

FTA Annual Report 2013 - Draft 19.3.14

A. Key Messages (see Annex 1 for indicator table)

All Flagships revised their impact pathways in 2013 to better articulate respective contributions to the FTA's central objective: Optimizing tree contribution to human wellbeing and environmental health. Flagship 2 reduced its Clusters of Activities, while adding a new one on 'restoration of tree-based ecosystems'. An evaluation of Flagship 2 was completed and provides useful input for its next phase (Kettle, C., Sept 2013. Advancing conservation and management of forest and tree resources: Is CRP6.2 on track to deliver its outcomes?).

Two new, non-CGIAR partners (CIRAD, CATIE) officially joined the CRP FTA, and are now full members of the FTA Steering Committee. The integration of these partners into the FTA provides the program with new expertise, networks, opportunities and impact. We are working to integrate CIRAD and CATIE financial and research contributions into our budgeting and planning processes. The FTA is the first CRP to be evaluated by the Independent Evaluation Arrangement and the results will be used in the Phase 2 planning process.

Aggregating results and progress towards outcomes and impacts across the FTA's portfolio of 130+ active projects remains challenging. We are making progress in developing a systematic approach to capturing, learning from, and communicating the evidence of our contributions, successes, and failures. Having this system in place will facilitate the development of joint CRP sites, where multiple CRPs contribute to nationally-relevant development objectives. FTA, WLE, CCAFS and Dryland Systems started trialing a multi-CRP initiative in Burkina Faso in 2013.

FTA work demonstrated the potential to contribute to large amounts of avoided GHG emissions in support of SLO 4. Analysis of 2004-2011 deforestation rates in Amazonia using our Terra-I platform showed that deforestation rates decreased in Brazil but increased in all other countries. This led to the development of a tool for low emissions strategy development that was incorporated into national (Panama) and local (Ucayali, Peru) planning procedures. LUWES, a Land Use Planning Tool for low emissions strategy development at landscape scale in the context of the REALU project, helps plan for emission reductions and is currently used by 30 of the 33 provinces of Indonesia. The stepwise approach to national emissions reference level reporting spearheaded by FTA has been taken up as a UNFCCC decision in 2012. Emissions factors for peatlands developed by the FTA have been used in the most recent (2013) IPCC's Guidelines for Wetlands. We are currently setting up a specific impact assessment study of our work on climate change.

In food security and poverty terms (SLO 1 and 2), the World Food Programme estimates that 1.8 million people in Malawi are currently vulnerable to food shortage, with poor access to inputs a key cause of low crop yield. FTA is researching and promoting *Faidherbia albida* trees in fields as a low cost method to increase crop yield. Building on decades of research, over 120,000 farm households have been reached with fertilizer tree technologies through FTA activity in Southern Africa to date. Fields with trees are showing 11-14% higher yields than those without equating to an increased grain yield of 200 kg ha⁻¹ yr⁻¹, which is more than enough extra grain to feed a child for a year.

	Budget				2013 Actual Expenditure						Expenditure on Gender
	Window 1&2			Bilateral Funding	Window 1 & 2	Window 3	Bilateral Funding	Center Funds	Total bilateral	TOTAL	
	As per Proposal	CO initial allocation*	CO final allocation+								
Bioversity	5,004	2,916		4,055	3,012	476	2,071	-	2,547	5,559	12%
CIAT	67	41		928	41	-	561	-	561	602	
CIFOR	12,022	11,524		24,073	11,366	7,447	14,562	338	22,347	33,713	
ICRAF	10,136	6,876		21,022	7,669	-	24,160	1,991	26,151	33,820	
PM+CCT	5,230	5,145		-	5,060		397	37	434	5,494	
TOTAL	32,459	26,502	28,750	50,078	27,148	7,923	41,751	2,366	52,040	79,188	
* Initial allocation based on 90% 2012 expenditure; CO allocation for FTA total only. Center specific allocations made by IC; djusted for 2012 results											
+ Final allocations by CO informed in August 2013											

* Initial allocation based on 90% 2012 expenditure; CO allocation for FTA total only. Center specific allocations made by LC; djusted for 2012 results

+ Final allocations by CO informed in August 2013

For full budget information, see Annex 5.

B. Impact Pathway and Intermediate Development Outcomes (IDOs)

The FTA theory of change is available from <http://tinyurl.com/FTA-TOC-13>. It uses interactive software to allow multiple sub-layers to be linked to the higher-level model. Flagship-level impact pathways are being revised, and link to the generic FTA theory of change. Our IDOs and indicators are being used to inform the Phase 2 FTA process.

FTA IDO	FTA IDO Draft Indicators
1. Policies supporting improved livelihoods and sustainable and equitable resource management adopted	<ul style="list-style-type: none"> - Number of policies with targets by type & scale - Proportion of policies that promote gender equity
2. Greater gender equity and women's empowerment in decision-making and control over forest, tree and agroforestry resource use	<ul style="list-style-type: none"> - Proportion of policies that promote gender equity - Proportion of FTA value chains income received by women - Proportion of women involved in FTA management decision making and control
3. Enhanced income from goods and services derived from forestry and agroforestry systems	<ul style="list-style-type: none"> - Income from FTA value chains - Proportion of FTA value chains income received by women - Proportion of share in FTA value chains by smallholders
4. Increased and stable access to nutritious food by rural and urban poor	<ul style="list-style-type: none"> - Months of food insecurity - Dietary diversity
5. Production of wood, food, fuel and other products from forestry and agroforestry systems increase	<ul style="list-style-type: none"> - Annual production of reference commodities (FTA index)
6. Biodiversity and ecosystem services (including carbon sequestration) from forests, trees and agroforestry resources conserved or improved	<ul style="list-style-type: none"> - Area of deforestation and degradation - Area of tree-based ecosystems restored

C. Progress along the Impact Pathway

C.1 Progress towards outputs (see Annex 2 traffic light report and Annex 3 publications)

Key developments were made in genetic characterization and propagation methods for six indigenous high value West African tree species include mapping variation in seed and pod traits of the African oil bean (*Pentaclethra macrophylla*), improvement in rooting of leafy stem cuttings in *P. macrophylla*, *Garcinia lucida* and the three *Allanblackia* species that are emerging, through the FTA collaboration with Unilever, as major new oil trees for Africa. Progress was also made in identifying microbial symbionts from natural stands of *A. stuhlmannii* and air layering in

the African pear (*Dacryodes edulis*). Two years of data were collected on seed production from pollarded *Gliricidia sepium* and a protocol for testing seed viability on farm was developed.

The new global Agroforestry Species Switchboard links 22,212 plant species to information about them in 13 web-based databases. This interactive species tool associated with natural vegetation maps is underpinning new approaches to promoting tree diversity across seven countries in Africa. An atlas of distribution of and threats to 100 neotropical forest tree species has been made available on the web¹ Species-specific distribution maps for 1022 East African tree and shrub species are now available²

A major synthesis of the role of trees in resilient livelihoods in dryland Africa was produced in conjunction with the Dryland Systems CRP, highlighting how trees sit at the nexus of meeting needs for food, energy and water³. Baseline data from Ethiopia and Rwanda indicate higher food security in households with higher and more diverse tree cover and this is informing participatory trials across the East African region on using trees as a basis for sustainable intensification⁴. A first paper with evidence that landscape-level tree cover and forests is positively correlated with dietary diversity and child nutrition⁵ was published and shared in policy circles.

A global assessment of the extent to which mapping tools can inform management of ecosystem service provision from rural areas, revealed a critical gap in being able to relate field and farm level decisions about change in tree cover to their consequences for ecosystem services at the local landscape scale at which they first manifest and can be managed⁶. A new tool, Polyscape, with the capability to address this gap has been developed and will form a key plank in our strategy for research to link landscapes and livelihoods.

Highlights of the FTA's Global Comparative Study on REDD+ are the analysis, publication, dissemination and uptake of research results on REDD+ policy and governance, and REDD+ implementation challenges in national and international policy arenas. Examples are the pick-up rates of global comparative chapters in "[Analysing REDD+](#)" and of journal articles on discourse on equity and participation. The policy network analysis is proceeding and country cases made available to stakeholders (e.g. on knowledge brokers for REDD+ in Tanzania). Articles in a special issue of *World Development* highlight the overarching role of tenure for REDD+. Importantly, we shared socioeconomic baseline field research results with REDD+ proponents and study villages, for their use.

We developed a database of 230+ adaptation and mitigation projects worldwide for analysing the potential for synergies between adaptation and mitigation and to assess how gender is considered in these projects.

Other outputs include: (a) the completion of feasibility analysis of landscape level emission reductions scenarios; (b) the development and testing of financial and non-financial incentives in progress in project landscapes; and (c) a new REDD+ readiness assessment framework that

¹ www.mapforagen.org

² <http://www.vegetationmap4africa.org/species-distribution.aspx>

³ <http://www.worldagroforestry.org/downloads/publications/PDFs/B17611.PDF>

⁴ <http://www.slideshare.net/DevFutures/catherine-muthuri-enhancing-food-security>

⁵ <http://www.sciencedirect.com/science/article/pii/S0959378013002318>

⁶ <http://link.springer.com/article/10.1007/s10980-013-9983-9>

was developed and applied to four countries as a framework for adaptive management of readiness processes.

FTA completed research on the impacts that FLEGT-VPA (an initiative for ensuring the compliance of legality in timber supply of European Union markets) has had in producer countries, specifically in Cameroon, Gabon, DRC, Indonesia and Ecuador. We provided recommendations on how best to support the integration of smallholders and small-scale chainsaw millers into the domestic timber markets without affecting their livelihoods as result of additional requests on legality.

We completed research on the forestry, mining and agricultural impacts of Chinese-related investments in sub-Saharan Africa. We completed two regional overviews, one in Congo and another one in Miombo woodlands depicting main implications, and undertaken four case studies in Mozambique, Zambia, Cameroon and Gabon. In addition, we completed research on the influence that Chinese-related investments have on expanding rubber production in Laos, and its socio-economic and environmental implications. This research will inform initiatives to promote greater sustainability in the supply to growing emerging economy markets, such as China.

In support of the Consortium open access and data management policy we have established two interoperability data sharing platforms with more than a 100 datasets uploaded and shared. Randomised farm level trials, institutional mapping, participatory research at village level; household level interviews and clustered hierarchical soil, vegetation and land-use assessment have been implemented across 6 sentinel sites within 2 pilot landscapes. Models have been developed that allow the causal link between vegetation cover and land health to be analyzed.

C.2 Progress towards the achievement of research outcomes and IDOs

The Peruvian Ministry of Environment has a national programme for forest conservation, targeting 54 million ha of the Peruvian Amazon. It requested FTA assistance in prescribing practices for smallholders to reduce forest loss and degradation. These focus on alternatives to slash and burn, and sustainable intensification of cocoa and oil palm cultivation amongst settler populations together with a broad range of agroforestry options amongst indigenous communities. Additionally, the Peruvian government, drafting new rules on forest use and planning policies and projects, drew on FTA knowledge combining GIS and government databases to provide up-to-date information on the degree of overlap between conflicting land uses in Madre de Dios. Maps and accompanying analyses showed that large areas of forests in Brazil nut concessions are being cleared for farming and mining, putting livelihoods and forests at risk. The FTA researchers identified which articles of the new Forests and Wildlife Law had weaknesses that could be rectified by implementing regulations. Senior officials in the Peruvian National Agency for Monitoring of Forest Resources and Wildlife, and the Ministry of Environment informed FTA that policymakers will refer to the research results when designing projects related to governance, land-use planning, policy coordination and sustainable economic activities in forests.

Based on research carried out by FTA on bushmeat hunting, a participatory bushmeat monitoring system (PBMS) was designed for district and provincial level authorities in Brazil. A

framework on the impact of road building on bushmeat and other forest resources will be included in environmental assessments on road building in the Ecuadorian Amazon.

In Cote d'Ivoire, engagement with the private sector and government within the Mars-supported Vision for Change project has led to development of a cocoa agroforestry research strategy aiming at sustainable production.

FTA scientists are helping the Indonesian government on implementation arrangements for their Payment for Ecosystem Services law⁷ that regulates economic incentives for environmental management. A negotiation support toolbox for learning landscapes⁸ was published, with 50 methods that have been tested for use by national partners in this respect. A tool for participatory land use planning at the interface of livelihoods and environmental integrity, the LUWES tool⁹ initially developed and adopted at national scale in Indonesia, was introduced in Peru and Viet Nam and adopted after adaptation to local circumstances, to support decisions and negotiations in the face of landscape level tradeoffs.

FTA analysis of the 2004-2011 deforestation rates in Amazonia (showing that deforestation rates decreased in Brazil but increased in all other countries) using terra-i in South America (<http://www.terra-i.org/>) led to the development of a tool for low emissions strategy development that was incorporated into national (Panama) and local (Ucayali, Peru) planning procedures. Terra-i detects land-cover changes resulting from human activities in near real-time, with updates every 16 days. LUWES, a Land Use Planning Tool for low emissions strategy development at landscape scale in the context of the REALU project, helps planning for emission reductions and is currently used by 30 of the 33 provinces of Indonesia.

The FTA-developed stepwise approach to national emissions reference level reporting has been taken up as a UNFCCC decision and is being implemented to better take the different capacities in different countries into account. We are also seeing uptake of the stepwise idea by other international organizations (IIED, GOFC-GOLD, etc.). Emissions factors for peatlands developed by the FTA have been used in the most recent (2013) IPCC Guidelines for Wetlands. Research on the synergies between adaptation and mitigation policies is informing the UNFCCC's Adaptation Board.

FTA research on promoting the integration of smallholders, chainsaw millers and traders that depend on domestic timber markets included in FLEGT-VPA agreements have been used in policy reforms and implementation taking place in Cameroon, DRC, Indonesia and Ecuador. In Cameroon and Ecuador, findings from our research have been used in forest policy working groups to enhance forests governance. Our findings are acknowledged in discussion forums organized by Chatham House, FAO, European Forests Institute and other global organizations.

In Indonesia, in addition to work conducted to support forest reforms related to the implementation of FLEGT-VPA, we have supported small-scale furniture enterprises and their suppliers in Jepara through the establishment of the Jepara Small-scale Furniture Producers Association, allowing member producers to negotiate with the Indonesian Furniture Industry,

⁷ <http://blog.worldagroforestry.org/index.php/2013/08/27/indonesia-aims-to-complete-regulations-on-payments-for-ecosystem-services-by-end-2013/>

⁸ <http://www.worldagroforestry.org/sea/Publications/files/book/BK0170-13/BK0170-13-1.PDF>

⁹ <http://www.asb.cgiar.org/policy-brief/land-use-planning-low-emission-development-strategies-luwes>

Handicrafts Association, and the Jepara Wood Traders Association. About 85% of Association members have seen improvement in total production, sales and profits in the last years.

The Global Landscapes Forum was held on the sidelines of the UNFCCC Conference of Parties in Warsaw, Poland. A website created for the conference — www.landscapes.org — now serves as a knowledge-sharing hub about forestry and agroforestry issues, publishing content from all FTA centers and generating 200,000 page views since its launch in August. Between August and November, the Forum's social media campaign saw 14,558 landscapes- and Forum-related tweets sent by 1,936 contributors, reaching a total audience of 3.49 million people. More than 1,000 people from more than 100 countries attended the two-day Forum, including 180 official climate change negotiators and 100 journalists. Thousands more followed the event online via live video. According to a participant survey, 85% believed that the Forum informed the Sustainable Development Goals; 56% believed that the Forum informed the UNFCCC negotiations. More than 50 partner organizations developed an Outcome Statement, including 13 recommendations to the UNFCCC, during the two-day Forum, which was covered extensively in national and international media.

FTA research contributed to formulation of the recommendations and priorities of the first Global Plan for Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources, adopted in 2013¹⁰.

C.3 Progress towards Impact

The World Food Programme estimates that 1.8 million people in Malawi are currently vulnerable to food shortage, with poor access to inputs a key cause of low crop yield. FTA is researching and promoting *Faidherbia* trees in fields as a low cost method to increase crop yield. We found that over 70% of maize fields had *Faidherbia* trees in them (sample stratified for farmers within and outside FTA project target areas) and that fields with trees were associated with 11-14% higher yield than those without (depending on the model fitted to the data), equating to around 200 kg ha⁻¹ yr⁻¹, which is more than enough extra grain to feed a child for a year. Higher yields were associated with higher tree density and larger tree size, and the trees in the measured plots were still young (mean of 26.3 cm DBH) and sparse (mean of 9.6 trees ha⁻¹), so a greater impact on crop yield is expected as the existing trees grow larger, and there is further potential to intensify by encouraging more trees. Over 120 thousand farm households have been reached with fertilizer tree technologies through FTA activity in Southern Africa to date.

In 2013, Government agencies in Peru used an FTA InfoBrief¹¹ to draft new rules on forest use and plan policies and projects. Through a series of maps and an accompanying analysis, research showed that large areas of forest in Brazil nut concessions are being cleared for farming and mining, thus putting livelihoods and forests at risk. The overall area concerned by our study is around 2 million ha of Brazil nut rich forests among which there are up to 100,000 ha of conflict “lands” between 40-yr Brazil nut concessions and agricultural titling that were at a very high risk of being cleared for agriculture. They represent on average 300 t of C per ha in terra firme forests in Madre de Dios. This work has therefore contributed to about 300,000,000

¹⁰ <http://www.fao.org/docrep/meeting/028/mg538e.pdf>

¹¹ <http://www.cifor.org/online-library/browse/view-publication/publication/4034.html>

tons of C stored or equivalent avoided emission.

D. Gender research achievements (see Annex 4)

A 2013 study illustrates ways in which gender disparities in forest management can be addressed. By deploying gender transformative techniques among participating user groups in fifteen randomly selected villages/communities in Uganda and Nicaragua, researchers and delivery partners were able to increase the proportion of women in leadership roles, and increase the number of women planting preferred tree species on farms owned by men. Women contributed actively in group meetings, and increased their contact and coordination with external actors such as forestry agencies and NGOs. The process appears to have increased prospects for joint learning of men and women, resulted in increased confidence among women both in leadership and as group participants, and contributed towards greater gender responsiveness among men and women, officials and NGOs.

Analysis across 10 countries in Africa, Asia and Latin America revealed that there was less conflict in participatory forest management institutions where women participated and were in leadership positions, and that women were more likely to participate where education levels were higher and there was low income inequality¹². Around Jelo forest in Ethiopia, women generated four times the amount of forest income than men and women headed households obtained over half their total income from forest¹³. Demand for our work grew among the development community, with CARE-Nepal adapting and translating our methods manual, RECOFTC requesting support in conducting a gender analysis of forest policy in five southeast Asian countries, global initiatives in food security and in forest resource assessments seeking our input, and global research forestry research associations inviting the delivery of keynote addresses in topical issues. Our 2013 gender relevant products (see Annex 3) include policy briefs (3), tools (6), journal articles (8), and blogs (9).

The FTA gender strategy was the first to be approved in January 2013. Five training programs were conducted in 2013 reaching 109 scientists and partners. Four workshops and writeshops were conducted to supplement and/or complement the gender strategy's capacity strengthening campaign. Topics included the development of FTA-wide research on gender and forestry value chains and gender methodologies for long term monitoring sites. FTA scientists participated in the CG gender network's gender, norms and agency global comparative initiative. 2013 saw the recruitment of three PhD level gender specialists and significant advances in the recruitment of a further two post-postdoctoral fellows and one junior professional officer at master's level. Five gender fellowships were awarded in 2013. A draft FTA gender strategy M&E plan is available, and Bioversity has integrated gender requirements into performance appraisal of its Flagship 2 scientists. FTA considers its gender integration to be on-track. We are developing a gender relevance assessment scale for all FTA projects and will include results in the next report.

Baselines against which longer-term gender-related assessments and impact evaluations can be conducted are under consideration. These include: a) the network of sites in Africa, Asia and Latin America of the Poverty and Environment Network; b) the network of sites in Africa, Asia and Latin America where of the Global Comparative Study on REDD+; and c) the network of FTAs long-term monitoring sites/Sentinel Landscapes.

¹² <http://www.sciencedirect.com/science/journal/09593780/23/1>

¹³ <http://dx.doi.org/10.1016/j.forpol.2013.01.005>

E. PARTNERSHIPS BUILDING ACHIEVEMENTS

The FTA achieved major new partnership milestones in 2013, with the formal integration of two new partners (CIRAD and CATIE) into the FTA's Steering Committee. This membership significantly expands the FTA's reach and impact delivery. At the national level, a partnership agreement was signed between CIFOR and the government of Peru for research to support policy development¹⁴.

In Burkina Faso, the FTA is working collaboratively with CCAFS, WLE and Dryland Systems CRPs to develop joint input to common development objectives aligned with National planning priorities. The range of national and regional partners that have bought into and are contributing to the elaboration of the joint CRP site initiative is significant and provides the basis for further expanding the joint CRP site concept to other locations (e.g. Zambia, Mekong). FTA is working with A4NH on nutrition issues, PIM on tenure, CCAFS on climate change, and WLE on land degradation issues. These collaborations will inform the development of FTA Phase 2.

FTA has cultivated a strong partnership with FAO, both its Commission on Genetic Resources and its Forestry Department. Through inputs to the State of the World's Forest Genetic Resources Report and Action plan, and FAO's 2013 Forests and Food Security Conference and publications, FTA has been able to promote our research results and recommendations to governments through FAO. Partnerships are being built with six timber concessionaires in the Congo Basin (two each in Cameroon, Gabon and Congo DRC), for the combined purpose of carrying out research on the concessions and jointly developing management recommendations to safeguard the access by local people to forest resources important to their livelihoods. During 2013, several joint discussions involving communities, the concessionaires and the research team represented the first time that communities and concessionaires came together to discuss issues of mutual concern.

FTA's research partnership approach ensures national ownership of knowledge products and a much more targeted dissemination in national policy arenas, where our partners themselves are active members. Partners from domestic civil society organizations and national research institutions have successfully published papers based on FTA core methodology. Examples include papers on climate change discourse analyses in Nepal (with ForestAction), Peru (with Libelula), and PNG (with colleagues from NRI and UPNG), and country profiles published for Nepal (with Forest Action) and DRC (with CODELT).

F. CAPACITY BUILDING (1/2 page)

We undertake capacity strengthening activities in support of results delivery, as per our theory of change. In 2013, more than 2000 people participated in capacity development activities supported by the FTA. Over 100 interns were hosted by FTA institutions in 2013, and over 25 undergraduate, masters and PhD students contributed to FTA research¹⁵.

Highlights include journalist training courses conducted by FTA and partner organisations at a two-day regional forestry conference in Central Africa, eight training courses in GIS and R in

¹⁴ <http://www.cifor.org/mediamultimedia/newsroom/press-releases/press-releases-detail-view/article/238/minam-and-cifor-sign-agreement-to-promote-research-for-sustainable-management-of-forests-in-peru.html>

¹⁵ <http://blog.cifor.org/16625/learning-experience-young-peruvian-foresters-contribute-to-brazil-nut-research#.UvzjGXUo6M8>.

Central and South America, training workshops on methods in governance and media discourse analysis and journalist trainings regarding climate change and REDD+, and training in outcome mapping.

G. RISK MANAGEMENT

Risk 1: How to manage short term expectations about impacts

It is our responsibility to engage donors in a discussion about our probability based theory of changed, results framework, and the complexities of knowledge transfer and uptake. We conduct research that, through the establishment of strong and productive partnerships with a range of intermediary knowledge users (“boundary partners”) inform policies and practices and most likely trigger changes. This planned contribution to change in behavior (“outcomes”), mainly through boundary partners, is as far as a research organisation can contribute to higher-level development achievements. While donors expect their investments in CRPs to yield results that contribute to System Level Objectives, judging a CRP’s performance annually on the achievement of results far beyond its control or influence is likely to be counter-productive. It is therefore necessary to carefully think about the management of donor expectations of what a research program can be held accountable for.

Risk 2: Lack of systematic approaches to planning, monitoring and learning

FTA informs policy and practice, and contributes to change processes through a range of knowledge generation, capacity strengthening, network development and agenda setting activities. Our knowledge generation, sharing, and upscaling processes are allowing us to reach our target audiences, however we currently lack a systematic approach to capturing, learning from, and communicating evidence of these achievements. We are working to develop and implement the approaches and tools that will allow us to better plan and target our contributions, understand and learn from feedback loops, and communicate progress and achievements to donors.

Risk 3: Interrupted W1/2 funding puts our long-term objectives at risk

The approved FTA is a framework proposal with clear expected impacts after 10 years that is managed through a 3-year rolling operational plan (OP) where the actual outputs/outcomes are defined in detail. The OP implementation is monitored every 6 months via a traffic-light report and is revised annually to consider funding situation, level of achievement and new research endeavors. We are working towards 10-year CRP and System objectives, and are leveraging W1/2 funds with W3/bilateral grants. Working on a 10 year framework program with 3-year tranches create some significant risks of interruption of W1/2 funding during transitions between funding tranches and puts the CRP at risk of non-delivery or of creating significant opportunity costs, especially regarding cross-cutting themes such as gender integration, communications, monitoring, evaluation and impact assessment, and sentinel landscapes.

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 high confidence in the quantitative indicators of e.g. # of people trained. We have less confidence in other types of indicators, such as the # of policies influenced. We have provided a report for USAID in 2013 (available on request) that lists the types of policies influenced, the stage of influence, and a short narrative description of that influence. 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.

Engaging with decision makers in regional and national state agencies in consumer countries may be more effective in developing policy incentives and mechanisms to regulate investments and have more leverage within international policy processes and the donor community than policy-makers in producers countries. The latter are however important with regard to the adoption of specific measures that have impact on the ground with regards to the actors and landscapes where we implement our projects. Therefore, it may be useful to more actively engage consumer country government and explore new avenues and opportunities for doing so.

Efforts were made to develop a global mango distribution map based on point location data available from <http://www.gbif.org/occurrence>. It was found that there were insufficient point location data points and the available data were strongly biased, showing a marginal distribution in India, but occurrence in North America¹⁶. The global mapping effort based on species distribution modelling approaches had to be abandoned. Lack of good data is often a constraint to analyzing status, trends and patterns and developing solutions or recommendations.

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

The majority of projects in the FTA portfolio do not contain explicit knowledge uptake progress markers or strategies that can be systematically monitored, instead relying on the logframe-friendly research - knowledge generation - knowledge use - better world model. Given that the FTA theory of change is based on research interface with policy and practice via intermediary knowledge users in a complex, dynamic system, we need to unpack project-level knowledge uptake assumptions, and develop approaches for aggregating results across multiple projects in order to derive an FTA-wide outcome progress dashboard. In order to achieve this objective, shorten our interventions' feedback loops, and provide a more real time understanding of progress towards outcomes, we are introducing 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.

¹⁶ <http://www.gbif.org/species/3190638>

Annex 1 Indicator list

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)	2012		2013		2014
				Target (if available for 2012)	Actual	Target	Actual	Target
KNOWLEDGE, TOOLS, DATA								
all	1. Number of flagship “products” produced by CRP	Includes: <ul style="list-style-type: none">- FORCC (two products, one each for Honduras and Laos)- Adaptation mapping toolbox (http://analogues.ciat.cgiar.org/climate/ (Joint work with CCAFS); Leining, C., J. Signer, M. van Zonneveld, A. Jarvis and W. Dvorak. Selection of provenances to adapt tropical pine forestry to climate change on the basis of Climate Change Analogs. Forests. 4, 155-178; doi:10.3390/f4010155)- Infobrief on the impacts of biofuels in forests-Strategy on oil Palm Development in Cameroon-Furniture value chains and landscape game-Synthesis of FLEGT-VPA influence on domestic timber markets-Synthesis on impacts of large-scale investments mediated by business models-OP on social impact of FSC in the Congo Basin- Framework on cacao strategy- Multiple use forest management http://www.fao.org/docrep/018/i3378e/i3378e00.ht		N/A	2	N/A	53	50

		<p><u>m</u></p> <ul style="list-style-type: none"> - Central Asia fruit trees SeedSource classification system under negotiation with OECD - Tree cover analysis, - Forest transition stage typology, - Ecosystem service indicators, - PES paradigms - Learning landscapes - Food security ~ forest concepts - LU decision making at HH level and in social context, - Fairness vs efficiency tradeoff analysis - Negotiation support systems - Infobrief and 2 blogs on action research to improve furniture value chain - summary paper on forests and biofuels (PP) - OP on the impacts of FLEGT-VPA on domestic timber markets - Research-in-development co-learning paradigm, - Option x context matrices, - Horizontally and vertically integrated intervention options, - Scaling domains for technology and enabling ingredients and rule sets for their combination, - Systematic approaches to local knowledge acquisition, - Formal approaches to combining knowledge from multiple sources, - Gender transformative framework for institutional analysis of access to, and decision making about, natural resources, - Typology of mapping tools for ecosystem service management, - Negotiation support framework for influencing impact of emergent field and farm scale land use decisions on ecosystem service provision at local landscape scales, - Tree domestication principles and protocols, - Field, farm and landscape management niches for promoting tree diversity, 						
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		- Species x site x management tree attribute sets for matching trees to sites and circumstances)						
all	2. % of flagship products produced that have explicit target of women farmers/NRM managers	In 2013, we had 116 blog stories about forests and climate change. Of those, seven mentioned or focused on women farmers.		N/A	N/A	N/A	Approximately 45%	30%
all	3. % of flagship products produced that have been assessed for likely gender-disaggregated impact			N/A	N/A	N/A	Approximately 30%	30%
all	4. Number of "tools" produced by CRP	<p>This includes:</p> <ul style="list-style-type: none"> Two tools for the statistical software R developed by ICRAF <ul style="list-style-type: none"> Biodiversity R Chill R: Statistical methods for phenology analysis in temperate fruit trees Pramova, E., Locatelli, B. 2013 Guidebook on integrating community-based adaptation into REDD+ projects: lessons from Indonesia and the Philippines. Center for International Forestry Research (CIFOR), Bogor, Indonesia. FGR training module Decision support tool for in situ conservation (cacao) Seed viability (ICRAF) . tropiTree: interactive NGS-based EST-SSR database designed at low cost for 24 useful tropical tree species (ICRAF, James Hutton Institute) Mapping of distribution of 'useful tree species' in 7 countries in Eastern Africa (ICRAF, University of Copenhagen) t5 1 set of guidelines for investigative audits in the forestry sector 1 training materials on the Integrated Law Enforcement Approach for law enforcement in Indonesia 1 online landscape game 		N/A	5	N/A	93	60

		<ul style="list-style-type: none"> • 1 manual presenting the process to assess the environmental and social risks of forest plantation investments in emerging markets • 1 methodology to assess environmental and social impacts of certification of ecosystem services • Diagnostic tools in the learning landscape book • Training manual for furniture producers (consist of 9 modules) • Polyscape spatially explicit negotiation support toolkit for exploring trade-offs amongst impacts of field scale land use change on ecosystem service provision, • Agroecological knowledge toolkit , • InPAC-S for combining local and expert knowledge on soil health • Tree attribute ranking analysis tool, • Tree domestication primer, • Agroforestry Tree Species Dashboard, • Customised tree species to site matching tools for catchment management in DRC, Tanzania and Zambia, • Natural vegetation mapping tools (VECEA) for seven African countries, • Extension methods selection guidelines, • Five capitals value chain analysis, • Pesticidal plant guidelines, • Vegetative propagation protocols 						
iii	5. % of tools that have an explicit target of women farmers			N/A	N/A	N/A	40%	40%
iii	6. % of tools assessed for likely gender-disaggregated impact			N/A	N/A	N/A	40%	50%
iii	7. Number of open access databases maintained by CRP	Three sets of database related to REDD+ national policies and strategies on 1) country profile, 2) policy network, and 3) media discourse (CIFOR)		N/A	7	N/A	32	20

		<p>VIOT - Atlas of distribution and threats to at least 50 neotropical forest tree species (2013) This been completed and the atlas is now available on the web for 100—not 50— species. The other two activities are in progress and on track (www.mapfor-gen.org) (BIOVERSITY)</p> <p>Trees and Agroforestry farming systems for improved smallholder resilience to climate change: Database builds up on surveys to identify income sources and analyze opportunities and challenges (including CC risks & smallholder adaptation needs) of agro-extrativists in the frame of asset-based Brazil nut VCD & innovative firefox-access database (ICRAF)</p> <p>Enabling rural transformation and grassroots institutional building for sustainable land management and increased incomes and food security in East Africa: Baseline data for farmer groups in the six project implementation sites available; currently being synthesized for a working paper (ICRAF)</p> <p>Suitable agroforestry germplasm for adaptation of smallholder farming systems to climate change – identification and introduction: Maps of current and future cultivation zones for 3 mango varieties developed for Kenya (ICRAF)</p> <p>Databases with information on companies and business models (LIFFE Options project) Database on furniture value chain in Jepara (Jepara project) Database with information on domestic timber markets in five countries (PROFORMAL project)</p> <ul style="list-style-type: none"> • Cocogis, (coconut) • CGRD (coconut) • CANGIS (cacao) <ul style="list-style-type: none"> • Five on tree species and their attributes; • two socio-economic benchmarks (Ethiopia and Rwanda); 						
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		<ul style="list-style-type: none"> • two impact analysis datasets (five countries in the Sahel and Malawi); • eleven local knowledge bases spanning nine countries (Kenya, Ethiopia, Tanzania, Rwanda, Uganda Nicaragua, Costa Rica, Guatemala, Mali) 						
all	8. Total number of users of these open access databases			N/A	662	N/A	>1000	500
all	9. Number of publications in ISI journals produced by CRP			N/A	46	N/A	245	200
1,2,3, 4, 6	10. Number of strategic value chains analyzed by CRP	Includes: <ul style="list-style-type: none"> - driven furniture value chains in Jepara, 1 on coffee in Peru and 1 on rubber in Laos, and 1 on oil palm in Indonesia - national value chains: oil palm and eucalyptus in Sumatra and Kalimantan (Indonesia) and Para (Brazil). Rice, sugar, and eucalyptus in Mozambique and Tanzania - 1 - planted log supply chains and furniture in ASEAN - smallholder timber, - charcoal and various fruit (Son Tra in Vietnam, Avocado in Kenya (with specific emphasis on women); - agricultural, plantation and forest commodities in Sulawesi, - various non timber forest products; - tree seedlings; - tree fodder and native cacao in Peru 		N/A	1	N/A	11	8
1,5,6,7	11. Number of targeted agro-ecosystems analysed/characterised by CRP	Includes: <ul style="list-style-type: none"> - Timber in warm humid tropics - 4 stages of forest transition curve, + peatland - Oil palm in warm humid tropics, and timber in warm humid tropics - Timber in warm humid tropics (HP, KO) 		N/A	1	N/A	18	10

