Dios, 3 from Pando, 2 from Ucayalli, 1 from ICRAF, 1 from IIAP) were trained</p>
<p>Output 6.7.1.3: Produce a data set that will be widely used and referred to by both donors and partners.</p>	
<p>Sentinel landscape Core Methodology linked with relevant existing data collection efforts</p>	<p>Proof of concept for various methodologies</p> <p>Method Group:</p> <p>New version of LDSF methodology tested in ACIAR funded Trees for Food security project http://worldagroforestry.org/project/aciarc</p> <p>Household modules tested in in ACIAR funded Trees for Food security project http://worldagroforestry.org/project/aciarc</p> <p>Household module integrated into monitoring and evaluation framework for Ministry of Foreign Affairs of Finland funded Building Biocarbon and Rural Development in West Africa Project</p> <p>Protocol developed for measuring and monitoring deforestation and vegetation in each SL from 2004 to present using the Terra-I vegetation monitoring system</p> <p>IMSAO:</p> <p>Review of Institutional Mapping methods commissioned</p> <p>A remote sensing-based data set using the Terra-I vegetation and monitoring system developed, including detection of deforestation and calculation of deforestation rates for the SL and administrative districts within it.</p>

	<p>Nicaragua/Honduras</p> <p>A Protocol for Institutional mapping at a landscape scale led by Sandrine Freguin-Gresh (CIRAD) working with UCA-Nitlapan and CATIE-Honduras has been developed and implemented.</p> <p>A remote sensing-based data set using the Terra-I vegetation and monitoring system developed, including detection of deforestation and calculation of deforestation rates for the SL and administrative districts within it.</p> <p>TmFO:</p> <p>Paper on sites and Methods in preparation for publication in a scientific journal (Journal of Vegetation Science) in progress submitted on February 4th to JVS</p> <p>Paper on sites and methods published in AVS</p> <p>Paper on data sharing agreement published in International Forestry Review</p> <p>Methods and objectives presented in the website www.tmfo.org</p> <p>Presentation of TmFO objectives and Methods in workshops and conference:</p> <p>IUFRO world Congress 2014</p> <p>Safe science workshop, Ascot, Imperial College October 2014</p>
<p>Interdisciplinary regional teams established for all sentinel landscapes</p>	<p>Meta- analysis</p> <p>TmFO:</p> <p>Three regional teams involving 20 partners</p> <p>The Amazon Network; Bruno Herault ,Paracou ,Cirad-Ecofog ,France (French Guiana); Lilian Blanc ,Paracou ,Cirad ,France (French Guiana) ; Christopher Baraloto ,Paracou ,INRA ,France (French Guiana) ; Ademir Ruschel, Tapajos km 67 &, Embrapa AO ,Brazil (Para) ; Milton Kanashiro, Tapajos km 114, Embrapa AO ,Brazil (Para) ; Lucas Mazzei, Tapajos km 114, Embrapa AO ,Brazil (Para) ; Lucas Mazzei, Jari ,Embrapa AO, Brazil (Amapa) ; Eleneide Stoff Souza, Jari ,Embrapa Amapa, Brazil (Amapa) ; Marcelino Guedes, Jari ,Embrapa Amapa, Brazil (Amapa) ; Edson Vidal, Paragominas ,USP ,Brazil (Para) ; Thales West, Paragominas ,USP ,Brazil (Para) ; Cintia Souza, Mil Madeireira ,Embrapa AOc ,Brazil (Amazonas) ; Katia Emidio, Mil Madeireira ,Embrapa AOc ,Brazil (Amazonas) ; Celso Azevedo, Mil Madeireira ,Embrapa AOc ,Brazil (Amazonas) ; Verginia Wortel ,Kabo ,Celos ,Surinam ; Marisol Toledo, La Chonta ,IBIF ,Bolivia ; Marielos Pena-Claros, La Chonta ,IBIF ,Bolivia ; Plinio Sist, Cikel ,Cirad-Embrapa ,Brazil (Para)</p>

;Lucas Mazzei,Cikel ,Cirad-Embrapa ,Brazil (Para) ;Lilian Blanc,Cikel ,Cirad-Embrapa ,Brazil (Para) ;Laurent Descroix, Montagne Tortue ,ONF- Cirad ,France (French Guiana) ;Bruno Herault, Montagne Tortue ,ONF- Cirad ,France (French Guiana) ;Lilian Blanc, Montagne Tortue ,ONF- Cirad ,France (French Guiana) ;Verginia Wortel ,Kabo ,Celos ,Surinam ;Marcus V.N. d'Oliveira ,Tabocal ,Embrapa Acre ,Brazil (Acre) ;Anand Roopsind ,Iwokrama ,Iwokrama ,Guyana;

The south East Asia Network; Hari Priyadi, Malinau ,CIFOR-Cirad ,Indonesia (East Kalimantan) ;Plinio Sist, Malinau ,CIFOR-Cirad ,Indonesia (East Kalimantan) ;Philippa Lincoln, Ulu Segama ,University of Aberdeen / Yayasan Sabah ,Malaysia (Sabah) ;Michelle Pinard, Ulu Segama ,University of Aberdeen / Yayasan Sabah ,Malaysia (Sabah) ;Ahmad Saerozi ,STREK ,Dipterocarps Research Center Samarinda ,Indonesia (East Kalimantan) ;Budhi ,PT Erna Djulawati ,Konservasi & Litbang (pak Budhi) ,Indonesia (Central Kalimantan) ;Abd. Rahman Kassim, Tekam ,FRIM ,Malaysia ;Mohd Nor ,Lesong, FRIM ,Malaysia ;, Semangkok ,FRIM ,Malaysia;

Africa Network; Vincent Medjibe, Monts Cristal, Parcs nationaux du Gabon, Gabon; Vincent Medjibe, Milole FS, Parcs nationaux du Gabon, Gabon; Vincent Medjibe, Milole CL , Parcs nationaux du Gabon, Gabon; Sylvie Gourlet-Fleury, Mbaiki, Cirad-University of bangui, CRA; Vivien Rossi, Mbaiki, Cirad-University of bangui, CRA; Stephen Pietch, Aboun, University of Natural Resources and Life Sciences, Austria, Gabon; Stephen Pietch, Mondah, University of Natural Resources and Life Sciences, Austria, Gabon;

Nicacargua/Honduras:

A research proposal submitted for funding 2015-16. The proposal: What options for what context? Principles to assesses and promote tree based options for livelihoods and ecosystem services across four Sentinel Landscapes (Nicaragua-Honduras, Western Ghats, Western Amazon and Mekong).

An ICRAF post-doctoral researcher based at CATIE, with the support of FTA/CATIE/SL have develop a research team that will be addressing various subjects related to the impacts of land use intensification on the presence of trees in forests and outside forests in the landscape. One post-doc research will overarch four master level students conducting research simultaneously and complementarily. Field work, data analysis and reporting will take place in 2015. Following the titles of the research projects

Amores, F. 2015. Contribucion de los arboles en finca a los medios de vida de familias rurales del paisaje centinela. Tesis de Maestria.

Espinoza, V. 2015. Cambio de uso de suelo y su incidencia sobre el almacenamiento de carbono. analisis multitemporal mediante imagenes de satelite para cuatro zonas del paisaje centinela. Tesis de Maestria

Oblitas, S. 2015. Tipologia de fincas agropecuarias por intensidad de manejo en el paisaje centinela. Tesis de Maestria.

Caicedo. W. 2015. Diversidad y almacenamiento de carbono, en dos sitios con diferente grado de intensificación de uso de suelo en el paisaje centinela. Tesis de Maestría.

Oil Palm:

Partnerships established with NES Naturaleza in Colombia, WWF and Ministry of Agriculture in Cameroon, ICRAF in Peru and University of Agriculture in Bogor (IPB), as key partners for data collection and comparative analysis.

WASL

For the purpose of establishing a baseline, CIFOR, ICRAF, IER-Mali, TUDRIDEP in Ghana, and INERA in Burkina Faso formed a multidisciplinary team including socio-economists, soil scientists, botanists, foresters, and GIS technicians. An LOA was signed with INERA and informal agreements with the other partners who have provided staff, vehicles and other equipment as required

IMSAO:

For the implementation of the SL baseline we are working with IIAP in Peru. They are in charge of Ucayali and Madre de Dios.

For the implementation of the SL baseline we are working with CESVI in Bolivia. They are in charge of Pando.

For the development and improvement of Institutional Mapping and IFRI tools, we are working with experts Tanya Hayes (Seattle University), Jean Paul Benavides (CERES Bolivia).

Partner engagement

WASL: 4 persons from CIFOR (Burkina Faso), ICRAF-WCA (Mali), INERA - DPF (Burkina Faso) and BERACIL (Burkina Faso) were trained for the Village baseline surveys.

Six members of the WASL data collection team trained in implementation of the Household survey protocols, including; 1 CIFOR staff, 1 ICRAF staff, 1 INERA staff, 2 consultants and 1 University of Ouagadougou student.

2 staff and 4 consultants of TUDRIDEPP -Ghana trained by WASL team in implementation of the Household survey protocols.

11 consultants trained by the WASL team in data entry using CSPRO.

Village level Baselines completed in 28 villages in Burkina including 10 in Kongoussi site and 18 in Cassou site as well as in 18 villages in Walembelle- Ghana.

Household Baselines completed in 10 villages per site in Cassou, Kongoussi and Walembelle with 900 Households interviewed.

A total of 1,758 questionnaires were filled out representing five Village survey tools: Association Form (36 questionnaires), Forest Form (46), Product Form (138), Settlement Form (46), and Poverty Form (1492).

900 questionnaires were filled out for households of three sites sampled so far with 30 HHs for each of the ten villages per site.

All data has been entered using the double data entry method.

3 persons from ICRAF - WCA (Mali), INERA -DPF (Burkina Faso) and IER (Mali) were trained for the LDSF surveys.

1500 Soil samples were collected from 16 x 2 Clusters in Cassou and Kongoussi, processed in Bamako and sent to the ICRAF soil spectral lab in Nairobi. Other data has been entered.

LDSF surveys in and Bawku (Ghana) will be completed by March 2015.

Nicaragua/Honduras:

18 team members from 6 organisation were trained the biophysical field methodology: CATIE, National Agricultural University (UNA) in Catacamas, Foundation of Madera Verde (FMV) in La Ceiba, Institute of Forest Conservation (ICF) in Tegulcigalpa. Nicaragua-Honduras SL trip reports and preliminary analysis of the biophysical baseline data are shared here: http://www.cifor.org/fileadmin/subsites/sentinel-landscapes/document/CRP6_2013_Trip_Report_Nicaragua-Honduras.pdf

http://www.cifor.org/fileadmin/subsites/sentinel-landscapes/document/SL_LDSF_Nicaragua.pdf

Soil samples in the process to be send to Nairobi to ICRAF soil spectral lab; other data entered into databases.

24 people from 5 organizations training on participatory methods an household interviews conducted by the IFRI network

Socio-economic baselines finished in 3 sentinel landscapes; involving 16 communities in Nicaragua and 22 communities in Honduras.

