CGIAR RESEARCH PROGRAM ON Water, Land and Ecosystems

LED BY: IWMI International Water Management Institute

CGIAR Research Program on Water, Land and Ecosystems: Annual Report 2014

Submitted to the CGIAR Consortium Office

JULY 29, 2015

IN PARTNERSHIP WITH:

Bioversity International · CGIAR Challenge Program on WATER & FOOD · CIAT · CIP · FAO · ICARDA · ICRISAT · IITA · IFPRI · ILRI · World Agroforestry Centre · WorldFish

Acronyms

AAS	CGIAR Research Program on Aquatic Agricultural Systems
A4NH	Agriculture for Nutrition and Health
AC	Activity Cluster
AfSIS	Africa Soil Information Service
AWM	Agricultural Water Management
AWLM	Agricultural Water and Land Management
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CIAT	International Center for Tropical Agriculture
CIP	International Potato Center
CPWF	CGIAR Challenge Program on Water and Food
CRP	CGIAR Research Program
DAI	Decision Analysis and Information Systems
DFAT	Australian Department of Foreign Affairs and Trade
DSSAT	Decision Support System for Agrotechnology Transfer
EFR	Environmental flow requirement
ES	Ecosystem services
ESR	Ecosystem services and resilience
FAO	United Nations Food and Agriculture Organization
FC	Fund Council
FTA	CGIAR Research Program on Forests, Trees and Agroforestry
GBIF	Global Biodiversity Information Facility
GEF	Global Environment Facility
GIS	Geographic information system
GLF	Global Landscape Forum
GPI	Gender, poverty and institutions
GRISP	CGIAR Research Program on Rice, Global Rice Science Partnership (GRiSP)
HT	CGIAR Research Program on Integrated Systems for the Humid Tropics
ICARDA	International Center for Agricultural Research in the Dry Areas
ICID	International Commission on Drainage & Irrigation
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDO	Intermediate development outcome
IES	Integrating ecosystem solutions into policy and investments
IF	Innovation Fund
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture
ILRI	International Livestock Research Institute
INVEST	Integrated valuation of ecosystem services and trade-offs
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
IPTRID	International Program for Technology and Research in Irrigation and Drainage
ITP	IWMI-Tata Water Policy Research Program
IWMI	International Water Management Institute
LWP	Land and water productivity
MENA	Middle East and North Africa region
MINAM	Ministry of Environment (Ministerio del Ambiente), Peru
MOU	Memorandum of Understanding
MRB	Mechanized raised bed technology
MRV	Managing resource variability and competing uses

NatCap	The Natural Capital Project and Stanford University
NABARD	National Bank for Rural Development (India)
NGOs	Non-governmental organizations
PIM	CGIAR Research Program on Policies, Institutions and Markets
PPP	Public-private partnership
RDE	Regenerating degraded agricultural ecosystems
REDD	Reducing Emissions from Deforestation and Forest Degradation
RIOS	Resource Investment Optimization System
RRR	Recovering and reusing resources in urbanizing ecosystems
RS	Remote Sensing
SDG	Sustainable Development Goal
SIDA	Swedish International Development Cooperation Agency
SRP	Strategic research portfolio
SSA	Sub-Saharan Africa
SSP	Sanitation Safety Plan
SWAT	Soil and Water Assessment Tool
TEEB	The Economics of Ecosystems & Biodiversity
TNC	The Nature Conservancy
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNESCO-IHE	United Nations Educational, Scientific and Cultural Organization – Institute of Water
UN-SPIDER	UN Platform for Space-based Information for Disaster Management and Emergency Response
UNU	United Nations University
USAID	United States Agency for International Development
UTFI	Underground taming of floods for irrigation
VBA	Volta Basin Authority
W1/2	Windows 1 and Windows 2 of the CGIAR fund
W3	Windows 3 of the CGIAR fund
WA+	Water Accounting
WHO	World Health Organization
WIC	Water Impact Calculator
WLE	CGIAR Research Program on Water, Land and Ecosystems
WOCAT	World Overview of Conservation Approaches and Technologies
WSP	Water Sanitation Program (World Bank)
WUA	Water user association
WWAP	UN World Water Assessment Program
WWF	World Water Forum