		<ul style="list-style-type: none"> - Oil palm and eucalyptus in humid tropics; sugarcane, rice, and eucalyptus in the subhumid tropics (GS) 						
5,6,7	12. Estimated population of above-mentioned agro-ecosystems	<p>Includes:</p> <ul style="list-style-type: none"> - Around 50 million of rural population in Java, Sulawesi etc. who have teak and mahogany plantations - Approx.. 3.1 million within the landscape, approx.. 40 million if talking about the Congo Basin humid tropics, approx. 959 million if considering all hum tropics in the world. - Around 50 million of rural population in Java, Sulawesi etc. who have teak and mahogany plantations - 4.7 million (population in agri sector out of approx. 12.7 million total population of Papua, South Kalimantan and Riau) - Zomer et al (2014) found >10% tree cover on more than 43% of all agricultural land globally in 30% of rural populations. This land-use type represents over 1 billion hectares of land and more than 900 million people - Maize-millet parkland systems in the sahel (five countries) - Smallholder cocoa agroforestry in Cote d'Ivoire Peru and Indonesia - Smallholder maize agroforestry in Ethiopia, Rwanda and Malawi - Coffee agroforestry systems in Central America, East Africa and India - Maize cultivation on sloping land in NW Vietnam - Smallholder tropical timber in Indonesia - Smallholder dairy production in East Africa 		N/A	50 million	N/A	900 million	959 million in humid tropics and 616 million in sub-humid tropics
CAPACITY ENHANCEMENT AND INNOVATION PLATFORMS				N/A	N/A	N/A		
all	13. Number of trainees in short-term programs facilitated by CRP (male)			N/A	1269	60	4419	2000
all	14. Number of trainees in			N/A	621	N/A	2332	2000

	short-term programs facilitated by CRP (female)							
all	15. Number of trainees in long-term programs facilitated by CRP (male)			N/A	17	N/A	128	50
all	16. Number of trainees in long-term programs facilitated by CRP (female)			N/A	14	8	85	50
5,6,7	17. Number of multi-stakeholder R4D innovation platforms established for the targeted agro-ecosystems by the CRPs	Includes: - CacaoNet, COGENT – both Global - 10 Learning landscapes in the PRESA and RUPES networks		N/A	2	N/A	33	25
				N/A	N/A	N/A		
TECHNOLOGIES/PRACTICES IN VARIOUS STAGES OF DEVELOPMENT				N/A	N/A	N/A		
all	18. Number of technologies/NRM practices under research in the CRP (Phase I)	Includes: - Southern Africa Miombo Woodland - Sustainable wild honey harvesting - Central Asia - Technology for collecting seeds, producing seedlings and planting trees - Mexico - Restoration of Mahogany Forests - Timber Tracking - Global - Prunus - spatial analysis of genetic diversity for conservation planning - Malaysia - Dipterocarp - India - Conservation and Sustainable Use of Cultivated and Wild Tropical Fruit Diversity: Promoting Sustainable Livelihoods, Food Security and Ecosystem Services - Congo Basin SFM and certification - Guidelines for cacao genebank documentation to increase capacity of national partners, linking with global systems such as CANGIS. - Study of uniqueness and duplication between and		N/A	12	12	66	50

		<p>within cacao collections for global priority and development of the Global Strategic Cacao Collection (GSCC).</p> <ul style="list-style-type: none"> - Costing of the key cacao genebank operations and agreements by partners for the management of the Global Strategic Cacao Collection (GSCC). - Brazil nut - Bush meat practices – garden hunting - Bush meat practices – forest hunting - Burkina Faso conservation strategies Parkia - Abarco conservation and restoration - 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 						
all	19. % of technologies under research that have an explicit target of women farmers			N/A	N/A	N/A	50%	50%
all	20. % of technologies under research that have been assessed for likely gender-disaggregated impact			N/A	N/A	N/A	45%	50%
5,6,7	21 Number of agro-ecosystems for which CRP			N/A	N/A	N/A	13	8

	has identified feasible approaches for improving ecosystem services and for establishing positive incentives for farmers to improve ecosystem functions as per the CRP's recommendations							
,5,6,7	22. Number of people who will potentially benefit from plans, once finalised, for the scaling up of strategies	Includes: 5 000 000 cacao farmers + 1.000 000 bush meat, mahogany, Brazil nut, Central Asian fruit tree cultivators		N/A	N/A	N/A	>10 million	50 million
all, except ;	23. Number of technologies /NRM practices field tested (phase II)	Includes: 1. Miombo Woodland –Sustainable wild honey harvesting 2. Central Asia - Technology for collecting seeds, producing seedlings and planting trees 3. Mexico - Restoration of Mahogany Forests 4. Abarco restoration		N/A	3	3	30	20
,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)	Includes: - Interactive maps were made available publically that allow for tree species (and provenance) selection in Eastern Africa for agroforestry ecosystems within following global subsystems: (1) Tropical/subtropical forest/woodlands; (2) Semi-arid drylands; (3) Dry subhumiddrylands; (4) Mountain systems 300-1000 m; (5) Mountain systems 1000-2500 m; (6) Mountain systems 2500-4500 m); (7) Mixed cultivated systems; And from Bioversity: - (8) Southern Africa, Miombo Woodland - (9) Central Asia, Temperate deciduous Forests - (10). Mexico, tropical, moist forest - South East Asia Fruit tree systems		N/A	10	10	27	20
,5,6,7	25. % of above innovations/approaches/o			N/A	N/A	N/A	40%	10%

	ptions that are targeted at decreasing inequality between men and women							
,5,6,7	26. Number of published research outputs from CRP utilised in targeted agro-ecosystems	Includes: - 1 Seed viability guidelines for farmers - 2. Central Asia fruit trees conservation and management guidelines - 3 Nondestructive honey harvesting practices for Niassa Reserve/Miombo woodland		N/A	7	7	6	9
all, except	27. Number of technologies/NRM practices released by public and private sector partners globally (phase III)			N/A	N/A	N/A	34	30
POLICIES IN VARIOUS STAGES OF DEVELOPMENT								
all	28. Numbers of Policies/ Regulations/ Administrative Procedures Analyzed (Stage 1)	Includes: - Certification - Peruvian brazil nut - Central Asia Fruit trees - Germplasm Supply in Southern Africa - Seed Source classification system, OECD - PES-related + certification - land and tree tenure in a range of national and local scales; - tree seed and seedling certification; - NTFP marketing		N/A	1	1	42	40
all	29. Number of policies / regulations / administrative procedures drafted and presented for public/stakeholder consultation (Stage 2)	Includes: - ICRAF reporting 4 unspecified cases - CIFOR reporting REDD+ policies in 12 countries and at international level in this stage (public debate and stakeholder consultation) that are potentially influenced by work in the Global Comparative Study on REDD+ - Smallholder options to reduce deforestation and forest		N/A	N/A	N/A	18	20

		degradation in Peru, - National agroforestry strategy in Zambia						
all	30. Number of policies / regulations / administrative procedures presented for legislation(Stage 3)	Includes: - India agroforestry policy (relevant for 10% of a country of 1.2 billion people)		N/A	N/A	N/A	5	5
all	31. Number of policies / regulations / administrative procedures prepared passed/approved (Stage 4)			N/A	N/A	N/A	N/A	
all	32. Number of policies / regulations / administrative procedures passed for which implementation has begun (Stage 5)			N/A	N/A	N/A	N/A	
OUTCOMES ON THE GROUND								
All	33. Number of hectares under improved technologies or management practices as a result of CRP research	ICRAF identified 12.000 hectares affected by management practices (without giving the specific locations). CIFOR identified the potential of affecting 39.1 million hectares (Mha) through their work in GCS on REDD+ implementation at the subnational scale (this is the area of the projects studied) in six countries (Brazil, Cameroon, Indonesia, Peru, Tanzania, and Vietnam). (to give a range, the 5 jurisdictional sites in this study amount to 27.5 Mha. The 5 largest project sites in the study amount to 36.8 Mha). CIAT's terra-I potentially affects 91 million hectares of rainforest in Peru that are monitored against deforestation and degradation CIFOR research mitigated the potential clearing of 100,000ha of		N/A	N/A	N/A	>100 million ha	?

		forest in Brazil nut concessions for farming and mining, mitigating risks to livelihoods and forests, resulting in a better management planning approach of 2 million hectares and avoided emission of 30 million ton of C.						
All	34. Number of farmers and others who have applied new technologies or management practices as a result of CRP research	Includes: <ul style="list-style-type: none"> - 100 male farmers honey harvesting Miombo - FMNR – 500 K; - fertilizer trees 120 K in Malawi alone; - fodder trees 250 K in East Africa alone – only considers figures where impact studies have been completed 		N/A	N/A	N/A	870,000	500,000

Annex 2 2013 traffic light report

Theme: Smallholder production systems and markets	
Outcome 6.1.1: NARES (including NGO sector) promote and farmers adopt improved tree germplasm and management options appropriate to local circumstances that increase productivity and sustainability of smallholder farm and forest 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	<p>Journal article: Alain Tsobeng, Ebenezer Asaah, Josephine Makueti, Zac Tchoundjeu, Patrick Van Damme. 2013. Propagation of <i>Pentaclethra macrophylla</i> Benth (Fabaceae) through seed and rooting of leafy stem cuttings. International Journal of Agronomy and Agricultural Research (IJAAR), Vol. 3, No. 12, p. 10-20. http://www.innspub.net/wp-content/uploads/2013/12/IJAAR-V3No12-p10-20.pdf</p> <p>Journal article: Kyei, B. A., Ofori, D. A., Bandoh, W., Cobbinah, J.R. and Jamnadass, R. (2013). Micropropagation of pest resistant genotypes of <i>Milicia</i> spp. (Iroko) in Ghana. East African Agricultural and Forestry Journal (in print)</p> <p>Martini, E, JM Roshetko, P Purnomosidhi, J Tarigan, N Idris, and T Zulfadhli. 2013. Fruit Germplasm' Resources and Demands for Smallscale Farmers Post-Tsunami and Conflicts in Aceh, Indonesia. Acta Hort. (ISHS) 975:657-664 (http://www.actahort.org/books/975/975_82.htm)</p> <p>Journal article: Tsobeng A., Asaah E., Tchoundjeu Z., Degrande A., Nkeumoe F., Takoutsing B., Tanly L. and Van Damme P. Domestication of <i>Pentaclethra macrophylla</i> Benth: Phenotypic variation in tree, pod and seed traits in the humid lowlands of Cameroon. Submitted to "Afrika Focus".</p> <p>Journal article: Takoutsing Bertin, Tsobeng Alain., Tchoundjeu Zacharie., Asaah Ebenezer. Effect of rooting media, leaf area and type of hormones on rooting ability of the leafy stem cuttings of <i>Garcinia lucida</i> Vesque (Clusiaceae) Submitted to "Afrika Focus".</p> <p>Journal article: 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>Database entry: Okwu Chioma, Bertin Takoutsing, Zacharie Tchoundjeu, Ebenezer Asaah, AlainTsobeng, Julius Atia. <i>Chrysophyllum albidum</i> (Sapotaceae). Prota</p> <p>Database entry: Takoutsing Bertin, Asaah Ebenezer, Tchoundjeu Zacharie, Tsobeng Alain, Atia Julius. <i>Garcinia kola</i> Heckel (Guttifereae). Prota</p> <p>Database entry: Zac Tchoundjeu, Ebenezer K. Asaah, Alain Tsobeng, Takoutsing Bertin1, Atia Julius. <i>Irvingia gabonensis</i> (Irvingiaceae). Prota</p> <p>Database entryEbenezer k. Asaah, Zac Tchoundjeu, Divine Foundjem Tita, Alain Tsobeng, Patrick Van Damme. <i>Dacryodes edulis</i> (Burseraceae). Prota</p> <p>Databse entry: Alain Tsobeng, Zac Tchoundjeu, Ebenezer Asaah, Bertin Takoutsing, Ann Degrande, Rose Caspa and Julius Iseli. <i>Gnetum africanum</i> Welw.: Enhancing its contribution to income generation and food security, through improved propagation methods. Prota</p> <p>Conference Poster -Alain Tsobeng, Ebenezer Asaah, Daniel Ofori, Zac Tchoundjeu, Patrick Van Damme, Ramni Jamnadass. Improving rooting in leafy stem cuttings of <i>Allanblackia floribunda</i> Oliver using fertilizers. Neglected and Underutilized Species conference, Ghana, 25 - 27 September 2013.</p> <p>Conference poster - Sigrun Dahlin, Petra Fransson, Helena StrOm, Kajsa Alvum-Toll, Daniel Ofori, Ramni Jamnadass. Symbionts and soil characteristics of native <i>Allanblackia stuhlmanni</i> stands, Tanzania. Poster presentation, Conference on Agricultural Research for Development, SLU in Uppsala, 25th-26th of September 2013.</p>
Domestication approaches, practices and methods evaluated and refined	<p>Journal article: Narendra BH, JM Roshetko, HL Tata, E Mulyoutami. 2013. Prioritizing Underutilized Tree Species for Domestication in Smallholder Systems of West Java. Small-scale Forestry 12(4): 519-538</p> <p>Journal article: Makueti, J T Tchoundjeu, Z Kalanganire, A Nkongmeneck, B A Asaah, E 2013 Early decapitation on African plum control-pollinated seedlings and consequences on subsequent growth in Cameroon International Journal of Agronomy and Agricultural Research 3 (3) p11-21</p> <p>Report Purnomosidhi P, Roshetko JM, Prahmono A, Suryadi A, Ismawan IN, Surgana M. 2013. Perlakuan Benih Sebelum Disemai untuk Beberapa Jenis Tanaman Prioritas Kehutanan,</p>

	<p>Multiguna, Buah-buahan, dan Perkebunan. [Seed pretreatment for priority forestry, multipurpose, fruit, and commodity trees]. Lembar Informasi. Bogor, Indonesia World Agroforestry Centre (ICRAF) 6p 2013079</p> <p>Report Martini E, Roshetko JM, Paramita E. 2013. Jenis-jenis Pohon Prioritas di Sulawesi Selatan (Kabupaten Bantaeng dan Bulukumba) dan Sulawesi Tenggara (Kabupaten Konawe dan Kolaka). [Priority tree species for South Sulawesi (Bantaeng and Bulukumba districts) and Southeast Sulawesi (Konawe and Kolaka districts)]. Lembar Informasi. Bogor, Indonesia World Agroforestry Centre (ICRAF) 4p 2013078</p> <p>Report on clonal multiplication gardens; clean data sets for early selection in Latin America.</p> <p>Report on Promoting rural innovation through participatory tree domestication in West and Central Africa. IFAD Project completion report.</p> <p>Tool: Farmer's tree planting logbook. This is used as a long term method to record tree management data on farmer's fields.</p> <p>Database entry: <i>Sclerocarya birrea</i> and <i>Strychnos cocculoides</i>: data retrieved from paper archives, processed in softcopy and uploaded in domestication database</p> <p>Conference paper: Alain Tsobeng, Ebenezer Asaah, Zacharie Tchoundjeu, Daniel Ofori and Patrick Van Damme. Comparative growth, flowering and fruiting of different propagule types of <i>Allanblackia floribunda</i> Oliver (Clusiaceae) in Cameroon. 11th African Crop Science Society Conference, Uganda 13 - 17 Octobre 2013. Book of abstracts, p 164.</p>
Tree species for producing bioenergy in smallholder systems evaluated	<p>Iiyama M, Newman D, Munster C, Nyabenge M, Sileshi GW, Moraa V, Onchieku J, Mowo JG, Jamnadass R. 2013. Productivity of <i>Jatropha curcas</i> under smallholder farm conditions in Kenya. <i>Agroforestry Systems</i> 87 (4): 729-746. http://blog.worldagroforestry.org/index.php/2013/04/03/long-awaited-study-warns-against-jatropha-hype/</p> <p>CS Montes, JC Weber, DA Silva, C Andrade, GIB Muniz, RA Garcia and A Kalinganire (2014). 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> 45:179-197 (published online 12 December 2013). http://link.springer.com/article/10.1007/s11056-013-9401-9#page-2</p> <p>Book chapter: 'Role of wood fuel in support of the resilience provided by trees in the drylands of Eastern Africa' http://www.worldagroforestry.org/knowfordocs/Treesilience_Book_2014.pdf</p> <p>Sailesh Ranjitkar (2013). Progress report on <i>Camellia</i> and <i>Juglans</i>. World Agroforestry Centre East Asia Node, Kunming Institute of Botany</p>
Capacity in tree domestication and improvement within national systems strengthened	<p>Manual: Munjuga, M R Gachuri, A N Ofori, D A Mpanda, M M Muriuki, J K Jamnadass, R H Mowo, J 2013 Nursery management, tree propagation and marketing strategy: a training manual for smallholder farmers and nursery operators Nairobi, Kenya World Agroforestry Centre (ICRAF) 84p B17565</p> <p>Report on nursery establishment in Vietnam. AFLi project. http://www.worldagroforestry.org/newsroom/highlights/nw-vietnam-new-fruit-species-brings-ripe-opportunity-poverty-reduction</p> <p>Extension leaflets</p> <ol style="list-style-type: none"> 1. Anjarwalla, P Mwaura, L Ofori, D A Jamnadass, R Stevenson, P C Smith, P 2013 <i>Euphorbia tirucalli</i> Pesticidal Plant Leaflet Series Nairobi, Kenya World Agroforestry Centre (ICRAF) 2p 2013124 2. Anjarwalla, P Mwaura, L Ofori, D A Jamnadass, R Stevenson, P C Smith, P 2013 <i>Aloe ferox</i> Mill. Pesticidal Plant Leaflet Series Nairobi, Kenya World Agroforestry Centre (ICRAF) 2p 2013126 3. Anjarwalla, P Ofori, D A Jamnadass, R Stevenson, P C Smith, P 2013 <i>Dysphania ambrosioides</i> L. Pesticidal Plant Leaflet Series Nairobi, Kenya World Agroforestry Centre (ICRAF) 2p 2013130 4. Kandungu, J Anjarwalla, P Mwaura, L Ofori, D A Jamnadass, R Stevenson, P C Smith, P 2013 <i>Tithonia diversifolia</i> (Hemsley) A. Gray Pesticidal Plant Leaflet Series Nairobi, Kenya World Agroforestry Centre (ICRAF) 2p 2013125 5. Mwaura, L Anjarwalla, P Ofori, D A Jamnadass, R Stevenson, P C Smith, P 2013 <i>Solanum incanum</i> L. Pesticidal Plant Leaflet Series Nairobi, Kenya World Agroforestry Centre (ICRAF) 2p 2013133 6. Mwaura, L Anjarwalla, P Ofori, D A Jamnadass, R Stevenson, P Smith, P 2013 <i>Strychnos spinosa</i> Lam. Pesticidal Plant Leaflet Series Nairobi, Kenya World Agroforestry Centre (ICRAF) 2p 2013134 7. Mwaura, L Stevenson, P C Ofori, D A Anjarwalla, P Jamnadass, R Smith, P 2013 <i>Tephrosia vogelii</i> Hook. f Pesticidal Plant Leaflet Series Nairobi, Kenya World Agroforestry Centre (ICRAF) 2p 2013137 8. Ofori, D A Anjarwalla, P Jamnadass, R Stevenson, P C Smith, P 2013 <i>Vernonia amygdalina</i> Del. Pesticidal Plant Leaflet Series Nairobi, Kenya World Agroforestry Centre (ICRAF) 2p

	<p>2013123</p> <p>9. Ofori, D A Anjarwalla, P Mwaura, L Jamnadass, R Stevenson, P C Smith, P 2013 <i>Tagetes minuta</i> L. Pesticidal Plant Leaflet Series Nairobi, Kenya World Agroforestry Centre (ICRAF) 2p 2013136</p> <p>Theses</p> <p>1. MSc thesis: Nna Denis. 2013. Rooting capacity of leafy stem cuttings of <i>Theobroma cacao</i> L.: Effect of the number of nodes, node position and hormon stimulation. MSc dissertation, University of Yaounde 1-Cameroon. .</p> <p>2. MSc thesis: Atone M. Growth and development of 12 years old trees of seed and vegetative origin (Cuttings and Marcots): Case of <i>Dacryodes edulis</i> (G. Don) H.J. Lam. University of Yaounde I-Cameroon.</p> <p>3. PhD thesis submitted: -Makueti J. Breeding system of <i>Dacryodes edulis</i> (G. Don.) H. J. Lam.: implications for cultivars development, selective breeding, and conservation of genetic resources</p>
Output 6.1.1.2: Tree management options developed for forests and farms	
Use of trees within sustainable land management options developed and promoted	<p>Journal article: Luedeling et al. (2014). Agroforestry systems in a changing climate-challenges in projecting future performance. <i>Current Opinion in Environmental Sustainability</i>, 6, 1-7.</p> <p>Journal article: Z Adimassu, B Gorfu, D Nigussie, J Mowoand K. Hilemichael (2013). Farmers' preference for soil and water conservation practices in central highlands of Ethiopia. <i>African Crop Science Journal</i> 21:781-790 http://www.ajol.info/index.php/acsj/article/viewFile/98449/87726</p> <p>Journal article: JMB Tukahirwa, J Mowo, J Tanui, R Kamugisha, K Masuki (2013). Scaling Sustainable Land management Innovations: The African Highland Initiative Devolution Model. <i>African Crop Science Journal</i> 21: 705-722</p> <p>Report: Janudianto, Sofiyuddin M, Perdana A, Jasnari. (2013). Jelutong and rubber based-agroforest systems to improve local livelihood and reduce emission in the peatlands of Sumatra and Central Kalimantan. Bogor, Indonesia. World Agroforestry Centre (ICRAF) Southeast Asia Regional Program. http://blog.worldagroforestry.org/index.php/2013/11/13/traditional-tree-species-holds-promise-for-farmers-in-indonesias-peatlands/</p> <p>Journal article: Roshetko JM, D Rohadi, A Perdana, G Sabastian, N Nuryartono, AA Pramono, N Widayani, P Manalu, MA Fauzi, P Sumardamto, N Kusumowardhani. 2013. Teak agroforestry systems for livelihood enhancement, industrial timber production, and environmental rehabilitation. <i>Forests, Trees, and Livelihoods</i> 22 (4): 251-256 DOI: 10.1080/14728028.2013.855150</p> <p>Report: Roshetko, JM and P Purnomosidhi. 2013. Smallholder agroforestry fruit production in Lampung, Indonesia: horticultural strategies for smallholder livelihood enhancement. <i>Acta Hort.</i> (ISHS) 975:671-679 (http://www.actahort.org/books/975/975_84.htm)</p> <p>Funding for the Horn of Africa proposal development was applied for from holdback funds but was not funded this year.</p> <p>Confernece presentation - Catherine Muthuri, Amos Gyau, Miyuki Iiyama, Abayneh Derero, Evelyn Kiptot, Amini Mutanganda, Anja Gassner, Jeremias Mowo and Fergus Sinclair (2013). Enhancing Food Security and Livelihoods through Agroforestry practices: key lessons from the 'Trees for Food Security' project in Ethiopia and Rwanda. Development Futures Conference, Australia, December 2013.</p> <p>Working paper: Robert Winterbottom, Chris Reij, Dennis Garrity, Jerry Glover, Debbie Hellums, Mike McGahuey and Sara Scherr (2013). Improving Land and Water Management. Creating a Sustainable Food Future, Installment Four. World Resources Institute. 44pp. http://www.wri.org/publication/improving-land-and-water-management</p> <p>Hoang TL, Simelton E, Ha VT, Vu DT, Nguyen TH, Nguyen VC, Phung QT (2013). Diagnosis of farming systems in the Agroforestry for Livelihoods of Smallholder farmers in Northwestern Viet Nam project. Working Paper no. 161. Hanoi, Viet Nam: World Agroforestry Centre (ICRAF). Southeast Asia Regional Program. 24p. DOI: 10.5716/WP13033.PDF</p> <p>Dawson, I K Place, F Torquebiau, E Malezieux, E Iiyama, M Sileshi, G W Kehlenbeck, K Masters, E McMullin, S Jamnadass, R 2013 Agroforestry, food and nutritional security Background Paper No. 4 Background paper for the International Conference on Forests for Food Security and Nutrition, FAO, Rome, 13-15 May, 2013 21p 2013210 http://www.worldagroforestry.org/downloads/publications/PDFs/PP13210.PDF</p> <p>Jamnadass, R Place, F Torquebiau, E Malezieux, E Iiyama, M Sileshi, G W Kehlenbeck, K Masters, E McMullin, S Dawson, I K 2013 Agroforestry for food and nutritional security <i>Unasylva</i> 241 (64) p23-29 2013322 http://www.fao.org/docrep/019/i3482e/i3482e.pdf</p> <p>Jamnadass, R. Place, F. Torquebiau, E. Malezieux, E. Iiyama, M. Sileshi, G.W. Kehlenbeck, K. Masters, E. McMullin, S. Weber, J.C. Dawson, I.K. 2013 The benefits of agroforestry systems</p>

	<p>for food and nutritional security The Overstory 258 1p 2013 http://bit.ly/M48aos</p> <p>Jamnadass, R Place, F Torquebiau, E Malezieux, E Iiyama, M Sileshi, G W Kehlenbeck, K Masters, E McMullin, S Weber, J C Dawson, I K 2013 Agroforestry, food and nutritional security ICRAF Working Paper no. 170 Nairobi, Kenya World Agroforestry Centre (ICRAF) 24p 2013054 http://www.worldagroforestry.org/downloads/publications/PDFs/WP13054.PDF</p>
Management options for perennial tree crop agroforestry developed and promoted	<p>Journal article: Cannavo P., Harmand J.M., Zeller B., Vaast P., Ramirez J.E., Dambrine E. 2013. Low nitrogen use efficiency and high nitrate leaching in a highly fertilized <i>Coffea arabica</i>-<i>Inga densiflora</i> agroforestry system: A 15N labeled fertilizer study. <i>Nutrient cycling in agroecosystems</i>, 95 (3) : 377-394. http://dx.doi.org/10.1007/s10705-013-9571-z</p> <p>Journal article: Boreux V., Kushalappa C.G., Vaast P., Ghazoul J. 2013. Interactive effects among ecosystem services and management practices on crop production: Pollination in coffee agroforestry systems. <i>Proceedings of the National Academy of Sciences</i> 110: 8387-8392.</p> <p>Journal article: Charbonnier F., le Maire G., Dreyer E., Casanoves F., Christina M., Dauzat J., Eitel J.U.H., Vaast P., Vierling L.A., Rouspard O. 2013. Competition for light in heterogeneous canopies: Application of MAESTRA to a coffee (<i>Coffea arabica</i> L.) agroforestry system. <i>Agricultural and Forest Meteorology</i> 181, 152-169. http://dx.doi.org/10.1016/j.agrformet.2013.07.010</p> <p>Report E. Smith Dumont, G.M. Gnahou, L. Ohouo, F.L. Sinclair, P. Vaast (2013). Scoping study on potential tree species for Cocoa agroforestry in Soubre. What Innovative Agroforestry systems for improved cocoa productivity and sustainability? Cocoa Agroforestry review & planning workshop 25-27 February 2013, Bassam, Cote d'Ivoire http://www.slideshare.net/AkeMamo/farmers-perception-of-trees-on-cocoa-farms-in-cote-d-ivoire-preliminary-results</p> <p>Journal article: E. Smith Dumont, G.M. Gnahou, L. Ohouo, F.L. Sinclair, P. Vaast (in press). Farmers in Cote d'Ivoire value integrating tree diversity in cocoa for the provision of ecosystem services. <i>Agroforestry Systems</i> in press.</p> <p>Report: Mahrizal, Roshetko JM, Purnomosidhi P, Syahrir M, Suharman. 2013. Recommendation for increasing cocoa production for small-scale farmers (in Indonesian). National Seminar on Agroforestry IV. Development of agroforestry technologies and its products for energy security and health, October 26-27, 2013, at Hotel Roditha Banjarbaru, South Kalimantan, Indonesia</p> <p>Report: Mahrizal, Syahrir, M Suharman Purnomosidhi, P Roshetko, J M 2013. Panduan budidaya Kakao (Cokelat) untuk petani skala kecil. [Cacao (chocolate) cultivation guide for small-scale farmers]. Lembar Informasi. Bogor, Indonesia World Agroforestry Centre (ICRAF) 12p 2013184</p> <p>Report: Sofiyuddin M, Janudianto, Jasnari and Khususiyah N. 2013. Coffee-based Agroforestry as an Alternative to Improve Local Livelihoods in Peat Landscapes of Sumatra. . Bogor, Indonesia. World Agroforestry Centre (ICRAF) Southeast Asia Regional Program. http://www.worldagroforestry.org/sea/publication?do=view_pub_detail&pub_no=PO0318-13</p>
Underlying principles for management of trees to improve soil health developed	<p>Journal paper: Heng et al. (2014) Impact of <i>Alnus nepalensis</i> on soil microbial communities and crop production. Submitted to <i>Agronomy for Sustainable Development</i>.</p> <p>Journal paper: Lelei D, Barrios E., Ayuke F., Coe R., Karanja N, Shepherd K.D. and Sinclair F. (2014) Assessing the influence of trees and soil properties on soil macrofauna diversity and spatial distribution in agricultural landscapes of Tanzania.</p> <p>Journal paper: Barrios E., Coe R., Sileshi G.W., Mbow C., Shepherd K.D., Sinclair F. (2014). Principles underlying the impacts of trees on soil health and their application in addressing long term food security. Prepared for PNAS.</p>
Analysis of womens' participation in forest management decisions of IFRI data set	<p>Journal article: Larson, A., Mwangi, E. and Alwang, J. 2013. Comparative assessment of gender roles in community forests in Nicaragua and Uganda. Paper presented at IASC conference in Fuji, Japan (June 2013). Journal special issue proposal accepted.</p> <p>Journal article: Coleman, E., and Mwangi, E. 2013. Women's participation in forest management: A cross-country analysis. <i>Global Environmental Change</i>. 23 (1) pp 193-205 http://www.sciencedirect.com/science/journal/09593780/23/1</p>
Analysis of womens' participation in forest product value chains	<p>Asfaw, A., Lemenih, M., Kassa, H. and Ewnetu, Z. 2013. Importance, determinants and gender dimensions of forest income in eastern highlands of Ethiopia: The case of communities around Jelo Afromontane forest. <i>Forest Policy and Economics</i> 28 (2013): 1-7. (URL address: http://dx.doi.org/10.1016/j.forpol.2013.01.005)</p>

	<p>Four papers presented at IASC conference in Fuji, Japan (June 2013).</p> <p>Coleman, E., and Mwangi, E. 2012. Women's participation in forest management: A cross-country analysis. Global Environmental Change.</p>
Analysis of the productivity of smallscale timber operations	<p>Lescuyer G., 2013. Sustainable forest management at the local scale: A comparative analysis of community and domestic forests in Cameroon. Small-scale Forestry, 12(1), 51-66</p> <p>Robiglio V., Lescuyer G., Cerutti P.O., 2013. From farmers to loggers: the role of shifting cultivation landscapes in timber production in Cameroon. Small-scale Forestry, 12(1), 67-85</p> <p>Lescuyer G., Cerutti P.O., Robiglio V., 2013. Artisanal chainsaw milling to support decentralized management of timber in Central Africa? An analysis through the theory of access. Forest Policy and Economics, 32, 68-77.</p>
Analysis of economic, social and environmental benefits of mixed fruit production systems in high tropics	<p>Work completed but CIAT's fruit research programme subsequently discontinued.</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	
Performance of Jatropha provences evaluated	<p>Domestication of Jatropha Curcas for Oil Production on Smallholder Farms in the Sudano-Sahelian Region with focus on Mali.[http://drp.dfccentre.com/project/domestication-jatropha-curcas-oil-production-smallholder-farms-sudano-sahelian-region-focus-]</p>
Principles for targetting evergreen agriculture developed	<p>Report: Bishaw, B., Mowo, J., Muriuki, Kassa, H. and Neufeldt, H.2013. Introduction. In: Farmers' Strategies for Adapting to and Mitigating Climate Variability and Change through Agroforestry in Ethiopia and Kenya, edited by Caryn M. Davis, Bryan Bernart, and Aleksandra Dmitriev. Forestry Communications Group, Oregon State University, Corvallis, Oregon. Pp1-14. http://oregonstate.edu/international/sites/default/files/final_report_agroforestry_synthesis_paper_3_14_2013.pdf</p> <p>Report: Bishaw, B., Mowo, J., Kassa, H. and Muriuki, J. 2013. Agriculture, Forestry, and Land Use in East Africa. In: Farmers' Strategies for Adapting to and Mitigating Climate Variability and Change through Agroforestry in Ethiopia and Kenya, edited by Caryn M. Davis, Bryan Bernart, and Aleksandra Dmitriev. Forestry Communications Group, Oregon State University, Corvallis, Oregon. Pp 15-20. http://oregonstate.edu/international/sites/default/files/final_report_agroforestry_synthesis_paper_3_14_2013.pdf</p>
Spatially targeted recommendations for use of trees to improve water productivity	<p>Journal paper: Pagella T, Cronin M, Lamond G, Sida T and Sinclair FL (2013) Local knowledge of impacts of eucalyptus expansion on water security in the Ethiopian highlands. Nile Basin Development Challenge (NBDC) Science Workshop july 2013 prepared for Ecology and Society https://results.waterandfood.org/bitstream/handle/10568/34239/nbdcreport5_chapter18.pdf?sequence=1</p> <p>Journal paper: Cronin M, Lamond G, Balaguer F, Venturini F, Sida T, Pagella T and Sinclair FL (2013) A synthesis of local knowledge on drivers of tree cover change in the Blue Nile Basin. Nile Basin Development Challenge (NBDC) Science Workshop july 2013 prepared for Agriculture, Ecosystems and Environment https://cgspace.cgiar.org/bitstream/handle/10568/34232/nbdcreport5_chapter26.pdf?sequence=2</p> <p>Report including maps also on dataverse: Winowiecki, L. and Vagen, T. G- (2013). CPWF-LDSF Results Part II: Soil Health. Soil degradation and risk maps. World Agroforestry Centre, September, 2003. report: http://ubuntuone.com/0TLxtdcVzfnXcQUE9rQeze data: http://hdl.handle.net/1902.1/22520</p>
Characterisation of scaling domain for best fit tree management options for food	<p>Baseline surveys completed in Ethiopia and Rwanda and paper based on them was presented at the Development Futures Conference in Australia in November</p> <p>Kuria A, Ataa-Asantewaa M, Lamond G, Cronin M, Pagella T, Muthuri C, Hadgu K, Musana B, Mukuralinda A and Sinclair F (in prep) A synthesis of the contribution of local knowledge</p>

security in Ethiopia and Rwanda	<p>research to food security project in East Shewa, Ethiopia and Gishwati, Rwanda</p> <p>(CIFOR) Aregawi, T., Animut, G. and Kassa, H. 2013. Utilization and nutritive value of sesame (<i>Sesamum indicum</i> L.) straw as feed for livestock in the North western lowlands of Ethiopia. <i>Livestock Research for Rural Development</i> 25 (7) 2013 http://www.lrrd.org/lrrd25/7/areg25124.html</p>
Review of spatial tools for managing impacts of changing tree cover on ecosystem service flows	<p>Journal article: 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. Accepted: 31 December 2013 http://link.springer.com/article/10.1007/s10980-013-9983-9. .</p>
Farmer knowledge of tree attributes affecting ecosystem service provision in coffee agroforests acquired	<p>Journal paper: Cerdan, C R; Rapidel, B, Soto, G; Lamond, G. and Sinclair, F L. Farmers' knowledge of the way ecosystem services are related to productivity in coffee agroforestry systems. Submitted to <i>Agroforestry Systems</i>.</p>
Database of current knowledge of functional traits determining local tree selection criteria and knowledge gaps identified	<p>The 'Agroforestry Species Switchboard' is now available from:</p> <ul style="list-style-type: none"> - Description: http://www.worldagroforestry.org/our_products/databases/switchboard - Searching: http://www.worldagroforestry.org/products/switchboard/ <p>The interactive species selection tool for Eastern Africa provided in the VECEA map (http://www.vegetationmap4africa.org/vegetation-map.aspx) was updated to better reflect the distribution of each potential natural vegetation type. Some changes were also made in the map based on fieldwork in Kenya and Uganda on the boundary between Combretum wooded grassland and Evergreen bushland and thicket.</p> <p>Van Breugel P, Kindt R, Lilleso JPB, Bingham M, Demissew S, Dudley C, Friis I, Gachathi F, Kalema J, Mbago F, Moshi HN, Mulumba, J, Namaganda M, Ndangalasi HJ, Ruffo CK, Vedaste M, Jamnadass R and Graudal L (2013) Potential Natural Vegetation Map of Eastern Africa: An interactive vegetation map for Ethiopia, Kenya, Malawi, Rwanda, Tanzania, Uganda and Zambia. Version 1.2. Forest and Landscape (Denmark) and World Agroforestry Centre (ICRAF). URL: http://vegetationmap4africa.org.</p> <p>Kindt R, van Breugel P, Orwa C, Lilleso JPB, Jamnadass R and Graudal L (2013) Useful tree species for Eastern Africa: a species selection tool based on the VECEA map. Version 1.1. World Agroforestry Centre (ICRAF) and Forest and Landscape (Denmark). URL /species-selection-tool.aspx</p> <p>Journal paper: R Kindt, JPB Lilleso, P Breugel, M Bingham, S Demissew, C Dudley et al. (2014). Correspondence in forest species composition between the Vegetation Map of Africa and higher resolution maps for seven African countries. <i>Applied Vegetation Science</i> 17 (1), 162-171 Article first published online: 19 JUL 2013. http://onlinelibrary.wiley.com/doi/10.1111/avsc.12055/abstract</p>
Outcome 6.1.2: Smallholder farmers and forest users become more aware of market operation and interact more effectively with other actors in value chains to gain better access to markets and realise higher value from their products	
Output 6.1.2.1: Tools and strategies for value chain analysis and development including certification and enterprise developed	
Local communities appreciate value and application of certification models for domesticated-cultivars of indigenous fruit trees	<p>Report on community training. Agroforestry for Food Security Project, World Agroforestry Centre, Lilongwe.</p>