Data entry 80% completed for 2 sentinel sites

In Nicaragua the Institutional mapping protocol was implemented in 11 municipalities (out of 18 of the SL) and 6 indigenous territories (out of 18 of the SL). Most municipalities (9) and indigenous territories (5) are within the Bosawas Biosphere reserve. The application of the protocol with two types of instruments covers 4 scales within the landscape: the national; the regional (Autonomous North Atlantic Region), departmental; the municipal/territorial level (application of a Governance questionnaire); and the community level (application of the revised IFRI protocol). The case study using the IFRI protocols was chosen in the indigenous territory of Diez Comunidades (Municipality of Puerto Cabezas) and refer to the block of six Miskitu communities SIPBAA, located

in the buffer zone of Bosawas Reserve. The application of the Governance questionnaire has been broadly applied to more than 60 representatives of state agencies in charge of natural resources management, but the team did not manage to include representatives of the private sector, the external cooperation and of the civil society due to time and budget constraints

In Honduras the Institutional mapping protocol was implemented in 2 municipalities (out of 8 within the N-H-SL): Catacamas (Olancho department) and Iriona (Colon department). The sites were chosen because they coincide with the location of the socio-economic baseline sites, where the biophysical and socio-economic baseline is being implemented. In both Iriona, and Catacamas a community was chosen to apply the revised IFRI protocol to provide with two case studies; The Governance questionnaire was applied with representatives of the main actors in the governance of NR at the national / municipal and community levels, but in contrast to Nicaragua, the application of the questionnaire has only been applied to a selection of representatives of state agencies, private sector and cooperatives.

Western Ghats:

Report on training is shared here: http://www.cifor.org/fileadmin/subsites/sentinel-landscapes/document/CRP6_2013_Trip_Report_Western_Ghats_Sentinel_Landscape.pdf

Biophysical data collection for Coorg has been completed and BRT data collection will be completed by Dec 2014

IFPRI training for household survey has been completed

Household survey for two sites viz. BRT Hills and Coorg have been completed for 10 villages each and data has been entered

Institutional mapping of natural resources management in the Western Ghats Sentinel Landscape site completed by Pierre-Marie Aubert, AgroParisTech in partnership with ATREE

Partners participated in SL Data Analysis Workshop at Costa Rica

TREE participated in Institutional mapping Write shop organized by Pierre-Marie Aubert, AgroParisTech

University of Agricultural and Horticultural Science, Shimoga partner attended Geoinformatics training programme at Nairobi

Mekong:

LDSF team trained by Methods group and LDSF protocol completed for one site (Menglaxiang)

Workshop on IFRI and Household survey instruments, with IFRI trainer, held in Kunming in September 2014.

Enumerator training conducted for China team and data collected for one site (Menglaxiang).

Workshop on IFRI and Household survey instruments conducted in Oudomxay, Laos with members from Lao and Thai partner institutions.

Oil Palm:

Completed secondary data collection on oil palm development to build reliable baselines in the selected landscapes in five countries (Cameroon, Colombia, Indonesia, Malaysia, Nigeria, Peru); In process the completion of narrative reports addressing four research questions based on available data in these same countries.

Completed literature review on the status of oil palm development and knowledge gap analysis covering the seven countries of the SL oil palm. Potter, L. (in press) Managing palm oil in tropical landscapes: A seven-country survey of the modern palm oil industry. Occasional Paper, CIFOR, Bogor, Indonesia

Completed publications:

Li, T.M. (in press) Social Impacts of Oil Palm in Indonesia: A Gendered Perspective from West Kalimantan. Occasional Paper, CIFOR, Bogor, Indonesia

Nkongho R.N., L. Feintrenie and P. Levang. 2014. Strengths and weaknesses of the smallholder oil palm sector in Cameroon. OCL: 21(2). D208

Nkongho, R.N., Y. Nchanji, O. Tataw and P. Levang. 2014. Less oil but more money! Artisanal palm oil milling in Cameroon. African Journal of Agricultural Research 9(20): 1586-1596

Obidzinski K, Dermawan A, Hadianto A. 2014. Oil palm estates in Indonesia's forest frontiers: an option for sustainable development? Environment, Development and Sustainability

Rueda, A. and P. Pacheco (in press) Palma de aceite en Colombia: Politicas, dinamicas sociales y modelos de produccion, Occasional Paper, CIFOR, Bogor, Indonesia

Schoneveld, G. 2014. The politics of the forest frontier: Negotiating between conservation, development, and indigenous rights in Cross River State, Nigeria. Land Use Policy 38:147-162

TmFO

Meta-analysis of the impact of logging on biomass recovery at a regional scale of the Amazon finalized

Paper presenting the results of the meta analysis for the Amazon in preparation (submission planned for the end of 2014)

Meta-analysis on the recovery of timber volume and biomass in mixed dipterocarp forest started

IMSAO:

14 team members from Peru and Bolivia were trained for LDSF activities under the guidance of Nicaragua/Honduras team in AUGUST 2014.

15 team members from Peru and Bolivia were trained for Socio-economic and Institutional Mapping activities in AUGUST 2014.

LDSF Field data collection:

Madre de Dios: sampling 100% done; Ucayali: sampling 80% done; Pando: sampling 1% done

Socio-economic & IM data collection: Madre de Dios: sampling 45% done; Ucayali: sampling 50% done; Pando: sampling 1% done;

Processed soil samples: Madre de Dios: 90% ; Ucayali: 60% ; Pando: 0%

4 team members were trained for Data Entry under guidance of Jean Paul Benavides.

CAFHUT

4 teams have been constituted with consideration of multidisciplinary requirements - each team comprising several scientists from different FTA centers.

3 modules have started with the data collection on 2 sites. The data are currently being collected and entered; we expect to sample the other 2 sites and, as well implement the institutional mapping module in 2015.

LDSF: Organized training of team members (from 7th to 10th July 2014 in Bafia, with 15 participants) on the module objective and data collection methodology. Completed data collection and entry (using PDA) for first site (Bokito). Data collection and entry is on-going for a second site (Ayos)

SOCIOECONOMIC Module: Data collection completed for first site (Mintom) and partially completed for second site (Bokito). Data entry for both sites is on-going using CSPRO

HEALTH; Data collection completed for Mintom and Ayos. Data entry is on-going

Partner engagement

Method Group: In the Western Ghats Sentinel Landscape: LDSF training provided to partners from Centre for Ecological Sciences of the Indian Institute of Science (CES), Ashoka Trust for Research in Ecology and the Environment (ATREE) & University of Horticulture and Agriculture Sciences, Shimoga (UHASS),.

The International Forestry Resources and Institutions network joint the sentinel landscape initiative

AgroParisTech (France) contributes to the definition of methods for Institutional Mapping.

Nicaragua/Honduras: Close relationships established with CIRAD-NITLAPAN on the analysis of human migrations and other social processes on land use evolution and impacts on trees in forests and outside forests in the NHSL. New alliances established with PCP (CIRAD-CATIE-ICRAF-BIOVERSITY-INCAE-PROMECAFE) to focus research in the NHSL from 2015 on.

Close ties and follow up of outputs, outcomes and budget leveraging from CATIE projects [MAPNoruega, PRCC (Programa Regional de Cambio Climatico), FINNFOR], and institutional Programs [Model Forest Network and Sustainable Forest Management].

Close ties with CCAFS and Humidtropics which have operations in the NHSL; close ties with the Government (Vice-Presidencia de la Republica-CONICYT, MAG, Ministerio de Agricultura Familiar) and various national universities (UNA, URACCAN).

Seven exchange students joined us to work on SL related issues. The students came from Colombia (3 students, University Narino and University Tolima), France (2 students, Ecole Nationale Superieure des Sciences Agronomiques de Bordeaux Aquitaine; ENSAT (Ecole Nationale Superieure Agronomique de Toulouse), Belgium (1 student, Universidad Libre de Bruselas), and Germany (1 student, Univ Hohenheim).

To Articulate Science, Rural Development and Education in Nicaragua, a national symposium/workshop was held with massive participation, a total of 12 NGOs, 8 Gubernmental organizations, 8 Universities, 6 internacional centres, and 4 International Cooperation. The work in the NHSL was portrayed at this event.

WASL :

Partners engaged and trained in implementing LDSF and IFPRI protocols (CIFOR, ICRAF-WCA, INERA, BERACYL)

Co-organized a meeting for developing a framework for coordination across CRPs and partners working within the same landscapes in Burkina Faso. FTA, DS, WLE and CCAFS were represented and in terms of institutions; CIFOR, ICRISAT, Bioversity, CARE, IUCN, USAID's WA-WASH Programme, INERA, IRSAT, CONNED, Tree Aid, University of Ouagadougou, CNSF, WASCAL.

Follow up meeting organized with partners to define priority actions for 2014. Based on recommendations of this meeting, an analysis of opportunities for synergy between the CGIAR common IDO's and Burkina Faso's SCADD and PNSR has been conducted

LOA established with INERA for completion of HH data collection in Ghana.

3 Consultants, 2 ICRAF staff, 5 CIFOR staff and one student from University of Helsinki (under BIODEV Project) trained in use of CSPRO and ODK for data entry.

TmFO Annual workshop organized in Macapa in March 2014

Annual workshop organized in Kuala Lumpur in June 2014

MoU drafted

IMSAO:

Partners for the Peru sites have been identified. A MoU with IIAP was signed for executing LDSF and IFRI&IM activities.

For Bolivia a specific partnership with CESVI has been established for executing LDSF&IM activities in Pando.

Brazil discussions with potential partners are in stand by for 2015.

Strong collaboration with FTA Component 3 on Certification study

Review of methodology for Institutional Mapping in collaboration with Tanya Hayes of Seattle University is completed.

Regional workshop held in Madre de Dios (Peru), 6-7 FEBRUARY 2014 to: present the 4 resource management outcomes, to present the SL methodology, and to jointly select the 4 final SL Sites. Participants:

BOLIVIA: ABT (Jose Luis Santivanez), HERENCIA (Fernando Reyes) CERES IFRI (Jean Paul Benavides), CATIE (Fatima Baquero), UAP (Guillermo Rioja), Fundacion Amigos de la Naturaleza (Natalia Calderon), CESVI (Marco Antonio Albornoz).

BRAZIL: Embrapa (Patricia Drumond, Marcus Neves), Woods Hole Research Center UFAC (Foster Brown), Jamil Macedo (Procitropicos).

PERU: IIAP (Dennis del Castillo, Ronald Corvera, Samuel Berrocal), INIA (Eloy Cuellar, Ymber Flores, FAO (Carla Ramirez), UNUcayali (Jorge Vela) UNAMAD (Gabriel Alarcon, Mishari Garcia), SPDA (Jose Vargas).

CGIAR: Bioersity (Evert Thomas, Maria Fernandez), CIAT (Rolf Wachholtz, Glenn Hyman), CIFOR (Manuel Guariguata, Ashwin Ravikumar), ICRAF (Jonathan Cornelius, Valentina Robiglio, Martin Reyes), CATIE (Norvin Sepulveda)

Expert: Tanya Hayes (Seattle University).

CAFHUT:

IRD collected information of the health module

The CG centers (Bioersity, CIFOR, ICRAF) met regularly to discuss on the SL activities.