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A. Key Messages

A.1. Synthesis of Progress and Challenges

This report presents the performance and results of the CGIAR Research Program on Water, Land and Ecosystems (WLE) in 2014. It describes a number of specific innovations aimed at strengthening the basis for learning and accountability. In particular, the report has a strong focus on actual achievements against planned results, where and how the budget was spent and progress along the pathway towards intended outcomes and impacts. In order to achieve this, the writers of the report have taken advantage of the Consortium Office's flexibility regarding the length of the report to allow for a more detailed account of progress. The report also demonstrates how WLE aligns towards the new CGIAR Strategic Results Framework to illustrate the continued resonance and relevance of the program to the objectives of the CGIAR System.

The WLE program's primary research objective is to explore the possibilities for sustainable agricultural intensification using a multidisciplinary ecosystems approach. This involves undertaking a range of actions to identify and address perennial evidence gaps, testing and demonstrating new approaches and ways of working (results outputs). All of WLE's activities require that it work closely with key partners to find ways to bring new knowledge to bear on agricultural practices, to change behaviors (research and development outcomes) and ultimately to elicit positive benefits for people (development impacts).

To better achieve its goals, WLE restructured in 2014, organizing the program around five flagships and three core crosscutting themes (see extension proposal). This reorganization was based on the recognition that a truly integrated ecosystems-based approach to natural resource management requires both working across multiple sectors and focusing on the landscape scale. Hence, the flagships take a systems approach to tackling challenges related to livelihoods and resilience, gender and equity, land degradation, biodiversity and ecosystems service provision, water security, irrigation systems, water resource variability and water and energy recovery and reuse. WLE applies the program's Ecosystems Services and Resilience Framework to guide the research focus, concentrating not only on the science but also on practical investment opportunities for strengthening demand for environmental improvements. Such opportunities include payment for ecosystem services from agriculture and business opportunities in the re-use of waste; strengthening WLE's geographical focus in key target basins and regions; and opening the program to partners in order to supplement our capacity. Over the reporting period stronger linkages have been forged with other CRPs, including CCAFS, AAS, HT, GRiSP and PIM.

As part of the restructuring, WLE established a new flagship entitled *Integrating Ecosystem Solutions into Policy and Investments* (IES), focused on four regions (Volta/Niger, Nile/East Africa corridor, Ganges and Greater Mekong) and encompassing 33 projects financed in late 2014 through an open and competitive call. In parallel, three projects were selected through a new instrument called the Innovation Fund (IF). The IF supports pioneering research that advances the concepts of sustainable agricultural intensification, integrates the contributions of the flagships and supplements other research activities. The increased focus on partnerships in the IES flagship means that an estimated 20% of its total W1/2 budget has been allocated to non-WLE core partners from 2014-2016. Coordination teams in each focal region ensure that research outputs move toward outcomes.

Almost three years into the program, a range of research outputs are starting to help answer questions around the value addition of an ecosystems services-based approach to intensifying agriculture in a sustainable manner. Examples described in this report include solutions that promote sustainable agricultural intensification through solar power while reducing the danger of over-exploiting groundwater and business models for reuse of nutrients and wastewater to reduce negative

environmental impacts while closing the nutrient loop. In each case, the outputs are being applied by the private sector, by governments and development partners. In 2015 and 2016, WLE will be working to build on this uptake, seeking out opportunities to take research outputs to scale and promoting investment and implementation to benefit the lives of people.

A.2. Significant Achievements

The following WLE achievements support the formulation of credible Sustainable Development Goals (SDGs) and an innovative approach to addressing India's energy crisis while promoting sustainable agricultural intensification through access to groundwater.

Impact Story 1. Influencing and supporting the SDGs

The SDGs recognize that achieving a balance between the exploitation of natural resources for economic development and the conservation of ecosystem services is critical to our well-being. While WLE is only one of many players in the UN's SDG process, its efforts could well lead to improvements in the indicators chosen to monitor the targets at national levels. Involvement in SDG development has also enabled WLE to participate in large multi-lateral processes and partnerships. The following paragraphs highlight the interactions and partnerships that were formed through the SDG process (see this presentation for more details).