Synthesis of collective action activities in WCA	A Gyau, S Franzel, M Chiatoh, G Nimino, K Owusu (2014). Collective action to improve market access for smallholder producers of agroforestry products: key lessons learned with insights from Cameroon's experience. Current Opinion in Environmental Sustainability 6, 68-72 (Online in 2013). http://www.sciencedirect.com/science/article/pii/S1877343513001474
Experiences of action research on tree products value chains in Africa documented	Proceedings of the International Symposium on 'Tree Product Value Chains in Africa: Sharing Innovations that Work for Smallholders' http://www.aftp-symposium.org/
Value chain analysis of selected fruit tree products	http://www.worldagroforestry.org/newsroom/highlights/%E2%80%9Cseeds-growth%E2%80%9D-begin-germinate-vietnam-uplands
Assessment of the cacao cooperatives and associations (benchmarking in terms of business performance, member relations, buyer relations)	Donovan, J. et al (2013). Benchmarking of cocoa cooperatives and associations in Peru. World Agroforestry Centre.
Market change analysis for agroforestry	Perdana A, Roshetko JM. 2013. Seri Agroforestri dan Kehutanan di Sulawesi: Laporan hasil penilaian cepat untuk komoditas pertanian, perkebunan dan kehutanan di Sulawesi Selatan dan Tenggara. [Rapid market appraisal of agricultural, plantation and forestry commodities in South and Southeast Sulawesi]. ICRAF Working Paper no. 169 Nairobi, Kenya World Agroforestry Centre (ICRAF) 18p 2013045 http://www.worldagroforestry.org/downloads/publications/PDFs/WP13045.PDF
Smallholder timber marketing analysed in Indonesia	Roshetko JM, D Rohadi, A. Perdana, G Sabastian, N Nuryartono, AA Pramono, N Widyani, P Manalu, MA Fauzi, P Sumardamto. 2013. Teak's contribution to rural development in Indonesia. Paper presented at the World Teak Conference 2013, Bangkok, Thailand, 24-27 March 2013
Guidelines for assessing market potential of agroforestry products developed using case studies from Western Kenya, Ethiopia and Tanzania	Oduol, J.B.A and Franzel, S. (2013). Assessing Market Potential of Agroforestry Tree Seedlings in Western Kenya, Small-scale Forestry. DOI: 10.1007/s11842-013-9254-2
Value chain analysis of smallholder avocado farmers in Kenya conducted to identify leverage points for integrating the marginalised groups into agricultural commodity markets	Conference paper: Mercy Mwambi, Judith Oduol, Patience Mshenga, Saidi Mwanarusi (2013). Does Contract Farming Improve Smallholder Farmers Income? The Case of Avocado Farming in Kenya. African Association of Agricultural Economists (AAAE), Fourth International Conference, September 22-25, 2013, Hammamet, Tunisia. http://ageconsearch.umn.edu/handle/161514
Rapid market appraisal for	Journal article: Amos Gyau , Kaitlyn Smoot, Christophe Kouame, Lucien Diby, Jane Kahia and Daniel Ofori (2014). Farmer attitudes and intentions towards trees in cocoa (Theobroma

indigeneous tree products (integrated or with high potential to be integrated into cocoa agroforestry sytems) in C'ote d'Ivoire completed	<p>cacao L.) farms in Cote d'Ivoire. Agroforestry Systems http://link.springer.com/article/10.1007/s10457-014-9677-6/fulltext.html</p> <p>Manga Essouma F., 2013. Systemes agroforestiers a base de cacaoyer : Dynamiques spatiales et strategies des acteurs a Akongo (region du Centre-Cameroun). Memoire presente en vue de l'obtention du Master Professionnel en Sciences Forestieres ; Option : Agroforesterie. Universite de Yaounde</p> <p>Moisy C., 2013. Systemes agroforestiers complexes a base de cacaoyers : evolutions et strategies des acteurs, a Obala au Centre du Cameroun. Memoire presente pour l'obtention du diplome ingenieur Specialite Systemes agricoles et agro-alimentaires durables au sud (SAADS) ; Option Developpement agricole et rural au sud (DARS) ; Parcours Ressources, systemes agricoles et developpement (RESAD). SupAgro Montpellier.</p> <p>Ngono F., 2014. Systemes agroforestiers cacao : evolution et strategie des acteurs dans le village de Talba (Mbangassina). Memoire presente en vue de l'obtention du Master Professionnel en Sciences Forestieres ; Option : Agroforesterie. Universite de Yaounde 1.</p>
Management options for adding value to native cacao diversity evaluated	<p>Journal article published online re Nicaragua in 2012 now has full details: Trognitz, B.; Cros, E.; Assemat, S.; Davrieux, F.; Forestier-Chiron, N.; Ayestas, E.; Kuant, A.; Scheldeman, X.; Hermann, M.(2013). Diversity of cacao trees in Waslala, Nicaragua: associations between genotype spectra, product quality and yield potential. PLoS ONE 8(1): e54079: ISSN:1932-6203 DOI: 10.1371/journal.pone.0054079. The managmeent options for Peru will be reported in 2014.</p> <p>International Cocoa Awards were held at the Salon de Chocolat in Paris, 30th October-4th November 2013.</p>
Forest value chain analysis methodology developed	<p>Peruvian smallholder production and marketing of bolaina (Guazuma crinita), a fast-growing Amazonian timber species: Call for a pro-livelihoods policy environment. Louis Putzel, Peter Cronkleton, Anne Larson, Miguel Pinedo-Vasquez, Omar Salazar and Robin Sears. CIFOR Brief No. 23, August 2013.</p> <p>The use of pigue (Piptocoma discolor) by smallholders in Napo, Ecuador: Sustainable management of a pioneer timber species for local livelihoods. Gabriela Erazo, Juan Carlos Izurieta, Peter Cronkleton, Anne Larson and Louis Putzel. CIFOR Brief, No 24, October 2013.</p> <p>Produccion y comercializacion de bolaina (Guazuma crinita), una especie amazonica de rapido crecimiento: Un llamado a la adopcion de un marco de politicas que apoye los medios de vida. Louis Putzel, Peter Cronkleton, Anne Larson, Miguel Pinedo-Vasquez, Omar Salazar and Robin Sears. CIFOR Brief No. 25, Octubre 2013.</p> <p>El uso de pigue (Piptocoma discolor) por pequenos productores en Napo, Ecuador: Manejo sustentable de un especie pionera</p>
Value chain studies on NTFPs, fuelwood and charcoal	<p>Yemane Gebru, Zeleke Ewnetu, Habtemariam Kassa and Christine Padoch. Determinants of producers' participation in gums and resins value chains from dry forests and analysis of marketing channels in northwestern and southern Ethiopia. paper accepted for publication in Forests, Trees and Livelihoods</p> <p>Awono, A., Ingram, V., Schure, J. and Levang, P. 2013. Guide for small and medium enterprises in the sustainable non-timber forest product trade in Central Africa. CIFOR, Bogor, Indonesia. http://www.cifor.org/online-library/browse/view-publication/publication/4053.html</p> <p>Ingram, V., A. Awono and J. Schure (2013). La contribution des produits forestiers non ligneux a la vie quotidienne des populations d'Afrique Centrale. Vivre et se nourrir de la foret. P. Vantomme and O. Ndoye. Rome, FAO.</p> <p>Awono, A., V. Ingram, J. Schure and P. Levang (2013). Guide for small and medium enterprises in the sustainable non-timber forest product trade in Central Africa. Bogor, Indonesia, CIFOR: 34.</p> <p>Eba'a Atyi R., Lescuyer G., Ngouhouo Poufoun J. (eds.), 2013. Etude de l'importance economique et sociale du secteur forestier et faunique au Cameroun. Rapport du CIFOR pour le MINFOF, Yaounde</p>
Value chain studies of smallholder palm oil production / small scale milling	<p>Yvonne kiki Nchanji and Ofundem Tataw. 2013. ARTISANAL MILLING OF PALM OIL IN CAMEROON. CIFOR working paper.</p>

Business opportunities for palm species in the humid tropics assessed	Journal article: Sophie Graefe, Dominique Dufour, Maarten van Zonneveld, Fernando Rodriguez & Alonso Gonzalez (2013). ch palm (<i>Bactris gasipaes</i>) intropical Latin America: implications for biodiversity conservation, natural resource management and human nutrition. <i>Biodiversity and Conservation</i> . 22:269-300 DOI 10.1007/s10531-012-0402-3
Output 6.1.2.2: Extension approaches for agroforestry interventions and alternatives evaluated and frameworks for their application developed	
Market opportunities for tree products and services assessed and synergies identified	A Degrande, A Gyau, D Foundjem-Tita, E Tollens (in press). Improving smallholders' participation in tree product value chains: experiences from the Congo Basin. <i>Forests, Trees and Livelihoods</i> , 1-14 (in press, online). DOI: 10.1080/14728028.2014.886867
Adoption and impact of tree domestication in Cameroon assessed	Ann Degrande, Patrick Tadjou, Bertin Takoutsing, Ebenezer Asaah, Alain Tsobeng, Zac Tchoundjeu (2013). Getting Trees Into Farmers' Fields: Success of Rural Nurseries in Distributing High Quality Planting Material in Cameroon. <i>Small-scale Forestry</i> 12 (3): 403-420. DOI 10.1007/s11842-012-9220-4
Analysis of existing extension programs and extension services with partners	Martini E, Tarigan J, Purnomosidhi P, Prahmono A, Surgana M, Setiawan A, Megawati Mulyoutami E, Meldy BW, Syamsidar, Talui R, Janudianto, Suyanto, Roshetko JM. 2013. Seri Agroforestri dan Kehutanan di Sulawesi: Kebutuhan penyuluhan agroforestri pada tingkat masyarakat di lokasi proyek AgFor di Sulawesi Selatan dan Tenggara, Indonesia. [Agroforestry extension needs at the community level in AgFor project sites in South and Southeast Sulawesi, Indonesia]. ICRAF Working Paper no. 168 Nairobi, Kenya World Agroforestry Centre (ICRAF) 44p 2013044 http://www.worldagroforestry.org/downloads/publications/PDFs/WP13044.PDF
Menu of climate smart practices developed and Training of extension staff and farmers conducted	Report: Charles Wambugu and Steven Franzel (2013). Options for Climate Smart Agriculture at Kaptumo Site in Kenya. World Agroforestry Centre, Nairobi, 37pp. Report: Kirui, J.W, Muthama, J., Lutakome, P., Wafula, S.N., Kugonza, J., Ongadi, P.M and Wabwire, R. (2013). PARTICIPATORY NEEDS ASSESSMENT REPORT ON CLIMATE SMART AGRICULTURE IN KOSIRAI, KENYA AND NAMAYUMBA, UGANDA. World Agroforestry Centre, Nairobi, 41pp.
Model for strengthening grass roots institutions developed and tested	Verrah Akinyi Otiende, 1Joseph Tanui Kibet, 2Anthony Gachuhi Waititu, 1Mieke Sophia Bourne, 1Jeremias Gasper Mowo (in press). Fostering collective action at landscape level: Success factors of smallholder innovation platforms in the Eastern Highlands of Kenya and Uganda. <i>African Journal of Agricultural Economics and Rural Development</i> (in press). www.internationalscholarsjournals.org
Assessment of adoption of feed practices and effectiveness of farmer trainer programs in promoting them	Kiptot, E. and Franzel, S. (in press). Voluntarism as an investment in human, social and financial capital: evidence from a farmer-to-farmer extension program in Kenya. <i>Agriculture and Human Values</i> . DOI:10.1007/s10460-013-9463-5
Output 6.1.2.3: Tree seed and seedling supply systems analysed and guidelines for their improvement within public and private sectors developed	
Global synthesis on sustainable tree seed and seedling supply systems	Journal article: a manuscript on delivering inputs (germplasm) to farmers for improved livelihoods was prepared by ICRAF and Forest and Landscape, Denmark and submitted to the <i>World Development Journal</i> . Corrections will be re-submitted in February, 2014 Journal article on: 'Tree seed and seedling supply systems: a review for Asia, Africa and Latin America models' was submitted and accepted by <i>Small Scale Forestry journal</i> . A beta version of seed sourcing tool has been prepared and is available as a web application.

<p>Robust tree seed and seedlings input systems developed to ensure sustained agroforestry systems productivity</p>	<p>Masters thesis: Eboutou Lea Yvonne. 2013. The effectiveness of RRCs in the diffusion of agroforestry techniques: stakeholders' perception in Cameroon. University of Dschang Cameroon. 101p.</p> <p>Conference paper: Martini E, Roshetko JM, Purnomosidhi P, Tarigan J, Idris N, Zulfadhli T. (2013). Fruit germplasm resources and demands for small-scale farmers post-tsunami and conflicts in Aceh, Indonesia. Acta Hort. (ISHS) 975:657-664</p> <p>Journal article: .Muriuki J, Kuria K, Muthuri A.W, Mukuralinda CW, Simons AJ, Jamnadass RH. (2013). Testing biodegradable seedling containers as an alternative for polythene tubes in tropical small-scale tree nurseries. Small-scale Forestry 12 (2) http://link.springer.com/article/10.1007%2Fs11842-013-9245-31.</p> <p>Working paper: Guidelines on germplasm supply in East Africa</p> <p>Together with national partners 40 demonstration plots that promote uptake of fertilizer trees were established in Machakos, Kenya; three in Bugesera, Rwanda and five in Mbarali Tanzania.</p>
<p>Models of sustainable quality tree seed and seedling supply systems for agroforestry species developed and promoted.</p>	<p>Journal article: Takoutsing B, Tchoundjeu Z; Degrande A; Asaah E, Gyau A, Nkeumoe F, Tsobeng A. (2013). Assessing the quality of seedlings in small-scale nurseries in the highlands of Cameroon: the use of growth characteristics and quality thresholds as indicators. Small-scale Forestry - http://link.springer.com/article/10.1007%2Fs11842-013-9241-7#page-1</p> <p>Conference article: 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>Outcome 6.1.3: Government and NGO extension providers and the private input supply sector use more effective means to disseminate agroforestry options</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 that influence benefits from NTFPs produced by smallholders</p>	<p>Duchelle, A.E., K. Kainer, and L.H.O Wadt. 2013. Is certification associated with better forest management and socioeconomic benefits? A comparative analysis of three certification schemes applied to Brazil nuts in Western Amazonia. Society and Natural Resources: http://dx.doi.org/10.1080/08941920.2013.840022</p> <p>Nawir, A. A. and Manalu, P., 2013. Development of timber and non-timber forest products' production and market strategies for improvement of smallholders' livelihoods in Indonesia, Poster presented at ACIAR Project Inception Meeting (FST/2012/039), CIFOR (Center for International Forestry Research), Bogor.</p> <p>Maryudi, A., 2013. Policy and regulatory frameworks that hinder smallholding forestry in Gunungkidul District, Yogyakarta. Part of Project on Development of timber and non-timber forest products' production and market strategies for improvement of smallholders' livelihoods in Indonesia (Report submitted to CIFOR for ACIAR Project FST/2012/039).</p> <p>Hogarth, N.J. (2013). The link between smallholder management of bamboo shoots, income and livelihoods: A case study in southern China. Forests, Trees and Livelihoods 22(2): 70-85. http://dx.doi.org/10.1080/14728028.2013.779078</p> <p>Hogarth, N.J. and Belcher, B. (2013). The contribution of bamboo to household income and rural livelihoods in a poor and mountainous county in Guangxi, China. International Forestry Review 15(1): 71-81. http://www.cifor.org/publications/pdf_files/articles/AHogarth1301.pdf http://dx.doi.org/10.1505/146554813805927237</p>
<p>Analysis of obstacles and opportunities for women's participation in forest decisions</p>	<p>Policy briefs published. Gender and forestry in Uganda: policy, legal and institutional frameworks. CIFOR infobrief. Concepta Mukasa, Alice Tibazalika, Alice Mango and Harriet Nabirye Muloki. 2013. http://www.cifor.org/publications/pdf_files/inforbrief/3855-infobrief.pdf</p> <p>Policy briefs published: Gender and forestry in Uganda: policy, legal and institutional frameworks. CIFOR infobrief. Concepta Mukasa, Alice Tibazalika, Alice Mango and Harriet Nabirye Muloki. 2013. http://www.cifor.org/publications/pdf_files/inforbrief/3855-infobrief.pdf</p> <p>Why don't women participate in forest governance and what difference will their participation make? http://blog.cifor.org/18776/why-dont-women-participate-in-forest-governance-and-what-difference-will-their-participation-make/#.UhyLkJz-J</p>

	<p>Creating parity under the canopy: A research program in Uganda and Nicaragua is using collaborative forest management to better address the social structures that inhibit women's equal access to forest resources and decision making - and to drive changes that are promoting greater gender equity http://www.cgiar.org/consortium-news/creating-parity-under-the-canopy/</p> <p>Taking migration seriously: What are the implications for gender and community forestry? http://www.cifor.org/publications/pdf_files/infobrief/4183-infobrief.pdf</p> <p>Mairena, E., Lorio, G., Hernandez, X., Wilson, C., Muller, P. and Larson A.M. 2013 Genero y bosques en las regions autonomas de Nicaragua: participacion comunitaria. CIFOR Infobrief 59. http://www.cifor.org/publications/pdf_files/infobrief/4027-infobrief.pdf</p> <p>Mairena, E., G. Lorio, X. Hernandez, C. Wilson, P. Muller, and A. Larson. 2013 Gender and forests in Nicaragua's indigenous territories; From national policy to local practice. CIFOR working paper. http://www.cifor.org/publications/pdf_files/WPapers/WP95Larson.pdf</p> <p>Larson, A. Derechos de tenencia y acceso a los bosques. Manual de capacitacion para la investigacion: Parte 1. Guia introductoria a los problemas clave. CIFOR. Bogor. http://www.cifor.org/publications/pdf_files/Books/BLarson1304.pdf</p> <p>Four papers presented at IASC conference in Fuji, Japan (June 2013). Journal special issue proposal accepted with request of a fifth article, currently being drafted. Submission requested in early 2014. One paper on Nicaragua / Uganda comparison reported under 6.1.1.2, three others are:</p> <p>Banana, A., Mukasa, C., Tibazalika, A. and Mwangi, E. 2013 Gender, tenure and community forests in Uganda: policy and practice for women's participation.</p> <p>Hernandez, X. et al. 2013. Inclusive forest governance through adaptive collaborative management.</p> <p>Mukasa, C., Tibazalika, A., Banana, A., Mwangi, E., and Mutimukuru-Maravanyika, T. 2013. Enhancing women's participation in forest management using adaptive collaborative management in Uganda.</p>
Initiation of global analysis of smallholder and community forestry initiatives	<p>Concept note prepared for USAID, 1 design workshop held in August (Iquitos) and a second in November (Barcelona)</p> <p>Nugroho, B., Dermawan, A., Putzel, L. 2013. Financing smallholder timber planting in Indonesia: Mismatches between loan scheme attributes and smallholder borrowing characteristics. International Forestry Review 15(4). Pp 499-508.</p> <p>Special issue of Small-scale Forestry, which included Peter Cronkleton, Anne M Larson, Laurene Feintrenie, Claude Garcia, Patrice Levang. 2013. Reframing Community Forestry to Manage the Forest-Farm Interface. Small-scale Forestry. Volume12, Issue,1.pp. 5-13</p> <p>Laurene Feintrenie, Peter Cronkleton, Claude Garcia, Anne Larson, Patrice Levang.2013. Foreword (editorial for special issue). Small-scale Forestry. Volume 12, Issue 1, pp 1-3</p> <p>Nawir, A. A. and Paudel, N.S. Forthcoming (2014). How to implement benefit sharing mechanism under REDD+ in complementing community forestry system at the local level: lessons learnt from Indonesia and Nepal. CIFOR Info brief for EU Benefit sharing Project. Bogor</p> <p>Julve Larrubia C., Tabi Eckebil P.T., Nzoyem Saha N., Tchanchouang JC., Kerkhofs B., Beauquin A., Mbarga Mbarga J.P., Vermeulen C., Cerutti P.O., Lescuyer G., 2013. Forets communautaires camerounaises et Plan d'action FLEGT : quel prix pour la legalite ? Bois et Forets des Tropiques, 317, 3, 71-80</p>
Reformed policy and legislation and capacity building for sustainable charcoal production and trade	<p>Vermeulen C. & Lescuyer G., 2013. Forets des communes locales et gestion du bois-energie. In << Quand la ville mange la foret. Les defis du bois-energie en Afrique centrale >>, J.N.Marien, E.Dubiez, D.Loupe, A.Larzilliere (eds.), Quae, Montpellier, 117-119</p>

Forest base enterprises capturing value from sustainably managed forests	Nawir, A. A., 2013. Social forestry for commercial objectives: lessons learnt from community-company contractual partnership in Indonesia (Case studies from industrial timber plantation management), Poster presented at the ASEAN Social Forestry Network Annual Meeting and Conference, 17-18 June 2013, CIFOR (Center for International Forestry Research), Luang Prabhang, Lao PDR.
Analysis of obstacles and opportunities for women's participation in forest decision	Same as 3 rows above.
Options for improved policies for agroforestry developed and disseminated	<p>FAO. 2013. Advancing Agroforestry on the Policy Agenda: A guide for decision-makers, by G. Buttoud, in collaboration with O. Ajayi, G. Detlefsen, F. Place & E. Torquebiau. Agroforestry Working Paper no. 1. Food and Agriculture Organization of the United Nations. FAO, Rome. 37 pp. http://www.fao.org/docrep/017/i3182e/i3182e00.pdf</p> <p>National consultation on agroforestry in India, 19th November, 2013 http://www.worldagroforestry.org/newsroom/media_coverage/agroforestry-benefits-outlined-national-meeting-indiahttp://</p> <p>Godfrey Kundhlande. INTERSECTORAL DIALOGUE AND POLICIES FOR PROMOTING AGROFORESTRY IN SOUTHERN AFRICA: THE CASE OF MALAWI www.fao.org/climatechange/36147-09a0eff8ca223cab921fd961062e449ef.pdf.</p> <p>Namubiru-Mwaura, E Place, F 2013 Securing land for Agricultural production In: Alliance for a Green Revolution in Africa (AGRA). The African Agriculture Status Report 2013. Nairobi: AGRA p30-38 2013222 http://www.worldagroforestry.org/downloads/publications/PDFs/BC13222.PDF.</p> <p>Buttoud, G Place, F Gauthier, M Gallopin, K Gauthier, M Detlefsen, G Torquebiau, E Ajayi, O 2013 Advancing agroforestry on the policy agenda: a guide for decision-makers FAO Agroforestry Working Paper no. 1 Rome, Italy Food and Agriculture Organization of the United Nations (FAO) 36p B17571 http://www.worldagroforestry.org/downloads/publications/PDFs/WP17571.PDF</p>
Output 6.1.3.2: Frameworks and tools developed to support negotiating use of land and trees across differing knowledge systems	
Evaluation of local and global scientific knowledge about management of farm trees	<p>Sabrina Tomasini, Timothy Pagella, Evelyne C. Kiptot, Fergus L. Sinclair (2013). Adaptation of local agroecological knowledge to climate variability and intensification of land use. Manuscript prepared for Agricultural Systems.</p> <p>Bos, S., Pagella, T. and Luceling, E. (2013). Evaluation of local knowledge amongst climate analogue sites. Manuscript prepared for climate change journal.</p> <p>Cronin, M., Jisha, Lamond, G., Muriuki, J. and Sinclair F (2013). Comparative analysis of local knowledge about tree management across three countries in East Africa. Manuscript prepared for Agroforestry Systems.</p> <p>Cormier-Salem M.C., Lescuyer G., Takforyan A., 2013. Les paysans ont leurs raisons que les experts ignorent. In << Rendre possible. Jacques Weber, itineraire d'un economiste passe-frontieres >>, M.Bouamrane, M.Antona, R.Barbault, M.C.Cormier-Salem (coord.), collection Indisciplines, Quae, Paris, 53-61</p> <p>Africa Agriculture Status Report: Focus on Staple Crops. Nairobi, Kenya: Alliance for a Green Revolution (AGRA). 2013. Chapter 3. www.agra.org/download/5226fe87ea799</p>
Development of interface to enable local stakeholder adjustment of land cover data to support participatory GIS tools	Journal article and GIS tool: Jackson, B., Pagella, T., Sinclair, F et al., (2013) Polyscape: a GIS mapping framework providing efficient and spatially explicit landscape-scale valuation of multiple ecosystem services. Landscape and Urban Planning, 112:74-88 http://www.sciencedirect.com/science/article/pii/S0169204612003532
Outcome 6.1.4: Government and NGO extension providers and the private input supply sector make quality tree seed and seedlings available to smallholder farmers	
Output 6.1.4.1: Impact model developed and tested	

Impact study of Lamil Project	Framing report for study completed
Impact study on smallholder rubber adoption	Framing report for study completed
Impacts of tree domestication in Cameroon	Reported under 6.1.2.2, 5. Place, F Binam, J N Kalinganire, A Hamade, S Boureima, M Tougiani, A Dakouo, J Mounkoro, B Diaminatou, S Diop, M Badji, M Haglund., E 2013 Socio-economic assessment of farmer managed natural regeneration in the Sahel: evidence from four selected countries (Burkina Faso, Mali, Niger and Senegal) Nairobi, Kenya World Agroforestry Centre (ICRAF) B17608
Baseline survey analysis of trees for food security project	Baseline survey completed in Rwanda and Ethiopia. Report produced and initial results discussed at international food security conference [http://www.slideshare.net/DevFutures/catherine-muthuri-enhancing-food-security]
Theme: Management and conservation of forest and tree resources	
Outcome 6.2.1: Decision makers at the local, national and international levels adopt effective portfolios of strategies and gender-sensitive guidelines for conservation and sustainable use of genetic resources of priority tree species to meet the needs of men and women stakeholders.	
Output 6.2.1.1: Understanding the threats to populations of important tree species	
Criteria for prioritizing tree species based on value, status and threats	<p>This output target has been superseded as per August 2013. All the activities planned for 2013 have been completed.</p> <p>ICRAF</p> <p>VIOT - Species -specific maps for 100+ useful tree species in East Africa based on information from the VECEA map</p> <p>A new database was created based on the VECEA map that documents the vegetation types where a species is characteristic, occurring and occurring marginally. Vegetation-specific kml layers were created for each of the vegetation types in the website of the VECEA map (www.vegetationmap4africa.org). For 1022 tree and shrubs species, species-specific distribution maps are now available from: http://www.vegetationmap4africa.org/species-distribution.aspx. The protection status of each species was also assessed by calculating the percentage of each natural vegetation type under formalized protection. Citation: Kindt R, van Breugel P, Orwa C, Lilleso JPB, Jamnadass R and Gaudal L (2013) Species distribution selection based on the VECEA map. Version 1.0. World Agroforestry Centre (ICRAF) and Forest and Landscape (Denmark). http://www.vegetationmap4africa.org/species-distribution.aspx</p> <p>VIOT - Report on morphologic comparison of fruit from hybrid trees to mother trees of IFT in West and Central Africa (2013)</p> <p>The concerned species is <i>Dacryodes edulis</i>. Sixty hybrid trees (produced from cross pollination of selected mother trees) have been planted at Mbamayo ICRAF demonstration plot. The assessment of growth parameters (height, collar and crown diameters) is ongoing. The distribution pattern of flower and fruit on the crown, the percentage of flower developed into fruit, the percentage of fruit that reaches the maturity and the phenotypic variation of fruit traits will be measured during the flowering and fruiting periods. Data collection has been completed in 2013 and data analysis and reporting will be finalized in 2014.</p> <p>Data on growth parameters available at ICRAF dataverse http://dvn.iq.harvard.edu/dvn/dv/icraf</p> <p>VIOT - Report on genetic diversity of provenances of <i>D. edulis</i> trees used in breeding (2013)</p> <p>Those provenances are Mbouda, Limbe, Boumnyebel, Makenene and Kekem in Cameroon. The research protocol has been validated. The leaf sample collection for DNA analysis has already been done in Makenene and Mbouda. The sampling at other sites is planned for the near future. Reporting will be finalized in 2014.</p> <p>VIOT - Distribution maps of old mother tree for 5 species in China</p> <p>Two species have been mapped:</p> <ol style="list-style-type: none"> Camellia reticulenta Alnus nepalensis

	<p>BIOVERSITY</p> <p>VIOT - Atlas of distribution and threats to at least 50 neotropical forest tree species (2013)</p> <p>This been completed and the atlas is now available on the web for 100-not 50- species. The other two activities are in progress and on track (www.mapforgen.org)</p> <p>VIOT - Knowledge generated and disseminated about use of food tree species in Africa during food shortage times; the relationship to health of young children; and threats to the important tree species</p> <p>A background paper was developed on the contribution of forest foods to sustainable diets for an FAO conference held in May 2013 on "Forests, food security and nutrition". Two additional publications were derived from the background paper.</p> <p>http://www.fao.org/forestry/37132-051da8e87e54f379de4d7411aa3a3c32a.pdf</p> <p>http://www.mdpi.com/2071-1050/5/11/4797</p> <p>http://www.fao.org/docrep/019/i3482e/i3482e07.pdf</p> <p>An article is in preparation on the patterns of consumption of food trees species during food shortage period in some West African countries.</p> <p>Two articles in preparation; expected to be submitted in 2014</p> <p>First threat mapping methodology and maps developed</p> <p>Hannes Gaisberger is developing a methodology for assessing threats to key tree species based on different variables (e.g. development of infrastructure, occurrence of fire, livestock density, etc). The robustness of the methodology is being tested within the framework of the ADA project in Burkina Faso (Threats to priority food tree species in Burkina Faso) and the plan is to include this dynamic module into the online tool MAPFORGEN. At the moment a draft methodology is available, which requires further testing. It will require also access to highly detailed datasets that we hope will be made available within the course of the ADA project (e.g. National Forest inventory data).</p> <p>BIOVERSITY and ICRAF</p> <p>VIOT - Application of ensemble prediction methods for at least 50 neotropical forest tree species</p> <p>Evert Thomas (Bioversity) and Roeland Kindt (ICRAF) have developed ensemble suitability models for MAPFORGEN species, using and updating the ensemble suitability methodologies of BiodiversityR. Ready end of Feb 2014.</p> <p>PUBLICATIONS</p> <p>-Azpilicueta MM, Gallo LA, van Zonneveld M, Thomas E, Moreno C, Marchelli P (2013) Management of Nothofagus genetic resources: definition of genetic zones based on a combination of nuclear and chloroplast marker data. Forest Ecology and Management 302: 414-424.</p> <p>-Soldati M, Fornes L, van Zonneveld M, Thomas E, Zelener N (2013) An assessment of the genetic diversity of Cedrela balansae (Meliaceae) in Northwestern Argentina by means of combined use of SSR and AFLP molecular markers. Biochemical Systematics and Ecology 47: 45-55.</p> <p>-Graefe S, Dufour D, van Zonneveld M, Rodriguez F, Gonzalez A (2013) Peach palm (Bactris gasipaes) in tropical Latin America: implications for biodiversity conservation, natural resource management and human nutrition. Biodiversity and Conservation 22 (2): 269-300</p>
Output 6.2.1.2: Effective, efficient and equitable genetic conservation strategies	
Global long term GR conservation strategy for tree crop GR agreed upon by global community	<p>Bioversity</p> <p>COCONUT: 91 cited contributors from 28 countries have participated in writing the Strategy. Chapter 1 (Introduction) is yet to receive final review, chapters 2 (Where we are now) and 3 (Where we need to be) have been reviewed, chapter 4 is still in draft form (Costings/Budgets) and chapter 5 (annexes) is complete. We are aiming to publish both full document and 20-page Brochure by Spring 2014.</p> <p>Surveys complete all contributions from co-authors received and processed, final drafts of chapters 1, 2, 3 and 5 completed, but awaiting final review. Chapter 4 (costings, draft issued but still needs completing) need final endorsement. we are aiming for publication in time for the APCC COCOTECH meeting in early June 2014</p> <p>In the area of marketing and communication, it is still planned to engage the twenty largest private sector companies working in the coconut value chain, but funds do not allow for this activity at the moment. One intern began analyzing private sector opportunities and has built up contacts information on private sector coconut companies.</p>

Impact Assessment of intervention	Finalizing this activity is postponed to 2014.
Evaluation of different approaches to conservation and their complementarity.	<p>A series of 4 chapters (co-authored by Sthapit) in a book published by Earthscan: Walter S. de Boef, Abishkar Subedi, Nivaldo Peroni and Marja Thijssen (eds.) 2013. Community biodiversity management: promoting resilience and the conservation of plant genetic resources, Earthscan from Routledge, UK:</p> <p>Rao, R.; Sthapit, B.(2013) Conservation of tropical plant genetic resources: in situ approach. In Conservation of tropical plant species (Normah, M.N. et al. (eds.). Springer p. 3-26 ISBN:978-1-4614-3775-8</p> <p>Shrestha, P.; Sthapit, S.; Subedi, A.; Sthapit, B. (2013) Community biodiversity management fund: promoting conservation through livelihood development in Nepal. In Community biodiversity management: promoting resilience and the conservation of plant genetic resources. (de Boef, W. et al. (eds.)). Earthscan/Routledge p. 118- 122 ISBN:978-0-415-50219-1</p> <p>Ramesh, V, N Hegde and B Sthapit (2013) Promoting the community management of Garcinia genetic resources in the central Western Ghats, India. A proposal for a book entitled 'Tropical Fruit Tree Diversity: Good practices for diversity management' has been developed and accepted by the Earthscan publishers. Chapters are under preparation and the book will be published by end of 2014.</p> <p>An outline of field guide to CBM practices developed. It is scheduled to be published in 2014.</p>
Output 6.2.1.3: Capacity strengthened, awareness increased	
Addressing capacity gaps in FGR conservation, management and gender issues	<p>Most activities have been exceeded; for example we have mentored 2 ASO fellows, 5 gender fellows, and 19 graduate students. Many training courses have been delivered; the special issue of FEM is on track; the case studies are on track.</p> <p>VIOT's listed below for updates and progress: VIOT: Special issue of journal with series of review papers on forest genetic resources topics A special issue of Forest Ecology and Management is in the pipeline, bringing together articles based on the SOW-FGR. So far, one article has been fully accepted, six are being revised following review, and one is being written for submission. The special issue will be published in 2014.</p> <p>VIOT: Three case studies completed in the FGR Training Guide Case Study 4.3. Prunus africana in final phase. It has already been utilized during the training course in Costa Rica (Judy, Maarten)</p> <p>A video interview explaining the content and utility of the FGR training guide has been produced and promoted through website and other online platforms. VIOT: ASO Fellow and at least one graduate student selected and mentored Addisalem Ayele Bekele was awarded the ASO scholarship in 2012 and worked during 2013 on "Population genetic structure of the frankincense tree (Boswellia papyrifera) in Ethiopia and implications for conservation" Guibien Cleophas Zerbo was awarded the ASO scholarship in autumn 2013 to work on "Utilization of Parkia biglobosa improved genetic material by small farmers to increase their income and to contribute to the conservation of the species diversity" Seven male and 3 female students from Gabon, Cameroon and DRC earned their Masters degrees with theses carried out under the supervision of Theme 2 scientists within the "Beyond Timber" project; three more will defend their theses in 2014. Three students have initiated their PhD research within the project.</p> <p>VIOT: At least one gender fellowship to enhance scientists' ability to conduct gender-relevant research and produce gender products from research Five gender fellowships awarded to develop gender analysis component of four collaborative projects by Bioversity and partners, strengthen capacity of scientists to conduct gender-responsive research and produce gender products from research.</p> <p>Activities of the 1-year Gender Research Fellowship Programme, which ends in April, 2014, are well advanced. Fellows have nearly completed their fieldwork and have begun preparing articles for a special journal issue on gender and forestry.</p> <p>VIOT: At least 2 short courses using FGR Training Guide and/or GIS training for analysing and visualising status and threats to genetic diversity</p>