Mekong:

MOUs signed with: National University of Laos, National Forestry; Khamla Phanvilay, klphanvilay@hotmail.com), Forestry University, Yezin, Myanmar San Win, Sanwin.env@gmail.com); Mae Fah Luang University, Thailand; (Kevin Hyde, kdhyde3@gmail.com)

Western Ghats:

Scientific board established among 9 partner members: ATREE(Ganesan Balachander, gbalachander@atree.org); ETH Zurich(Claude Garcia, claude.garcia@usys.ethz.ch), University of Horticulture and Agricultural Sciences, Shimoga (Gudappa Devagiri, gdevagiri@gmail.com), CIRAD (Philippe Vaast, philippe.vaast@cirad.fr): Indian Institute of Sciences, Asian Nature Conservation Foundation (R. Sukumar, rsuku@ces.iisc.ernet.in), French Institute of Pondicherry (B.R.Ramesh, ramesh.br@ifpindia.org), University of Agricultural Sciences (Uma Shaanker, umashaanker@gmail.com), ICRAF South Asia (Tomar, Sanjay, S.Tomar@cgiar.org),

Formal contracts with UAHS and ATREE have been agreed upon for data collection for remaining two sites.

Oil Palm:

Held meetings with partners in charge of data collection in Indonesia, Peru, Colombia and Malaysia. Different interactions to discuss scope of data collection and expected analysis

Central Asia:

	<p>Workshop to bring together potential partners, identify major issues and data sources, 16-17 December, Tashkent, Uzbekistan. Participants included national research institute representatives: Uzbekistan (Abduhalil Kayimov, Professor, Tashkent State Agrarian University), Tajikistan (Svetlana Shamuradova, Senior researcher, Tajik Research Institute of Forestry) and Kyrgyzstan (Kubanichbek Turgunbaev, Associate professor, Kyrgyz National Agrarian University named after K.I. Skryabin); ICARDA-CAC (Jozef Turok, Head of PFU CGIAR /Regional Coordinator); Central Asia University (Horst Weyerhaeuser, Director, Institute of Mountain Communities, Central Asia University); FAO (Ekrem Yazici, Senior forestry consultant); CIFOR (Christopher Martius); Adrian Newton, Co-chair of the IUCN/SSC Global Tree Specialist Group, Global Trees Campaign and others.</p> <p>Interested in testing and using add on module for Biodiversity</p>
<p>Relevant Indicators developed to assess the status of landscapes</p>	<p>Development of Protocols for sufficient standardization of data collection and analysis methods across sites</p> <p>Method Group:</p> <p>New Version of the Land Degradation Surveillance Framework, including a tree biodiversity and rangeland health module developed, published at: http://www.cifor.org/fileadmin/subsites/sentinel-landscapes/document/LDSF_Field_Guide.pdf</p> <p>Standard Operating Procedure for soil processing developed ; Standardized analysis for soil parameters developed</p> <p>Household survey tool developed available at: http://www.cifor.org/fileadmin/subsites/sentinel-landscapes/document/SL_Household_Module.pdf</p> <p>Protocol for to assess social mobility developed http://www.cifor.org/fileadmin/subsites/sentinel-landscapes/document/Stages_of_Poverty.pdf</p> <p>Models developed for derive indices on land degradation (surface wetness, erosion, fertility)</p> <p>MODIS image library (Africa, Southern Asia, Middle East, South America, and Australia) for the years 2001 and 2011 developed and uploaded to landscape portal</p> <p>TmFo: Protocol for data analysis on the impact of logging on biomass recovery in the Amazon Basin produced and shared within Team;</p> <p>Protocol for data analysis on the impact of logging on biodiversity in the Amazon Basin produced and shared within Team;</p> <p>Protocol for data analysis on the impact of logging on biomass and timber volume in SE Asia in preparation;</p> <p>Protocol for data analysis on the impact of logging on biodiversity in SE Asia in preparation</p>

	<p>WASL:</p> <p>Tool for Stages of Poverty Survey developed.</p> <p>Western Ghats:</p> <p>Protocol for Institutional Mapping proposed And report is ready and accessible here</p> <p>Nicaragua – Honduras</p> <p>Limited development of the idea of using drones to aid in the effective, efficient and accurate assessment of the presence of trees in forests and outside forests in the landscape. Not enough funding available due to cash flow. We need to set up a task force to produce a solid protocol for assessing trees in the SLs. We propose to use NHSL as a pilot for developing and testing the methodology and implementation tools.</p> <p>IMSAO: 4 Institutional Mapping Forms developed: a) Socio economic Unit Overview Form, b) Stakeholder Organization Form, c) Community Land Management Organization Form, d) Community Overview Form.</p> <p>Socioeconomic data gathering guide developed.</p> <p>Oil palm:</p> <p>Developed protocols for data collection in four out of the seven oil palm Sentinel Landscapes (Peru, Indonesia, Cameroon and Malaysia)</p> <p>Data collected at the household level in three sites (Colombia, Peru, Malaysia) and in process in Indonesia (West Kalimantan)</p> <p>Elaboration of a clean dataset containing data from three countries with data sets completed</p>
<p>Peer reviewed publications produced that address the suitability of comparative research to provide evidence to enable stakeholders and decision makers to enhance the management and use of forests, agroforestry and tree genetic resources across the landscape from forests to farms</p>	

<p>Core Methodology to assess the covariation between tree cover and livelihood outcomes developed, shared and implemented</p>	
<p>Output 6.7.1.4: Communication and information flow between all CRP6 scientists with respect to sentinel landscapes established.</p>	
<p>Sentinel landscape initiative presented at relevant international and regional forums</p>	<p>Method Group:</p> <p>Sentinel landscape webpage launched: http://www.cifor.org/forests-trees-agroforestry/sentinel-landscapes/home.html</p> <p>Presentation of the sentinel landscape initiative, at the Bi-annual meeting of the IFRI network, Annapolis: ppt available at: http://www.slideshare.net/rchalat/icraf-ifri-presentation-2013</p> <p>Sentinel landscape initiative presented as promising practice and lesson learned showcase at Consortium Knowledge Management Workshop, Bioversity Rome, power point presentation available at https://docs.google.com/file/d/0B3fRBYVceZzic3M4VXhQRjVVTFU/edit?pli=1</p> <p>Sentinel landscape initiative presented at Cross CRP meeting in Bonn,</p> <p>Presentation of the sentinel landscape initiative at the Inception workshop of the DIFID funded Agrarian Change Project, Bogor March 17th</p> <p>Nicaragua/Honduras:</p> <p>Sentinel landscape webpage updated with NORVIN/GEOVANA AQUI LISTAR QUE HAN HECHO EN ACTUALIZACION DE LA PAGINA WEB DEL NHSL...dar link</p> <p>A flyer with information about the long term coffee under agroforestry system was written</p> <p>Insect pathogenic fungi <i>Hypothenemus hampei</i>, <i>Leucoptera coffella</i> and in the soil in coffee plantations in Central America: natural occurrence, management system and genetic diversity</p> <p>Carbon footprint of conventional coffee production system</p> <p>Root-Knot Nematodes and Coffee in Nicaragua Management System, Species Identification and Genetic Diversity</p> <p>Changes in soil fertility, production and nitrogen balance in coffee agroforestry systems in Nicaragua</p>

Occurrence of Meloidogyne sp. And Pratylenchus sp. in conventional and organic coffee systems in Nicaragua

Web page of two long-term coffee-agroforestry systems experiments released (<http://www.catie.ac.cr/es/en-que-trabajamos/2013-08-26-22-56-13/agro-cafe/proyectos-agroforesteria/ensayos-saf-con-cafe>). A long list of technical publications, theses, and manuscript for scientific paper prepared on these experiments (Annex 2).

Nearly 50 power point presentations were made by NHSL researchers to inform, discuss, etc. about the NHSL; a wide audience was targeted, including decision makers, high management teams, government, scientific community (Annex 3).

TmFO: Webpage launched: <http://www.tmfo.org>

Presentation of TmFO objectives and Methods in workshops and conference:

- IUFRO world Congress 2014; Safe science workshop, Ascot, Imperial College October 2014 ; UNESCO conference on Botany; Presentation of TmFO network in CIRAD webpage news; Presentation of TmFO network in CIFOR blog

Data Analysis Workshop - 3rd - 7th March 2014

Workshop presentations can be found on <http://www1.cifor.org/sentinel-landscapes/presentations.html>

IUFRO Latin America congress

1 technical session organized at the IUFRO Latin America congress in June 2014 San Jose Costa Rica: "*Impact of logging on carbon storage and biodiversity in tropical production forests of Latin America.*" Chairs : Plinio Sist (CIRAD) and Bryan Finegan(CATIE) Presentations of the session:

- a. Sist. P. Is Tropical Forest Conservation through silviculture possible? The contribution of Tropical Production Forest Observatory Sentinel Landscape
- b. Ruschel, A. Thirty years after logging: Tree species dynamics in the Tapajos National Forest, Eastern Amazon, Brazil
- c. Mazzei, L. Large trees as key elements of Carbon storage and dynamics after selective logging in the Eastern Amazon
- d. d'Oliveira; M. 20 years forest dynamics study case in the Embrapa Acre Forest in Acre State, Brazilian Western Amazon
- e. Finegan, B. La dinamica a largo plazo de la diversidad taxonomica y funcional de especies lenosas en bosques lluviosos tropicales aprovechados y con tratamiento silvicultural en Costa Rica.
- f. Putz, F. Post-logging Biomass Recovery: A Pan-Tropical Analysis

Integrating gender into the sentinel landscapes, Bogor, Indonesia 1-2 July. The workshop report and presentations from the speakers are available from the following website: <http://www.cifor.org/forests-trees-agroforestry/documents/gender-analysis-and-research.html>

Warsaw Landscape Forum: Discussion forum: A landscape approach to management and conservation of natural resources: Change of paradigm or new illusory fad? Speakers: **Robert Nasi** FTA Director; **Anja Gassner** SL coordinator, **Ruth De Fries** Denning Professor of Sustainable Development; Professor of Ecology, Evolution, and Environmental Biology, The Earth Institute, Columbia University; **Terry Sunderland**, Principal Scientist, Forests and Livelihoods Programme, **Jaboury Ghazoul** Professor of Ecosystem Management, ETH Zurich; **Catalina Santamaria**, Programme Officer Forests, Convention on Biological Diversity (CBD)

Impact pathways to Articulate Science, Rural Development and Education in Nicaragua, a national seminar and workshop was held with massive participation, more than 120 participants from a total of 12 NGOs, 8 Governmental organizations, 8 Universities, 6 international centers, and 4 International Cooperation agencies and Governments. The workshop/symposium focused on family agriculture, a priority line of action of the Nicaraguan Government. In this event we portrayed our concepts and current work in the NHSL. This event was designed and implemented in close cooperation with the Vice-Presidency of the Government of Nicaragua, the National Science and Technology council (CONICYT), the Universidad Nacional Agraria, CIAT, CIRAD.....A plan to continue the priorities to next year is been developed with a very close relationship with CONICYT, CIAT, UNA, CNU, CIRAD, ICRAF, UNAN, Academia Cientifica de Nicaragua, and INTA

Jenny Ordonez co-organized the first Sentinel Landscapes Data Analysis Workshop, 3rd-7th March 2014 CATIE Costa Rica. Participants included 34 Scientist from CGIAR and non-CGIAR centers part of the Sentinel landscapes network

TMFO:

Sist,P., Rutishauser, E. 2014. Understanding the resilience of tropical production forest: the contribution of a new pan-tropical forest observatory. Annual Conference of the Society for Tropical Ecology (gtO) "Tropical Ecosystems - Between Protection and Production" February 25 to 28, 2014 in Freising-Weihenstephan, Germany.