	<p>GIS course in Pergamino, Argentina (15-18 October 2013) based on the GIS training manual and own course material in R program - 16 participants (7M, 9F). GIS as a tool for supporting the conservation of plant genetic diversity, two half day seminars in Colombia. 6 males 7 females One-day course: 24 students (12 M: 12 F) trained in application of spatial approaches to improve conservation and sustainable use of forest genetic resources; San Jose, Costa Rica 11/06/2013</p> <p>Completed Trainings</p> <p>Course in R program during Capacity Building for Conservation Congress, Villa de Leyva, Colombia (12-15 February 2013) - 5 participants (3M, 2F).</p> <p>2-week training course provided to two Peruvian students involved in a Brazil nut pilot study with respect to data analysis in GIS and R - 2 participants</p> <p>Capacity building provided to a staff member of the Colombian Von Humboldt Institute who visited the Cali office from 25 to 27 November to acquire knowledge about the spatial analysis of diversity data</p> <p>Capacity workshop for staff of the Von Humboldt Institute on data analysis in R programming language in Bogota (28-29 November 2013) - 7 participants (5M, 2F)</p> <p>3 students, Nurullo Muhsimov from Uzbekistan, Farhod Bobokalonov from Tajikistan and Sagynbek Aaliev from Kyrgyzstan, were selected for training in Central Asia and Luxembourg; the first training in sampling and field collection methods was conducted in and near Tashkent, Uzbekistan</p> <p>3 students, 2 junior researchers in national research organizations of Cameroon, Gabon and DRC and 8 technicians from logging companies trained on ecological methods for forest studies in Congo Basin; 3 students, one each from Cameroon, Gabon and DRC, trained in gene flow and genetic diversity studies in the Congo Basin.</p> <p>Training in gender research (funded by cross-cutting gender funds)</p> <p>Training in gender-responsive and participatory methods (4 trainings /workshops) was given to CGIAR staff and partners: 22 participants in Kuching, Malaysia, 33 participants in Yaounde, Cameroon, 37 participants in two workshops in Rome, Italy.</p> <p>VIOT: Training course on geospatial molecular marker analysis and suitability mapping</p> <p>The training course on geospatial molecular marker analysis and suitability mapping has been delayed until 2014 due to lack of funds.</p>
Guidelines, communication tools and training for germplasm documentation, evaluation, and safe movement	<p>CACAO: The CacaoNet Documentation and Information Working Group developed documentation guidelines to link information to the new structure of the CacaoNet Germplasm Information System - CANGIS. A needs assessment was carried out at the 2 international collections at CATIE and CRC Trinidad to make specific recommendations for improving the documentation and sharing of information of the germplasm with users. This entailed a feasibility study of adopting a new genebank documentation system in the case of CRC or upgrading the current one in the case of CATIE. The costing of the current documentation activities was also done. The work was carried out in close collaboration with the International Cacao Quarantine Centre in Reading, UK also managing the International Cocoa Germplasm Database (ICGD).</p>
<p>Outcome 6.2.2a: Local stakeholders (men and women farmers, private enterprise, NGOs and CBOs) become more involved in supplying quality germplasm (seeds, seedlings, clones)</p> <p>Outcome 6.2.2b: International, national and development partners support local germplasm supply system by facilitating foundation germplasm, knowledge, training, and market linkages</p> <p>Outcome 6.2.2c: Men and women farmers cultivate more diversified, adapted, profitable tree crops (conservation through use)</p>	
Output 6.2.2.1: Best approaches and methodologies for characterising germplasm	
Assessment of seed production and quality	<p>VIOT - Analysis of seed yield of coppiced and pollarded Gliricidia sepium conducted (2013)</p> <p>First year seed yield data was analyzed. Second year seed yield data was collected in September-October 2013. A report on seed yield will be prepared in 2014.</p> <p>VIOT - Protocols for testing tree seed viability on farm by farmers developed and disseminated (2013)</p> <p>Protocol fully developed and tested. Dissemination of the protocol was done between July and December 2013.</p>
Assessment of genetic diversity	<p>CACAO: Bioversity collaborated with the Cocoa Research Association UK and Reading University UK to develop the methodology to analyze duplication between the 2 international collections at CATIE and CRC Trinidad and with a number of key national collections with unique diversity. Data from CATIE and CRC were uploaded into CANGIS and duplication was</p>

content of ex situ collections	<p>assessed between the 2 international cacao collections. Information from several national cocoa collections was also received and their format is being converted for inclusion into CANGIS.</p> <p>COCONUT: An internship is devoted to this topic in the international genebank in Cote d'Ivoire, and another is planned in Sri Lanka. Analysis of the content of the database in progress.</p>
Fruits germplasm characterization tools developed	<p>VIOT - Growth, flowering and fruit yield potential of <i>Sclerocarya birrea</i> in Southern Africa evaluated (2013)</p> <p>Scientific paper entitled 'Variation in growth and fruit yield of natural populations of <i>Sclerocarya birrea</i> (A. Rich.) Hochst.' was submitted for publication in Agroforestry Systems journal. Authors: BI Nyoka, T Chanyenga, SA Mng'omba, FK Akinnifesi and W Sagona</p>
Output 6.2.2.2: Knowledge for conserving germplasm	
Evaluation of different approaches to conservation	<p>VIOT - Species ecological mapping for <i>Mangifera indica</i> available</p> <p>An analysis of the turnover of Mango varieties along an environmental gradient from drylands towards lower highlands was completed in 2013 in Kenya, but this activity was reported under CRP7 as it was funded by CCAFS. In addition to this high resolution mapping effort of different mango varieties, we attempted in CRP 6.2 to develop a global mango distribution map based on point location data available from http://www.gbif.org/occurrence. As a result of the lack of sufficient point location data, and as a result of strong bias in the available data (showing a marginal distribution in India, but occurrence in north America; see also http://www.gbif.org/species/3190638), we aborted the global mapping effort based on species distribution modelling approaches. If needed, country-specific maps can be produced with biophysical limits available from: http://ecocrop.fao.org/ecocrop/srv/en/dataSheet?id=1416 .</p> <p>VIOT - Evaluation of different approaches to conservation for <i>Rhododendron</i> species</p> <p>Two papers have been submitted:</p> <ul style="list-style-type: none"> a) "Future reduction in the bioclimatic space of Himalayan tree <i>Rhododendron</i> predicted by ensemble suitability models" submitted to Global Change Biology (in review) b) Extraction of <i>Rhododendron</i> for firewood, submitted to Biomass and Bioenergy (revision after long delay in review)
Ex situ tree crop collections secured in line with Global Strategy	<p>CACAO: CacaoNet established a Task Force looking into the long-term funding of the key cacao collections currently accessible in the public domain. The Task Force includes partners representing the aspects of long-term conservation, use and value-chain. The first step for establishing long-term funding mechanism is to have a clear understanding of the resources currently needed and in 20 years. The methodology for the costing of the operations of the Global Strategic Cacao Collection (GSCC) has been agreed. The 2 International cacao collections maintained by CATIE and CRC have implemented the costing tool and produced reports estimating the cost of the management of the collections. In addition, the International Cocoa Quarantine Centre at Reading, UK has carried out a similar costing exercise, allowing CacaoNet to move forward with costing the long-term conservation of the global strategic cacao collections for cacao.</p>
Output 6.2.2.3: Policies and information enhance access to germplasm	
Policies to enhance access to germplasm by local communities	<p>All work in progress, notably for the following VIOTs:</p> <p>VIOT: Seed sources characterized and certification criteria for tropical tree seed developed in East Africa; criteria promoted by national partners for adoption within national and international tropical tree seed certification strategies (OECD scheme)</p> <p>In collaboration with Forest & Landscape Denmark (Jens-Peter Lillesø) and the national Tree Seed Centres of Kenya and Uganda, a case has been made to OECD to modify the current seed source classification system into one that accommodates on farm and indigenous tree seed sources.</p> <p>VIOT: Main obstacles and opportunities in current national policies and legislation for sustainable delivery of quality fruit tree germplasm to smallholder farmers identified</p> <p>A report entitled 'A review of policies and legislation on germplasm supply systems in southern African countries' covering 4 countries was completed</p>
Information systems and	<p>CACAO: Bioversity worked with the Cocoa Research Association UK and the Reading University UK to develop the new structure of CANGIS. The architecture and the different</p>

databases for tree crops upgraded	<p>components have been agreed and CANGIS was recently upgraded to the new environment development framework, i.e. transferred from Google Web Tool Kit to Spring MVC.</p> <p>COCONUT: COCOGIS and CGRD6 were released on line in 2012. Both software packages will be upgraded, and new versions will be online before the end of the year.</p> <p>The latest version of CGRD 6.1 is available online for download. CocoGIS web site containing the latest data will be released online in January 2014.</p>
<p>Outcome 6.2.3a: Managers, forest owners and other decision makers incorporate tools and guidelines that reconcile the needs and views of different stakeholders including both women and men, for the provision of multiple forest goods and services</p> <p>Outcome 6.2.3b: Managers, farmers, and other decision makers adopt tools, guidelines and decision support systems for the rehabilitation and/or restoration of tree and forest cover while addressing the needs and views of men and women</p> <p>Outcome 6.2.3c: Managers, forest owners, farmers and other decision makers develop and adopt tools, improved policies and legal frameworks on forest harvesting that address the economic needs of forest-dependent men and women while minimizing negative environmental impacts.</p>	
Output 6.2.3.1: Improved management practices and monitoring methods for multiple use of forest ecosystems	
Approaches and tools to address wildlife management concerns in production forests and multiple land-use mosaics	<p>The main drivers and processes relating to the sustainability of bushmeat harvest, consumption and trade were identified and analyzed with local partners in Brazil, Peru, Colombia and Ecuador, and gender roles elucidated. The results will be published in 2014.</p> <p>A participatory bush meat monitoring system (PBMS) was designed for district and provincial level authorities in Brazil and a framework on the impact of road building on bush meat and other forest resources will be included in environmental assessments on road building in the Ecuadorian Amazon.</p>
Identification and assessment of social, biophysical, technical and economic factors influencing multiple use forest management outcomes	<p>CIFOR</p> <p>Ongoing studies in Peru of selective logging impacts on Brazil nut production completed during the first fruiting season. Production data empirically gathered for >700 trees over 2000 ha of forest rich in Brazil nut. One scientific presentation delivered on preliminary results. One multi-stakeholder event held in Peru on conflicting land use allocations influencing long term sustainability of multiple use concessions. Data gathering will be repeated in 2014.</p> <p>BIOVERSITY</p> <p>Most activities are on track with some unavoidable delays; the Congo Basin activities have been delayed by unforeseen complexity of interactions with the African Development Bank and consequent delayed disbursement of funds. No-cost extension of the project to December 2014 to allow for the completion of genetic and ecology data collections as well as data analyses and reporting</p> <p>The workshop, related to the VIOT, "New project on managing multiple resources in Amazonian forests developed and funded; A technical report on intercenter (CIFOR-Bioversity-ICRAF) workshop on joint research activities in Western Amazonia", has been cancelled.</p> <p>The Niassa Reserve project was granted a no cost extension to 2014 in response to a change in management of the reserve. Meetings were held with the new reserve manager (WCS) in 2013 and the final season of field work was carried out to evaluate the degree of change in behavior among honey gatherers in response to nondestructive practices demonstrated in 2012. Recommendations and publications will be developed in 2014.</p> <p>VIOT: Assessment of the factors influencing NTFP value chains in Congo Basin</p> <p>Paper published related to this topic in 2012 with emphasis on Factors and attributes used in the assessment of the potentials of products for small business development.</p> <p>VIOT: Literature review on multiple-use forest management systems and forestry policy framework in Central Africa including selected case studies</p> <p>Review paper on the sustainability of management of Congo Basin forests linked to four inter-related factors: economic viability, adequate management capacity, political support at the highest level and better institutional arrangements. Drawing on an example from the Sangha Tri-National Park (TNS) area, an illustrative model was developed depicting complex interactions among stakeholders and the flow of resources and responsibilities.</p> <p>This review paper targets a special issue in the Journal of Environmental Management. The abstract has been submitted and is being reviewed with other abstracts until April 2014, when full articles for qualified abstracts will be requested for submission by July 2014.</p> <p>FAO report on multiple use forest management that is in part based on Central African cases was published: Sabogal C., Guariguata M.R., Broadhead J., Lescuyer G., Savilaakso S.,</p>

	<p>Essoungou N., Sist P. 2013. Multiple-use forest management in the humid tropics: opportunities and challenges for sustainable forest management. FAO Forestry Paper No. 173. Rome, Food and Agriculture Organization of the United Nations, and Bogor, Indonesia, Center for International Forestry Research</p> <p>VIOT: Studies on production and extraction rates/techniques by timber companies and local populations for selected NTFPs including species prone to conflict of use with timber in the Congo Basin Field work carried out in Cameroon and DRC on the impacts of logging on food tree species, the nutritional importance of food trees, and the geography of collection of these products by men and by women. Field work will be completed in Gabon in 2014.</p>
Capacity enhanced for multiple resource forest management	<p>Draft modules have been peer reviewed by 7 independent experts and a revised version has been completed and is currently under translation into Spanish en route to a regional workshop to take place in 2014.</p>
Output 6.2.3.2: Improved methods and approaches for forest restoration	
Identification of socioeconomic, biophysical and technical factors influencing forest restoration outcomes	<p>ICRAF VIOT: Restoration of sloping lands in China: a species-centered approach One manuscript has been completed, entitled "Economic incentives in Sloping Land Conversion Program in tropical China do not guarantee an improvement of local ecosystem services"</p> <p>CIFOR Nation-wide assessment on lessons learned after 5 decades of forest restoration in Colombia finalized and on its way to publication as a CIFOR Occasional Paper.</p> <p>BIOVERSITY VIOT: Overview of forest restoration practices using native species and incorporating genetic considerations. Thematic study: 'Genetic considerations in ecosystem restoration using native tree species' completed and submitted to FAO, book prepared for joint publication with FAO, awaiting review at FAO.</p> <p>Journal article submitted to special issue of Forest Ecology and Management: 'Genetic considerations in ecosystem restoration using native tree species' Evert Thomas, Riina Jalonen, Judy Loo, David Boshier, Leonardo Gallo, Stephen Cavers, Sandor Bordacs, Paul Smith and Michele Bozzano.</p> <p>Restoration Project initiated in Colombia "Selección de poblaciones e individuos, caracterización fenotípica, genética y ambiental y propagación de la especie arborea <i>Cariniana pyriformis</i>" (not in POWB for 2013)</p> <p>Publication: Douterlungne, D., Thomas, E., Levy-Tacher, S. (2013) Stands of broad-leaved fast-growing pioneer trees as a Rapid and Cost-effective Strategy for Bracken Elimination in the Neotropics. Journal of Applied Ecology 50: 1257-1265</p>
Outcome 6.2.4: Women and men in communities, local and national governments and companies use appropriate conflict resolution arrangements for the equitable management of forests and trees	
Output 6.2.4.1: Developing tools and methods to resolve conflicts about distribution of benefits and resource rights in the use of forest and tree resources	
Effective approaches for resolving conflicts between private concessions and local communities in the use and management of production forests.	<p>Methods were developed for gender-disaggregated mapping of the spatial distribution of non-timber resource gathering and applied in eight villages in Cameroon and DRC. Results from Cameroon were presented at a 2-day workshop on Central African Forests and Institutions (CAFI) in Paris, France ('Beyond Timber: Balancing demands for tree resources by concessionaires and villagers' by Dr Julius Tieguhong; Is sustainable forest management detrimental to local livelihoods in Central Africa? Lessons from a socio-economic survey in six logging concessions' by Dr Guillaume Lescuyer).</p> <p>Two other rounds of discussion with stakeholders will take place in 2014.</p>

	In Gabon the activity was postponed to 2014, however, the interns have been hired and will start collecting data in March.
Theme: Landscape Management for environmental services, biodiversity conservation and livelihoods	
Outcome 6.3.1: Recognition by government agencies and in public debate of tree cover and forest transitions as a basis for realistic land use and development planning and institutional reform of land use regulation	
Output 6.3.1.1: Empirical data sets of quantitative and qualitative tree cover transitions across major ecoclimatic zones	
ICRAF: Papers on a) Rubber expansion and land use change pattern in upper Mekong, b) Integrated agroforestry systems in peat swamp area, c) Analysis of candidates for sentinel landscapes in the context of global representativeness in terms of tree cover transition	<p>Database on Land use cover change on Benet Landscape, Mt Elgon is completed. Posters, policy brief and paper/ journal articles are published:</p> <ul style="list-style-type: none"> - Do Trong H. 2013. Tree cover transitions in space and time. Bac Kan province. Hanoi, Vietnam. Poster. Vietnam. World Agroforestry Centre (ICRAF) - Vietnam. - World Agroforestry Centre - ICRAF Philippines. 2013. Tree cover transitions in space and time. Ikalahan Ancestral Domain. Los Banos, Philippines. Poster. World Agroforestry Centre (ICRAF) Philippines. - Zhuangfang Y and Huafang C. 2013. Tree cover transitions in space and time. Linking forest and demographic transitions. Upper Mekong. Poster. Kunming, China. World Agroforestry Centre, ICRAF East Asia Node. - Wangpakapattanawong P, Thomas DE, Chairat N, Ratnamhin A and Punsompong P. 2013. Tree cover transitions in space and time. Impacts on Traditional Mountain Land Use. Northern Thailand. Chiang Mai, Thailand. Poster. World Agroforestry Centre (ICRAF) Thailand. - Lott, R; Garrity, D; Boffa, J-M. 2013. The drivers shaping change in African farming systems. -- Nairobi, Kenya: World Agroforestry Centre (ICRAF) ICRAF Policy Brief no. 17, 4p.
CIFOR: Papers on a) Global comparison of tropical forest biomass and carbon storage: implications for policy options and responses, b) Tree structure and biodiversity in periodically inundated swamp forests, c) Soil assessment under tree cover transition in Kalimantan, d) Mapping vegetation and tree cover transition, e) reports on the use of remote sensing to monitor wetland dynamics in Seram and Kalimantan; f) Land use changes and erosion in the humid tropics: could transitions be the main driver of soil erosion?, g) Paper on mangrove dynamics across the strait of Malacca	<p>Journal Articles are published: a) Three papers published, one in press, blogs and media coverage:</p> <ul style="list-style-type: none"> - Slik, et al. 2013, Large trees drive forest aboveground biomass variation in moist lowland forests across the tropics. Global Ecology and Biogeography. doi: 10.1111/geb.12092 - Lewis, et al. 2013 Above-ground biomass and structure of 260 African tropical forests. Philosophical Transactions of the Royal Society B 368: . http://rstb.royalsocietypublishing.org/content/368/1625/20120295.full.pdf+html - Rutishauser E, J. Halperin, F. Nooran, A. Rufi, Y. Laumonier, K. Hergoual'h and L. Verchot. 2013. Carbon stocks assessment in Indonesian forests: how do allometric models matter? Forest Ecology and Management 307, 219-225 - Day, M, C. Baldauf, E. Ratshauser & T. Sunderland. 2013. Tree species diversity and above ground biomass in Central African rainforests. Environmental Conservation. http://journals.cambridge.org/download.php?file=%2FENC%2F50376892913000295a.pdf&code=07223cfd2a27e643f111c69b82140018 - Old growth trees store half rainforest carbon http://news.mongabay.com/2013/0807-big-trees-biomass.html (7th August 2013) - 'Large trees play key role in tropical forest biomass storage' study http://blog.cifor.org/18427/large-trees-play-key-role-in-tropical-forest-biomass-storage-study/#.Ugst1BbJD8s (6th August 2013) b) - Stass, S. and Y. Laumonier: Tree structure and biodiversity in periodically inundated swamp forests, CIFOR Working Paper. In press - Gonmadje, C., C. Doumenge, T. Sunderland, M. Balinga & Bonaventure Sonke. 2013. Analyse phytogéographique des forêts d'Afrique Centrale: le cas du massif de Ngovayang (Cameroun). Scripta Botanica Belgica 50: 244-256. c) Basuki, I. and Y. Laumonier: Soil dynamics and land-use changes under tree cover transition in Indonesian Borneo, in prep. d) - Boulogne, M., Laumonier, Y. and V. Gond. Mapping vegetation types in Seram island, assessment of various remote sensing tools. CIFOR Working Paper, in press - Betbeder J, Laumonier Y, Gond V: Use of remote sensing to monitor wetland dynamics in West Kalimantan; CIFOR Working Paper, in press f) study under completion, preliminary analysis (Nicolas Labriere) NB c-f are CIFOR working papers.
Output 6.3.1.2: Empirical data on changes in spatial pattern of tree cover within landscapes in relation to segregation/ integration of functions	
CIFOR: Paper on Analysis of influence of landscape configuration on provision and marketing of environmental services in coffee agroforestry landscapes	<p>Paper on coffee agroforestry systems in the western Ghats of India is presented in ATBC Conference: Garcia, C. 2013. Our landscape, my trees: landscape trends and biodiversity dynamics of coffee agroforestry systems in the western Ghats of India. New Frontiers in Tropical Ecology, ATBC Conference, Costa Rica (oral presentation)</p>

<p>ICRAF: Journal articles on a) Comparative pattern analysis across Landscape Mosaics sites, b) Spatial patterns in relation to dispersal constraints, c) Spatial patterns in candidate Sentinel Landscapes</p>	<p>Database of Ucayali Region, Peru is available and journal on peat conversion to oil palm and wetland mapping in Himalayan region are published:</p> <ul style="list-style-type: none"> - Li, Z, Xu, J, Shilpakar, RL, Ma, X. 2013. Mapping wetland cover in the greater Himalayan region: a hybrid method combining multispectral and ecological characteristics. Environmental Earth Sciences p1-12. [2013]108] - Zhai, D; Xu, J; Dai Z; Cannon, C; Grumbine, R E. Kunming Institute of Botany (CAS), Kunming (China) 2013. Increasing tree cover while losing diverse natural forests in tropical Hainan, China. Regional Environmental Change 11p. - Tata HL, van Noordwijk M, Ruyschaert D, Mulia R, Rahayu S, Mulyoutami E, Widayati A, Ekadinata A, Zen R, Darsoyo A, Oktaviani R and Dewi S. 2013. Will funding to Reduce Emissions from Deforestation and (forest) Degradation (REDD+) stop conversion of peat swamps to oil palm in orangutan habitat in Tripa in Aceh, Indonesia?. Mitigation and Adaptation Strategies for Global Change. : P. 1-21. - Database of land use systems with variables degree of tree cover in the Ucayali region completed - Do Trong H. 2013. Who is planting or removing trees? Bac Kan Province. Poster. Hanoi, Vietnam. World Agroforestry Centre (ICRAF) - Vietnam. - Do Trong H. 2013. Stakeholders of tree (+ or -) change. Bac Kan Province. Poster. Hanoi, Vietnam. World Agroforestry Centre (ICRAF) - Vietnam. - Do Trong H. 2013. Leverage on real drivers of change? Bac Kan Province. Poster. Hanoi, Vietnam. World Agroforestry Centre (ICRAF) - Vietnam. - World Agroforestry Centre - ICRAF Philippines. 2013. Who is planting trees? Ikalahan Ancestral Domain. Poster. Los Banos, Philippines. World Agroforestry Centre (ICRAF) Philippines. - World Agroforestry Centre - ICRAF Philippines. 2013. Stakeholders of tree change. Ikalahan Ancestral Domain. Poster. Los Banos, Philippines. World Agroforestry Centre (ICRAF) Philippines. - World Agroforestry Centre - ICRAF Philippines. 2013. Leverage on real drivers of change. Ikalahan Ancestral Domain. Poster. Los Banos, Philippines. World Agroforestry Centre (ICRAF) Philippines. - Xu Jianchu. 2013. Leverage on real drivers of change? Mekong Basin. Poster. Kunming, China. World Agroforestry Centre, ICRAF East Asia Node. - Yufang S. 2013. Stakeholders of tree (+ or -) change. Exploring Mekong Future. Upper Mekong. Poster. Kunming, China. World Agroforestry Centre, ICRAF East Asia Node. - Schmidt-Vogt D and Huafang C. 2013. Who is planting or removing trees? Shifting cultivation in a shifting context. Upper Mekong. Poster. Kunming, China. World Agroforestry Centre, ICRAF East Asia Node. - Schmidt-Vogt D and Huafang C. 2013. Who is planting or removing trees? Shifting cultivation in a shifting context. Upper Mekong. Poster. Kunming, China. World Agroforestry Centre, ICRAF East Asia Node. - Wangpakapattana Wong P, Thomas DE, Chairat N, Ratnamhin A and Punsompong P. 2013. Who is planting or removing trees? Traditional land use systems. Northern Thailand. Poster. Chiang Mai, Thailand. World Agroforestry Centre (ICRAF) Thailand. - Wangpakapattana Wong P, Thomas D, Chairat N, Ratnamhin A and Punsompong P. 2013. Stakeholders of tree (+ or -) change. Northern Thailand. Poster. Chiang Mai, Thailand. World Agroforestry Centre (ICRAF) Thailand. - Wangpakapattana Wong P, Thomas D, Chairat N, Ratnamhin A and Punsompong P. 2013. Leverage on real drivers of change? Institutional context of resource governance. Northern Thailand. Poster. Chiang Mai, Thailand. World Agroforestry Centre (ICRAF) Thailand.
<p>Output 6.3.1.3: Methods for monitoring and quantifying tree cover refined and linked to data uncertainty</p>	
<p>CIFOR: a) Journal article on Understanding shock responses of households in tropical forest environments; b) Journal article on drivers of deforestation from global HH analysis (PEN); c) Baseline assessment of dry forest carbon value</p>	<p>a & b) Papers completed and submitted to special issue of World Development c) Two reports completed: currently in press. (i) A global strategy for tropical dry forests, and (ii) Estimates of biomass in the miombo woodland of Zambia. Roe, D & T.C.H. Sunderland. 2013. Biodiversity conservation: an effective mechanism for poverty alleviation? In Hari Bansha Dulal (ed) Poverty Reduction in a Changing Climate. Lexington Books, Lanham, MD, USA pp 217-234.</p>
<p>ICRAF: Journal articles on a) Belowground carbon storage in oil palm plantations and the threshold for C-debt in land conversion. b) Tree cover based landscape typology for Africa + Asia</p>	<p>More journal articles are published: - See, L, Fritz, S, De Leeuw, J. 2013. The rise of collaborative mapping: trends and future directions. ISPRS International Journal of Geo-Information 2 (4) p955-958. - Sow, M, Hely, C, Mbow, C, Sambou, B. 2013. Fuel and fire behavior analysis for early-season prescribed fire planning in Sudanian and Sahelian savannas. Journal of Arid Environments 89 p. 84-93. - Sow, M, Mbow, C, Hely, C, Fensholt, R, Sambou, B. 2013. Estimation of herbaceous fuel moisture content using vegetation indices and land surface temperature from MODIS data. Remote Sensing 5 p2617-2638. - Beckschafer, P; Mundhenk, P; Kleinn, C; Ji, Y; Yu, D W; Harrison, R D. 2013. Enhanced structural complexity index: an improved index for describing forest structural complexity. Open Journal of Forestry 3 (1) p23-29 - Kashindy, A, Mtalo, E, Mpanda, MM, Liwa, E, Giliba, R. Forestry Training Institute, Arusha (Tanzania) 2013. Multi-temporal assessment of forest cover, stocking parameters and above-ground tree biomass dynamics in Miombo Woodlands of Tanzania. African Journal of Environmental Science and Technology 7 (7) p611-623. - Kuyah, S, Dietz, J, Muthuri, C, van Noordwijk, M, Neufeldt, H. 2013. Allometry and partitioning of above- and below-ground biomass in farmed eucalyptus species dominant in. Biomass and Bioenergy 55 p276-284. - Mbow, C, Verstraete, MM, Sambou, B, Diaw, AT, Neufeldt, H. 2013. Allometric models for aboveground biomass in dry savanna trees of the Sudan and Sudan-Guinean ecosystems of Southern Senegal. Journal of Forest Research (original article) 7p. - Ran, L, Lu, X, Xu, J. 2013. Effects of vegetation restoration on soil conservation and sediment loads in China: a critical review. Critical Reviews in Environmental Science and Technology 43 (13) p1384-1415. - Rahayu, S, Harja, D. 2013. Dinamika diversitas tumbuhan dan cadangan karbon pada skala lanskap dan tutupan lahan. In: Sukara E, Widiatmoko D dan Astutik S (eds.).</p>

	Konservasi Biocarbon, Lanskap dan Kearifan Lokal untuk Masa Depan: Integrasi pemikiran multidimensi untuk keberlanjutan. Kebun Raya Cibodas - Lembaga Penelitian Ilmiah Indonesia p44 - 58. - Dewi, S.; van Noordwijk, M.; Ekadinata, A.; Pfund, J.-L. 2013. Protected areas within multifunctional landscapes : squeezing out intermediate land use intensities in the tropics? Land Use Policy 30 (1) . http://dx.doi.org/10.1016/j.landusepol.2012.02.006
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	
CIFOR: Journal article on shock responses, using the global PEN data base	Paper completed and submitted to special issue of World Development (to be published on line in April 2014)
ICRAF: Journal article on a) Pan-tropical spatial characterization of Agroforestry and its dependence on environmental, socio-economic and policy conditions, b) Validation of agent-based models	More journals and other publications are published: - Rantala, S E; Vihemaki, H; Swallow, B M; Jambiya, G. 2013. Who gains and who loses from compensated displacement from protected areas? The case of the Derema corridor, Tanzania. Conservation & Society 11 (2) p97-111. - ZF Yi, CH Cannon, J Chen, CX Ye, RD Swetnam., 2013. Developing indicators of economic value and biodiversity loss for rubber plantations in Xishuangbanna, southwest China: A case study from Menglun township. Ecol. Indicators, http://dx.doi.org/10.1016/j.ecolind.2013.03.016 ; - Xu, J.C.; Grumbine, R.E. 2013. Landscape transformation through the use of ecological and socioeconomic indicators in Xishuangbanna, Southwest China, Mekong Region. Ecological Indicators 8p - Robiglio, V; Lescuyer, G; Cerutti, P O. 2013. From farmers to loggers: the role of shifting cultivation landscapes in timber production in Cameroon. Small-scale Forestry 12 (1) p67-85. - Sebastian GE, Kanowski P, Race D, Williams E and Roshetko JM. 2014. Household and farm attributes affecting adoption of smallholder timber management practices by tree growers in Gunungkidul region, Indonesia. Agroforestry Systems. . : P. 1-12. URL - Received: 28 February 2013 / Accepted: 15 January 2014 - Ordóñez JC, Luedeling E, Kindt R, Tata HL, Harja D, Jamnadass R and van Noordwijk M. 2014. Constraints and opportunities for tree diversity management along the forest transition curve to achieve multifunctional agriculture. In: Mbow C, Neufeldt H, Minang PA, Luedeling E and Kowero G, eds. Current Opinion in Environmental Sustainability. 6. : P. 54-60. URL - accepted Oct 2013 - Bizard, V. 2013. Rattan futures in Katingan: why do smallholders abandon or keep their gardens in Indonesia's 'rattan district'? -- Bogor, Indonesia: World Agroforestry Centre (ICRAF) ICRAF Working Paper no. 175, 23p - Garcia K, Malabrigo Jr. PL and Gevana DT. 2013. Philippines' Mangrove Ecosystem: Status, Threats and Conservation. Mangrove Ecosystems of Asia. : P. 81-94.
Output 6.3.1.5: Policy levers and negotiation opportunities to influence drivers of tree cover transitions, rehabilitation and/or agroforestry transformation	
CIFOR: a) Paper on Analysis of influence of landscape configuration on provision and marketing of environmental services in coffee agroforestry landscapes, b) Linking landscapes and productivity in agroforestry	a) Garcia, C. 2013. Our landscape, my trees: landscape trends and biodiversity dynamics of coffee agroforestry systems in the western Ghats of India. New Frontiers in Tropical Ecology, ATBC Conference, Costa Rica (oral presentation) b) - Rahman, S., C. Baldauf, E. M. Mollee, A.-Al-Pavel, Md. Abdullah-Al-Mamun, M. Mannan Toy & T. Sunderland. 2013. Cultivated Plants in the Diversified Homegardens of Local Communities in Ganges Valley, Bangladesh.?Science Journal of Agricultural Research and Management. http://www.sjpub.org/sjar/sjarm-197.pdf - Rahman, S.A., M.F. Rahman & T. Sunderland. Increasing Tree Cover in Degrading Landscapes: Integration and Intensification of Smallholder Forest Culture in the Alutilla Valley, Matiranga, Bangladesh. Small Scale Forestry.
ICRAF: Journal articles on a) Comparative pattern analysis across Landscape Mosaics sites, b) Spatial patterns in relation to dispersal constraints, c) Spatial patterns in candidate Sentinel Landscapes	- van Noordwijk, M; Agus, F; Dewi, S; Purnomo, H. 2013. Reducing emissions from land use in Indonesia: motivation, policy instruments and expected funding streams. Mitigation & Adaptation Strategies for Global Change 16p. - Mowo, J G; Adimassu, Z; Catacutan, D; Tanui, J; Masuki, K; Lyamchai, C. 2013. The importance of local traditional institutions in the management of natural resources in the highlands of East Africa. Human Organization 72 (2) p1-10. - Garcia K, Lasco RD, Pulhin FB, Ines A, Lyon B, Alcantara A and Combalicer E. 2013. Sensitivity of Philippines' Forest Tree Species to Climate Change: Policy Implications and Future Directions. Proceedings of the International Symposium on Tropical Forest Ecosystem Science and Management. Bintulu, Malaysia. Universiti Putra Malaysia Bintulu Sarwak Campus.
Outcome 6.3.2: Local resource managers in tree-based multiple use landscapes use cost-effective and replicable tools and approaches to appraise likely impacts of changes in landuse on watershed functions, biodiversity and carbon stocks as well as on the economic productivity of the landscape	
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	
ICRAF: Journal articles on a) Flow persistence metric as candidate of watershed quality indicator, b) Hydrological impacts of rubber	Book on participatory water monitoring guideline and journal articles on Layawan watershed and Himalaya Dam are published: - Palao LK, Dorado MM, Anit KP and Lasco RD. 2013. Using the Soil and Water Assessment Tool (SWAT) to Assess Material Transfer in the Layawan Watershed, Mindanao, Philippines and Its Implications on Payment for Ecosystem Services. Journal of Sustainable Development. 6(6):P. 73-88 - Grumbine, R E; Pandit, R. 2013. Threats from India's Himalaya dam. Science 339 p36-37. - Rahayu S, Widodo RH, van Noordwijk M, Suryadi I and Verbist B. 2013. Water monitoring in watersheds. Bogor, Indonesia. World Agroforestry Centre (ICRAF) SEA Regional Program. 104 p.

plantations in SW China, c) Quantify tree effects (coffee agroforestry systems) on river border erosion and its contribution to watershed scale erosion in a small watershed in Costa Rica, d) Dendrochronology	
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>CIFOR: Publications on a) Comparative assessment of the long term impact and effectiveness of donor funded biodiversity assessment in developing countries, b) Development of participatory biodiversity and livelihoods monitoring guidelines, c) Evaluation of both of conservation and livelihood value of human-modified forest formed through local arboricultural practices; d) Report and guidelines on Collaborative Land Use Planning (CLUP). This is based on second phase of CLUP training for Mamberamo Raya District officials - organized by Conservation International (CI) Indonesia, which will depend on funding availability from IFACS/USAID.</p>	<p>a)</p> <ul style="list-style-type: none"> - Identification of ecosystem services managed by local communities in Sulawesi including analysis of local institutions and governance systems related to ES management (Linda Yuliani et al.) - Redford, K., C. Padoch & T. Sunderland. 2013. Editorial: Fads, funding and forgetting in three decades of conservation. <i>Conservation Biology</i>. 27: 437-438. http://onlinelibrary.wiley.com/doi/10.1111/cobi.12071/abstract b) Paper published: Belcher et al. 2012. Development of a village-level livelihood monitoring tool: a case-study in Viengkham District, Lao PDR. In <i>International Forestry Review</i> 14 (4). A second paper has been submitted to <i>Biodiversity and Conservation</i>, on participatory biodiversity monitoring, and is currently being revised for re-submission. c) Two guidelines book published: <ul style="list-style-type: none"> - N. Liswanti, B. Shantiko, E. Fripp, E. Mwangi, Y. Laumonier (2012). Panduan praktis untuk survei mata pencaharian sosial-ekonomi dan hak dan kepemilikan lahan untuk digunakan dalam perencanaan penggunaan lahan kolaboratif yang berbasis ekosistem. Center for International Forestry Research, Bogor, Indonesia. ISBN 978-602-8693-91-2. - N. Liswanti, B. Shantiko, E. Fripp, E. Mwangi, Y. Laumonier (2012). Practical guide for socio-economic livelihood, land tenure and rights surveys for use in collaborative ecosystem-based land use planning. Center for International Forestry Research, Bogor, Indonesia. ISBN 978-602-8693-89-9. d) In addition to CLUP final report guidelines, we produced multilingual (English, Bahasa Indonesia, and French) DVD and e-book containing results in various formats, which have been being distributed to partners (e.g. local government and ENGOs) as well as donors.
<p>ICRAF: Publications on a) Ecological corridor development in Upper Mekong, b) Review methods for upscaling functional traits and ecosystem services from plants, plots to landscapes</p>	<p>More Journals articles are published: -Gillison, A N; Bignell, D E; Brewer, K R W; Fernandes, E C M; Jones , D T; Sheil , D; May, P H; Watt , A D; Constantino, R; Couto, E G; Hairiah, K; Jepson , P; Kartono, A P; Maryanto , I; Neto, G G; van Noordwijk , M; Silveira , E A; Susilo, F-X; Vosti, S A; Nunes, P C. 2013. Plant functional types and traits as biodiversity indicators for tropical forests: two biogeographically separated case studies including birds, mammals and termites. <i>Biodiversity and Conservation</i> 22 (9) p1909-1930. [2013098] -Harrison, R D; Tan, S; Plotkin, J B; Slik, J W F; Detto, M; Brenes, T; Itoh, A; Davies, S W. 2013. Consequences of defaunation for a tropical tree community. <i>Ecology Letters</i> 16 (5) p687-694. [2013144] - Carsan, S; Stroebel, A; Dawson, I; Kindt, R; Swanepoel, F; Jambadass, R. 2013. Implications of shifts in coffee production on tree species richness, composition and structure on small farms around Mount Kenya. <i>Biodiversity Conservation</i> (original paper) 18p. -Metzger, M J; Bunce, R G H; Jongman, R H G; Sayre, R; Trabucco, A; Zomer, R. 2013. A high-resolution bioclimate map of the world: a unifying framework for global biodiversity research and monitoring. <i>Global Ecology and Biogeography</i> 22 (5) p630-638. - Kehlenbeck, K; Asaah, E; Jambadass R. 2013. Diversity of indigenous fruit trees and their contribution to nutrition and livelihoods in sub-Saharan Africa: Examples from Kenya and Cameroon. In: Fanzo J., Hunter D., Borelli T., Mattei F. (eds.) <i>Diversifying food and diets: using agricultural biodiversity to improve nutrition and health</i>. Earthscan: New York p257-269. - Zhai, D; Xu, J; Dai Z; Cannon, C; Grumbine, R E. Kunming Institute of Botany (CAS), Kunming (China) 2013. Increasing tree cover while losing diverse natural forests in tropical Hainan, China. <i>Regional Environmental Change</i> 11p. - Dai, Z-C; Si, C-C; Zhai, D-L; Huang, P; Qi, S-S; Zhong, Q-X; Hu, X; Li, H-M; Du, D-L 2013 Human impacts on genetic diversity and differentiation in six natural populations of <i>Madhuca hainanensis</i>, an endemic and endangered timber species in China. <i>Biochemical Systematics and Ecology</i> 50: 212-219.</p>
Output 6.3.2.3: Not just carbon? Quantified trade-offs between C stocks and other environmental services across tree cover transitions	
<p>CIFOR: a) Publication on a widely applicable method to measure</p>	<p>a) No progress b) Suzanne Stass and Y. Laumonier: draft paper on carbon stock assessment in secondary forest in limestone in Seram to be submitted to <i>Forest Ecology and Management</i> c) Study under completion (PhD of Nicolas Labriere)</p>

quantitatively forest provisioning services and tempo-spatial patterns of those services use; b) Papers on biodiversity and carbon stock assessment in tropical limestone landscape; b)Comparing biodiversity, above ground biomass and prevention of soil erosion in a multi functional landscape	
ICRAF: Publication on decarbonizing the perceptions of forests and trees: partial correlations between C stocks and environmental services that matter for local livelihoods	More journals articles are published: - Ackom E.K., Alemagi D., Ackom N.B., Minang P.A., Tchoundjeu, Z, 2013 . Modern bioenergy from forestry and agricultural residues in Cameroon: Potential, Challenges and the way forward. Accepted for publication in Energy Policy. - 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 - Gupta J, Matthews R, Minang PA, van Noordwijk M, Kuik O and van der Grijp N. 2013. Climate change and forests. From the Noordwijk Declaration to REDD. In: Gupta J, van der Grijp N and Kuik O,eds. Climate Change, Forests and REDD. Lessons for Institutional Design. . New York, USA. Routledge Taylor & Francis Group. P. 1-24 -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
Output 6.3.2.4: Gender, age and wealth-specific appreciation of tree cover transitions in relation to demographic transitions and development context	
ICRAF: Publications on a) Gender-specific appreciation of tree cover transitions through adaptive learning on benefit-sharing in RES mechanisms, enhancing landscape buffers and filter functions, b) Analysis of agroforestry options for buffer zones and production forest management zones in Indonesia	More journals are published: - 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. Current Opinion in Environmental Sustainability. 6. : P. 128-133. - Budidarsono, S; Susanti, A; Zoomers, A. 2013. Oil palm plantations in Indonesia: the implications for migration, settlement/resettlement and local economic development. In: Fang, Z (ed.) Biofuels - Economy, Environment and Sustainability. InTech p173-193. - Villamor G B; Pontius Jr. R G; van Noordwijk M. 2013. Agroforest's growing role in reducing carbon losses from Jambi (Sumatra), Indonesia. Regional Environmental Change (Online first) 12p. - Villamor, G B; Desrianti, F; Akiefnawati, R; Amaruzaman, S; van Noordwijk, M. 2013. Gender influences decisions to change land use practices in the tropical forest margins of Jambi, Indonesia. Mitigation and Adaptation Strategies for Global Change 23p.
CIFOR: Paper on the gendered differentiation of forest utilisation	Papers completed: Colfer, C.J.P., Achdiawan, R., Adnan, H., Erni, Yuliani, E.L., with Balang and LePMIL. 2013. Forests, Trees and Livelihoods (2013): Gender and natural resource governance indicators: a need to assess and address sensitive and tabootopics. Forests, Trees and Livelihoods. http://dx.doi.org/10.1080/14728028.2013.807143 Sunderland, T., A. Ickowitz, V. Reyes-Perez, R. Babimigura & R. Achdiawan [in press] Challenging perceptions about men, women, and forest resources: Results from the PEN global dataset. World Development.
Output 6.3.2.5: Tested tools and governance mechanisms for adaptive landscape management of ecology-economics tradeoffs including performance-based incentive systems	
CIFOR: Publications on a) Collaborative assessment and analysis of land tenure arrangements for landuse planning, b) Development of conceptual platform to devise integrated mangrove management in Sumatra; c) Paper on livelihoods, gender, tenure and rights for land use planning	a) Published: Socio-economic considerations for land use planning: N. Liswanti, E Fripp T. Silaya, M Tjoa, Y. Laumonier (2013). The case of Seram, Central Maluku. Working Paper 109. Center for International Forestry Research, Bogor, Indonesia. b) No progress c) Colfer, C.J.P., Achdiawan, R., Adnan, H., Erni, Yuliani, E.L., with Balang and LePMIL. 2013. Forests, Trees and Livelihoods (2013): Gender and natural resource governance indicators: a need to assess and address 'sensitive and taboo' topics. Forests, Trees and Livelihoods. http://dx.doi.org/10.1080/14728028.2013.807143

<p>ICRAF: Publications on a) Commodification, compensation and coinvestment paradigms of PES: next level issues identified; b) Mechanisms for the promotion of low-emissions Amazonian agriculture.</p>	<p>More journals are published: - Manuscript: Can carbon-trading schemes help to protect China's most diverse forest ecosystems? A case study from Xishuangbanna, Yunnan, Submitted to Land Use Policy (accepted with revision) -Minang, P.A.; van Noordwijk, M. 2013. Design challenges for achieving reduced emissions from deforestation and forest degradation through conservation: leveraging multiple paradigms at the tropical forest margins. Land Use Policy 31 (2013) p61-70. -Mng'omba, S A; Beedy, T. 2013. Positioning fruit trees into climate change / variability scenarios: opportunities and constraints in the placement of fruit tree species in payment for environmental services. Scientific Research and Essays 8 (28) p1343-1348. -Ackom E.K., Alemagi D., Ackom N.B., Minang P.A., Tchoundjeu, Z, 2013 . Modern bioenergy from agricultural and forestry residues in Cameroon: Potential, challenges and the way forward. Energy Policy 01/2013; 63:101-113. DOI:10.1016/j.enpol.2013.09.006 -Crossman, N D; Bryan, B A; de Groot, R S; Lin, Y-P; Minang, P A. 2013. Land science contributions to ecosystem services. Current Opinion in Environmental Sustainability 5 6p. -Davis, S C; Boddey, R M; Alves, B J; Cowie, A; George, B H; Ogle, S; Smith, P; van Noordwijk, M; van Wijk, M T. 2013. Management swing potential for bioenergy crops. Global Change Biology Bioenergy p1-16. - Mbow, C; Fensholt, R; Rasmussen, K; Diop, D. 2013. Can vegetation productivity be derived from greenness in a semi-arid environment? Evidence from ground-based measurements. Journal of Arid Environments 97 p56-65. [2013059] - 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 - Suyanto S, Ekadinata A, Sofiyuddin M and Rahmanulloh A. 2014. Opportunity Costs of Emissions Caused by Land-Use Changes. Open Journal of Forestry. 4. (1)P. 85-90. URL -Dewi S; Johana F; Agung P; Zulkarnain M T; Harja D; Galudra G; Suyanto S; Ekadinata A. 2013. Perencanaan Penggunaan Lahan Untuk Mendukung Pembangunan Rendah Emisi: LUWES - Land Use Planning for Low Emission Development Strategies. -- Bogor, Indonesia: World Agroforestry Centre (ICRAF) 135p. -van Noordwijk M, Lusiana B, Leimona B, Dewi S, Wulandari D, eds. Negotiation-support toolkit for learning landscapes. Bogor, Indonesia. World Agroforestry Centre (ICRAF) Southeast Asia Regional Program. 285p.</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>CIFOR: a) Publication on analysis of optimum institutional approaches to maximise ecosystem service provision; b) Linking forest cover with child nutrition and food security</p>	<p>Journals are published:</p> <ul style="list-style-type: none"> - Padoch, C. & T. Sunderland. 2013. Managing Landscapes for Food Security and Enhanced Livelihoods: Building upon a Wealth of Local Experience. Unasylva 241, Vol. 64, 2013/2 http://www.fao.org/docrep/019/i3482e/i3482e01.pdf - Ickowitz, A., B. Powell & T. Sunderland. 2013. Dietary Quality and Tree Cover in Africa. Global Environmental Change. http://dx.doi.org/10.1016/j.gloenvcha.2013.12.001 - Powell, B., A. Ickowitz, R. Jamnadass, C. Padoch, M. Pinedo-Vasquez & T. Sunderland. 2013. The role of forests, trees and wild biodiversity for nutrition-sensitive food systems and landscapes. FAO Expert Paper. http://www.fao.org/fileadmin/user_upload/agn/pdf/Powelleetal_ICN21_ForestsandTreesforNutritionSensitive_FINAL_NoEndnote.pdf - Sunderland, T.C.H., B. Powell, A. Ickowitz, S. Foli, M. Pinedo-Vasquez, R. Nasi and C. Padoch. 2013. Food security and nutrition: the role of forests. Discussion Paper. CIFOR. Bogor, Indonesia. http://www.cifor.org/online-library/browse/view-publication/publication/4103.html - Powell B, Maundu P, Kuhnlein HV, Johns T. 2013. Wild foods from farm and forest in the east Usambara mountains, Tanzania. Ecology of Food and Nutrition 52 (6) . http://dx.doi.org/10.1080/03670244.2013.768122 - Powell B, Maundu P, Kuhnlein HV, Johns T. 2013. Foods from farm and forest in the East Usambara Mountains, Tanzania. Ecology of Food and Nutrition 52 (6) . DOI: 10.1080/03670244.2013.768122 - Vinceti B, Termote C, Ickowitz A, Powell B, Kehlenbeck K, Hunter D. 2013. The contribution of forests and trees to sustainable diets. Sustainability 5 (11) . http://dx.doi.org/10.3390/su5114797 - Vinceti B, Termote C, Ickowitz A, Powell B, Kehlenbeck K, Hunter D. 2013. Strengthening the contribution of forests and trees to sustainable diets: challenges and opportunities. Sustainability 5 p4797-4824. [2013250] - Coates D, Pert PL, Barron J, Muthuri C, Nguyen-Khoa S, Boelee E, Jarvis D. 2013. Water-related ecosystem services and food security. In: Boelee E. Managing water and Agroecosystems for food security. Wallingford: CABI p29-41. [2013201] - Ickowitz A, Powell B, Salim MA, Sunderland TCH. 2013. Dietary quality and tree cover in Africa. Global Environmental Change. http://dx.doi.org/10.1016/j.gloenvcha.2013.12.001 - Padoch C, Sunderland TCH. 2013. Managing landscapes for greater food security and improved livelihoods. Unasylva 64 (241) - Vinceti B, Ickowitz A, Powell B, Kehlenbeck K, Termote C, Cogill B, Hunter D. 2013. The contributions of forest foods to sustainable diets. Unasylva 64 (241)
<p>ICRAF: Publication on adapting and testing of novel multiple incentive and decision support systems for reducing emissions and bundling of environmental services ASB benchmark landscapes in Asia, Africa and Latin America.</p>	<p>Good progress with the LUWES tool for Indonesia (uptake & outcome...), growing interest elsewhere. Journals are published - Alemagi, D ; Hajjar, R ; Tchoundjeu, Z ; Kozak, R. 2013. Cameroon's Environmental Impact Assessment decree and public participation in concession-based forestry: an exploratory assessment of eight forest-dependent communities. Journal of Sustainable Development 6(10). 17p - 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.</p>
<p>Outcome 6.3.3: Land use planners and practitioners use principles and methods resulting in clearer and more transparent recognition of conservation and development tradeoffs in land and rights allocation, as well as adjustments to economic incentives</p>	

Output 6.3.3.1: Network of 'active learning landscapes' on RES/PES mechanisms maintained and enhanced		
ICRAF: RUPES/PRESA network of field sites with active learning on rewards for ecosystem services, across CES/COS/CIS paradigms, supported through interactive website; Synthesis from action research sites, identifying principles, methods and processes for advancing conservation, use rights and livelihood values		RUPES/ PRESA Projects maintained. Journals are published: -Metzger, M J; Brus, D J; Bunce, R G H; Carey, P D; Goncalves, J; Honrado, J P; Jongman, R H G; Trabucco, A; Zomer, R. 2013. Environmental stratifications as the basis for national, European and global ecological monitoring. <i>Ecological Indicators</i> 33 p26-35. -Neilson J; Leimona B. 2013. Payments for ecosystem services and environmental governance in Indonesia. In: Lyster R, MacKenzie C, and McDermott, C (eds). <i>Law, tropical forests and carbon: the case of REDD+</i> . Cambridge: Cambridge University Press p207-229. -Kissinger, G; Patterson, C; Neufeldt, H. 2013. Payments for ecosystem services schemes: project-level insights on benefits for ecosystems and the rural poor. -- Nairobi, Kenya: World Agroforestry Centre (ICRAF) ICRAF Working Paper no. 172, 36p.
CIFOR: Free access to social ecological information system via internet on project web site		PEN data not yet posted on line due to delays in data cleaning
Output 6.3.3.2: Synthesis from action research sites, identifying principles, methods and processes for advancing conservation, use rights and livelihood values		
ICRAF: Drafts of RUPES/PRESA national strategies on PES and its multiple paradigms		PES National strategies has been discussed with the Ministry of Environmental Indonesia, and the scheme draft has been produced. Journals articles from China are completed: 1. Xu, J, Grumbine, RE, Beckschafer, P. 2013. Landscape transformation through the use of ecological and socioeconomic indicators in Xishuangbanna, Southwest China, Mekong Region. <i>Ecol. Indicators</i> , http://dx.doi.org/10.1016/j.ecolind.2012.08.023 2. Thanichanon, P., D. Schmidt-Vogt, et al. (2013). "Secondary Forests and Local Livelihoods along a Gradient of Accessibility: A Case Study in Northern Laos." <i>Society & Natural Resources</i> : 1-17. 3. Harrison, R.D.* (2013). Ecology of a fig ant-plant. <i>Acta Oecologia</i> DOI: 10.1016/j.actao.2013.05.008 4. Bain, A., Harrison R.D.*, and Schatz B. (2013). How to be an ant on figs. <i>Acta Oecologia</i> DOI: 10.1016/j.actao.2013.05.006 5. Harrison, R.D.*, Tan, S., Plotkin, J.B., Slik, J.W.F., Detto, M., Brenes, T., Itoh, I. and Davies. S.W. (2013). Consequences of defaunation for a tropical tree community. <i>Ecology Letters</i> 16, 687-694. 6. Beckschafer, P., Mundhenk, P., Kleinn, C., Ji, Y., Yu, D.W. and Harrison, R.D. (2013) Enhanced structural complexity index: An improved index for describing forest structural complexity. <i>Open Journal of Forestry</i> 3: 23-29. 7. Ramage, B, S, Sheil, D., Salim, H.M.W., Fletcher, C, Mustafa, N-Z. A., Luruthusamy, J.C., Harrison, R.D., Butod, E., Dzulkiply, A.D., Kassim, A.R. and Potts, M.D. (2013) Persistent methodological flaws undermine biodiversity conservation in tropical forests. <i>Biological Conservation</i> DOI: 10.1111/cobi.12004. 8. Beckschafer P., Seidel D., Kleinn C., Xu J. On the exposure of hemispherical photographs in forests. <i>iForest - Biogeosciences and Forestry</i> vol. 6, pp. 228-237 (Aug 2013) 9. Marleen de Ble'court1, Rainer Brumme1, Jianchu Xu, Marife D. Corre, Edzo Veldkamp. Soil Carbon Stocks Decrease following Conversion of Secondary Forests to Rubber (<i>Hevea brasiliensis</i>) Plantations <i>PLOS ONE</i> e69357 And more journals: - Cremaschi DG, Lasco RD and Delfino RJ. 2013. Payments for Watershed Protection Services: Emerging Lessons from the Philippines. <i>Journal of Sustainable Development</i> . 6. (1)P. 90-103. URL - Ekadinata, S; van Noordwijk, M; Budidarsono, S; Dewi, S. 2013. Hot spots in Riau, haze in Singapore: the June 2013 event analyzed. -- Nairobi, Kenya: ASB Partnership for the Tropical Forest Margins, ASB Policy Brief no. 33, 6p. - Eastman D, Catacutan D, Do Trong H, Guarnaschelli S, Dam VB and Bishaw B. 2013. Stakeholder preferences over rewards for ecosystem services: implications for a REDD+ benefit distribution system in Viet Nam. Working Paper 17117 p. - Simelton E, Dam VB, Catacutan D, Do Trong H, Nguyen TH and Traldi R. 2013. Local capacity for implementing payments for environmental services schemes: lessons from the RUPES project in northeastern Viet Nam. Working Paper 16334 p.
CIFOR: a) Info brief on participatory prospective analysis on mutually agreed future work from keystakeholders expert meeting; b) pilot report on socio-economic consideration for land use planning ; c) paper on locally valued habitats, species, and sites and their significance for collaborative land use planning; d) refinement of governance assessment tools; e) traditional knowledge, perceptions and forest condition		a) Published (Info brief): - Liswanti N. 2012. Building a shared vision: Scenarios for collaborative land use planning on Seram Island, Central Moluccas Regency, Indonesia. Brief No. 39. Future Studies. Global Forum Agricultural Research. - Shantiko B. 2012. Seeking harmony: Scenarios for nature conservation and agricultural development in Kapuas Hulu district, Indonesia. Brief No. 18. Future Studies. Global Forum Agricultural Research. - Shantiko B and Liswanti N. 2013. Seeking harmony in Indonesia. <i>New Agriculturist: Research and Innovation</i> . http://www.new-ag.info/en/research/innovationItem.php?a=2934 . N. Liswanti (2013). Creating different land-use scenarios to reduce conflict. World Agroforestry Center, Bogor, Indonesia. http://blog.worldagroforestry.org/index.php/2013/09/08/creating-different-land-use-scenarios-to-reduce-conflict/ b) Published Liswanti N, Fripp E, Silaya T, Tjoa M, Laumonier Y. 2013. Socio-economic considerations for land use planning: The case of Seram, Central Maluku. Working Paper 109. Center for International Forestry Research, Bogor, Indonesia. c) Sunderland T, Roe D, Blomley T, Day M and Yuliani EL. 2013. Linking great ape conservation and poverty alleviation: Sharing experiences from Africa and Asia. CIFOR Infobrief no. 60, March 2013. e) Yuliani EL, Adnan H, Bakara DO, Sammy J, Heri V, Bujani AA. 2013. Integrating traditional norms and formal law for collaborative protection of the Indonesian orangutan. Presented in IASC Global Conference, 3-7 June 2013, Fujiyoshida City, Japan. - Sasaoka, M. and Y. Laumonier. 2012. Suitability of Indigenous Resource Management Practices Based on Supernatural Enforcement Mechanisms in the Local Sociocultural Context. <i>Ecology Society</i>

Output 6.3.3.3: Identification of improved modalities and approaches to effectively support conservation in forest landscape mosaics	
CIFOR: paper on local soil monitoring in participatory land use planning	Padmanaba, M.; Sheil, D.; Basuki, I.; Liswanti, N. 2013. Accessing local knowledge to identify where species of conservation concern occur in a tropical forest landscape. Environmental Management 52 (2) . http://dx.doi.org/10.1007/s00267-013-0051-7
Output 6.3.3.4: Participatory models for reserve management: resource use rights, threats to targeted species, guidelines for monitoring	
CIFOR: Capacity of stakeholders to collectively design and monitor participatory development actions by producing new allocation maps and new proposed method for land allocation in Indonesia at large scale of operation	<ul style="list-style-type: none"> - CIFOR, CIRAD and Conservation International (CI) Indonesia conducted a CLUP Papua training intended to develop capacity of district officials in collecting, organizing and analyzing data for spatial planning in the region. The training included theoretical, fieldwork in 2 villages, and data analysis. Having finished the training, the trainees were expected to continue working in the 53 remaining un-surveyed villages to ensure collaborative natural resource management in Mamberamo. - Training manual and awareness program materials developed collaboratively by CIFOR, Riak Bumi, West Kalimantan Conservation Agency and West Kalimantan WWF (with input from BOSF) are adopted by schools and law enforcement institutions in several subdistricts in Kapuas Hulu. The manual and awareness program materials are on (a) the importance of protecting orangutans; (b) national legislations on protected species and conservation; and (c) integrating traditional norms with formal regulations in protecting orangutans. <p>Additional project Reports:</p> <ul style="list-style-type: none"> - N. Liswanti, M. Tjoa, T. Silaya (2012). Building a Shared Vision of the Future Land Uses in Central Maluku District, Seram Island. - B. Shantiko (2012). The uses of Participatory Prospective Analysis in Kapuas Hulu District, West Kalimantan.
Output 6.3.3.5: Impact studies testing assumptions of the CRP6.3 theory of change and output-outcome-impact pathways	
ICRAF&CIFOR: Clarifying IDO's and assumptions of the CRP6.3 theory of change and output-outcome-impact pathways	<p>Good progress was made at 6.3/6.5 meeting in March 2013, but writeups fell behind schedule after that. A dynamic model for grassroots institutional analysis and strengthening and a platform for rural service delivery and engagement in policy process: farmer institutional development model developed and being tested in 6 sites in 3 countries of eastern Africa (Kenya , Uganda and Tanzania). Baseline characterization of current capacity and issues identified by landscape-level stakeholders: ICRAF-SEA Working Paper published and Vietnamese journal version submitted. Publications:</p> <ul style="list-style-type: none"> - Eastman D, Catacutan D, Do Trong H, Guarnaschelli S, Dam VB and Bishaw B. 2013. Stakeholder preferences over rewards for ecosystem services: implications for a REDD+ benefit distribution system in Viet Nam. Working Paper 17117 p. - Alemagi, D; Hajjar, R; Tchoundjeu, Z; Kozak, R. 2013. Cameroon Environmental Impact Assessment decree and public participation in concession-based forestry: an exploratory assessment of eight forest-dependent communities. Journal of Sustainable Development 6 (10) 17p. - Sayer, J., T. Sunderland, J. Ghazoul, J.-L. Pfund, D. Sheil, E. Meijaard, M. Venter, A.K. Boedhihartono, M. Day, C. Garcia, C. van Oosten & L. Buck. 2013. The landscape approach: ten principles to apply at the nexus of agriculture, conservation and other competing land-uses. Proceedings of the National Academy of Sciences. 110 (21) 8345-8348 http://www.pnas.org/content/110/21/8349.full.pdf+html
Outcome 6.3.4: Local and external stakeholders negotiate and have access to a range of conditional and performance-based arrangements that support the provision and maintenance of environmental services and biodiversity in productive landscapes	
Output 6.3.4.1: Network of 'active learning landscapes' on RES/PES mechanisms maintained and enhanced	
Output 6.3.4.2: Synthesis from action research sites, identifying principles, methods and processes for advancing conservation, use rights and livelihood values	
Outcome 6.3.5: Opportunities for win-win solutions in restoration contexts are fully used, while the hard tradeoffs are recognised and contest over them is replaced by negotiation	
Output 6.3.5.1: Identification of improved modalities and approaches to effectively support conservation in forest landscape mosaics	
Output 6.3.5.2: Participatory models for reserve management: resource use rights, threats to targeted species, guidelines for monitoring	
Output 6.3.5.3: Impact studies testing assumptions of the CRP6,3 theory of change and output-outcome-impact pathways	
Theme: Climate change adaptation and mitigation	
Outcome 6.4.1: Research conducted under this component will contribute to the development of new forest-and-climate regimes (currently being negotiated at global and national levels) and subnational initiatives related to climate change, forests and trees in ways that ensure that they are effective, efficient and equitable.	

Output 6.4.1.1: Informing international and national level policy processes		
Framework for identifying constraints for effective policy making in national REDD+ policy arenas		Paper published: Angelsen, A. and T.K. Rudel. 2013. Designing and implementing effective REDD+ policies: A forest transition approach. Review Environmental Economics and Policy 7(1): 91-113.
Global comparative analysis of politics and power in REDD+ policy arenas to provide guidance for second-generation REDD+ design to address problems appearing in national policy arenas from first generation REDD+ initiatives		Paper published: Brockhaus, M., Di Gregorio, M., Mardiah, S. 2013. Governing the design of national REDD+: An analysis of the power of agency. Forest Policy and Economics. http://dx.doi.org/10.1016/j.forpol.2013.07.003 Databases established: Three sets of database related to REDD+ national policies and strategies on 1) country profile, 2) policy network, and 3) media discourse
New projects implemented		Proposal developed in 2013, the (new) project will be implemented in 2014
Peatlands in Cameroon: community perception, usage level, and policy options for sustainable management		Structured interviews have been conducted in the case study communities. The data analysis was done and the project report completed ("Peatlands in Cameroon: Community perception, usage Level, and policy options for sustainable management")
Vulnerability of rural communities to climate change in Burkina Faso, Mali and Niger		Papers published: Methodological paper for participatory analysis of vulnerability and adaptation to climate change in English and french published Work in progress: Analysis of data collected in rural communities in Burkina Faso, Mali and Niger is in process. Data will be stored in ICRAF database by December 2014 First draft of journal article synthesizing results of participatory analysis of vulnerability and adaptation to climate change in Burkina Faso, Mali and Niger, and recommendations for climate change adaptation planning in the region (will be done in 2014)
Conceptual and analytical frameworks for High Carbon Stock Rural Development Pathways/low carbon development pathways developed and tested in ASB sites		Paper submitted: Agroforestry in REDD+: potentials, prospects and enabling conditions. Submitted for the Special Issue in Current Opinion in Environmental Sustainability in June 2013 Manuscript: Managing at a Landscape Scale: A review of landscape approach conceptual frameworks for resource management. Almost ready for submission Minang PA, Duguma LA, Bernard F, Mertz O, van Noordwijk M. 2013. Prospects for Agroforestry in REDD+ landscapes in Africa. 2014. Current Opinion in Environmental Sustainability 6:78-82. DOI 10.1016/j.cosust.2013.10.015.
Readiness assessment		Paper submitted: 1 Special Issue on REDD Readiness (11 papers under preparation including 4 country papers, 2 case-studies, 1 comparative paper, 1 paper on CSA and REDD+, 1 paper on the conceptual framework and 1 conclusion paper). Submitted to Climate Policy in April 2013. Currently (January 2014), 7 papers are under review
Reference emission scenarios in the Amazon, Indonesia, Cameroun and Brazil		Substantive report titled "Towards a landscape approach for reducing emissions: A substantive report of the Reduced Emission from All Land Uses (REALU) Project" published on 15 November 2013
Training on land use planning for low emission strategies and monitoring, reporting and		International Workshop on LUWES methodology, held from 22nd - 26th April of 2013 in Peru with more than 50 participants; held 5th-9th Nov 2012 in Cameroon; 22-26 October 2012 in Vietnam with 22 participants; 4-7 December 2012 in Indonesia with district spatial planning teams of two Jambi districts, Tanjung Jabung Barat and Merangin

verification	
Output 6.4.1.2: Informing subnational and local initiatives	
Assessment of elements that contribute to successful design of REDD+ demonstration activities.	<p>Papers published: Awono, Abdon, Olufunso A. Somorin, Richard Eba'a Atyi, and Patrice Levang. 2013. Tenure and participation in local REDD+ projects: Insights from southern Cameroon. Environmental Science & Policy. http://dx.doi.org/10.1016/j.envsci.2013.01.017 Joseph, Shijo, Martin Herold, William D. Sunderlin and Louis V. Verchot. 2013. REDD+ readiness: early insights on monitoring, reporting and verification systems of project developers. Environmental Research Letters 8: 034038 (15pp). doi:10.1088/1748-9326/8/3/034038. Larson, Anne M., Maria Brockhaus, William D. Sunderlin, Amy Duchelle, Andrea Babon, Therese Dokken, Thu Thuy Pham, I.A.P. Resosudarmo, Galia Selaya, Abdon Awono, and Thu Ba Huynh. 2013. Land Tenure and REDD+: The good, the bad and the ugly. Global Environmental Change 23(3):678-689. http://dx.doi.org/10.1016/j.gloenvcha.2013.02.014 Hyman G., V. Robiglio, C. Silva, D. White. 2013. Planning for low emissions development efforts in Ucayali-PERU. Policy Brief 41. Landscape Approaches Series No. Y. ASB: Nairobi</p>
Synthesis and papers on options / alternatives for high carbon stocks development / low carbon development pathways published	<p>Paper submitted: Intensification of Cocoa Agroforestry Systems in the South Region of Cameroon as a REDD+ Strategy: Major Hurdles, Motivations, and Challenges. Under review in the International Journal of Agricultural Sustainability.</p>
Output 6.4.1.3: Best-practice methods	
Assessment of MRV capacity of non-Annex 1 countries	<p>Book published: Mora, B., Herold, M., De Sy, V., Wijaya, A., Verchot, L. and J. Penman. (eds). 2012. Capacity development in national forest monitoring: Experiences and progress for REDD+. CIFOR, Bogor, Indonesia. [This book was launched at COP 18 in Doha, Qatar in December 2012]</p> <p>Recommendations on the design of national monitoring systems relating the costs of monitoring to the expected benefits of higher quality of data. REDD-ALERT project report to donor. Deliverable D2.3</p>
Develop an understanding of leakage at the project scale	<p>Iban, Angela. 2013. "Menggali Hidup Di Balik Hitamnya Gambuit: Sebuah Kajian Etnoekologi". Undergraduate Thesis. Anthropology Dept., Universitas Gadjah Mada.</p> <p>Jihadah, Lina Farida. 2013. Persepsi masyarakat Lokal tentang Kalamantan Forests and Climate Partnership (KFCP) Serta Partisipasinya Dalam Pelaksanaan KFCP. Undergraduate Thesis. Forestry Dept., University Gadjah Mada</p>
Assessment of drivers of deforestation in relation to forest transition curve	<p>Paper published: Romijn, E., Ainembabazi, J.H., Wijaya, A., Herold, M., Angelsen, A., Verchot, L. and D. Murdiyarso. 2013. Different forest definitions and their impact on developing REDD+ reference emission levels: a case study for Indonesia. Environmental Science and Policy 33: 246-259.</p>
Development of emissions factors for better GHG inventories	<p>Papers published: Hergoualc'h K and Verchot LV. 2013. Greenhouse gas emission factors for land use and land-use change in Southeast Asian peatlands. Mitigation and Adaptation Strategies for Global Change. DOI 10.1007/s11027-013-9511-x</p> <p>Farmer J, Matthews R, Smith P, Langan C, Hergoualc'h K, Verchot L, Smith JU. 2013. Comparison of methods for quantifying soil carbon in tropical peats. Geoderma 124-125: 177-183. http://dx.doi.org/10.1016/j.geoderma.2013.09.013</p>
Improved methods for setting reference emissions levels	<p>Mulatu, K. A., Herold, M., Koster, H., Aguilar-Amuchastegui, N., Thompson, D., Mora, B., Wijaya, A., Skutsch, M., Calmel, M, 2013, "Science Solutions to Policy Challenges for Evolving REDD+ MRV Requirements: Report from A Multi-Stakeholder Workshop", Published in : Carbon Management Journal, Carbon Management 4(6), 587-590</p> <p>Info Brief published: Dutschke M. 2013. Verification vs. Finance? Removing the negotiation roadblocks for results-based REDD+ activities. Info Brief 66. Bogor, Indonesia: CIFOR.</p>