Sist, P., Rutishauser, P., Shenkin, A. Gourlet-Fleury, S. 2014. The Tropical managed Forests Observatory: a research network addressing the future of tropical logged forests SAFE workshop, Silwood Park Campus, Imperial College London, 1-3 OCTOBER 2014

Sist, P. 2014. An Advocacy for Tropical Production Forests. Botanists of the 21st Century: roles, challenges and opportunities, Unesco, Paris, September 22-25, 2014

	<p>Sist, P., Nasi, R. 2014. Current state and future management trends: implications for the silviculture of natural tropical production forests. Technical session: What future for tropical silviculture. XXIV IUFRO World Congress 2014 - Salt Lake City, UT, United States, 5-11 October 2014</p> <p>"Sustaining Forests, Sustaining People: The Role of Research" IUFRO</p> <p>Sist, P., Rutishauser, E. 2014. The Tropical managed Forests Observatory: A New Research Tool to Address the Future of Logged Forests. Side event, XXIV IUFRO World Congress, 2014 - Salt Lake City, UT, United States, 5-11 October 2014 "Sustaining Forests, Sustaining People: The Role of Research" IUFRO</p>
Flagship Project: Communication - outreach	
Cluster Activities 6.8.1: Create an integrated communication program across all centers to maximize impact of CRP6 outputs	
Output 6.8.1.1: CGIAR.org: Regular updating of CRP-FTA webpage on cgiar.org	
Ongoing page maintenance	CRP-FTA page on CGIAR.org continues to be curated and updated regularly. New curator assigned for regular action.
Output 6.8.1.2: ForestsTreesAgroforestry.org: Creation and maintenance of hub website to curate FTA content from all centers and act as a main portal for FTA promotion	
Fully functional hub site	New hub website developed and live at ForestsTreesAgroforestry.org . Improvements continue to be made, to increase quantity and relevance of content coming from each center. CIFOR is working with CGIAR to share RSS feed systems for improved efficiencies.
Output 6.8.1.3: Center websites: Creation and regular updating of CRP-FTA web pages on websites of CIFOR, ICRAF, Bioversity and CIAT	
Center websites to feature CRP-FTA	<p>CIFOR's website is now redirecting to the hub of ForestsTreesAgroforestry.org. A program-specific information page on CIFOR.org in progress.</p> <p>ICRAF and Bioversity both maintain CRP-FTA landing pages on their sites. CIAT's is in progress</p> <p>All pages are scheduled for review and updating for maximum consistency</p>
Cluster Activities 6.8.2: Create cutting-edge publications to maximize impact of CRP6 research findings	

Output 6.8.2.1: Publications: Provide editing, design, layout and printing support	
Publications supported	<p>CIFOR published 20 occasional papers, 40 working papers, 30 books, 76 briefs, 27 factsheets, and 191 journal articles.</p> <p>ICRAF published 12 conference papers, 1 conference proceedings, 12 working papers, 11 books, 16 book chapters and 118 journal articles</p> <p>Bioversity: FTA scientists published 16 articles in peer-reviewed journals, 1 book chapter, 1 book, 2 factsheets and 6 scientific posters in 2014. The State of the World's Forest Genetic Resources, published by FAO was co-authored by Bioversity researchers, who also led several associated Thematic Studies, several of them in collaboration with ICRAF. On the basis of these studies, one of Bioversity's FTA scientists co-edited with an ICRAF scientist and FAO 7 open access articles on forest genetic resources in Elsevier's special issue of Forest Ecology and Management. The "Beyond Timber" project led by Bioversity and incorporating CIFOR Scientists, generated 13 policy briefs in French.</p> <p>CIAT: Co-authored three technical/policy notes on low-emissions agricultural development and impact of deforestation on GHG emissions</p>
Cluster Activities 6.8.3: Market CRP6 outputs to key stakeholders	
Output 6.8.3.1: Blogs: Articles will be written and posted on centers' blogs to promote key policy messages from CRP-FTA outputs	
Blogs written	<p>CIFOR: On blog.cifor.org, CIFOR posted 260 blog stories in English, along with translations: 174 in French, 128 in Spanish and 142 in Indonesian. In addition, 6 special packages were produced to collect and promote related content.</p> <p>CIAT published a total of 11 blog posts (in English or Spanish) on CIAT's News Blog and DAPA Blog; these dealt mainly with Terra-i applications and gender issues in forestry research.</p> <p>ICRAF posted 88 CRP-FTA blogs in Jan-Dec 2014.</p> <p>Bioversity: In 2014, Bioversity posted 55 blog stories in English regarding FTA.</p>
Output 6.8.3.2: Media: Make use of mainstream media to promote awareness of key messages stemming from CRP6 research	

Mainstream media hits	<p>CIFOR: CIFOR and FTA research appeared in 1432 mainstream media hits in 2014, including in multiple languages and international media. CIFOR has partnered with Thompson Reuters to curate blog content into their online web portal. CIFOR also partnered with the Jakarta Globe to publish a regular series of CIFOR-authored articles in their weekly environmental issues section.</p> <p>CIAT: Two articles published in Peruvian media about the decision of the government's Ministry of the Environment to make Terra-i its official tool for monitoring land-use change.</p> <p>ICRAF and FTA research featured in 1286 mainstream media hits from January to December 2014.</p> <p>Bioversity's research appeared in 10 mainstream media hits from Jan-July 2014 and FTA research was highlighted in <i>Nature</i>, <i>BBC Radio 4</i> amongst other media outlets.</p>
Output 6.8.3.3: Other social media: Centers will make full use of other social media tools to promote awareness of CRP-FTA outputs	
Social media growth and engagement	<p>CIFOR's online social media presence continued to grow in 2014: Flickr had over 4.6 million photo views, up 204% from the end of 2013. YouTube had almost 310,000 video views, up 71% from the end of 2013. Facebook total likes (in 4 languages) are up to over 27k from 11k at the end of 2013 (+130%). Twitter total followers (in 4 languages) are up to 26k from 12k at the end of 2013 (+117%). LinkedIn has been a new source of promotion since late in 2013, increasing to 5500 followers at the end of 2014. SlideShare views continue to increase, up to average monthly views of over 12.5k from 9.8k in 2013.</p> <p>CIAT: Promoted blog posts on forest-related research through our Twitter and Facebook accounts.</p> <p>ICRAF: Twitter followers increased by 92.88% by the end of 2014 Dec with over 17k followers in total. Facebook likes had a 55.16% increase, gaining over 3k followers in 2014. Youtube views grew by 81.7% in 2014 with a total of over 85K in comparison to 47K in 2013. Flickr: Total 544,786 views. Slideshare downloads had a total increase of 36.4% with a total of 88753 downloads in 2014, approximately 23k more than in 2013. LinkedIn followers increased with a total of 796. Having started 2014 with 427 followers and reaching 1223 in Dec 2014.</p> <p>Bioversity: In 2014, Bioversity's Twitter fans grew from 5,137 to 11,300 and Facebook from 4,235 to 7,144. This year, #forests has been our most popular hashtag. Our LinkedIn profile has 894 followers and 223 employees connected online. Started in February 2014, Bioversity International's Instagram has 93 followers. Our SlideShare reached 130 followers in the first half of the year. As of December 2014, we're at 153 with almost 65k views of our presentations. LinkedIn has 1,375 followers. Our YouTube channel has 275 subscribers</p>

Output 6.8.3.4: Events: Centers will leverage events for promotion of CRP-FTA and engagement with CRP-FTA stakeholders

Events for CRP-FTA	<p>CIFOR had a significant presence at over 20 international events, including the key events: World Congress on Agroforestry (Feb 10-14), The Forests Dialogue (Mar 16-19), SBSTA 40 (Jun 4-15), FAO COFO (Jun 23-27), Landscapes for People Food and Nature in Africa (Jul 1-3), ATBC 2014 (Jul 20-24), 2014 IUFRO World Congress (Oct 5-11), CGIAR Development Dialogues (Sep 25) and UNFCCC COP20 (Dec 1-12). CIFOR also distributed CRP-FTA publications at 81 additional international events. In May, CIFOR hosted the Forests Asia Summit in Jakarta, bringing together 2200 participants, including public and private sector officials, top experts in forests and landscapes, 13 ministers, and the President of Indonesia. CRP-FTA presence was promoted through an exhibition space. In September, CIFOR hosted the Colloquium on Forests and Climate on the sidelines of NY Climate Week, attended by 350 key negotiators and thought leaders, co-branded as an FTA event. And in December, CIFOR led the 2014 Global Landscapes Forum at COP20 in Lima. Over 1700 participants, 10 ministers including the former President of Mexico, and 95 organizations joined this fully bilingual event, featuring FTA materials and branding.</p> <p>CIAT organized a well-attended demonstration of the Terra-i tool in conjunction with an event held for the signing of a new agreement to strengthen CIAT's research support for Peru's Ministry of the Environment. Terra-i also featured prominently in GLF 2014 events organized by WRI, whose Global Forest Watch system now incorporates Terra-i.</p> <p>ICRAF distributed over 3000 CRP-FTA-related publications and DVDs at nine conferences and workshops from January to December 2014.</p> <p>Bioversity distributed CRP-FTA publications and communications materials at 9 conferences and workshops, including SBSTA 40 (Jun 4-15), FAO COFO (Jun 23-27), IUFRO 2014 (October) and GLF 2014 (Dec).</p>
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Cluster Activities 6.8.4: Promote CRP6 internal communications to maximize synergies

Output 6.8.4.1: Establishment and use of an internal communications platform	
Internal communications platform	SharePoint has been built for CRP-FTA, but has seen minimal use. Key FTA comms focal points from the centers are scheduled to review and re-establish relevant internal communications tools.
Output 6.8.4.2: Newsletter: Establish and support a regular CRP-FTA newsletter for information sharing within the team and to key stakeholders	
Internal newsletter	An FTA newsletter was developed and the first edition scheduled for release in February 2015.

Output 6.8.4.3: Branding guidelines: Develop and maintain a clear branding strategy for CRP-FTA, aligned with CGIAR standards	
CRP-FTA branding guidelines	CRP-FTA is scheduled to go through a branding exercise to establish its standardized identity for use by the centers, and fulfil CGIAR branding requirements
Output 6.8.4.4: Communications Calendar: Creation & maintenance of a CRP-FTA communications calendar	
Communications calendar	New events calendar function built into ForestsTreesAgroforestry.org. Population and connection to centers' activities is in progress.
Flagship Project: Monitoring, evaluation and impact assessment	
Cluster Activities 6.9.1: Monitoring Evaluation and Impact Assessment	
Output 6.9.1.1: Establish an FTA Planning, Monitoring and Learning Framework	
Establish FTA project information database	Database structure completed, and about 90% populated
At least 2 geographic or thematic aggregate results chains, targets and indicators established	This activity will only be applicable once the lessons from 6.9.1.4 are documented. Given that 6.1.9.4 will only be completed in third quarter 2015, it is unlikely that this activity will be completed in 2015.
FTA Theory of change and impact pathways refined	New revised TOC included in extension proposal
Output 6.9.1.2: Develop strategic evaluation plan for FTA	
2014-2015 evaluation plan agreed	2015 MEIA Workplan is completed
Output 6.9.1.3: Evaluations and Impact Assessments conducted	

LAMIL impact assessment completed		In progress, to be completed in mid-2015.
Congo Basin study completed		Completed
Climate Change outcomes evaluated		In progress, to be completed in mid-2015.
Output 6.9.1.4: Initiate joint CRP planning in Burkina Faso		
Multi-CRP result, target and indicator set developed for Burkina Faso		In progress
Output 6.9.1.5: Enhanced implementation of MEIA tools and approaches in FTA		
Trainings held on MEIA tools and approaches		Trainings delivered on program logic and use of knowledge sharing evidence capture