Comparative analysis of references levels and methods for developing them (Demonstration Landscapes)		Analysis of the Mesa REDD role for efficient REDD+ strategies at the regional level in Peru. Under press
Outcome 6.4.2: Research conducted under this component will contribute to the development of national adaptation plans and investments as part of new forest-and-climate regimes and sustainable development planning.		
Output 6.4.2.1: Informing international and national level policy processes		
Methodologies and approaches to determine/assess the degree of vulnerability of forest ecosystem and tree populations to climatic changes (Also reported under CRP6 Theme 2)		<p>Paper published: Leibing, C.; Signer, J.; van Zonneveld, M.; Jarvis, A.; Dvorak, W. (2013). Selection of provenances to adapt tropical pine forestry to climate change on the basis of climate analogs. <i>Forests</i> 4(1): p. 155-178 ISSN:1999-4907</p> <p>Map: VIOT - Atlas of distribution and threats to at least 50 neotropical forest tree species (2013) This been completed and the atlas is now available on the web for 100-not 50- species. The other two activities are in progress and on track (www.mapforger.org)</p>
Analysis of governance arrangements for ecosystem-based adaptation		<p>Working paper published:</p> <p>Russell, Aaron J.M., Bruno Locatelli, Emilia Pramova, Godfrey Jeff Alumai, and Diji Chandrasekharan Behr. 2012. Using Forests to Enhance Resilience to Climate Change: What do we know about how forests can contribute to adaptation? Working Paper. Washington DC: Program on Forests (PROFOR).</p> <p>Robins, L. and A.J.M. Russell. 2013. Using Forests to Enhance Resilience to Climate Change: Synthesis Report. PROFOR Draft Technical Report.</p>
Analysis of policies relevant to adaptation in West Africa		<p>Papers published:</p> <p>Brockhaus M., Djoudi H., Kambire H., 2012. Multi-level governance and adaptive capacity in West Africa. <i>International Journal of the Commons</i> 6(2).</p> <p>Sonwa, D.J., Nkem, J., Idinoba, M., Bele, M.Y., Jum, C., 2012. Building regional priorities in forests for development and adaptation to climate change in the Congo Basin. <i>Mitigation and Adaptation Strategies for Global Change</i> 17, 441-450.</p> <p>Brown, H.C.P., Smith, B., Somorin, O.A., Sonwa, D.J., Ngana, F., 2013. Institutional perceptions, adaptive capacity and climate change response in a post-conflict country: a case study from Central African Republic. <i>Climate and Development</i> DOI: 10.1080/17565529.2013.812954</p>
Bioenergy provision within agroforestry systems in Africa		<p>Good progress was made in 2013, in terms of having stakeholder workshops, implementing case studies, networking with stakedholders including policy makers, publishing a strategic paper with communication products. Mobilizing extra fundraising is still challenge. the biophysical and socio-economic baseline for a case study (Mutomo, South Kitui in Kenya) was collected and now being analyzed by a PhD student to evaluate the impacts of woodfuel harvest on forest/land degradation. ICRAF-DFID dryland workshop produced some communication products on woodfuels together with regional/global partners to influence policy outcomes: - http://www.worldagroforestry.org/knowfor/ A preliminary result from woodfuel review was presented during a workshop: - http://blog.worldagroforestry.org/index.php/2013/10/03/unpacking-the-evidence-on-firewood-and-charcoal-in-africa/ - http://www.slideshare.net/agroforestry/miyuki-iiyamaicrafcharcoal-review2013 Also successfully had ICRAF-SEI cross-sectoral bioenergy workshop in November 2013, with a report complied</p>
Assessing Climate Change resilience of smallholder who are practicing agroforestry in Uganda		<p>Work in progress: Paper : "Resilient adaptation to climate change: strategies, barriers and gaps among agroforestry practicing farmers on Mt. Elgon, Uganda". Almost complete Two papers and a policy brief on Small holder farmers resilience almost complete Manual for assessing resilience : almost complete</p>

Trees and Agroforestry farming systems for improved smallholder resilience to climate change	Workshops: Conference on value chain development (VCD) of products of Brazil's socio-biodiversity as input to implement the national program PNPSB; Workshop on local and regional value chains/ clusters - vulnerability of Brazil nut value chain actors in the Lower Amazon basin Data: Database builds up on surveys to identify income sources and analyze opportunities and challenges (including CC risks & smallholder adaptation needs) of agro-extrativistas in the frame of asset-based Brazil nut VCD & innovative firefox-access database Report/Publication: Two reports on potential and (CC & other) constraints (based on SWOT analysis) for Brazil nut value chain development Work in progress: Paper under progress on Climate change impact analysis of native palm species (Babacu Orbignya phalerata, Tucuma Astrocaryum vulgare) to support the agro-ecological zoning program in the state of Para and Maranjao, Brazil Paper in preparation (M Cunha) on "adaptation needs for smallholders"
Integration of climate change in national agroforestry policy in India	Status reports on the national and sub-national priorities, programs and policies with respect to climate change A paper / report on the potentials and possibilities of agroforestry for addressing the challenges of climate change This part has been dealt with by five national level consultations with the central government, state governments, industry & financial institutions, donors, NGOS. ICRAF, ICAR with other partners in the country under the leadership support of the National Advisory Council spearheaded a national consultation effort for Developing a National Policy on Agroforestry. Workshop: Workshop agenda according to the objectives identified above, and a list of topics (questions) to be deliberated during the workshop. The workshop was organized in November 2013. ICRAF, ICAR with FAO, selected Ministries of the Government of India, State Governments in India, NGO & civil societies and other partners participated and prepared the draft of the recommendations that was posted at the NAC website for public review and scrutiny.
Methodology for creating adaptation maps for plantation forestry	Leiming, C., J. Signer, M. van Zonneveld, A. Jarvis and W. Dvorak. Selection of provenances to adapt tropical pine forestry to climate change on the basis of Climate Change Analogs. Forests. 4, 155-178; doi:10.3390/f4010155
Output 6.4.2.2: Informing subnational and local initiatives	
Analysis of the impacts of agroforestry systems on livelihoods of farmers and their adaptation	Paper published: "Reducing subsistence farmers' vulnerability to climate change: evaluating the potential contributions of agroforestry in western Kenya" (Tannis Thorlakson and Henry Neufeldt) http://www.agricultureandfoodsecurity.com/content/1/1/15 ICRAF Policy Brief 15: "Climate Finance for Agriculture and Livelihoods" (Foster K., Neufeldt H., Franks P., Diro R., Munden L., Anan M., Wollenberg E.) http://www.worldagroforestry.org/downloads/publications/PDFs/PB13035.PDF
Strategies for adaptation in small farms	India new National Policy on Agroforestry. ICRAF has participated in the drafting of the document.
Analysis of the role of ecosystems in reducing the vulnerability of local communities to climate change	Pramova E., Locatelli B., Djoudi H., Somorin O., 2012. Forests and trees for social adaptation to climate variability and change. WIREs Climate Change 3:581-596. Boissiere M., Locatelli B., Sheil D., Padmanaba M., Sadjudin E., 2013. Local Perceptions of Climate Variability and Change in Tropical Forests of Papua (Indonesia). Ecology and Society 18(4): 13. Russell, A.J.M., Foppes, J., Ketphanh, S., Vongphasouvanh, S., Rafanoharana, S., Locatelli, B., Sihanat, L., Phonephanom, P., Louangsouvanh, K., Anyango Nakondiege, N., and Nanthavong, S. 2013. Using Forests to Enhance Resilience to Climate Change: Case study of the role of forests in adaptation strategies of agricultural households living in Savannakhet Province in Lao PDR. PROFOR Technical Report. [Report produced in English and Lao languages] Procter, A., Diaz Briones, A., Vignola, R. and McDaniels, T. with contributions from Rafanoharana, S., Locatelli, B. and Russell, A. J.M. 2013. Using Forests to Enhance Resilience to Climate Change: Case study of the role of forests in contributing to adaptation of drinking water systems in Tegucigalpa, Honduras. PROFOR Technical Report. [Report produced in English and Spanish languages]
Analysis of the vulnerability of local communities to climate variability and climate change, in interaction with other socioeconomic and political changes in West Africa.	Paper published: Brockhaus M., Djoudi H., Locatelli B., 2013. Envisioning the future and learning from the past: Adapting to a changing environment in northern Mali. Environmental Science & Policy 25: 95-106. doi:10.1016/j.envsci.2012.08.008 Djoudi H., Brockhaus M., Locatelli B., 2013. Once there was a lake: Vulnerability to environmental changes in northern Mali. Regional Environmental Change 13(3): 493-508. doi: 10.1007/s10113-011-0262-5

		Djouidi, H.; Brockhaus, M.; Brown, H.C.P.; Bandiaky-Badji, 2012. Gender, climate change and women's representation. Infobrief, Center for International Forestry Research (CIFOR) Bogor, Indonesia.
Vulnerability assessments of local communities and analysis of perceptions of vulnerability		<p>Papers published:</p> <p>Bele, M.Y., Sonwa, D.J., Tiani, A.M., 2013. Supporting local adaptive capacity to climate change in the Congo basin forest of Cameroon: a participatory action research approach. International Journal of Climate Change Strategies and Management 5, 181-197.</p> <p>Bele, M.Y., Tiani, A.M., Somorin, O.A., Sonwa, D.J., 2013. Exploring vulnerability and adaptation to climate change of communities in the forest zone of Cameroon. Climatic Change 119, 875-889.</p> <p>Devisscher, T., Bharwani, S., Tiani, A.M., Pavageau, C., 2013. Current vulnerability in the Tri-National de la Sangha landscape, Cameroon. Center for International Forestry Research (CIFOR), Bogor, Indonesia, p. 4p.</p> <p>Devisscher, T., Bharwani, S., Tiani, A.M., Pavageau, C., Kwack, N.E., Taylor, R., 2013. Current vulnerability in the Tri-National de la Sangha landscape, Cameroon. Center for International Forestry Research (CIFOR), Bogor, Indonesia, p. 29p.</p> <p>Boissiere M., Locatelli B., Sheil D., Padmanaba M., Sadjudin E., forthcoming. Local Perceptions of Climate Variability and Change in Tropical Forests of Papua (Indonesia). Ecology and Society. In press</p> <p>Munji, C.A., Bele, M.Y., Nkwatoh, A.F., Idinoba, M., Somorin, O.A., Sonwa, D.J., 2013. Vulnerability to coastal flooding and response strategies: the case of settlements in Cameroon mangrove forests. Environmental Development 5, 54-72.</p> <p>Nkem, J.N., Somorin, O.A., Jum, C., Idinoba, M.E., Bele, Y.M., Sonwa, D.J., 2013. Profiling climate change vulnerability of forest indigenous communities in the Congo Basin. Mitigation and Adaptation Strategies for Global Change 18, 513-533.</p> <p>Pavageau, C., Butterfield, R., Tiani, A.M., 2013. Current vulnerability in the Monte Alen-Monts de Cristal landscape, Equatorial Guinea. Center for International Forestry Research (CIFOR), Bogor, Indonesia, p. 4p.</p> <p>Pavageau, C., Butterfield, R., Tiani, A.M., 2013. Current vulnerability in the Virunga landscape, Rwanda. Center for International Forestry Research (CIFOR), Bogor, Indonesia, p. 4p.</p>
Enabling rural transformation and grassroots institutional building for sustainable land management and increased incomes and food security in East Africa		<p>Workshop: Workshop report on institutional capacity needs analysis Paper: Working paper no. 1 on platforms and network Data: Baseline data for farmer groups in the six project implementation sites available; currently being synthesised for a working paper Model: Model for rural institutional strengthening developed diagnostic model tool and software for grass roots institutions developed Proposal: Proposal on a rural institutions and climate change project. Developed, submitted and approved Capacity: Training materials developed and tested for capacity building of farmers, nursery managers and extension workers on vegetative fruit tree propagation (Facilitators soft skills manual ; Capacity Needs Assessment Guide for Facilitators) Work in progress: For the other paper " Role of rural institutions in climate change adaptation, currently", the data collection and cleaning is completed, the analysis is underway</p>
Suitable agroforestry germplasm for adaptation of smallholder farming systems to climate change - identification and introduction		<p>Open-source modeling framework for species distribution modeling and overlay with climate analogues developed. The modelling framework has been completed, and results were presented during the 2013 Tropentag conference. Maps of current and future cultivation zones for 3 mango varieties developed for Kenya 2 mango varieties were introduced from hot and dry northern India. The evaluation of the new varieties did not yet start as we received the material only recently. Contacts to partners and genebanks in some countries are made and germplasm exchange initiated, but it may take some more time to receive the material. Aim is to introduce in Kenya 5 mango varieties from climate-analogue locations in EA and WA (Sudan, Mali, Niger) and evaluate them by on-station trials with national partners</p>
Developing regional climate change adaptation strategies and mechanisms		<p>Workshop: The workshop was carried out in India and an internal report was prepared; a follow-up workshop is planned for the end of the year Report: Country reports (national priorities and programs) with respect to climate change especially the adaptation aspects to be prepared by the participants. They are embed in the workshop report</p>

Synergy between climate change mitigation and adaptation in the land use sector: developing a conceptual framework and defining principles, criteria and indicators		Paper submitted: "Climate Change Mitigation and Adaptation in the Land Use Sector: From Complementarity to Synergy" submitted to Environmental Management. Article under review Training/Communication: Presentation of the conceptual framework at GLF 2013 in COP 19 and during the ASB Global Steering Group meeting
Role of rural farm households in enabling adaptation to climate change		Much of the data base already established Workshops for local grassroots institutions; workshop report and journal article
Output 6.4.2.3: Best-practice methods		
Adaptation mapping toolbox		http://analogues.ciat.cgiar.org/climate/ (Joint work with CCAFS); Leling, C., J. Signer, M. van Zonneveld, A. Jarvis and W. Dvorak. Selection of provenances to adapt tropical pine forestry to climate change on the basis of Climate Change Analogs. Forests. 4, 155-178; doi:10.3390/f4010155
Data and tools for assessing climate change impacts on tree species		Paper published: - Luedeling E, Kunz A and Blanke M, 2013. Identification of chilling and heat requirements of cherry trees - a statistical approach. International Journal of Biometeorology 57, 679-689 - Luedeling E, Guo L, Dai J, Leslie C, Blanke M, 2013. Differential responses of trees to temperature variation during the chilling and forcing phases. Agricultural and Forest Meteorology 181, 33-42 - Guo L, Dai J, Ranjitkar S, Xu J, Luedeling E, 2013. Response of chestnut phenology in China to climate variation and change. Agricultural and Forest Meteorology 180, 164-172. Tools developed: 2 R-Packages - Biodiversity R - Chill R: Statistical methods for phenology analysis in temperate fruit trees Database: done
Methods and tools for assessing the potential impacts of climate change on forests and their ecosystem services		Papers submitted: Imbach P., Molina L., Locatelli B., Rounsard O., Mahe G., Neilson R., Corrales L., Scholze M., Ciais P., 2012. Modeling potential equilibrium states of vegetation and terrestrial water cycle of Mesoamerica under climate change scenarios. Journal of Hydrometeorology 13(2): 665-680. doi:10.1175/JHM-D-11-023.1 Imbach P, Locatelli B., Molina L., Ciais P., Leadley P., 2013. Climate change and plant dispersal along corridors in fragmented landscapes of Mesoamerica. Ecology and Evolution. doi: 10.1002/ece3.672 Locatelli B., Imbach B., Wunder S., 2013. Synergies and trade-offs between ecosystem services in Costa Rica. Environmental Conservation. doi:10.1017/S0376892913000234
Enabling smallholder vulnerable communities to secure rural livelihoods		A catalogue of the climate change resilient strategies and interventions (with detail technology profile) for 3 ecological cases A manual on the production of high quality planting material and other techniques: at draft stage
Documentation and comparative assessment of past and current local adaptive strategies and coping responses of local communities in Southeast Asian watersheds		Workshops: Workshop done on local adaptive strategies and coping responses of small holder farmers Workshops done on the role of trees and agroforestry in enhancing the resilience of small holder farmers Review paper for journal publication on local adaptive strategies and coping responses of small holder farmers in Southeast Asian watersheds: paper accepted for comments Work in progress: Research paper documenting the local adaptive strategies and coping responses of small holder farmers Journal paper submitted on the role of trees and agroforestry in enhancing the resilience of small holder farmers: formatting and editing step
Uncovering the past climate,		Capacity: Training of technician for tree ring lab in Germany. She is now working in the lab in Nairobi Equipment purchased: Equipment purchase and Tree ring lab in Nairobi

extreme events and impacts across regions to adapt and mitigate climate changes		established http://www.flickr.com/photos/icraf/9247877208/ http://www.worldagroforestrycentre.org/newsroom/highlights/tree-rings-link-climate-and-carbon-africa http://www.worldagroforestry.org/newsroom/highlights/tracing-carbon-forests-how-degradation-could-speed-carbon-cycle Work in progress: Data are being collected
Outcome 6.4.3: Increased recognition of synergies between M&A leads to increased investment in these types of activities in rural communities to enhance co-benefits of national REDD+ programs. Outcome 6.4.4: Increased integration of M&A in national sector planning documents. Outcome 6.4.5: Increased implementation of M&A activities co-jointly by international development agencies and NGOs		
Output 6.4.3.1: Informing international and national level policy processes		
Identification of opportunities to integrate adaptation and mitigation activities in policies		<p>Papers published:</p> <p>Gapia, M., Bele, Y., 2012. Adaptation and mitigation in Central African Republic: actors and political processes, Adaptation et atténuation en République Centrafricaine: acteurs et processus politiques, CIFOR Indonesia.</p> <p>Gapia, M., Bele, Y., 2012. Adaptation et atténuation en République centrafricaine: Acteurs et processus politiques. Center for International Forestry Research (CIFOR), Bogor, Indonesia, p. 32p.</p> <p>Nguema, J., Pavageau, C., 2012. Adaptation et atténuation en Guinée équatoriale: Acteurs et processus politiques. Center for International Forestry Research (CIFOR), Bogor, Indonesia.</p> <p>Nguema, J., Pavageau, C., 2012. Adaptacion y atenuacion en Guinea Ecuatorial: Actores y procesos politicos. Center for International Forestry Research (CIFOR), Bogor, Indonesia.</p> <p>Pongui, B.S., Kenfack, C.E., 2012. Adaptation et atténuation en République du Congo: Acteurs et processus politiques. Center for International Forestry Research (CIFOR), Bogor, Indonesia, p. 33p.</p>
Developing community-based climate-smart agriculture through participatory action research in five benchmark sites in West Africa		<p>Workshop: Workshops to refine and validate the work plan in each countries Capacity: Ghana team trained by IUCN on the tools for PM&E of the project Data: Socio-economic data, carbon stocks, GHGs in the 5 countries ; Data collected but not yet analyzed Work in progress: Establishment of land restoration trials combining anti-erosion structures with assisted natural regeneration of local species involving 20 farmers Field trials in Jatropha Integrated soil fertility management trials established on farmers' fields + soil samples in Ghana and Mali + tree seedling planted in Ghana Burkina and Ghana team trained by IUCN on the tools for PM&E of the project Socio-economic data, carbon stocks, GHGs in the 5 countries Training for farmers and students</p>
Output 6.4.3.2: Informing subnational and local initiatives		
NO MILESTONES IN 2013		
Output 6.4.3.3: Best-practice methods		
Tools for analyzing REDD and adaptation opportunities at the project scale		LUWES tool + Casava tool (capacity strengthening for vulnerability assessment)
Guidebook for analyzing the social returns of investment (SROI) of integrating community-based adaptation interventions into REDD+ projects.		Pramova, E., Locatelli, B., 2013. Guidebook on integrating community-based adaptation into REDD+ projects: Lessons from Indonesia and the Philippines. Bogor, Indonesia: CIFOR, 72 p. ISBN 978-602-1504-24-6

Benefits, opportunities and challenges related to using the Social Returns of Investment (SROI) methodology for identifying, analyzing, monitoring and evaluating adaptation options in REDD+ project sites.		<p>Pramova, E., Locatelli, B., Mench, A., Marbyanto, E., Kartika, K. and Prihatmaja, H. 2013. Integrating adaptation into REDD+: Potential impacts and social return on investment in Setulang, Malinau District, Indonesia. Working Paper 112. CIFOR, Bogor, Indonesia.</p> <p>Pramova, E., Locatelli, B., Liss, Bernd-Markus, Ignacio, G.B., Villamor, M. and Sumaylo, V.E. 2013 Integrating adaptation into REDD+: potential impacts and social return on investment in Sogod, Southern Leyte, Philippines. Working Paper 113. CIFOR, Bogor, Indonesia.</p>
Developing best-practice methods related to adaptation-mitigation synergies at smallholder farmers' level for Ethiopia		This project never received funding
Theme: Impacts of trade and investment on forests and people		
Outcome 6.5.1: Research findings help strengthening policy and governance conditions that reduce the negative impacts of forest-related trade and investment and promote more inclusive markets and sustainable investments		
Output 6.5.1.1: Assessment of processes and factors through which trade and investment influence on forests and people		
Analysis of the regional trade and investment flows in Southeast Asia with implications for land use competition and forest conservation		This regional report reviewing investment projects in 3 major commodities in 6 countries, as well as the main sources of funding for these investments is being prepared for publication. The paper has been shared with the donor.
Analysis of the market forces, policies and governance conditions shaping land use dynamics for specific commodities		<p>Completed two reports on the dynamics of indirect land use change, and the policy and institutional factors shaping land governance in Indonesia and Brazil.</p> <p>In progress a report on the Cross-regional value chain analysis of rubber in Northern Laos and Yunnan Province of China</p>
Output 6.5.1.2: Analysis of the impacts associated with trade and investment trends on forests and people's livelihoods		
Analysis of the implications of Chinese forest-related trade and investment for national economic development, local livelihoods and forests in two selected regions		<ul style="list-style-type: none"> . One paper completed on the Political Economy of Chinese investments in Mozambique accepted for publication in International Forestry Review. . One paper completed on the Political Economy of Chinese investments in Cameroon submitted to a peer-reviewed journal for publication
Analysis of the implications of different tree crops production systems for smallholder livelihoods and business viability		<ul style="list-style-type: none"> . One paper accepted in OCL on oil palm smallholders in Cameroon . One paper submitted on palm oil artisanal milling in Cameroon . One report about the story of oil palm in Cameroon ready for publishing . A report on the business viability of cacao cooperatives in Peru in progress - partnerships for design and implementation of the conceptual framework have been formed, advanced drafts of the conceptual framework and data collection tools have been elaborated. Final report including results from data collection and analysis is expected by in 2014.

Output 6.5.1.3: Methods for improved assessments on social and ecological impacts of trade and investment at multiple scales		
Analysis of the geography of greenhouse gas emissions embedded in trade and life-cycle analysis under varying biophysical and technological conditions		Data collection on the geography of GHG emissions and a preliminary assessment have been completed with a focus in the Western Amazon, a final report is in progress.
Outcome 6.5.2: Select global processes and actors, and governments in consumer and producer countries informed with options for enhancing governance of trade and investments for protecting forests and enhancing people's livelihoods		
Output 6.5.2.1: Lessons learned on the effectiveness of market driven processes and international sustainability initiatives		
Lessons from cases of formalization in different resource sectors (land, mining, fisheries, NTFPs) to inform EU development of policies on VPAs related to domestic logging in partners countries.		5 individual reports on cases of formalization of access to and trade in natural resources with regard to land, mining and timber are ready and available. All papers were presented at the IASC conference at Mt Fuji in June 2013 and the authors have been invited to submit them as a group for a special issue of Society and Natural Resources.
Analysis of the adoption and effectiveness of different national policies and market-based instruments to reduce deforestation and forest degradation in select countries		<ul style="list-style-type: none"> . One paper assessing adoption, interest, and awareness of ISO 14001 and FSC certification among logging companies in Cameroon - The paper is complete and has been submitted for publication to the journal Business Strategy and the Environment. A copy of the paper is available upon your request . One paper in press in PlosOne focusing on the implications from the decision of reclassifying 25% of areas allocated for natural timber harvesting for use as monoculture oil palm plantations in Indonesia. . One paper in progress describing the land use trajectories in Borneo based on via visual interpretation of 268 Landsat scenes from six different periods of time (1970s, 1990, 1995, 2000, 2005 and 2010). . Journal article exploring the extent and scope of the mechanisms governing consumption's distant environmental impacts has been submitted to 2 journals, but not recommended for publishing. Needs revisions before submitting to a third journal.
Assessment of the effectiveness of governance instruments shaping international foreign trade and investment in Africa		Policy brief on governance instruments for foreign trade and investment in Africa at different levels and their effects on Chinese investments (e.g. comparative analysis of log-export bans in Gabon and Mozambique) completed.
Output 6.5.2.2: Analysis of policy regulations and options for managing impacts associated with trade and investment		
Policy lessons made available to Chinese and sub Saharan Africa decision makers on governance of international investment and		Combined Policy brief on Chinese trade and investment in Africa geared to Chinese policy makers; and on governance of foreign investment, resource access and trade in SSA targeting decision makers in countries of focus in SSA is in final draft.

access and trade in natural resources		
Analysis on sustainable oil palm production and sustainability initiatives		<ul style="list-style-type: none"> . A research report on sustainable oil palm production sustainability initiatives still in progress. . Two policy briefs on sustainable oil palm production and sustainability initiative are completed.
Policy options for formalization of smallholders linked to domestic and foreign timber markets are discussed and take-up process designed in participative manner		<ol style="list-style-type: none"> 1. National-level policy consultations with key private and public actors and participation in strategic policy dialogues is completed 2. Policy documents and briefs with recommendations for enhancing formalization of smallholders in timber markets is completed
Output 6.5.2.3: Approaches on collaborative mechanisms to enhance multi-scale governance and sustainable investments		
Informed dialogues and initiatives for enhancing responsible investments and accountability of investments in foods, fibre and energy production select countries		Despite funding for EC biofuels phase 2 was not secured, participation in dialogues and debates on mechanisms to improve responsible investment in food and energy production and enhance the accountability of large-scale investments could be covered under other projects (LIFFE Options and Emerging Economies). In this context a number of dialogues were participated in. This will further develop in 2014.
Recommendations to selected governments of FLEGT-VPA countries on measures to integrate the domestic timber markets in their Legality Assurance Systems		<p>Case studies and comparative report discussing approaches of formalization and their achieved outcomes in timber and not-timber sectors with lessons for VPA countries has been completed for Cameroon, Gabon, DRC, Indonesia and Ecuador</p> <ul style="list-style-type: none"> . A synthesis document with options for the VPA's legality verification system to integrate the domestic timber sector in the economy is completed
Theme: Gender		
Outcome 6.6.1: Gender integrated into FTA research and action		
Output 6.6.1.1: Enhanced capacity for the collection and analysis of gender-disaggregated data		
Gender disaggregated data generated and gender analysis incorporated in research		<p>2 postdocs hiring complete (CIFOR, CIAT); 2 others in process (CIFOR, ICRAF)</p> <p>3 gender trainings completed (2 Bioversity, 1 ICRAF)</p> <p>Research questions and methods for integrating gender in Sentinel landscapes identified at Bogor workshop</p> <p>Sentinel landscapes instruments screened and adjusted for gender dimensions;</p> <p>Writeshop to develop user guide for selected, novel methods (ICRAF);</p> <p>Proposal development guide completed and published;</p> <p>Proposal assessment guide completed and published;</p> <p>Tips for identifying gender-responsive questions completed and published;</p> <p>Tips for conducting gender-responsive fieldwork completed and published;</p>

Output 6.6.1.2: Effectiveness and relevance of gender-responsive research is improved through adaptive learning	
Monitoring and evaluation program designed and implemented	<p>Monitoring and Evaluation strategy has been outlined in the gender strategy, which was approved in January, 2013;</p> <p>M&E expert to support the further elaboration of an M&E plan, in a participatory manner, has been identified and a ToR specified;</p> <p>Workshop on indicator development completed;</p> <p>Gender and natural resource governance indicators published in Forests, Trees and Livelihoods;</p>
Output 6.6.1.3: Gender perspectives in research and policy enhanced and reinforced through knowledge sharing and dissemination	
Scientific and policy materials, mentoring, strategic interactions	<p>Gender strategy completed and approved;</p> <p>Gender strategy--abbreviated version--completed;</p> <p>Framework for analyzing gender completed and published as CIFOR occasional paper;</p> <p>Review of gender methods published in Forest, Trees and Livelihoods;</p> <p>Infobrief on gender and migration published;</p> <p>Gender factsheet for policy makers completed;</p> <p>Workshop on gender and tenure in Latin America held;</p> <p>Two gender panels (8 paper presentations) at the International Association for the Study of the Commons meeting in Fujioshida, Japan;</p> <p>Polex on gender, forests and participation published;</p> <p>Gender FTA newsletter published</p> <p>6 Blogs on gender published</p>
Theme: Sentinel landscape	
Outcome 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	
Inventory of candidate sites with legacy data and information about availability and accessibility of data and link to CRP6 component questions	<p>Nicaragua/Honduras:</p> <ul style="list-style-type: none"> - 18 legacy data sets compiled and archived http://thedata.harvard.edu/dvn/dv/N-H-SL - 126 spatial datasets compiled and archived http://thedata.harvard.edu/dvn/dv/SL - 4 sentinel sites selected for implementation of core methodology: El Tuma (Nicaragua), Columbus (Nicaragua), Catacamas (Honduras), Sico (Honduras) <p>WASL</p> <ul style="list-style-type: none"> - Database of ongoing projects including descriptors, outcomes, contact persons and details and field sites compiled. - 4 sentinel sites selected for implementation of core methodology: Koungoussi (Burkina Faso); Cassou (Burkina Faso); Walembale (Ghana); Bwaku (Ghana) <p>TmFO:</p> <ul style="list-style-type: none"> - TmFO currently comprises 24 experimental sites located in 9 countries across three main regions (Figure 1, Appendix 1): 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 (Figure 1, Appendix 1). <p>Mekong:</p>

	<ul style="list-style-type: none"> - 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 <p>IMSAO:</p> <ul style="list-style-type: none"> - 4 regions in the Western Amazon identified, across Peru, Bolivia and Brazil , boundaries of SL confirmed - Four sentinel sites selected: Peru: Ucayali, Madre de Dios; Bolivia: Pando, Brazil: Acre - 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. <p>CAFHUT:</p> <ul style="list-style-type: none"> - Final boundary of the SL has been agreed - Proposed sentinel sites visited and ranked by the team; four final sentinel sites selected Bokito (Cameroon), Ayos (Cameroon), Lomie/Kongo and Mintom (Cameroon) <p>Western Ghats</p> <ul style="list-style-type: none"> - Database on trees in agroforestry systems (CIRAD) has been archived and shared on Dataverse - List of available datasets compiled - Final SL boundary confirmed and 4 sentinel sites selected with partners (Kodagu, BRT Hills, Nilgiris and Waynad) <p>Oil Palm</p> <ul style="list-style-type: none"> - 7 focal countries selected: Indonesia; Malaysia, Cameroon, Nigeria, Colombia, Peru, Brazil. <p>Central Asia</p> <ul style="list-style-type: none"> - Boundary of proposed SL has been agreed - Available digitized data identified and/or assembled
Output 6.7.1.2: Platform for data archiving and data sharing provided and necessary policies and guidelines in place	
Development of Protocols and guidelines for Data archiving	<p>Method Group:</p> <ul style="list-style-type: none"> - Development of a spatial data storage and sharing platform, which went live in March in 2013 and has been used by all SL teams to upload and share existing spatial data layers for their landscapes, including meta-data information. - 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 (see 3) of the GeoPortal is rolled out in January, 2014. - 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

	<p>enable SL teams to conduct analysis of land health indices online tools</p> <p>Nicaragua/Honduras:</p> <ul style="list-style-type: none"> - Data sharing guidelines for legacy Data in progress <p>TmFO:</p> <ul style="list-style-type: none"> - 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. <p>Western Ghats</p> <ul style="list-style-type: none"> - 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	<p>Method Group:</p> <ul style="list-style-type: none"> - Teams in Nicaragua/Honduras and BurkinaFaso/Mali provided with CSPro data entry forms - Backstopping on data entry provided to Teams in Nicaragua/Honduras and BurkinaFaso/Mali - Quick user guide on CSPro translated into Spanish (Jenny Ordóñez) - Mobile data entry forms developed (Cybertracker and ODK) and shared with WASL team - 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 CAFHUT - http://dx.doi.org/10.7910/DVN/24137 Western Amazon - http://dx.doi.org/10.7910/DVN/24136 Mekong - http://dx.doi.org/10.7910/DVN/24135 Borneo/Sumatra - http://dx.doi.org/10.7910/DVN/24134
Output 6.7.1.3: Produce a data set that will be widely used and referred to by both donors and partners	
Partner engagement	<p>Method Group:</p> <ul style="list-style-type: none"> - Partners were engaged and trained in the biophysical field (LDSF) methodology. In the Nicaragua-Honduras Sentinel Landscape: CATIE, National Agricultural University (UNA) in Catacamas, Foundation of Madera Verde (FMV) in La Ceiba, Institute of Forest Conservation (ICF) in Tegucigalpa. - 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),.

- MOU established with University of Witswatersrand and Agincourt Wits Rural Facility.