Annex 3: Publications in 2014

Type of pubs	No of titles	Open Access	%
ISI Article	328	82	25%
Non-ISI Article	32	4	13%
Books	36	13	36%
Brief	79	79	100%
Brochures & Flyers	8	8	100%
Chapters	86	54	63%
Factsheets	14	14	100%
Guideline	1	1	100%
News	5	0	0%
Papers	87	86	99%
Database	2	2	100%
Proceeding	3	0	0%
Poster	11	11	100%
Report	10	5	50%
Strategy document	2	2	100%
Tools	7	5	71%
Total	711	366	51%

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Meet the Fellows: Mawa Karambiri: <http://www.biodiversityinternational.org/capacity-strengthening/fellows-gallery/single-details-fellow/news/mawa-karambiri/>

Participatory research for social learning and conservation of forest fruit trees:
<https://www.youtube.com/watch?v=ZI8tqITjWdM>

WEBPAGES

<http://www.biodiversityinternational.org/news/detail/a-year-of-gender-responsive-participatory-research/>

<http://www.worldagroforestry.org/crp6/gender/news>

<http://www.cifor.org/forests-and-gender/>

<http://foreststreesagroforestry.org/forests-trees-agroforestry-research-portfolio/gender-analysis-and-research/>

Annex 5: Capacity Development numbers 2014

Indicator	Number of events	Total Participants	Female	Male
Long term training		313	138	185
1. No. of MS Students defended in 2014(total)	Not applicable	146	86	64
2. No. of PhD Students defended in 2014(total)	Not applicable	86	38	48
3. No. of Visiting Scientists from partners/NARES hosted by FTA mapped projects in 2014 (total)	Not applicable	63	13	50
4. No. of FTA scientists based at partner institutions for more than a week in 2014(total)	Not applicable	18	5	13
Short term training		8464	3229	5235
5. Trainings events (non-degree) held on FTA related issues for innovation system actors in 2014 by FTA mapped projects (Total)	536 (17 exclusively for female audience)	6792	2540	4252
6. Other CapDev events (seminars, lectures, road shows, demonstrations, field visits, etc held on FTA related issues for innovation system actors) in 2014 by FTA mapped projects	513 (12 exclusively for female audience)	1672	689	983
Other Capacity Development activities				
7. Teaching Course materials produced in 2014 (eg books, manuals, guidelines, lecture notes, audio-visuals, online courses)	699			
For scientific audience	59			
For practitioners (extensionists, CBOs/NGOs/...)	46			
For farmers/producers/smallholders	550			
For other innovation system actors	14			

Annex 6: Compliance table with evaluation recommendations

Progress in Implementation of Action Plan Response to the Evaluation of the CGIAR Research Program “Forests, Trees and Agroforestry” (FTA)			Date of Action Plan 02.09.2014.		Date of Report 31.12.2014.
Number ³	Action to be taken	Responsible for Action	Original timeframe (start-finish)	Revised timeframe (start-finish)	Progress on Action
1	Appropriate system in place to record expenditure by country/region (also relevant to R9, #39)	FTA Director, project management and finance units	Sep-Dec 2014		Done as part of the development of FTA project database
5	Precise overarching hypotheses for the 5 FPs	FP leaders	Aug 2014		Done during the preparation of the extension proposal
6	Create a Cluster of Activities on “tenure and resource rights” in FP5	FTA Management Unit; FP5 leader; Tenure coordinator	Sep-Dec 2014		Done – implementation starts with the extension in 2015
7	Program of work on FTA tenure for PIM	Tenure coordinator and relevant scientists	Sep-Dec 2014; implemented in 2015-2016		Done – unfortunately the budget cuts have hindered progress as PIM was not able to contribute anymore
9	Organize FTA wide scientific conference	FTA Management Unit and scientists	Nov 2014		Done as planned in Nov 2014
15	Revision of SC TORs	FTA Director, SC, Lead Center BOT	Aug-Dec 2014		Done
20	Integration of SLs in relevant FPs	FTA Management, SL coordinator	Aug-Sep 2014		Done as part of the extension proposal and implemented in POWB 2015
21	Distribute scientific leadership	FTA Director, relevant FP leaders, SL coordinator	Sep-Dec 2014		Done with the creation of a FTA management team composed of FP leaders and cross-cutting coordinators
30	Revisit PRGA outputs and processes	GIT	Sep-Dec 2014		Done by the gender integration team
38	Active promotion of FTA as a program with important policy and practitioner partners	Resource Mobilization and Communication units, FTA Management and team	Starting Oct 2014		Done and ongoing. See section C1 in this report

³ Given to Action in the Management Action Plan

39	Phase 1 of FTA project database development	MEIA, FTA Management, FP leaders, project managers	Aug-Dec 2014		Done
43	Develop new TORs for Steering Committee	FTA Director	Oct 2014		
44	Actively search for new members	FTA Management, SC	Sep-Dec 2014		Done – 4 independent members selected
45	TORs of new SC approved	SC at its 9th session	Dec 2014 (tbc)	Dec 2014	Approved as planned and confirmed by the lead Center BOT in April 2015
46	Revised FTA Director TORs	FTA Director, Lead Center DG	Oct 2014		Done – although recruitment suspended because of the total uncertainty of the context and the budget cuts
47	TORs for FTA Management Unit or Committee	FTA Management	Oct 2014		Done – the MT is up and running and meets one a month, normally virtually and whenever necessary face to face (e.g. Jan 2015 in Nairobi)
48	Revised TORs for FP leaders and CCT coordinators	FTA Director	Oct 2014		Not deemed necessary given the other changes
49	All these TORs approved by SC	SC at its 9 th session	Dec 2014 (tbc)		Approved as planned

Annex 7: FTA Intermediate Development Outcomes and indicators

IDO	Indicator	Aspirational target for 2025	Potential verification tool	FP
1 - Policies supporting improved livelihoods and sustainable and equitable resource management adopted	Number of policies influenced	At least 50 FT&A related policies in 30 countries designed following uptake of and influence from FTA research products	Policy analysis; targeted interviews; ex-ante and ex-post impact studies	1,2,3,4,5
2 - Greater gender equity and women's empowerment in decision-making and control over forest, tree and agroforestry resource use	Proportion of women in FT&A management decision making and control	At least 25% of women members in FT&A management and decision making institutions in 5 countries	Household surveys; targeted interviews	1,2,3,4,5
3 - Enhanced income from goods and services derived from forestry and agroforestry systems	Income from FT&A value chains	A 20% income increase for 5 million smallholder forest and plantation owners, and a 5% increase for 34 million people in forest-dependent communities – a minimum of 25% of the generated income is received or controlled by women	General equilibrium macroeconomic models; household surveys; national statistics offices; ex-post impact studies	1,2,5
4 - Increased and stable access to nutritious food by rural and urban poor	Number of food insecure months Dietary diversity contributions of FT&A resources	A 20% reduction in food insecure months thanks to tree-based systems on farms in 10 countries, helping 7 million people Increased or maintained dietary diversity for 90 million people via access to FT&A diversified food sources	Household surveys; national statistics offices; ex-post impact studies	1,2,3
5 – Sustainable production of wood, food, fuel and other products from forestry and agroforestry systems increase	Annual production of FT&A commodities / Area under sustainable management	Increase in: <ul style="list-style-type: none"> • Smallholder food crop productivity over 11 million ha • Total factor productivity by up to 30% for 10.5 million smallholder farmers • Tree-crop system productivity by 75% over 450,000 ha and by 50% over 1.25 million ha. • Livestock productivity by 25% for 2 million smallholder farmers • Sustainably managed wood energy production by 25% in five countries • Certified timber production by 20% in five timber producing countries 	General equilibrium macroeconomic models; household surveys; national statistics offices; ex-post adoption and impact studies	1,2,5
6 - Biodiversity and ecosystem services (including carbon sequestration) from forests, trees and agroforestry resources conserved or improved	Area of avoided deforestation and degradation /C sequestered	One billion ha of forests under efficient, equitable and effective REDD+ mechanism with 0.5-1.7 million hectares of avoided deforestation, sustainable management practices adopted in at least 30 million hectares of forests and emissions reduced by 0.16 (carbon) and 0.68 (CO ₂) Gt annually.	Global forest models and remote sensing monitoring platforms; national statistics; ex-post adoption and impact studies	1,2,3,4,5

Annex 8: “L” financial tables for 2014

FTA Financial Reporting Templates

Ref	Description	Comments
Budget and Financial Reports		
L101	CRP Cumulative Financial Summary	
L106	CRP Annual Funding Summary	
L111	CRP Annual Financial Summary	Total spending for the year by Center, including Gender expenditure
L121	CRP - Expenditure by Natural Classification Report	Included mainly for reconciliation purposes and to eliminate double counting of CGIAR collaboration costs; note that it is the net amount (i.e. expenses excluding CGIAR collaboration costs) which should be used as the total for L111 and L131
L131	CRP - Flagship Projects Report	Simplified - Source of funding no longer required; note that this report is still titled "Themes"; transition is underway and some CRPs are already recording costs by Flagship Project. If that is the case for your CRP, please change the title of the report.
L136	Gender Expenditure by Theme	
L141		
Analytical Financial Reports		
L211	CRP Partnerships Report	

Notes

Most reports are for current year only. Exceptions are L101 which is multi-year (cumulative).

All reports shown here are for individual CRP's. The Consortium Office will prepare consolidated CRP reports.

Budget figures in all of the attached forms should be the annual confirmed budget (POWB) for the year.

W1/2 total will be as the Financing Plan notified by the Consortium Office, and W3/Bilateral the forecast prepared internally.

Actual events since the signing of the PIAs result in the budget per PIA no longer being a meaningful measure of performance.

For reporting purposes, please delete from L121 and L131 Centers not relevant to your CRP.

Period: 07/01/2011 - 12/31/2014

Cumulative Financial Summary

Amounts in USD (000's)

Report Description

Name of Report:	Cumulative Financial Summary
Frequency/Period:	Annual
Deadline:	Every April 15th

Summary Report - by
CG Partners

	(a) Total POWB budget since inception					(b) Actual cumulative Expenses					(c) Variance / Balance				
	Windows 1 & 2	Window 3	Bilateral Funding	Center funds	Total Funding	Windows 1 & 2	Window 3	Bilateral Funding	Center funds	Total Funding	Windows 1 & 2	Window 3	Bilateral Funding	Center funds	Total Funding
1. AFRICA RICE					-00					-00	-00	-00	-00	-00	-00
2. BIOVERSITY	16,028	961	11,033	-00	28,021	12,867	1,603	7,128	847	22,445	3,161	(642)	3,905	(847)	5,576
3. CIAT	1,460	-00	2,259	-00	3,719	1,342	-00	2,087	-00	3,430	118	-00	171	-00	289
4. CIFOR	47,296	6,913	73,913	-00	128,122	48,307	16,875	52,690	1,217	119,088	(1,011)	(9,962)	21,224	(1,217)	9,034
5. CIMMYT					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

6. CIP					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
7. ICARDA					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
8. ICRAF	37,484	3,233	70,474	2,586	113,777	34,602	2,752	71,552	6,819	115,725	2,882	481	(1,078)	(4,233)	(1,948)
9. ICRISAT					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
10. IFPRI					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
11. IITA					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
12. ILRI					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
13. IRRI					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
14. IWMI					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
15. WORLD FISH					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
16. CIRAD	580	-00	450	-00	1,030	573	-00	593	-00	1,166	7	-00	(143)	-00	(136)
17. CATIE	440	-00	-00	1,508	1,948	438	-00	-00	1,442	1,880	2	-00	-00	66	68
Total for CRP	103,288	11,107	158,128	4,094	276,618	98,129	21,230	134,050	10,325	263,734	5,159	(10,123)	24,078	(6,231)	12,883
	37%	4%	57%	1%	100%	37%	8%	51%	4%	100%	40%	-79%	187%	-48%	100%

CRP No. 6 - Forest, Tree, Agroforestry CGIAR TEMPLATE: L106

Period: 12/31/2014

Amounts in USD (000's)

1,000.00

**Annual
Funding
Summary**

Report Description

Name of Report: Annual Funding Summary

Frequency/Period: Annual

Deadline: Every April 15th

PART 1 - Annual FINANCE PLAN (Totals for Windows 1 and 2 combined)

Approved Level for Year - Initial Approval (as per PIA)

Approved Level for Year - Final Amount

PART 2 - Funding Summary for Year

2014 Actual Funding

		Windows 1&2	Window 3	Bilateral Funding	Total Funding
1	CGIAR Fund	30,400	-00	-00	30,400
2	CIFOR	-00	-00	214	214
3	ACIAR	-00	1,411	536	1,947
4	ADB	-00	-00	946	946
5	AusAID	-00	3,242	-00	3,242

6	Australia	-00	-00	223	223
7	Austria	-00	420	-00	420
8	Austrian Development Agency (ADA)	-00	385	-00	385
9	Bioversity International	-00	-00	129	129
10	BMU	-00	-00	6	6
11	Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (BMU) via Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety Division KI II 7-International Climate Finance, International Climate Initiative				
			-00	47	47
12	Canadian International Development Agency		-00	1,917	1,917
13	Catholic Organization for Relief and Development Aid (CORDAID)	-00	-00	101	101
14	CBFF		-00	483	483
15	Centre for Development Innovation	-00	-00	50	50
16	Chemonics International		-00	160	160
17	COFORTIPS ANR		-00	300	300
18	Colciencias		-00	129	129
19	Cooperation of Common Fund For Commodities		-00	327	327
20	Danish International Development Agency		-00	714	714
21	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	-00	-00	150	150
22	Deutsche Gessellschaft fur Technische Zusammenarbeit		-00	643	643
23	DYNAFOR -AFD-FFEM		-00	157	157
24	EcoPatrol		-00	136	136
25	European Commission (EC)	-00	-00	2,811	2,811

26	FAO		-00	-00	358	358
27	Finland	-00		-00	1,961	1,961
28	Flemish Office for Development Cooperation and Technical Assistance			-00	1,484	1,484
29	Forest Stewardship Council (FSC)	-00		-00	32	32
30	French Agricultural Research Centre for International Development (CIRAD)		-00	-00	71	71
31	French Global Environment Facility (FFEM)	-00		-00	111	111
32	Georg-August-Universität Göttingen	-00		-00	37	37
33	Germany			-00	206	206
34	ICRAF		-00	-00	620	620
35	IDH Sustainable Trade Initiative			-00	673	673
36	IFAD		-00	1,602	1,255	2,857
37	IFPRI			-00	22	22
38	ILRI			-00	102	102
39	Intergovernmental Authority on Development			-00	423	423
40	International Bank for Reconstruction and Development (IBRD)		-00	-00	435	435
41	IRLD			-00	617	617
42	Japan		-00	182	3	185
43	Københavns Universitet		-00	-00	72	72
44	Korea Forest Research Institute	-00		-00	359	359
45	Korea			-00	30	30
46	KPMG East Africa Ltd (DFID)		-00	-00	568	568
47	Luxembourg			353	-00	353
48	Margaret A. Cargill Foundation			-00	393	393

49	Mars Inc.		-00	5,055	5,055
50	NERC		-00	100	100
51	Netherlands	-00	332	223	555
52	NORAD	-00	-00	5,528	5,528
53	Peru		-00	11	11
54	Prince Albert Foundation		-00	9	9
55	Rockefeller Foundation	-00	-00	42	42
56	SPIA		-00	5	5
57	Swiss Development Cooperation		-00	103	103
58	Switzerland	-00	-00	300	300
59	Technical University of Darmstadt	-00	-00	193	193
60	U4 Anti-Corruption Resource Centre	-00	-00	40	40
61	United Nations Environment Programme (UNEP)	-00	-00	562	562
62	University of Copenhagen (UCOP)		-00	140	140
63	US Forest Service - International Programs	-00	-00	199	199
64	USAID	-00	3,710	648	4,357
65	World Wide Fund (WWF)	-00	-00	51	51
66	WorldFish Center	-00	-00	194	194
67	WRI		-00	14	14
68	USDA		-00	52	52
69	Others	-00	231	1,764	1,995
Total for CRP 6			30,400	11,867	35,242
				77,509	

**CRP No. 6 - Forest, Tree,
Agroforestry**

Period: 12/31/2014

Annual Financial Summary by Centers

Amounts in USD
(000's)

Report Description

Name of Report: Annual Financial Summary by Centers
& Other Participants

Frequency/Period: Annual

Deadline: Every
April 15th

Summary Report - by CG Partners	(a) CRP 2014 POWB approved budget					(b) CRP 2014 Expenditure					(c) Variance this Year				
	Windows 1 & 2	Window 3	Bilateral Funding	Center funds	Total Funding	Windows 1 & 2	Window 3	Bilateral Funding	Center funds	Total Funding	Windows 1 & 2	Window 3	Bilateral Funding	Center funds	Total Funding
1. AFRICA RICE					-00					-00	-00	-00	-00	-00	-00
2. BIOVERSITY	3,475	961	1,535	-00	5,971	3,426	723	1,301	268	5,718	49	238	234	(268)	253
3. CIAT	754	-00	420	-00	1,174	751	-00	327	-00	1,078	3	-00	93	-00	96
4. CIFOR	14,883	6,913	17,984	-00	39,780	15,595	8,269	11,890	641	36,396	(712)	(1,356)	6,094	(641)	3,384
5. CIMMYT					-00					-00	-00	-00	-00	-00	-00
6. CIP					-00					-00	-00	-00	-00	-00	-00
7. ICARDA					-00					-00	-00	-00	-00	-00	-00

8. ICRAF	10,226	3,233	21,257	2,586	37,302	9,613	2,752	21,045	2,286	35,696	613	481	212	300	1,606
9. ICRISAT					-00					-00	-00	-00	-00	-00	-00
10. IFPRI					-00					-00	-00	-00	-00	-00	-00
11. IITA					-00					-00	-00	-00	-00	-00	-00
12. ILRI					-00					-00	-00	-00	-00	-00	-00
13. IRRI					-00					-00	-00	-00	-00	-00	-00
14. IWMI					-00					-00	-00	-00	-00	-00	-00
15. WORLDFISH					-00					-00	-00	-00	-00	-00	-00
16. CIRAD	580	-00	450	-00	1,030	573	-00	593	-00	1,166					
17. CATIE	440	-00	-00	1,508	1,948	438	-00	-00	1,442	1,880					
Total for CRP	30,358	11,107	41,647	4,094	87,206	30,396	11,744	35,156	4,638	81,934	(47)	(637)	6,634	(609)	5,340
	35%	13%	48%	5%	100%	37%	14%	43%	6%	100%	-1%	-12%	124%	-11%	100%

Annual Financial Summary by Natural Classification

Period: 12/31/2014

Amounts in USD
000's

1,000.00

Report Description

Name of Report: Financial Summary by Natural
Classification lines

Frequency/Period: Annual

Deadline: Every
April
15th

	Windows 1 & 2	Window 3	Bilateral Funding	Center Funds	Total Funding	Windows 1 & 2	Window 3	Bilateral Funding	Center Funds	Total Funding	Windows 1 & 2	Window 3	Bilateral Funding	Center Funds	Total Funding
Total CRP 6	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	10,720	3,318	13,008	1,767	28,812	14,582	3,665	12,640	2,384	33,271	(3,862)	(347)	367	(617)	(4,459)
Collaborators Costs - CGIAR Centers	-00	-00	-00	-00	-00	4	124	85	-00	213	(4)	(124)	(85)	-00	(213)
Collaborator Costs - Partners	3,674	2,497	9,706	765	16,641	1,006	1,626	4,792	200	7,625	2,667	870	4,914	565	9,016
Supplies and services	9,560	2,962	9,658	1,191	23,371	6,388	3,982	10,458	1,293	22,121	3,172	(1,019)	(800)	(103)	1,250
Operational Travel	1,802	649	3,539	288	6,277	2,377	927	3,267	490	7,061	(575)	(278)	271	(202)	(784)
Depreciation	304	82	566	84	1,036	783	60	682	125	1,651	(479)	22	(116)	(41)	(615)

Sub-total of Direct Costs	26,059	9,508	36,476	4,094	76,137		25,140	10,384	31,925	4,493	71,941	919	(876)	4,551	(399)	4,196
Indirect Costs	4,299	1,599	5,171	-00	11,069		5,260	1,485	3,316	145	10,205	(961)	115	1,855	(145)	864
Total - All Costs	30,358	11,107	41,647	4,094	87,206	#	30,400	11,868	35,241	4,638	82,147	(42)	(761)	6,406	(544)	5,059
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00		(4)	(124)	(85)	-00	(213)	4	124	85	-00	213
Total Net Costs	30,358	11,107	41,647	4,094	87,206		30,396	11,744	35,156	4,638	81,934	(38)	(637)	6,491	(544)	5,272

Amounts for each participating center below:

AFRICA RICE	POWB Approved Budget					Actual					Unspent/Variance									
Personnel					-00					-00					-00					-00
Collaborators Costs - CGIAR Centers					-00					-00					-00					-00
Collaborator Costs - Partners					-00					-00					-00					-00
Supplies and services					-00					-00					-00					-00
Operational Travel					-00					-00					-00					-00
Depreciation					-00					-00					-00					-00
Sub-total of Direct Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Indirect Costs					-00					-00					-00					-00

Total - All Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

BIOVERSITY	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	1,475	136	478	-00	2,089	1,536	116	421	-00	2,073	(61)	20	57	-00	16
Collaborators Costs - CGIAR Centers	-00	-00	-00	-00	-00	-00	51	-00	-00	51	-00	(51)	-00	-00	(51)
Collaborator Costs - Partners	-00	477	290	-00	766	42	388	249	-00	678	(42)	89	41	-00	88
Supplies and services	1,323	224	553	-00	2,101	1,183	98	512	225	2,019	141	126	41	(225)	82
Operational Travel	124	3	171	-00	298	116	36	69	-00	220	8	(32)	102	-00	78
Depreciation	2	-00	-00	-00	2	2	-00	-00	-00	2	(0)	-00	-00	-00	(0)
Sub-total of Direct Costs	2,925	841	1,491	-00	5,257	2,879	689	1,251	225	5,044	46	152	240	(225)	213
Indirect Costs	550	120	44	-00	714	547	85	50	43	725	3	35	(7)	(43)	(11)
Total - All Costs	3,475	961	1,535	-00	5,971	3,426	774	1,301	268	5,769	49	187	234	(268)	202
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	(51)	-00	-00	(51)	-00	51	-00	-00	51
Total Net Costs	3,475	961	1,535	-00	5,971	3,426	723	1,301	268	5,718	49	238	234	(268)	253