- 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:

- Since 2012 various regional partners have been engaged in the sentinel landscape initiative these are for Nicaragua: Ministerio de Ambiente Recursos Naturales; Universidad Nacional Agraria; Fundacion Madre Tierra; Instituto Tecnico de Waslala; Ministerio de Agricultura Ganaderia y Forestal, Secretaria Tecnica de Bosawas, Universidad Centroamericana, Instituto de Investigacion y Desarrollo Nitlapan, Universidad Nacional de Ingenieria, Universidad de las Regiones Autonomas de la Costa Caribe Nicaraguense and Honduras: Instituto de Conservacion Forestal, Universidad Nacional Agraria Honduras, Sercretaria de Ambiente y Recursos Naturales, Secretaria de Agricultura y Ganaderia

- A total of 12 Non-CGIAR organizations are actively involved in site selection and data collection: Jaime Peralta, Fundacion Maderaverde, jae_peralta@yahoo.com.mx; Melvin Cruz, Fundacion Maderaverde, melendezcruz@gmail.com; Kenny Najera, UNA-Honduras, knajeraaparicio@yahoo.com; Ceferino Wilson White, UCA-Nitlapan, cefewilson@gmail.com; Francisco Perez, UNAN-Managua, fipsjino@gmail.com; Bismarck Lee, URACCAN las Minas, bismarckleeleon@yahoo.com; Sandrine Freguin-Gresh, CIRAD/ UCA-Nitlapan, freguin@cirad.fr; Miguel Mendieta, ICF mr.mendieta@gmail.com; Yadir Meza, MARENA-SETAB, aymv3@yahoo.com; Angel Barcenas, GIZ- Honduras, angel.barcenas@giz.de; Leonardo Garcia, UNA, leogarciah@gmail.com; Frederic Huybrechs, Univ Amberes, Frederic.Huybrechs@ua.ac.be

WASL

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

- Strategic planning workshop on the West Africa sentinel landscape 7th - 9th January 2013, Ouagadougou, Joly hotel. SE/CILSS, UPS ACCRA, ICRISAT, DIFOR, CPWF/IWMI, SP/CONEDD, PNGT2, UFR/SVT, GRAF, Universite de Kara Togo, DGSCN TOGO, CNSF/DEF TOGO, TREE AID, ICRISAT/CCAFS, INERA, USAID WA-WASH, CERGIS UNIV GHANA, INSD, ITRA- Togo, IPR/IFRA, DNEF/MEA, IWMI, WASCAL, ICRISAT-NIGER, TIIPAALGA, CIFOR, METEO TOGO, IER MALI, BIOVERSITY, CARE USAID WA WASH, GHANA STATISTICAL SERVICE, ICRAF MALI, TREE AID, CNSF, UNIVERSITE OUAGA, DG METEO, RFGI, IGB

- 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.

TmFO

- annual workshops organized in Manaus, 3-9 June 2013 (20 participants)

- annual workshops organized in Bogor 28-29 November 2013 Bogor (11 participants)

IMSAO:

- Partners for the Peru sites have been identified but local teams have to be formed. MOU with IIAP is underway

- For Bolivia collaboration with the IFRI network underway

- Brazil discussions with potential partners still ongoing

- Strong collaboration with FTA Component 3 on Certification study

- Review of methodology for Institutional Mapping in collaboration with Tanya Hayes of Seattle University

- Regional workshop held in Lima, 13-14 NOVEMBER 2013: Instituto Nacional de Investigacion Agraria - INIA (Eloy Cuellar, Ymber Flores); Instituto del Bien Comun - IBC (Antonio Gonzales); Universidad Nacional de Ucayali - UNU (Jorge Vela); Instituto de Investigacion de la Amazonia Peruana - IIAP (Diego Garcia, Ronald Corvera, Roger Escobedo); Seattle University (Tanya Hayes); IFRI Bolivia (Jean Paul Benavides); CIAT (Glenn Hyman, Rolf Wachholtz); ICRAF (Jonathan Cornelius, Valentina Robiglio, Martin Reyes); CIFOR (Peter Cronkleton, Anne Larson, Aswhin Ravikumar); Sociedad Peruana de Derecho Ambiental - SPDA (Jean Araujo)

	<p>CAFHUT:</p> <ul style="list-style-type: none"> - Discussions with IRD underway to develop a add on health module - 2 teams meetings held in November 2013 to discuss workplans for 2014 <p>Mekong:</p> <ul style="list-style-type: none"> - 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, kdhhyde3@gmail.com) - Regional workshop held 8-12 April 2013 to review the current and planned projects in the landscape and to discuss how to link SL initiative to pertinent questions for the region. Participating partners: ICRAF, China (Rhett Harrison, r.harrison@cgiar.org); CIFOR, Indonesia (Aaron Russel, A.RUSSELL@CGIAR.ORG); CIAT, Laos (Keith Farhney, k.fahrney@cgiar.org); RECROFT (David Gritten, david.gritten@recoftc.org); National University of Laos (Sithong Thongmanivong, sithongth@hotmail.com); Yunnan Institute of Environmental Science (Zhaoqing Li, 706665597@qq.com) <p>Western Ghats:</p> <ul style="list-style-type: none"> - Scientific board established among 9 partner members: ATREE(Ganesan Balachander, gbalachander@atree.org); ETH Zurich(Claude Garcia, claud.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), - The WGSL held its annual workshop on September 27, 2013, at the ATREE offices in Bangalore. It gathered 25 persons from all the partners involved. <p>Oil Palm:</p> <ul style="list-style-type: none"> - Regional Workshop to discuss research progress, synthesis and next steps held Bogor, September 30th 2013 as part of the theme 5 Annual Retreat. <p>Central Asia:</p> <ul style="list-style-type: none"> - 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. - Interested in testing and using add on module for Biodiversity
<p>Interdisciplinary regional teams formed to conduct a meta-analysis across sites</p>	<p>TmFO:</p> <p>Three regional teams involving 17 partners</p> <ul style="list-style-type: none"> - 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) ;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

	<p>,Iwokrama ,Iwokrama ,Guyana;</p> <p>- 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 Djuliawati ,Konservasi & Litbang (pak Budhi) ,Indonesia (Central Kalimantan) ;Abd. Rahman Kassim,Tekam ,FRIM ,Malaysia ;Mohd Nor ,Lesong,FRIM ,Malaysia ;,Semangkok ,FRIM ,Malaysia;;</p> <p>- 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;</p> <p>Nicacargua/Honduras:</p> <p>- For the implementation of SL baseline CATIE is working with Fundacion Maderaverde 2, Universidad Nacional Agraria Honduras and Universidad Nacional Agraria Nicaragua Honduras, Universidad de las Regiones Autonomas de la Costa Caribe Nicaraguense for field data collection and processing of soil samples.</p> <p>- For the implementation of the institutional mapping, CIRAD, Nitlapan and CATIE-Honduras have developed a pluri-disciplinary approach within a team formed with agro-economists, foresters, and sociologists.</p> <p>Oil Palm:</p> <p>- 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.</p>
Proof of concept for various methodologies	<p>Method Group:</p> <p>- Two peer-reviewed publications using data collected in the LDSF were published in 2013. Vagen, T-G., Winowiecki, L.A., Abegaz, A., and K.M. Hadgu. 2013. Landsat-based approaches for mapping of land degradation prevalence and soil functional properties in Ethiopia. Remote Sensing of Environment. 134. 266-275; Vagen, T-G. and L.A. Winowiecki. 2013. Mapping of soil organic carbon stocks for spatially explicit assessments of climate change mitigation potential. Env. Res. Let. Online at stacks.iop.org/ERL/8/015011.</p> <p>- New version of LDSF methodology tested in ACIAR funded Trees for Food security project http://worldagroforestry.org/project/aciar</p> <p>- Household modules tested in in ACIAR funded Trees for Food security project http://worldagroforestry.org/project/aciar</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</p>

	and administrative districts within it.
Meta-analysis	<p>TmFO:</p> <ul style="list-style-type: none"> - 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>WASL:</p> <ul style="list-style-type: none"> - 4 persons from CIFOR (Burkina Faso), ICRAF-WCA (Mali), INERA - DPF (Burkina Faso) and BERACIL (Burkina Faso) were trained for the Village baseline surveys. - Village level Baselines completed in 28 villages in Burkina including 10 in Coungoussi site and 18 in Cassou site. - Across the 28 villages sampled, a total of 1,112 questionnaires were filled out representing five survey tools: Association Form (32 questionnaires), Forest Form (28), Product Form (84), Settlement Form (28), and Poverty Form (938). - All data has been entered once in Excel and 20% re-entered in CSPRO. The data in Excel will be imported into CSPRO in order to compare and eliminate errors. - Village level surveys in Tumu and Bawku (Ghana) as well as Household Surveys in all Burkina and Ghana Sites will be conducted between March and May 2014. - 3 persons from ICRAF - WCA (Mali), INERA - DPF (Burkina Faso) and IER (Mali) were trained for the LDSF surveys. - 750 Soil samples were collected from 16 Clusters and transferred to Bamako for processing before being sent to the ICRAF soil spectral lab in Nairobi. Other data has been entered. - LDSF surveys in Kongoussi (Burkina Faso), Tumu and Bawku (Ghana) will be completed between March and May 2014 <p>Nicaragua/Honduras:</p> <ul style="list-style-type: none"> - 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 applied 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.

	<p>Western Ghats:</p> <ul style="list-style-type: none"> - Report on training is shared here: http://www.cifor.org/fileadmin/subsites/sentinel-landscapes/document/CRP6_2013_Trip_Report_Western_Ghats_Sentinel_Landscape.pdf <p>Oil Palm:</p> <ul style="list-style-type: none"> - 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.
<p>Development of Protocols for sufficient standardization of data collection and analysis methods across sites</p>	<p>Method Group:</p> <ul style="list-style-type: none"> - 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 - Standard Operating Procedure for soil processing developed - Standardized analysis for soil parameters developed - Household survey tool developed available at: http://www.cifor.org/fileadmin/subsites/sentinel-landscapes/document/SL_Household_Module.pdf - Protocol for to assess social mobility developed http://www.cifor.org/fileadmin/subsites/sentinel-landscapes/document/Stages_of_Poverty.pdf - Models developed for derive indices on land degradation (surface wetness, erosion, fertility) - 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>TmFo:</p> <ul style="list-style-type: none"> - Protocol for data analysis on the impact of logging on biomass recovery in the Amazon Basin produced and shared within Team; - Protocol for data analysis on the impact of logging on biodiversity in the Amazon Basin produced and shared within Team; - Protocol for data analysis on the impact of logging on biomass and timber volume in SE Asia in preparation; - Protocol for data analysis on the impact of logging on biodiversity in SE Asia in preparation <p>WASL:</p> <ul style="list-style-type: none"> - Tool for Stages of Poverty Survey developed. <p>Western Ghats:</p> <ul style="list-style-type: none"> - Protocol for Institutional Mapping proposed.
<p>Output 6.7.1.4: Communication and information flow between all CRP6 scientists with respect to sentinel landscapes establishes</p>	

Presentations & Communication	<p>Method Group:</p> <ul style="list-style-type: none"> - Sentinel landscape webpage launched: http://www.cifor.org/forests-trees-agroforestry/sentinel-landscapes/home.html - 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 - Sentinel landscape initiative presented as promising practice and lesson learned showcase at Consortium Knowledge Management Workshop, Bioersity Rome, ppt available at https://docs.google.com/file/d/0B3fRBYVceZzic3M4VXhQRjVVTfU/edit?pli=1 - Sentinel landscape initiative presented at Cross CRP meeting in Bonn, - Presentation of the sentinel landscape initiative at the Inception workshop of the DIFID funded Agrarian Change Project, Bogor March 17th <p>Nicaragua/Honduras:</p> <ul style="list-style-type: none"> - 13 presentations have been given by different members of the N-H-SL team, to communicate about the initiative to local partners and international organizations. See - 2 short reports (news brief) of how work is advancing in the N-H-SL have been shared with local partners, international organizations and other CG centers working in the area, through email. <p>TmFo:</p> <ul style="list-style-type: none"> - Webpage launched: http://www.tmfo.org
Workshop	<ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> 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 Carbone 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 1-2July. 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) - Method workshop Burkina Faso Ouagadougou, Joly hotel 17th to 20th January 2013

Theme: Communication		
Outcome 6.8.1: Create an integrated communication program across all centers to maximize impact of CRP6 outputs		
Output 6.8.1.1: Create a strong and dynamic online presence for CRP6		
CGIAR.org: Creation and regular updating of CRP6 webpage on cgiar.org		In 2012, CRP6 Communication Support Unit (CSU) liaised with the CGIAR Consortium Office to create a CRP6 page on CGIAR.org: http://www.cgiar.org/our-research/cgiar-research-programs/cgiar-research-program-on-forests-trees-and-agroforestry/ Site is updated regularly with new information pertaining to CRP6, including press releases and blogs.
Center websites: Creation and regular updating of CRP6 web pages on websites of CIFOR, ICRAF, Bioversity and CIAT		CSU: In order to raise the profile and strengthen the identity of CRP-FTA, a new self-standing website (outside the umbrella of CGIAR.org or center websites) was created to serve as a hub for all CRP6 news and research. The new site launched in February 2014: http://www.foreststreesagroforestry.org The new site is bring populated with content and curated by focal points from each of the FTA centers.
Output 6.8.1.2: Create cutting-edge publications to maximize impact of CRP6 research findings		
Publications: Provide editing, design, layout and printing support		In the last six months of 2013, CIFOR produced 9 occasional papers, 11 working papers, 11 books, 10 policy briefs and factsheets, 89 ISI journal articles, and 18 non-ISI articles. In 2013, Bioversity International produced a total of 37 outputs (8 factsheets, 2 conference papers, 4 book chapters, 23 peer-reviewed journal articles, 1 working paper and 7 webpages on revamped institutional website). Bioversity's 2012 Annual Report (published as a pdf and as an interactive minisite) contained three stories about CRP-FTA projects. In the first six months of 2013, the World Agroforestry Centre published 43 ISI journal articles, 2 book chapters, 4 conference papers and 3 working papers. CIAT published 6 ISI journal articles and 11 non-ISI articles about CRP-FTA work.
Output 6.8.1.3: Market CRP6 outputs to key stakeholders		
Blogs: Articles will be written and posted on centers' blogs to promote key policy messages from CRP6 outputs		CIFOR posted 104 blogs in English, all of which were related to CRP6. The blogs continued to have a wide reach: A DFID report on gender referenced two CIFOR blogs. A photo gallery posted by New Agriculturist in June used as its topic a CIFOR blog as well as CIFOR's accompanying photos. A blog on tree plantations was reprinted in March in The Forestry Source, the monthly newspaper of the Society of American Foresters. Finally, a blog and multimedia package released by CIFOR on Javan leopards in an Indonesian national park was an extremely popular story. The CIFOR-produced video for this blog has been viewed more than 200,000 times since its release in May. Bioversity International posted 7 web stories (out of which 3 were blog posts and published on blog.cifor.org for the 'Forests for Food Security and Nutrition' conference), including 3 video stories, related to CRP-FTA work and research. ICRAF posted 84 blog stories (http://blog.worldagroforestry.org/), 31 feature articles and 255 "Agroforestry News" posts on its website. CIAT published three blog posts related to its CRP-FTA work.
Media: Make use of mainstream media to promote awareness of key messages stemming from CRP6 research		CIFOR issued five press releases in the last six months of 2013. Highlights include the signing of a research partnership with the Government of Peru and the outcomes of the two-day Global Landscapes Forum (formerly Forest Day), alongside the UN climate talks. CIFOR's work on CRP-FTA issues was cited 661 times in mainstream media outlets in the last six months of 2013, including the Guardian, the Wall Street Journal, the Financial Times, Kompas (Indonesia), Reuters AlertNet, among others. Highlights of stories and interviews with Bioversity International scientists include stories in La Nacion (print), The Independent, BBC Food and Environment, Thomson Reuters, and The Guardian. World Agroforestry Centre engaged with the media through press releases, events and interview opportunities for journalists, with features on, for example, the smoke haze in Singapore, in Singapore's Straits Times, which was published in over 15 other news outlets. Nature's Middle East blog, the UK's Guardian Development blog, Reuters AlertNet, Science magazine, and Irish Radio One all covered aspects of ICRAF's work.

Other social media: Centers will make full use of other social media tools to promote awareness of CRP6 outputs	<p>CIFOR expanded its use of social media to promote CRP6 outputs. In the second half of 2013, the number of followers of CIFOR's four news feeds on Facebook (English, Spanish, French and Indonesian) reached 11,993, up from 9,346 since June 2013, an increase of 28% in six months. The number of followers of CIFOR's four Twitter feeds (English, Spanish, French and Indonesian) reached 14,897, up from 11,809 since June 2013, and increase of 26% in six months. In addition, CIFOR uploaded more than 100 PowerPoint presentations on SlideShare in the second half of 2013, with more than 56,000 views during that time. Bioversity social media followers and engagement almost tripled in 2013: Facebook fans grew from 1797 to 4235 in 2013, and Twitter followers from 1491 to 5137; YouTube videos related to CRP-FTA were seen by more than 600 unique viewers. As of 2013, Bioversity's YouTube channel has 184 subscribers and the channel's videos have been seen 31,123 times. CRP-FTA related presentations on SlideShare got 1,100 views (the presentation on Sentinel Landscapes reached 980 viewers). A CRP-FTA related photo set published on Flickr in late 2013 got 75 views. ICRAF's following on social media continued to grow during the first half of 2013. By December 2013, ICRAF had 8,500 followers on Twitter (up from 6,349 in June), 5,473 friends on Facebook (up from 4,200). CIAT promoted awareness of Terra-i through various social media. The Center's Facebook followers grew to 3,223 - nearly double that from a year earlier - while its Twitter followers reached 6,425 by the end of 2013. CIAT's cumulative total number of Flickr views surpassed the 1 million mark in 2013, up from 750,000.</p>
CRP6 Events:	<p>The centers participated jointly in conferences and workshops, including the Global Landscapes Forum in Warsaw in November and the ESP Conference in Bali in August. CIFOR distributed CRP6 publications at the above conferences and more than 20 others in the second half of 2013, distributing more than 10,000 publications. Bioversity connected with CRP-FTA colleagues about event opportunities. A communications person/blogger was sent to blog and tweet from the Global Landscapes Forum. ICRAF had CRP-FTA work represented at 10 major meetings, with a total attendance of 31,000 people. Booths at these conferences distributed approximately 5,000 publications and DVDs of relevant material. CIAT provided communications support for CGIAR events held in connection with the Global Landscapes Forum. CIAT's Terra-i team received the 2013 GeoSUR Award during the Sixth Meeting of the Geospatial Network of Latin America and the Caribbean, held in late November at Montevideo, Uruguay. Terra-i was presented at the 33rd ESRI User Conference and 16th Annual Conference of the Society for Conservation GIS, both held during July in California, USA.</p>
CRP6 Publication downloads & other distribution	<p>CIFOR tallied more than 400,000 publication downloads during the first half of 2013.</p>
CRP6 Stakeholder database	<p>CRP6 stakeholder database created and continually increased, now at 432 stakeholders.</p>
Output 6.8.1.4: Promote CRP6 internal communications to maximize synergies	
Branding guidelines: Established & disseminated	<p>Branding guidelines established and posted online at http://library.cgiar.org/bitstream/handle/10947/2699/CGIAR_Branding_Guidelines_and_Toolkit.pdf?sequence=1</p>
Communications Calendar: Creation & maintenance of a CRP6 communications calendar	<p>Calendar listing all planned communications support for CRP6 outputs and activities in 2013 was produced, hosted on Google Docs and shared among communication focal points.</p>
Theme: Monitoring, evaluation and impact assessment	
Outcome 6.9.1: An impact-oriented learning culture in CRP6 that contributes to demonstrably cost effective research	
Output 6.9.1.1: Efficient project/program planning and reporting tools developed and implemented	
Online Operational Planning tool operational	<p>Developed, used for 2014 Operational Planning</p>
Online reporting tool operational	<p>Developed and in use</p>
Annual report demonstrates progress towards outcomes	<p>2012 Annual report developed and accepted by CO, some progress to be made with regard to reporting against indicators</p>

Output 6.9.1.2: Appropriate tools, methods and approaches developed and adopted for monitoring and evaluating CRP6 research		
LAMIL impact assessment study completed		LAMIL assessment now expected for completion in 2014
Congo basin study commissioned		Study commissioned, results expected mid 2014
Component level evaluation commissioned		Evaluation of Theme 2 commissioned and completed in 2013
MEIA training		6 Outcome mapping training/planning sessions implemented in 2013.
Output 6.9.1.3: Ex ante impact assessment/priority assessment		
Framework developed for ex ante impact assessment		This did not progress in 2013.

Annex 3 Publications

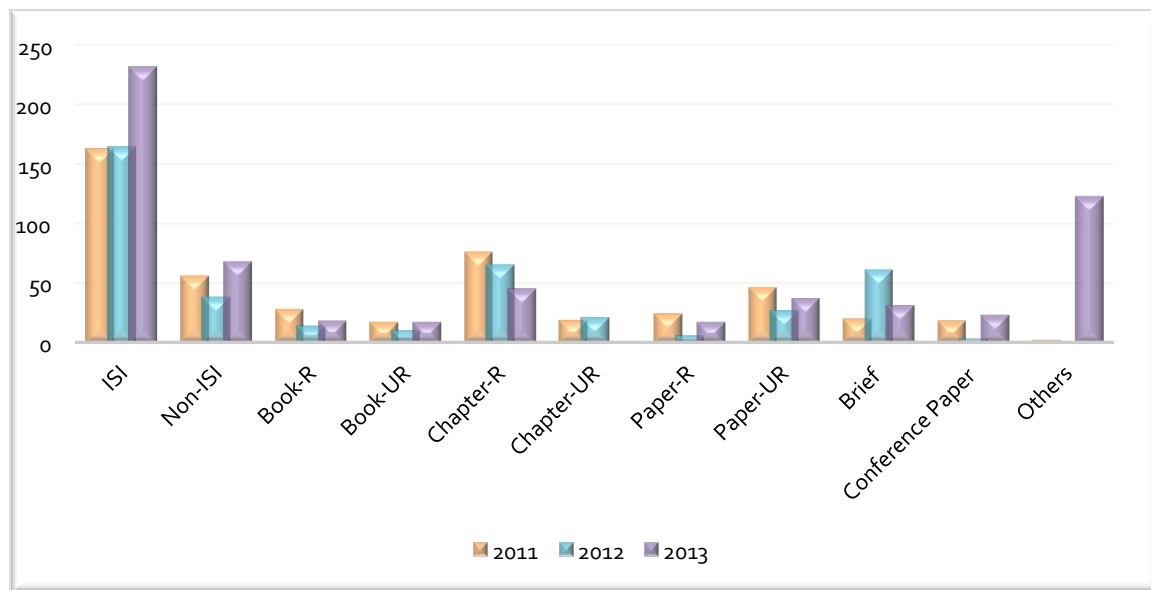
A full list of 2013 ISI publications is available from:

<https://dl.dropboxusercontent.com/u/19137705/FTA%20AR%202013%20Annex%203.xlsx>

FTA publications

2011-2013

Type	2011	2012	2013
ISI	163	164	231
Non-ISI	57	39	69
Book-R	29	15	19
Book-UR	18	11	18
Chapter-R	77	66	46
Chapter-UR	20	22	2
Paper-R	25	7	18
Paper-UR	47	28	38
Brief	21	62	32
Conference Paper	19	4	24
Others	3	0	123
Total	471	402	497



Annex 4: Gender-relevant outputs

JOURNAL ARTICLES

Forests, food security and gender: linkages, disparities and priorities for action. Background paper for the International Conference on Forests for Food Security and Nutrition, FAO, Rome, 13–15 May, 2013, by Francesca Guarascio, Nandini Gunewardena, Christine Holding, Susan Kaaria and Libor Stloukal, in close collaboration with Bimbika Bassnet, Carol Colfer, Esther Mwangi, Bronwen Powell, Sheona Shackleton, and Anne Degrande [converted into a shorter article for FAO's *UnaSylva* (7 June 2013)].

Adanech Asfaw, Mulugeta Lemenih, Habtemariam Kassa^c, Zeleke Ewnetu. 2013. Importance, determinants and gender dimensions of forest income in eastern highlands of Ethiopia: The case of communities around Jelo Afromontane forest. *Forest Policy and Economics* (28): 1–7. <http://dx.doi.org/10.1016/j.forpol.2013.01.005>

Bose, P. (2013) Individual Tenure Rights, Citizenship and Conflicts: Outcomes from Tribal India's Forest Governance. *Forest Policy and Economics*, 33: 71-79.

Carol J. Pierce Colfer and Rebakah Daro Minarchek. 2012. Forest research and gender: a review of available methods for promoting equity. *Forests, Trees and Livelihoods*, 21:4, 221-240, DOI: 10.1080/14728028.2012.761011

Carol J. Pierce Colfer, Ramadhani Achdiawan, Hasantoha Adnan, Erni, E., Linda Yuliani, Balang & LepMil. 2013. Gender and natural resource governance indicators: a need to assess and address 'sensitive and taboo' topics, *Forests, Trees and Livelihoods*, 22:3, 143-155, DOI: 10.1080/14728028.2013.807143

Colfer, C. J. P.; Minarchek, R.D, 2013. The gender box: A framework for analysing gender roles in forest management. *International Forestry Review* 15 (4): *-*. <http://www.cifor.org/online-library/browse/view-publication/publication/4303.html>

Eric Coleman and Esther Mwangi. 2013. Women's participation in forest management: A cross-country analysis. *Global Environmental Change* 23 (1): 193-205. 10.1016/j.gloenvcha.2012.10.005

Mariève Pouliot and Marlène Elias. 2013. To process or not to process? Factors enabling and constraining shea butter production and income in Burkina Faso. *Geoforum* (50): 211–220. <http://dx.doi.org/10.1016/j.geoforum.2013.09.014>

CENTER PUBLICATIONS

Dewi S, Janudianto and Martini E. 2013. Gender perspectives in selecting tree species (G-TreeFarm). In: van Noordwijk M, Lusiana B, Leimona B, Dewi S and Wulandari D, eds. Negotiation-support toolkit for learning landscapes. . Bogor, Indonesia. World Agroforestry Centre (ICRAF) Southeast Asia Regional Program. P. 69-74

Leimona B, Amanah S, Pasha R and Wijaya CI, eds. 2013. Gender dalam skema Imbal Jasa Lingkungan. Studi kasus di Singkarak, Sumberjaya, dan Sesaot. Bogor, Indonesia. World Agroforestry Centre (ICRAF) Southeast Asia Regional Program. 86 p.

Mulyoutami E, Catacutan D, Martini E, Khususiyah N, Janudianto, Villamor GB and van Noordwijk M. 2013. Gender roles in land use and value chains (GRoLUV). In: van Noordwijk M, Lusiana B, Leimona B, Dewi S and Wulandari D, eds. Negotiation-support toolkit for learning landscapes. . Bogor, Indonesia. World Agroforestry Centre (ICRAF) Southeast Asia Regional Program. P. 55-60

Mulyoutami E. 2013. ICRAF dalam Pengembangan Agroforestri Berwawasan Gender (ICRAF's involvement in Gendered Agroforestry Development) in Rahayu S, Juita R, Wijaya CI. Kiprah Agroforestri Volume 6 no 1 April 2013. ICRAF Southeast Asia

Mulyoutami E. 2013. Gender dan Pengelolaan Lahan (Gender and Land Management) in Rahayu S, Widayati A, Wijaya CI. Kiprah Agroforestri Volume 6 no 2 Agustus 2013. ICRAF Southeast Asia

Mulyoutami E, Martini E, Khususiyah N, Isnurdiansyah, Suyanto S. 2013. Agroforestry and forestry in Sulawesi series: Gender, Livelihood and Land in South Sulawesi and Southeast Sulawesi. ICRAF Working Paper 167:78 p

Mulyoutami, E;Martini, E;Khususiyah, N;Isnurdiansyah;Suyanto S. 2013. Seri Agroforestri dan Kehutanan di Sulawesi: Gender, Mata pencarian dan Lahan di Sulawesi Selatan dan Sulawesi Tenggara. ICRAF Working Paper 158:78 p

Women's empowerment in Kenya: Trading fuel briquettes By: Njenga, M2013.
http://www.worldagroforestry.org/our_products/publications/details?node=54257

van Noordwijk M, Mulia R and Dewi S. 2013. Ecological corridors (ECor): a distributed population model with gender specificity. In: van Noordwijk M, Lusiana B, Leimona B, Dewi S and Wulandari D,eds. Negotiation-support toolkit for learning landscapes. . Bogor, Indonesia. World Agroforestry Centre (ICRAF) Southeast Asia Regional Program. P. 194-196

Villamor GB, Desrianti F, Akiefnawati R, Amaruzaman S and van Noordwijk M. 2013. Gender influences decisions to change land use practices in the tropical forest margins of Jambi, Indonesia. Mitigation and Adaptation Strategies for Global Change. . : P. 1-23.

BOOK CHAPTERS

Carney, J. and Elias, M. 2013. Gendered Knowledge and the African Shea Nut Tree, In: Hecht, S., Morrison, K., and Padoch, C. (eds.) *The Social Lives of Forests* London and Chicago: The University of Chicago Press.

POLICY BRIEFS

Gender and forestry in Uganda: policy, legal and institutional frameworks. CIFOR infobrief. Concepta Mukasa, Alice Tibazalika, Alice Mango and Harriet Nabirye Muloki. 2013.

http://www.cifor.org/publications/pdf_files/infobrief/3855-infobrief.pdf

Bimbika Bassnett. 2013. Taking migration seriously: What are the implications for gender and community forestry?
http://www.cifor.org/publications/pdf_files/infobrief/4183-infobrief.pdf

Factsheet: Gender analysis in forestry research, What policymakers should know:

http://www.cifor.org/online-library/browse/view-publication/publication/4057.html?utm_source=July+2013&utm_campaign=GENDER+NEWSLETTER&utm_medium=website

TOOLS

Gender in the CGIAR Research Program on Forests, Trees and Agroforestry: A strategy for research and action
Center for International Forestry Research (CIFOR) Bogor, Indonesia
http://www.cifor.org/publications/pdf_files/Books/BCIFOR1303.pdf

At a glance: Gender strategy for the CGIAR Research Program on Forests, Trees and Agroforestry
http://www.cifor.org/publications/pdf_files/Books/BCIFOR1303/EnglishSummary.pdf

Practical tips for conducting gender-responsive data collection

http://www.biodiversityinternational.org/e-library/publications/detail/practical-tips-for-conducting-gender-responsive-data-collection/?utm_source=December+2013&utm_campaign=GENDER+NEWSLETTER&utm_medium=website

Tips for asking gender-responsive questions

http://www.bioversityinternational.org/e-library/publications/detail/tips-for-asking-gender-responsive-questions/?utm_source=December+2013&utm_campaign=GENDER+NEWSLETTER&utm_medium=website

Proposal Development Guidelines for Integrating Gender: Does your proposal demonstrate appropriate attention to gender issues?

<http://www.cifor.org/online-library/browse/view-publication/publication/4155.html>

Proposal Assessment Tool on Gender for Managers or Reviewers: Has this proposal demonstrated appropriate attention to gender issues?

<http://www.cifor.org/online-library/browse/view-publication/publication/4155.html>

WORKSHOP REPORTS

Bose, P., and van Dijk, H. (2013) Gendered Access to Forests and Small-holders in Latin America. Workshop report. CIAT, Colombia

Bimbika Bassnet (with Marlene Elias and Esther Mwangi). 2013. Integrating gender into the Sentinel Landscapes Research Protocol: A Review of IFRI Household survey, village survey, and 'Stages of progress methodology.

Deborah Rubin, (with Bimbika Bassnet, Esther Mwangi, Marlene Elias and Purabi Bose). 2013. Proceedings of Workshop on Integrating Gender into Sentinel Landscapes Research, July 1-2 2013.

Bimbika Bassnet (with Esther Mwangi, Marlene Elias and Delia Catacutan). 2013. Proceedings of Workshop on Gender and Value Chains in CRP FTA, October 14-15, 2013.

BLOGS

Can rural women also have it all? Why the voices of “elite women” are important for the truly oppressed?

Carol J. Pierce Colfer

<http://blog.cifor.org/15223/can-rural-women-also-have-it-all-voices-of-elite-women-important-for-truly-oppressed#.UyUd8uf-LmQ>

Basnett, Bimbika Sijapat and CJP Colfer, “Are women ‘victims’ of climate change?” Published on line on November 19, 2013, on CIFOR’s ForestsClimateChange.org <http://www.forestclimatechange.org/women-victims-climate-change/>

More power for women in Kenya to tackle climate change (news story reposted on ICRAF website) Kate Langford
http://www.worldagroforestrycentre.org/newsroom/media_coverage/more-power-women-kenya-tackle-climate-change

Edible vine improves women’s livelihoods in Cameroon

Yvonne Kiki Nchanji, Patrice Levang and Abdon Awono

http://blog.cifor.org/19286/edible-vine-improves-womens-livelihoods-in-cameroon?utm_source=December+2013&utm_campaign=GENDER+NEWSLETTER&utm_medium=website#.UwbD9uf-LIU

Why don’t women participate in forest governance and what difference will their participation make?