CIAT	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	369	-00	252	-00	621	374	-00	198	-00	572	(5)	-00	54	-00	49
Collaborators Costs - CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners	25	-00	-00	-00	25	25	-00	-00	-00	25	-00	-00	-00	-00	-00
Supplies and services	189	-00	62	-00	251	151	-00	70	-00	221	38	-00	(8)	-00	30
Operational Travel	69	-00	26	-00	95	101	-00	9	-00	109	(32)	-00	17	-00	(14)
Depreciation	10	-00	15	-00	25	9	-00	-00	-00	9	1	-00	15	-00	16
Sub-total of Direct Costs	662	-00	355	-00	1,017	659	-00	277	-00	936	3	-00	78	-00	81
Indirect Costs	92	-00	65	-00	157	92	-00	50	-00	142	(0)	-00	15	-00	15
Total - All Costs	754	-00	420	-00	1,174	751	-00	327	-00	1,078	3	-00	93	-00	96
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	754	-00	420	-00	1,174	751	-00	327	-00	1,078	3	-00	93	-00	96

CIFOR	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	4,442	1,987	4,243	-00	10,672	7,100	2,569	3,414	268	13,351	(2,658)	(582)	830	(268)	(2,679)
Collaborators Costs - CGIAR Centers	-00	-00	-00	-00	-00	4	73	85	-00	162	(4)	(73)	(85)	-00	(162)
Collaborator Costs - Partners	948	1,261	4,423	-00	6,632	494	874	1,268	45	2,681	454	387	3,155	(45)	3,952
Supplies and services	6,985	2,235	5,638	-00	14,858	2,869	3,131	5,245	95	11,340	4,116	(896)	392	(95)	3,518
Operational Travel	812	473	2,153	-00	3,437	1,161	522	874	56	2,613	(349)	(49)	1,279	(56)	825
Depreciation	9	-00	14	-00	23	757	41	73	75	946	(748)	(41)	(59)	(75)	(923)
Sub-total of Direct Costs	13,196	5,955	16,472	-00	35,623	12,385	7,210	10,959	539	31,093	811	(1,255)	5,513	(539)	4,530
Indirect Costs	1,687	958	1,513	-00	4,157	3,215	1,132	1,016	102	5,465	(1,528)	(174)	497	(102)	(1,308)
Total - All Costs	14,883	6,913	17,984	-00	39,780	15,600	8,342	11,975	641	36,558	(717)	(1,429)	6,010	(641)	3,223
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	(4)	(73)	(85)	-00	(162)	4	73	85	-00	162
Total Net Costs	14,883	6,913	17,984	-00	39,780	15,595	8,269	11,890	641	36,396	(712)	(1,356)	6,094	(641)	3,384

CIRAD	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	160	-00	180	-00	340	222	-00	262	-00	484	(62)	-00	(82)	-00	(144)
Collaborators Costs - CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Supplies and services	150	-00	100	-00	250	196	-00	115	-00	311	(46)	-00	(15)	-00	(61)
Operational Travel	170	-00	50	-00	220	57	-00	47	-00	104	113	-00	3	-00	116
Depreciation	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Sub-total of Direct Costs	480	-00	330	-00	810	475	-00	424	-00	899	5	-00	(94)	-00	(89)
Indirect Costs	100	-00	120	-00	220	98	-00	169	-00	267	2	-00	(49)	-00	(47)
Total - All Costs	580	-00	450	-00	1,030	573	-00	593	-00	1,166	7	-00	(143)	-00	(136)
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	580	-00	450	-00	1,030	573	-00	593	-00	1,166	7	-00	(143)	-00	(136)

CATIE	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	193	-00	-00	811	1,004	173	-00	-00	874	1,047	20	-00	-00	(63)	(43)
Collaborators Costs - CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners	39	-00	-00	158	197	60	-00	-00	125	185	(21)	-00	-00	33	12
Supplies and services	130	-00	-00	371	502	111	-00	-00	305	416	19	-00	-00	67	86
Operational Travel	18	-00	-00	149	167	39	-00	-00	139	178	(22)	-00	-00	10	(12)
Depreciation	-00	-00	-00	19	19	-00	-00	-00	-00	-00	-00	-00	-00	19	19
Sub-total of Direct Costs	380	-00	-00	1,508	1,888	384	-00	-00	1,442	1,826	(4)	-00	-00	66	62
Indirect Costs	60	-00	-00	-00	60	54	-00	-00	-00	54	6	-00	-00	-00	6
Total - All Costs	440	-00	-00	1,508	1,948	438	-00	-00	1,442	1,880	2	-00	-00	66	68
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	440	-00	-00	1,508	1,948	438	-00	-00	1,442	1,880	2	-00	-00	66	68

ICARDA	POWB Approved Budget					Actual					Unspent/Variance				
Personnel					-00					-00	-00	-00	-00	-00	-00
Collaborators Costs - CGIAR Centers					-00					-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners					-00					-00	-00	-00	-00	-00	-00
Supplies and services					-00					-00	-00	-00	-00	-00	-00
Operational Travel					-00					-00	-00	-00	-00	-00	-00
Depreciation					-00					-00	-00	-00	-00	-00	-00
Sub-total of Direct Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Indirect Costs					-00					-00	-00	-00	-00	-00	-00
Total - All Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

ICRISAT	POWB Approved Budget					Actual					Unspent/Variance				
Personnel					-00					-00	-00	-00	-00	-00	-00
Collaborators Costs - CGIAR Centers					-00					-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners					-00					-00	-00	-00	-00	-00	-00
Supplies and services					-00					-00	-00	-00	-00	-00	-00
Operational Travel					-00					-00	-00	-00	-00	-00	-00
Depreciation					-00					-00	-00	-00	-00	-00	-00
Sub-total of Direct Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Indirect Costs					-00					-00	-00	-00	-00	-00	-00
Total - All Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

IFPRI	POWB Approved Budget					Actual					Unspent/Variance				
Personnel					-00					-00	-00	-00	-00	-00	-00
Collaborators Costs - CGIAR Centers					-00					-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners					-00					-00	-00	-00	-00	-00	-00
Supplies and services					-00					-00	-00	-00	-00	-00	-00
Operational Travel					-00					-00	-00	-00	-00	-00	-00
Depreciation					-00					-00	-00	-00	-00	-00	-00
Sub-total of Direct Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Indirect Costs					-00					-00	-00	-00	-00	-00	-00
Total - All Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

IITA	POWB Approved Budget					Actual					Unspent/Variance				
Personnel					-00					-00	-00	-00	-00	-00	-00
Collaborators Costs - CGIAR Centers					-00					-00	-00	-00	-00	-00	-00

Collaborator Costs - Partners					-00					-00	-00	-00	-00	-00	-00
Supplies and services					-00					-00	-00	-00	-00	-00	-00
Operational Travel					-00					-00	-00	-00	-00	-00	-00
Depreciation					-00					-00	-00	-00	-00	-00	-00
Sub-total of Direct Costs					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Indirect Costs					-00					-00	-00	-00	-00	-00	-00
Total - All Costs					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
LESS Coll Costs CGIAR Centers					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs					-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

ILRI	POWB Approved Budget	Actual	Unspent/Variance			
Personnel	-00	-00	-00	-00	-00	-00
Collaborators Costs - CGIAR Centers	-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners	-00	-00	-00	-00	-00	-00
Supplies and services	-00	-00	-00	-00	-00	-00
Operational Travel	-00	-00	-00	-00	-00	-00
Depreciation	-00	-00	-00	-00	-00	-00

Sub-total of Direct Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Indirect Costs					-00					-00				-00	-00
Total - All Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

IRRI	POWB Approved Budget					Actual					Unspent/Variance				
Personnel					-00					-00				-00	-00
Collaborators Costs - CGIAR Centers					-00					-00				-00	-00
Collaborator Costs - Partners					-00					-00				-00	-00
Supplies and services					-00					-00				-00	-00
Operational Travel					-00					-00				-00	-00
Depreciation					-00					-00				-00	-00
Sub-total of Direct Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Indirect Costs					-00					-00				-00	-00
Total - All Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

IWMI	POWB Approved Budget					Actual					Unspent/Variance				
Personnel					-00					-00	-00	-00	-00	-00	
Collaborators Costs - CGIAR Centers					-00					-00	-00	-00	-00	-00	
Collaborator Costs - Partners					-00					-00	-00	-00	-00	-00	
Supplies and services					-00					-00	-00	-00	-00	-00	
Operational Travel					-00					-00	-00	-00	-00	-00	
Depreciation					-00					-00	-00	-00	-00	-00	
Sub-total of Direct Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	
Indirect Costs					-00					-00	-00	-00	-00	-00	
Total - All Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	
Total Net Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	

WORLD AGROFORESTRY	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	4,081	1,195	7,854	956	14,086	5,177	980	8,345	1,241	15,743	(1,095)	215	(491)	(286)	(1,657)
Collaborators Costs - CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners	2,661	759	4,992	607	9,020	385	365	3,275	31	4,056	2,276	395	1,717	576	4,964
Supplies and services	782	503	3,305	819	5,409	1,878	753	4,515	668	7,814	(1,096)	(250)	(1,210)	151	(2,405)
Operational Travel	609	173	1,140	139	2,060	903	369	2,269	295	3,836	(294)	(196)	(1,129)	(156)	(1,776)
Depreciation	283	82	536	65	966	16	18	609	50	694	267	63	(73)	15	273
Sub-total of Direct Costs	8,417	2,711	17,828	2,586	31,542	8,359	2,485	19,014	2,286	32,144	58	227	(1,186)	300	(602)
Indirect Costs	1,809	522	3,429	-00	6	1,254	267	2,031	-00	3,552	556	254	1,398	-00	2,208
Total - All Costs	10,226	3,233	21,257	2,586	31,548	9,613	2,752	21,045	2,286	35,696	613	481	212	300	1,606
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	10,226	3,233	21,257	2,586	31,548	9,613	2,752	21,045	2,286	35,696	613	481	212	300	1,606

WORLD FISH	POWB Approved Budget					Actual					Unspent/Variance				
Personnel					-00					-00	-00	-00	-00	-00	-00
Collaborators Costs - CGIAR Centers					-00					-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners					-00					-00	-00	-00	-00	-00	-00
Supplies and services					-00					-00	-00	-00	-00	-00	-00
Operational Travel					-00					-00	-00	-00	-00	-00	-00
Depreciation					-00					-00	-00	-00	-00	-00	-00
Sub-total of Direct Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Indirect Costs					-00					-00	-00	-00	-00	-00	-00
Total - All Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

PMU	POWB Approved Budget					Actual					Unspent/Variance				
Personnel					-00					-00	-00	-00	-00	-00	-00
Collaborators Costs - CGIAR Centers					-00					-00	-00	-00	-00	-00	-00
Collaborator Costs - Partners					-00					-00	-00	-00	-00	-00	-00
Supplies and services					-00					-00	-00	-00	-00	-00	-00
Operational Travel					-00					-00	-00	-00	-00	-00	-00
Depreciation					-00					-00	-00	-00	-00	-00	-00
Sub-total of Direct Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Indirect Costs					-00					-00	-00	-00	-00	-00	-00
Total - All Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
LESS Coll Costs CGIAR Centers	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00
Total Net Costs	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00	-00

CRP No. 6 - Forest, Tree, Agroforestry

Period: 12/31/2014

Amounts in USD 000's

Annual Financial Summary by Flagship Project

1,000.00

Report Description

Name of Report:	Financial Summary by Flagship Project
Frequency/Period:	Annual
Deadline:	Every April 15th

	POWB Approved	Current Year Actual Expenditures	Unspent Budget
Summary Report - by Flagship Project			
Flagship Project 1	18,181	24,255	(6,074)
Flagship Project 2	13,067	12,067	1,000
Flagship Project 3	20,005	13,197	6,809
Flagship Project 4	25,199	22,029	3,170
Flagship Project 5	5,270	4,826	445
CRP Management/Coordination	5,483	5,774	(291)
Total - All Costs	87,206	82,147	5,059

BIOVERSITY			
Flagship Project 1	132	90	42.29
Flagship Project 2	5,354	5,146	207.42
Flagship Project 3	-00	55	(54.84)
Flagship Project 4	-00	-00	-00
Flagship Project 5	-00	-00	-00
CRP Management/Coordination	485	478	7.16
Total - All Costs	5,971	5,769	202.03

CIAT			
Flagship Project 1	207	129	78.00
Flagship Project 2	-00	-00	-00
Flagship Project 3	-00	-00	-00
Flagship Project 4	655	637	18.37
Flagship Project 5	-00	-00	-00
CRP Management/Coordination	312	312	-00
Total - All Costs	1,174	1,078	96.37

CIFOR			
Flagship Project 1	3,465	4,021	(556)
Flagship Project 2	3,209	3,886	(677)
Flagship Project 3	6,316	5,661	655
Flagship Project 4	19,749	15,975	3,774
Flagship Project 5	4,334	4,625	(291)
CRP Management/Coordination	2,707	2,390	317
Total - All Costs	39,780	36,558	3,221.86

CIRAD			
Flagship Project 1			-00
Flagship Project 2	890	897	(6.92)
Flagship Project 3	-00	-00	-00
Flagship Project 4	-00	-00	-00
Flagship Project 5	-00	-00	-00
CRP Management/Coordination	140	269	(129.03)
Total - All Costs	1,030	1,166	(135.95)

CATIE			
Flagship Project 1	769	738	31.57
Flagship Project 2	648	645	2.60
Flagship Project 3	531	461	70.11
Flagship Project 4	-00	-00	-00
Flagship Project 5	-00	-00	-00
CRP Management/Coordination	-00	36	(36.22)
Total - All Costs	1,948	1,880	68.07

ICARDA			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
CRP Management/Coordination			-00
Total - All Costs	-00	-00	-00

ICRISAT			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
CRP Management/Coordination			-00
Total - All Costs		-00	-00
		-00	-00

IFPRI			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
CRP Management/Coordination			-00
Total - All Costs		#REF!	#REF!
		#REF!	#REF!

IITA			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
CRP Management/Coordination			-00
Total - All Costs		-00	-00

ILRI			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
CRP Management/Coordination			-00
Total - All Costs		-00	-00

IRRI			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
CRP Management/Coordination			-00
Total - All Costs		-00	-00

IWMI			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
CRP Management/Coordination			-00
Total - All Costs		-00	-00

WORLD AGROFORESTRY CENTRE (ICRAF)			
Flagship Project 1	13,607	19,278	(5,670.62)
Flagship Project 2	2,966	1,492	1,473.95
Flagship Project 3	13,158	7,020	6,138.56
Flagship Project 4	4,795	5,418	(622.50)
Flagship Project 5	936	200	735.83
CRP Management/Coordination	1,839	2,288	(449.06)
Total - All Costs	37,302	35,696	1,606.16

CRP No. 6 - Forest, Tree, Agroforestry

Period: 12/31/2014

Amounts in USD 000's

Annual Financial Summary of Gender by Flagship Project

1,000.00

Report Description

Name of Report:	Financial Summary of Gender Expenditure by Flagship Project
Frequency/Period:	Annual
Deadline:	Every April 15th

	POWB Approved	Current Year Actual Expenditures	Unspent Budget
Summary Gender Report - by Flagship Project			
Flagship Project 1	1	2	(1)
Flagship Project 2	226	205	21
Flagship Project 3	120	242	(122)
Flagship Project 4	441	418	24
Flagship Project 5	276	435	(158)
Total - All Costs	1,065	1,302	(237)
AFRICA RICE			

Flagship Project 1				-00
Flagship Project 2				-00
Flagship Project 3				-00
Flagship Project 4				-00
Flagship Project 5				-00
Total - All Costs				-00

BIOVERSITY				
Flagship Project 1				-00
Flagship Project 2				-00
Flagship Project 3				-00
Flagship Project 4				-00
Flagship Project 5				-00
Total - All Costs				-00

CIAT			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4	237	237	-00
Flagship Project 5			-00
Total - All Costs	237	237	-00

CIFOR			
Flagship Project 1	1	2	(1.30)
Flagship Project 2	226	205	20.83
Flagship Project 3	120	242	(121.74)
Flagship Project 4	204	181	23.59
Flagship Project 5	276	435	(158.11)
Total - All Costs	828	1,065	(236.72)

CIRAD			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

CATIE			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

ICARDA			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

ICRISAT			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

IFPRI			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

IITA			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

ILRI			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

IRRI			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

IWMI			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

WORLD AGROFORESTRY CENTRE (ICRAF)			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs		-00	-00

WORLD FISH			
Flagship Project 1			-00
Flagship Project 2			-00
Flagship Project 3			-00
Flagship Project 4			-00
Flagship Project 5			-00
Total - All Costs	#REF!	#REF!	#REF!

Item	Institute Acronym	Institute Name	Country	Windows 1 &2	Window 3	Bilateral	Center Funds	TOTAL
1	ANU	Australian National University	Australia	14	-	8	-	22
2	AUPWAE	Association of Uganda Professional Women in Agriculture and Environment	Uganda	-	25	-	-	25
3		Bioversity International	Kenya	-	39	-	-	39
4	CYMMIT	Centro Internacional de Mejoramiento de Maiz Trigo	Ethiopia	-	34	-	-	34
5	CESLAM	Center for the Study of Labour and Mobility	Nepal	2	-	-	-	2
6	CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement	France	290	30	9	-	329
7	CONTRAÇA	Conseil pour la Défense Environnementale par la Légalité et la Traçabilité	Congo (Democratic Republic)	-	-	14	-	14
8		The Trustees of Columbia University in the City of New York on behalf of the International Research Institute for Climate and Society (IRI)	United States of America	-	210	-	-	210
9	CYC	Community Youth Concern	Zambia	-	(6)	-	-	(6)

10		Cultural Practice LLC	United States of America	4	-	-	-	4
11		Department of Forestry - MAF	Laos	-	-	1	-	1
12		Ejecutor de Contrato de la Reserva Comunal El Sira	Peru	-	4	-	-	4
13		Energie, Environnement Développement de ENDA	Senegal	-	15	-	-	15
14	UNIKIS	Université de Kisangani	Congo (Democratic Republic)	-	-	85	-	85
15	FOREP	Forests Resources And People	Cameroon	33	9	-	-	42
16		Fundación S.I Science International	Colombia	-	106	-	-	106
17		FundAmazonia	Peru	-	36	-	-	36
18	ICRAF	World Agroforestry Centre	Kenya	4	-	84	-	88
19	INERA	Institute de l'Environnement et de Recherche Agricole	Burkina Faso	-	-	29	-	29
20	IRSAT	Institut de Recherche en Sciences Appliquées et Technologies	Burkina Faso	-	2	-	-	2
21	IASS	Institute for Advanced Sustainability Studies	Germany	25	-	-	-	25

22		Instituto de Investigaciones de la Amazonía Peru	Peru	-	8	0	6	14
23	IUFRO	International Union of Forestry	Austria	15	-	-	-	15
24	JAPESDA	Jaringan Advokasi Pengelolaan Sumber Daya Alam	Indonesia	-	-	8	-	8
25	KEFRI	Kenya Forestry Research Institute	Kenya	-	-	15	-	15
26		Komunitas Teras	Indonesia	-	-	16	-	16
27		Libelula - Comunicacion, Ambiente, Y Desarrollo Sac	Peru	-	15	3	-	18
28		LSM Balang	Indonesia	-	-	35	-	35
29		University of Liège	Belgium	-	-	5	-	5
30	Makerere	School of Forestry, Environmental and Geographical Sciences (SFECS) - Makerere University	Uganda	-	65	4	-	69
31		The Mullion Group	Australia	-	-	62	-	62
32		National Botanic Garden of Belgium	Belgium	-	-	6	-	6
33		National University of Laos	Laos	-	-	5	-	5

34		Nepa School of Social Sciences and Humanities	Nepal	2	-	-	-	2
35	NITLAPAN	Centro de Documentacion, Nitlapan	Nicaragua	-	56	-	-	56
36		Nolan Lehr Group	United States of America	-	5	-	-	5
37	NORDECO	Nordic Agency for Development and Ecology	Denmark	-	4	38	-	42
38	NCSU	North Carolina State University	United States of America	-	18	33	3	54
39		Overseas Development Institute	United Kingdom	-	60	62	-	122
40		Rede de Desenvolvimento Ensino e Sociedade	Brazil	-	13	-	-	13
41	REDES	Resources and Synergies Development	Latvia	-	-	60	-	60
42	RRU	Royal Roads University	Canada	32	-	-	-	32
43	SGN	Senckenberg - World of Biodiversity	Tanzania	-	-	36	-	36
44		School of Economics and Business, Norwegian University of Life Sciences	Norway	-	-	117	-	117
45	SUA	Sokoine University of Agriculture	Tanzania	-	-	49	-	49

46		Solutions & Evidence for Environment & Development LLP	United Kingdom	-	4	-	36	40
47	SEI	Stockholm Environment Institut	Sweden	-	-	154	-	154
48	TMP	The Munden Project	United States of America	5	-	-	-	5
49		Tropenbos International	Netherlands	-	-	13	-	13
50	UEM	Universidade Eduardo Mondlane	Mozambique	-	-	6	-	6
51	UNALM	Universidad Nacional Agraria La Molina	Peru	-	-	76	-	76
52		Universitas Negeri Papua	Indonesia	-	14	-	-	14
53		Universitas Sanata Dharma	Indonesia	-	-	65	-	65
54	BOKU	Universität für Bodenkultur Wien	Austria	-	1	-	-	1
55		University of Bonn	Germany	-	33	-	-	33
56		University of Brighton	United Kingdom	28	-	-	-	28
57	UBC	University of British Columbia	Canada	-	-	24	-	24

58	UEA	University of East Anglia	United Kingdom	-	-	95	-	95
59		University of Leeds	United Kingdom	-	138	-	-	138
60		University of Melbourne	Australia	-	-	8	-	8
61		University of Michigan	United States of America	38	-	-	-	38
62		University of Virginia	United States of America	-	-	25	-	25
63		Department of Geography and Environmental, University of Zimbabwe	Zimbabwe	-	-	4	-	4
64		Vietnamese Academy of Forest Sciences	Vietnam	6	-	27	-	33
65	VITRI	Viikki Tropical Resources Institute	Finland	-	-	52	-	52
66	WGI	Wageningen Univeristy	Netherlands	-	9	-	-	9
67	YPI	Yayasan Pelangi Indonesia	Indonesia	-	-	12	-	12
68		Others	Indonesia	-	-	8	-	8
		TOTAL		498	947	1,353	45	2,843