Bimbika Bassnett

http://blog.cifor.org/18776/why-dont-women-participate-in-forest-governance-and-what-difference-will-their-participation-make?utm_source=December%202013&utm_campaign=GENDER%20NEWSLETTER&utm_medium=website#.UwbI9-f-LIU

Farmer urges range of measures to aid women battling climate change

<http://blog.cifor.org/20846/farmer-urges-range-of-measures-to-aid-women-battling-climate-change#.UwbJ--f-LIV>

Time to ‘connect the dots’ among gender, forests, REDD+, experts say
<http://blog.cifor.org/20746/time-to-connect-the-dots-among-gender-forests-redd-experts-say#.UwbKVuf-LIV>

Toss clichés aside and consider gender in ‘landscape’ context — expert
<http://blog.cifor.org/20697/toss-cliches-aside-and-consider-gender-in-landscape-context-expert#.UwbM9ef-LIU>

Gendered access to trees and forests in Uganda and India
<http://dapa.ciat.cgiar.org/gendered-access-to-trees-and-forests-in-uganda-and-india/>

Forests for people
<http://dapa.ciat.cgiar.org/forests-for-people/>

NEWSLETTERS

Issue 1: http://www.cifor.org/fileadmin/subsites/CRP/newsletter/news_update_july_FTA.html

Issue 2: http://www.cifor.org/fileadmin/subsites/CRP/newsletter/news_update_December_FTA.html

WEBSITE

Gender-responsive forestry research:
Available at: <http://www.biodiversityinternational.org/research-portfolio/forest-tree-genetic-diversity/gender-responsive-forestry-research/?L=0>

INDEX

CRP 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	
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 <i>net</i> amount (i.e. expenses excluding CGIAR collaboration costs) which should be used as the total for L111 and L131
L131	CRP - Themes 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.
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

CRP No. 6 - Forest, Tree, Agroforestry

Period: 01/01/2013 - 12/31/2013

Amounts in USD (000's)

Cumulative Financial Summary



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					-					-	-	-	-	-	-
2. BIODIVERSITY	12,554	-	9,498		22,051	9,441	727	5,673	578	16,419	3,113	(727)	3,825	(578)	5,632
3. CIAT	706	-	1,839		2,544	581	-	1,761		2,342	124	-	78	-	202
4. CIFOR	32,413	-	55,929		88,342	32,646	8,533	40,715	576	82,470	(233)	(8,533)	15,214	(576)	5,872
5. CIMMYT					-					-	-	-	-	-	-
6. CIP					-					-	-	-	-	-	-
7. ICARDA					-					-	-	-	-	-	-
8. ICRAF	27,259	-	49,217		76,475	24,954		50,506	4,533	79,993	2,305	-	(1,290)	(4,533)	(3,518)
9. ICRISAT					-					-	-	-	-	-	-
10. IFPRI					-					-	-	-	-	-	-
11. IITA					-					-	-	-	-	-	-
12. ILRI					-					-	-	-	-	-	-
13. IRRI					-					-	-	-	-	-	-
14. IWMI					-					-	-	-	-	-	-
15. WORLD FISH					-					-	-	-	-	-	-
Total for CRP	72,930	-	116,482	-	189,412	67,622	9,260	98,655	5,687	181,224	5,308	(9,260)	17,827	(5,687)	8,188
	39%	0%	61%	0%	100%	37%	5%	54%	3%	100%	65%	-113%	218%	-69%	100%

CRP No. 6 - Forest, Tree, Agroforestry		Annual Funding			 <i>Science for a food secure future</i>
Period: 12/31/2013					
Amounts in USD (000's)					
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					
2013 Actual Funding					
		Windows 1&2	Window 3	Bilateral Funding	Total Funding
1	CGIAR Fund	27,259	-	-	27,259
2	Abt Associates INC.	-	-	257	257
3	ACIAR	-	-	1,614	1,614
4	ADB	-	-	1,650	1,650
5	AFESD	-	-	-	-
6	AgMIP	-	-	-	-
7	ASOHOFRUCOL	-	-	167	167
8	AusAID	-	2,748	-	2,748
9	Austria	-	307	-	307
10	Austrian Development Agency (ADA)	-	-	215	215
11	BACP	-	-	139	139
12	Bioforsk	-	-	-	-
13	Bioversity International	-	-	261	261
14	BMGF	-	-	-	-
15	Cameroon Ministry of Forestry and Wildlife	-	-	129	129
16	Canadian International Development Agency	-	-	1,600	1,600
17	Catholic Organization for Relief and Development Aid (CORDAID)	-	-	165	165
18	Chemonics International Inc.	-	-	53	53
19	China	-	-	57	57
20	COAGROPACIFICO	-	-	14	14
21	COLCIENCIAS	-	-	81	81
22	Common Market for East and Southern Africa	-	-	158	158
23	CONL	-	-	-	-
24	Cooperation of Common Fund for Commodities	-	-	470	470
25	CRS	-	-	-	-
26	Danish International Development Agency	-	-	303	303
27	Env. C.	-	-	-	-
28	European Commission (EC)	-	-	4,702	4,702
29	FAO	-	-	-	-
30	Federal Office for Environment (Switzerland-FOEN)	-	-	32	32
31	FIND	-	-	2,048	2,048
32	Finland	-	-	305	305
33	Flemish Office for Development Cooperation and T	-	-	889	889
34	Forest Stewardship Council (FSC)	-	-	64	64
35	French Agricultural Research Centre for International Development (CIRAD)	-	-	295	295
36	French Global Environment Facility (FFEM)	-	-	717	717
37	German Agency for International Cooperation and	-	-	689	689
38	Germany	-	-	-	-
39	Germany	-	-	233	233
40	ICAR	-	-	-	-
41	ICRISAT	-	-	141	141
42	IDH Sustainable Trade Initiative	-	-	428	428
43	IDRC	-	-	-	-
44	IFAD	-	-	2,941	2,941
45	IFPRI	-	-	162	162
46	ILRI	-	-	357	357
47	Instituto de Pesquisa Ambiental da Amazonia (IPAM)	-	-	38	38
48	International Union for Conservation of Nature (IUCN)	-	-	20	20
49	IRLD	-	-	708	708
50	Japan	-	-	44	44
51	JIRCAS	-	-	31	31
52	KOREA	-	-	248	248
53	KPMG East Africa Ltd.	-	-	66	66
54	Luxembourg	-	272	-	272
55	Malaysia	-	-	2	2
56	Margaret A.Cargill Foundation	-	-	396	396
57	Mars Inc.	-	-	6,152	6,152
58	Met Office Hardley Centre-Government of the United Kingdom	-	-	1	1
59	Natural Resources Canada	-	-	150	150
60	Netherlands	-	-	185	185
61	Netherlands	-	-	132	132
62	NORAD	-	-	5,618	5,618
63	PERU	-	-	3	3
64	Rockefeller Foundation	-	-	84	84
65	Swedish University of Agricultural Sciences	-	-	165	165
66	Switzerland	-	-	672	672
67	Technical University of Darmstadt	-	-	215	215
68	The Global Crop Diversity	-	-	-	-
69	The U.S Fish and Wildlife Services	-	-	4	4
70	U.S. Forest Service - International Program	-	-	64	64
71	UNEP	-	-	931	931
72	Unilever	-	-	130	130
73	United Nations Institute for Training and Research (UNITAR)	-	-	63	63
74	University of Nebraska	-	-	-	-
75	USAID	-	4,699	1,873	6,572
76	USDA	-	-	8	8
77	Wageningen International	-	-	72	72
78	World Bank	-	-	157	157
79	World Wide Fund for Nature (WWF)	-	-	132	132
80	WorldFish Center	-	-	26	26
81	Others	-	-	4,546	4,546
Total for CRP 6		27,259	8,026	44,270	79,555

CRP No. 6 - Forest, Tree, Agroforestry
Period: 12/31/2013
Amounts in USD (000's)

Annual Financial Summary by Centers



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 2013 POWB approved budget					(b) CRP 2013 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					-					-					-
2. BIOVERSITY	5,701	-	4,056	-	9,757	3,612	476	2,071	-	6,159	2,089	(476)	1,985	-	3,598
3. CIAT	373	-	928	-	1,301	291	-	561	-	852	81	-	367	-	449
4. CIFOR	14,148	-	24,072	-	38,220	13,833	7,447	14,562	338	36,180	315	(7,447)	9,510	(338)	2,040
5. CIMMYT					-					-					-
6. CIP					-					-					-
7. ICARDA					-					-					-
8. ICRAF	12,091	-	21,022	-	33,113	9,412	-	24,557	2,028	35,997	2,679	-	(3,535)	(2,028)	(2,884)
9. ICRISAT					-					-					-
10. IFPRI					-					-					-
11. IITA					-					-					-
12. ILRI					-					-					-
13. IRRI					-					-					-
14. IWMI					-					-					-
15. WORLD FISH					-					-					-
Total for CRP	32,312	-	50,078	-	82,390	27,148	7,923	41,751	2,366	79,188 A	5,164	(7,923)	8,327	(2,366)	3,202
	39%	0%	61%	0%	100%	34%	10%	53%	3%	100%	161%	-247%	260%	-74%	100%

A Agree with L121

Annual Financial Summary by Natural Classification



CRP No. 6 - Forest, Tree, Agroforestry
Period: 12/31/2013
Amounts in USD 000's

Report Description

Name of Report: Financial Summary by Natural Classification lines

Frequency/Period: Annual

Deadline: Every April 15th

1,000.00

	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	11,225	-	17,527	-	28,752	12,047	1,867	15,103	1,030	30,046	(822)	(1,867)	2,424	(1,030)	(1,294)
Collaborators Costs - CGIAR Centers	147	-	-	-	147	111	103	154	-	367	36	(103)	(154)	-	(221)
Collaborator Costs - Partners	7,132	-	12,019	-	19,150	1,942	855	6,644	103	9,544	5,190	(855)	5,375	(103)	9,607
Supplies and services	5,750	-	8,012	-	13,763	4,471	3,383	10,699	294	18,847	1,280	(3,383)	(2,687)	(294)	(5,084)
Operational Travel	2,243	-	3,005	-	5,247	2,341	468	3,879	230	6,918	(99)	(468)	(874)	(230)	(1,671)
Depreciation	294	-	501	-	795	802	215	1,466	653	3,136	(507)	(215)	(965)	(653)	(2,341)
Sub-total of Direct Costs	26,790	-	41,064	-	67,854	21,713	6,891	37,944	2,310	68,858	5,077	(6,891)	3,119	(2,310)	(1,004)
Indirect Costs	5,669	-	9,014	-	14,683	5,546	1,135	3,960	56	10,697	123	(1,135)	5,054	(56)	3,985
Total - All Costs	32,459	-	50,078	-	82,537	27,259	8,026	41,904	2,366	79,555	5,200	(8,026)	8,173	(2,366)	2,981
LESS Coll Costs CGIAR Centers	(146.7)	-	-	-	(147)	(111)	(103)	(154)	-	(367)	(36)	103	154	-	221
Total Net Costs	32,312	-	50,078	-	82,390	27,148	7,923	41,751	2,366	79,188	5,164	(7,923)	8,327	(2,366)	3,202

Amounts for each participating center below:

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

BIOVERSITY	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	1,885.49	-	1,419.43	-	3,305	1,492.28	85.68	700.04	-	2,278	393	(86)	719	-	1,027
Collaborators Costs - CGIAR Centers	139.00	-	-	-	139	-	102.76	153.62	-	256	139	(103)	(154)	-	(117)
Collaborator Costs - Partners	1,453.93	-	973.32	-	2,427	128.95	255.70	519.55	-	904	1,325	(256)	454	-	1,523
Supplies and services	969.82	-	648.88	-	1,619	1,330.12	51.09	562.98	-	1,944	(360)	(51)	86	-	(325)
Operational Travel	311.01	-	243.33	-	554	82.32	18.29	194.64	-	295	229	(18)	49	-	259
Depreciation	59.04	-	40.55	-	100	1.59	-	3.33	-	5	57	-	37	-	95
Sub-total of Direct Costs	4,818	-	3,326	-	8,144	3,035	514	2,134	-	5,683	1,783	(514)	1,191	-	2,461
Indirect Costs	1,021.72	-	729.99	-	1,752	576.70	65.25	90.42	-	732	445	(65)	640	-	1,019
Total - All Costs	5,840	-	4,056	-	9,896	3,612	579	2,225	-	6,415	2,228	(579)	1,831	-	3,480
LESS Coll Costs CGIAR Centers	(139.0)	-	-	-	(139)	-	(103)	(154)	-	(256)	(139)	103	154	-	117
Total Net Costs	5,701	-	4,056	-	9,757	3,612	476	2,071	-	6,159	2,089	(476)	1,985	-	3,598

CIAT	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	159.84	-	324.80	-	0.48	158.58	-	217.65	-	376	1	-	107	-	108
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collaborator Costs - Partners	43.38	-	222.72	-	0.27	-	-	3.34	-	3	43	-	219	-	263
Supplies and services	75.43	-	148.48	-	0.22	43.39	-	236.99	-	280	32	-	(89)	-	(56)
Operational Travel	37.54	-	55.68	-	0.09	51.07	-	43.18	-	94	(14)	-	13	-	(1)
Depreciation	0.67	-	9.28	-	0.01	-	-	2.76	-	3	1	-	7	-	7
Sub-total of Direct Costs	317	-	761	-	1,078	253	-	504	-	757	64	-	257	-	321
Indirect Costs	55.65	-	167.04	-	223	37.96	-	56.88	-	95	18	-	110	-	128
Total - All Costs	373	-	928	-	1,301	291	-	561	-	852	81	-	367	-	449
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Net Costs	373	-	928	-	1,301	291	-	561	-	852	81	-	367	-	449

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Annual Financial Summary by Themes



Report Description

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

	POWB Approved	Current Year Actual Expenditures	Unspent Budget
Summary Report - by Themes			
Theme 1	15,698	22,336	(6,639)
Theme 2	17,466	11,474	5,992
Theme 3	16,982	12,745	4,237
Theme 4	21,614	21,599	15
Theme 5	5,548	5,927	(380)
Gender Strategies	1,514	1,528	(14)
CRP Management/Coordination	3,716	3,946	(230)
Total - All Costs	82,537	79,555	2,982

AFRICA RICE			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-

BIOVERSITY			
Theme 1	501	230	271
Theme 2	8,309	5,576	2,733
Theme 3	-	9	(9)
Theme 4	250	-	250
Theme 5	-	-	-
Gender Strategies	454	406	48
CRP Management/Coordination	382	194	188
Total - All Costs	9,896	6,415	3,480

CIAT			
Theme 1	424	313.45	110
Theme 2	-	-	-
Theme 3	-	-	-
Theme 4	465	237.66	227
Theme 5	107	20.50	87
Gender Strategies	152	161.00	(10)
CRP Management/Coordination	154	119	35
Total - All Costs	1,301	852	449

	POWB Approved	Current Year Actual Expenditures	Unspent Budget
CIFOR			
Theme 1	3,443	2,324	1,119
Theme 2	7,117	3,888	3,229
Theme 3	3,776	4,839	(1,063)
Theme 4	16,504	17,173	(669)
Theme 5	5,256	5,602	(346)
Gender Strategies	454	529	(75)
CRP Management/Coordination	1,679	1,886	(207)
Total - All Costs	38,228	36,240	1,987

CIMMYT			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-

CIP			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-

ICARDA			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-

ICRISAT			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-

	POWB Approved	Current Year Actual Expenditures	Unspent Budget
IFPRI			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-
IITA			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-
ILRI			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-
IRRI			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-
IWMI			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-

	POWB Approved	Current Year Actual Expenditures	Unspent Budget
WORLD AGROFORESTRY CENTRE (ICRAF)			
Theme 1	11,331	19,470	(8,139)
Theme 2	2,041	2,010	31
Theme 3	13,206	7,897	5,309
Theme 4	4,396	4,188	207
Theme 5	185	305	(120)
Gender Strategies	454	432	22
CRP Management/Coordination	1,501	1,746	(245)
Total - All Costs	33,113	36,047	(2,934)

WORLD FISH			
Theme 1			-
Theme 2			-
Theme 3			-
Theme 4			-
Theme 5			-
Gender Strategies			-
CRP Management/Coordination			-
Total - All Costs	-	-	-

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Science for a food secure future

Report Description

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TOTAL FOR CRP 6				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1	CIFOR	Center for International Forestry Research (CIFOR)	Indonesia	-	64	154	-	217
2	DOA	Department of Agriculture (DOA)	Thailand	-	-	35	-	35
3		Department of Forest- and Soil Sciences	Austria	-	24	-	-	24
4		Federal Research and Training Centre for Forests, Natural Hazards and Landscape	Austria	-	41	-	-	41
5		Indonesian Center for Horticulture Research and Development	Indonesia	-	-	82	-	82
6		Innovation Centre of Phytotechnologies of National Academy of Sciences of Kyrgyz Republic	Kyrgyzstan	-	-	15	-	15
7	INERA	Institut de l'Environnement et de Recherches Agricoles (INERA)	Burkina Faso	-	29	-	-	29
8	MARDI	Malaysian Agricultural Research and Development Institute (MARDI)	Malaysia	-	-	71	-	71
9		Indian Council of Agricultural Research	India	-	-	38	-	38
10		The Institute of Genetics and Plant Experimental Biology	Uzbekistan	-	-	2	-	2
11		DHAN Foundation	India	-	-	7	-	7
12		Research Plant Industry	Uzbekistan	-	-	75	-	75
13		Academy of Agricultural Sciences of the Republic of Kazakhstan (debit memo)	Kazakhstan	-	-	(0)	-	(0)
14		Universite Libre de Bruxelles	Belgium	11	-	-	-	11
15	ICRAF	World Agroforestry Centre (ICRAF)	Kenya	-	39	-	-	39
16		Mozambique's Institute of Agricultural Research	Mozambique	3	13	-	-	16
17		Centre National de Semences Forestieres	Burkina Faso	11	-	-	-	11
18		International Support Group	Netherlands	33	-	-	-	33
19		Institut de Recherches sur l'Ecologie Tropicale	Gabon	-	-	63	-	63
20		Universite de Kisangani	Congo	-	-	51	-	51
21		Institut de Recherche Agricole pour le Développement	Cameroon	-	-	51	-	51
22		Centre de Recherche Publique Gabriel Lippmann	Luxembourg	-	149	-	-	149
23	SNU	Sunchon National University (SNU)	Republic of Korea	-	-	15	-	15
24	PCA	Philippine Coconut Authority (PCA)	Philippines	-	-	15	-	15
25		Centre de Coopération Internationale en Recherche Agronomique pour le Développement	Cote d'Ivoire	4	-	-	-	4
26		Centre National de Recherche Agronomique	Sri Lanka	1	-	-	-	1
27		Coconut Research Institute	Trinidad	2	-	-	-	2
28		Cacao Research Centre	Costa Rica	32	-	-	-	32
29		Centro Agronómico Tropical de Investigación y Enseñanza		32	-	-	-	32
30		CROPSTER.ORG	Austria			11		11
31		FUNDACIAT	Colombia			(8)		(8)
32	CATIE	Tropical Agricultural Research and Higher Centre de Coopération Internationale en Recherche	Costa Rica	272				272
33	CIRAD	Agronomie pour le Développement	France	121				121
34	ANADER	Le Agence Nationale Dappui au Developpement Rural	Ivory Coast			114		114
35	CIAT	Centro Internacional de Agricultura Tropical	Colombia			147		147
36	CIFOR	The Center for International Forestry Research	Indonesia			219		219
37	CNRA	Centre National de Recherche Agricole	Ivory Coast			67		67
38	IITA	International Institute for Tropical Agriculture	Nigeria			97		97
39	MUNDEN	Munden Project	United Kingdom			104		104
40	PLCD	Task Force	Indonesia			57		57
41	KKI WARSI	Komunitas Konservasi Indonesia Warsi	Indonesia			87		87
42	YKPM	Yayasan Konservasi dan Pemberdayaan Masyarakat	Indonesia			126		126
43	UB	University of Brawijaya Faculty of Agriculture	Indonesia			53		53
44	OWT	Operation Wallacea Trust	Indonesia			51		51
45	IPGRI	Biodiversity International	Italy	50				50
46		Acclimatise	United Kingdom	15	15	-	-	30
47		ANU-Australian National University	Australia	17		14	-	30
48		APYDOS S.A.	Luxembourg	-	-	15	-	15
49		Association of Uganda Professional Women in Agriculture and Environment (AUPWAE)	Uganda	-	-	16	-	16
50		Aventures Sans Frontières (ASF)	Gabon	-	-	18	-	18
51		Bosques Amazónicos S.A. Lima Peru	Peru	(36)	-	-	-	(36)
52		CATIE	Costa Rica	5	20	-	-	25
53		Centro de Estudios para el Desarrollo Laboral y Agrario (CEDLA)	Bolivia	-	-	8	-	8
54		Center For Development & Environment-University of Bern	Switzerland	27	-	-	-	27
55		The Centre de Recherche sur la Durabilité et la Prod	Congo	-	-	27	-	27
56		CIRAD Forest	France	449	-	3	-	452
57		Conseil pour la Défense Environnementale par la Législation et la Traçabilité (CODELT)	Congo	-	-	7	-	7
58		Columbia University (o/b IRI)	USA	92	95	-	-	187
59		Community Markets for Conservation	Zambia	-	15	-	-	15
60		Community Youth Concern, District Women's Association	Zambia	-	59	-	-	59
61		Reseau CREF	Congo	-	-	56	-	56
62		DAR-Dereto Ambiente Y Recursos Nat	Peru	-	-	6	-	6
63		Department of Forestry - MAF	Laos	-	-	0	-	0
64		Echecopar	Peru	-	-	10	-	10
65		ECOLEX-Ecuador	Ecuador	-	-	3	-	3
66		Eduardo Mondland University	Mozambique	-	-	14	-	14
67		Faculty Sciences, Univ Kisangani	Congo	-	-	1,143	-	1,143
68		FOREP	Cameroon	-	20	-	-	20
69		Forest Action Nepal (CFS)	Nepal	-	-	28	-	28
70		Forest Research Center (Laos)	Laos	-	-	3	-	3
71		Forestry Department	Zambia	-	6	-	-	6
72		Fundacion S.I.	Colombia	-	53	-	-	53
73		Fund Amazonia	Peru	-	54	-	-	54
74		Global Canopy Project	United Kingdom	-	15	29	-	44
75		GRUPO FARO	Ecuador	1	-	12	-	13

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76	ICRAF	Peru	62	-	-	-	62
77	Instituto del Bien Comun (IBC)	Peru	-	-	8	-	8
78	ICTSD	Switzerland	-	-	5	-	5
79	IISD:InstSustainableDevelopment	Canada	10	-	24	-	33
80	IndonesianInstituteOfSciences	Indonesia	-	3	-	-	3
81	INERA-InstEnv&AgriculturalRsrc	Burkina Faso	-	7	5	-	12
82	Institute of Agroforestry	Philippines	10	-	-	-	10
83	InstRechercheEcologieTropicale	Gabon	-	-	2	-	2
84	IPB-Institut Pertanian Bogor	Indonesia	-	-	15	-	15
85	IWOKRAMA INTL CENTRE FOR RAINF	Guyana	-	-	(45)	-	(45)
86	James Cook University - JCU	Australia	8	19	-	-	27
87	KEFRI-KenyaForestryResearchIns	Kenya	9	-	9	-	18
88	LePMIL-LembagaPengembanganMasy	Indonesia	-	-	9	-	9
89	LIBELULA COMMUNICATION AMBIENT	Peru	-	-	23	-	23
90	LSM Balang Bantaeng SouthSulaw	Indonesia	-	-	19	-	19
91	Makarere University	Uganda	8	-	41	-	49
92	Mazars Sterling Resources	Indonesia	-	-	80	-	80
93	National Botanic Garden of Bel	Belgium	-	-	27	-	27
94	Nepa School	Nepal	3	-	-	-	3
95	NES Naturaleza	Colombia	41	-	-	-	41
96	NITLAPAN	Nicaragua	-	-	49	-	49
97	NORDECO-NordicAgencyDev&Ecolog	Denmark	-	-	54	-	54
98	North Carolina State Universit	USA	14	8	-	-	22
99	Norwegian Univ of Life Science	Norway	199	4	20	-	222
	The Organisation Concertee des Ecologistes et Amis	Congo	-	-	15	-	15
100	de la Nature (Ocean)		-	-	67	-	67
101	ONF International	France	-	-	(213)	-	(213)
102	Papua New Guinea Forest Resc I	Papua New Guinea	-	-	37	-	37
103	PROFUNDO	Netherlands	-	-	64	-	64
104	PT.Serasi Kelola Alam	Indonesia	-	-	30	-	30
105	RedeDesenvolvimentoEnsinoSocie	Brazil	-	30	-	-	103
106	Resources&SynergiesDevelopmSIA	Latvia	-	-	103	-	103
107	Royal Road University, Canada	Canada	63	-	-	-	63
108	SAMIRI-PROGEA	Ecuador	-	-	11	-	11
109	SFTRRD-FoundationTribalRura	India	-	60	39	-	100
	SGN-Senckenberg Gesellschaft fuer Naturforschung	Germany	-	-	36	-	36
110	SI-SOLIDARIDAD INTERNACIONAL	Netherlands	-	-	7	-	7
111	Sokoine Univ. of Agriculture	Tanzania	-	-	24	-	24
112	Stockholm Environment Institute	Sweden	-	-	137	-	137
113	Swiss Federal Inst Tech Zurich	Switzerland	-	-	2	-	2
114	TREE AID	Burkina Faso	1	-	-	-	1
115	Tropenbos (TBI)	Indonesia	-	-	3	-	3
116	Eduardo Mondlane University	Mozambique	-	-	5	-	5
117	Universität Bonn	Germany	37	-	-	-	37
118	Universitas Hasanuddin	Indonesia	-	5	-	-	5
119	Universität LEIPZIG	Germany	-	-	4	-	4
120	Universite CatholiquedeLouvain	Belgium	-	-	12	-	12
121	University of British Columbia	Canada	-	-	34	-	34
122	University of Copenhagen	Denmark	-	41	21	-	62
123	University of East Anglia	United Kingdom	-	-	9	-	9
124	University of Leeds	United Kingdom	2	14	25	-	41
125	University of Melbourne	Australia	-	-	13	-	13
126	University of North Carolina at Chapel Hill	USA	-	-	5	-	5
127	University of Virginia	USA	27	-	-	-	27
128	Vietnam Forest Protection & Development Fund	Vietnam	-	-	17	-	17
129	Viikki Tropical Resoulstitute	Finland	-	-	140	-	140
130	Wageningen University	Netherlands	83	57	295	-	435
131	Yayasan Riak Bumi	Indonesia	14	-	10	-	24
132	Others		-	-	(195)	-	(195)
133	Others (values less than US\$50,000)		322	-	2,520	-	2,842
134	Total for CRP		2,054	958	6,798	-	9,810

1. AFRICA RICE

Item	Institute Acronym	Institute Name	Country	Actual Expenses - This Year				
				Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
2								-
Total for CRP				-	-	-	-	-

2. BIODIVERSITY

Item	Institute Acronym	Institute Name	Country	Actual Expenses - This Year				
				Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1	CIFOR	Center for International Forestry Research (CIFOR)	Indonesia	-	64	154	-	217
2	DOA	Department of Agriculture (DOA)	Thailand	-	-	35	-	35
3		Department of Forest- and Soil Sciences	Austria	-	24	-	-	24
4		Federal Research and Training Centre for Forests, Natural Hazards and Ladscape	Austria	-	41	-	-	41
5		Indonesian Center for Horticulture Research and Development	Indonesia	-	-	82	-	82
6		Innovation Centre of Phytotechnologies of National Academy of Sciences of Kyrgyz Republic	Kyrgyzstan	-	-	15	-	15
7	INERA	Agricoles (INERA)	Burkina Faso	-	29	-	-	29
8	MARDI	Institute (MARDI)	Malaysia	-	-	71	-	71
9		Indian Council of Agricultural Research	India	-	-	38	-	38
10		Biology	Uzbekistan	-	-	2	-	2
11		DHAN Foundation	India	-	-	7	-	7
12		Research Plant Industry	Uzbekistan	-	-	75	-	75
13		Kazakhstan (debit memo)	Kasakhstan	-	-	(0)	-	(0)
14		Universite Libre de Bruxelles	Belgium	11	-	-	-	11
15	ICRAF	World Agroforestry Centre (ICRAF)	Kenya	-	39	-	-	39
16		Mozambique's Institute of Agricultural Research	Mozambique	3	13	-	-	16

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17		Centre National de Semences Forestieres	Burkina Faso	11	-	-	-	11
18		International Support Group	Netherlands	33	-	-	-	33
19		Institut de Recherches sur l'Ecologie Tropicale	Gabon	-	-	63	-	63
20		Universite de Kisangani	Congo	-	-	51	-	51
21		Développement	Cameroon	-	-	51	-	51
22		Centre de Recherche Publique Gabriel Lippmann	Luxembourg	-	149	-	-	149
23	SNU	Sunchon National University (SNU)	Republic of Korea	-	-	15	-	15
24	PCA	Philippine Coconut Authority (PCA)	Philippines	-	-	15	-	15
25		Centre de Coopération Internationale en Recherche Agronomique pour le Développement	Cote d'Ivoire	4	-	-	-	4
26		Centre National de Recherche Agronomique	Sri Lanka	1	-	-	-	1
27		Coconut Research Institute	Trinidad	2	-	-	-	2
28		Cacao Research Centre	Costa Rica	32	-	-	-	32
29		Enseñanza		32	-	-	-	32
Total for CRP				129	358	673	-	1,161

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Report Description

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3. CIAT				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1		CROPSTER.ORG	Austria			11		11
2		FUNDACIAT	Colombia			(8)		(8)
3								
Total for CRP				-	-	3	-	3

4. CIFOR				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1		Acclimatise	United Kingdom	15	15	-	-	30
2		ANU-Australian National University	Australia	17	-	14	-	30
2		APYDOS S.A.	Luxembourg	-	-	15	-	15
3		Association of Uganda Professional Women in Agriculture and Environment (AUPWAE)	Uganda	-	-	16	-	16
3		AventuresSansFrontieres (ASF)	Gabon	-	-	18	-	18
4		BosquesAmazonicos SAC LimaPeru	Peru	(36)	-	-	-	(36)
4		CATIE	Costa Rica	5	20	-	-	25
5		Centro de Estudios para el Desarrollo Laboral y Agrario (CEDLA)	Bolivia	-	-	8	-	8
5		Center For Development & Environment-University of Bern	Switzerland	27	-	-	-	27
6		The Centre de Recherche sur la Durabilité et la Prod	Congo	-	-	27	-	27
6		CIRAD Foret	France	449	-	3	-	452
7		Conseil pour la Défense Environnementale par la Légalité et la Traçabilité (CODELT)	Congo	-	-	7	-	7
7		Columbia University (o/b IRI)	USA	92	95	-	-	187
8		Community Markets for Conservation	Zambia	-	15	-	-	15
8		Community Youth Concern, District Women's Association	Zambia	-	59	-	-	59
9		Reseau CREF	Congo	-	-	56	-	56
9		DAR-DeretoAmbienteYRecursosNat	Peru	-	-	6	-	6
10		Department of Forestry - MAF	Laos	-	-	0	-	0
10		Echecopar	Peru	-	-	10	-	10
11		ECOLEX-Ecuador	Ecuador	-	-	3	-	3
11		Eduardo Mondland University	Mozambique	-	-	14	-	14
12		FacultySciences,UnivKisangani	Congo	-	-	1,143	-	1,143
12		FOREP	Cameroon	-	20	-	-	20
13		Forest Action Nepal (CFS)	Nepal	-	-	28	-	28
13		Forest Reseach Center (Laos)	Laos	-	-	3	-	3
14		Forestry Department	Zambia	-	6	-	-	6
14		Fundacion S.I.	Colombia	-	53	-	-	53
15		Fund Amazonia	Peru	-	54	-	-	54
15		Global Canopy Project	United Kingdom	-	15	29	-	44
16		GRUPO FARO	Equador	1	-	12	-	13
16		ICRAF	Peru	62	-	-	-	62
17		Instituto del Bien Comun (IBC)	Peru	-	-	8	-	8
17		ICTSD	Switzerland	-	-	5	-	5
18		IISD:InstSustainableDevelopment	Canada	10	-	24	-	33
18		IndonesianInstituteOfSciences	Indonesia	-	3	-	-	3
19		INERA-InstEnv&AgriculturalRsrc	Burkina Faso	-	7	5	-	12
19		Institute of Agroforestry	Philippines	10	-	-	-	10
20		InstRechercheEcologieTropicale	Gabon	-	-	2	-	2
20		IPB-Institut Pertanian Bogor	Indonesia	-	-	15	-	15
21		IWOKRAMA INTL CENTRE FOR RAINF	Guyana	-	-	(45)	-	(45)
21		James Cook University - JCU	Australia	8	19	-	-	27
22		KEFRI-KenyaForestryResearchIns	Kenya	9	-	9	-	18
22		LePMIL-LembagaPengembanganMasy	Indonesia	-	-	9	-	9
23		LIBELULA COMMUNICATION AMBIENT	Peru	-	-	23	-	23
23		LSM Balang Bantaeng SouthSulaw	Indonesia	-	-	19	-	19
24		Makarere University	Uganda	8	-	41	-	49
24		Mazars Sterling Resources	Indonesia	-	-	80	-	80
25		National Botanic Garden of Bel	Belgium	-	-	27	-	27
25		Nepa School	Nepal	3	-	-	-	3
26		NES Naturaleza	Colombia	41	-	-	-	41
26		NITLAPAN	Nicaragua	-	-	49	-	49
27		NORDECO-NordicAgencyDev&Ecolog	Denmark	-	-	54	-	54
27		North Carolina State Universit	USA	14	8	-	-	22
28		Norwegian Univ of Life Science	Norway	199	4	20	-	222
28		The Organisation Concertee des Ecologistes et Amis de la Nature (Ocean)	Congo	-	-	15	-	15
29		ONF International	France	-	-	67	-	67
29		Papua New Guinea Forest Resc I	Papua New Guinea	-	-	(213)	-	(213)
30		PROFUNDO	Netherlands	-	-	37	-	37
30		PT.Serasi Kelola Alam	Indonesia	-	-	64	-	64
31		RedeDesenvolvimentoEnsinoSocie	Brazil	-	30	-	-	30
31		Resources&SynergiesDevelopmSIA	Latvia	-	-	103	-	103
32		Royal Road University, Canada	Canada	63	-	-	-	63
32		SAMIRI-PROGEA	Ecuador	-	-	11	-	11
33		SFTRRD-FoundationTribalRura	India	-	60	39	-	100
33		SGN-Senckenberg Gesellschaft fuer Naturforschung	Germany	-	-	36	-	36
34		SI-SOLIDARIDAD INTERNACIONAL	Netherlands	-	-	7	-	7
34		Sokoine Univ. of Agriculture	Tanzania	-	-	24	-	24
35		Stockholm Environment Institute	Sweden	-	-	137	-	137
35		Swiss Federal Inst Tech Zurich	Switzerland	-	-	2	-	2
36		TREE AID	Burkina Faso	1	-	-	-	1
36		Tropenbos (TBI)	Indonesia	-	-	3	-	3
37		Eduardo Mondlane University	Mozambique	-	-	5	-	5
37		Universität Bonn	Germany	37	-	-	-	37
38		Universitas Hasanuddin	Indonesia	-	5	-	-	5
38		Universitat LEIPZIG	Germany	-	-	4	-	4

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39	Universite CatholiquedeLouvain	Belgium	-	-	12	-	12
39	University of British Columbia	Canada	-	-	34	-	34
40	University of Copenhagen	Denmark	-	41	21	-	62
40	University of East Anglia	United Kingdom	-	-	9	-	9
41	University of Leeds	United Kingdom	2	14	25	-	41
41	University of Melbourne	Australia	-	-	13	-	13
42	University of North Carolina at Chapel Hill	USA	-	-	5	-	5
42	University of Virginia	USA	27	-	-	-	27
43	Vietnam Forest Protection & Development Fund	Vietnam	-	-	17	-	17
43	Vilki Tropical ResouInstitute	Finland	-	-	140	-	140
44	Wageningen University	Netherlands	83	57	295	-	435
45	Yayasan Riak Bumi	Indonesia	14	-	10	-	24
45	Others				(195)	-	(195)
Total for CRP			1,160	599	2,480	-	4,239 #

5. CIMMYT				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
2								-
3								-
4								-
5								-
6								-
7								-
8								-
9								-
10								-
11								-
12								-
13								-
14								-
15								-
16								-
Total for CRP				-	-	-	-	-

6. CIP				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
2								-
3								-
4								-
Total for CRP				-	-	-	-	-

7. ICARDA				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
2								-
3								-
4								-
5								-
6								-
7								-
8								-
Total for CRP				-	-	-	-	-

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8. ICRAF				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1	CATIE	Tropical Agricultural Research and Higher	Costa Rica	272				272
2	CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement	France	121				121
3	ANADER	Le Agence Nationale Dappui au Developpement Rural	Ivory Coast			114		114
4	CIAT	Centro Internacional de Agricultral Tropical	Colombia			147		147
5	CIFOR	The Center for International Forestry Research	Indonesia			219		219
6	CNRA	Centre National de Recherche Agricole	Ivory Coast			67		67
7	IITA	International Institute for Tropical Agriculture	Nigeria			97		97
8	MUNDEN	Munden Project	United Kingdom			104		104
9	PLCD	Task Force	Indonesia			57		57
10	KKI WARSI	Komunitas Konservasi Indonesia Warsi	Indonesia			87		87
11	YKPM	Yayasan Konservasi dan Pemberdayaan Masyarakat	Indonesia			126		126
12	UB	University of Brawijaya Faculty of Agriculature	Indonesia			53		53
13	OWT	Operation Wallacea Trust	Indonesia			51		51
14	IPGRI	Bioversity International	Italy	50				50
15	Others (values less than US\$50,000)			322		2,520	103	2,945
Total for CRP				765	-	3,642	103	4,510

9. ICRISAT				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
Total for CRP				-	-	-	-	-

10. IFPRI				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
Total for CRP				-	-	-	-	-

11. IITA				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
Total for CRP				-	-	-	-	-

12. ILRI				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
Total for CRP				-	-	-	-	-

13. IRRI				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
Total for CRP				-	-	-	-	-

14. IWMI				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
Total for CRP				-	-	-	-	-

15. WORLD FISH				Actual Expenses - This Year				
Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1								-
Total for CRP				-	-	-	-	-

TOTAL FOR CRP 6				Actual Expenses - This Year				
				Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1. AFRICA RICE								-
2. BIO DIVERSITY				129	358	673	-	1,161
3. CIAT				-	-	3	-	3
4. CIFOR				1,160	599	2,480	-	4,239
5. CIMMYT								-
6. CIP								-
7. ICARDA								-
8. ICRAF				765	-	3,642	103	4,510
9. ICRISAT								-
10. IFPRI								-
11. IITA								-
12. ILRI								-
13. IRRI								-
14. IWMI								-
15. WORLD FISH								-
Total for CRP				2,054	958	6,798	103	9,913

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