WLE scientists are involved in UN-led working groups, involving interaction with A4NH, to develop indicators for improving food security and nutrition (proposed SDG 2), sustainable agriculture (proposed SDG 2), water quality/wastewater reuse, water-use efficiency in agriculture (proposed SDG 6) and water withdrawals and ecosystems (proposed SDG 15) all of which are central to WLE's research mandate. The task team for Target 6.6 (By 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes) suggested a new and innovative primary indicator – natural water capital. Natural water capital is set as an inverse of the "environmental water stress" index, proposed by IWMI in 2004. While the term 'natural capital' is already widely used, the task team developed a measure specifically for water sources/bodies, highlighting the growing interest in the use of ecosystem-based approaches and providing opportunities to promote selected WLE tools and products, such as Water Accounting (developed in partnership with IWMI, FAO and UNESCO-IHE) to support the implementation of the SDGs. In addition, the FAO database AQUASTAT, to which WLE contributes, could be used to monitor progress towards targets under SDG 6. WLE has also contributed to the UN World Water Assessment Program (WWAP)'s Advisory Group on Gender Equality hosted by UNESCO and engaged in developing gender related indicators. WLE researchers from IFPRI were also asked to be part of a team to implement a scientific review of the proposed SDGs and targets to guide policymakers in finalizing the goals and researchers from IFPRI presented their results at a side event at the UN.

WLE partners also pushed for the SDGs to include an environmental water requirement designed to sustain healthy ecosystems and human well-being. The program has shared with the SDG teams its experience with mapping irrigated areas using remote sensing tools and with measuring water cooperation, water productivity and flood and drought risks. The Water Accounting Platform, a multi-institutional platform for assessing water productivity, was launched by WLE and partners in 2014. The platform's objective is to support the implementation of the SDGs in developing countries. WLE researchers participated in several task teams to develop indicators for the SDG targets on water, including Target 6.3 – water quality, wastewater reuse; Target 6.4 – water-use efficiency (including agriculture); and Target 6.6 – water withdrawals and ecosystems.

WLE will assist countries to achieve and monitor SDG targets, as described in WLE's 2014 report, 'On Target for People and Planet: Setting and Achieving Water-Related Sustainable Development Goals,' which stresses the importance of tailoring solutions to the local context.

At the national level, WLE is already working with governments to prepare for the SDGs. For example, WLE scientists are helping ministries in the Nile and Volta regions of Africa to develop natural resource and ecosystem-based indicators for monitoring progress in achieving the SDGs. The work is part of a WLE project – 'Making Ecosystems Count in the SDGs' – which involves PIM, The Nature Conservancy, The Wildlife Conservation Society, and The National Center for Ecological Analysis and Synthesis. The project is developing scenario analysis tools, building on existing ecosystem service assessment and valuation models, to assess the impact of large-scale investment decisions on ecosystem services, hunger, health, energy, water and the environment. The tools are being applied in WLE IES pilot projects in Ghana, Burkina Faso, Kenya and Tanzania. WLE scientists and partners are working with the Volta Basin Authority's council of ministers, which has developed a US$51 million strategic action plan (2014-2024) on "conserving and restoring ecosystem functions," to estimate the livelihood impacts and economic value of the proposed ecosystem restoration activities in the basin.

These significant technical inputs from WLE support the quality of science and scientific expertise present within the program, noting that the Program produced 150 IS journal articles over the reporting period. Further, they demonstrate WLE's explicit objective of informing global fora in the natural resource arena.

Impact Story 2. Solar irrigation and the potential of policy impact

WLE's research examines the water-food-energy nexus, a multidisciplinary approach to balancing productivity goals with equity and sustainability concerns. The program has established close working relationships with many governments to help them develop policies that address the trade-offs inherent in major natural resource investment decisions. That is especially true in India, where WLE research on solar irrigation pumps has directly influenced national and state policies.

In India, the rapidly expanding use of solar irrigation pumps will reduce demand on central power generating capacity and cut greenhouse gas emissions.

"Through solar irrigation pumps (SIPs), India can generate many times more solar energy without removing any land from existing uses, by retiring some 115 GW equivalent of conventional generation capacity currently deployed to run 21 million electric and diesel pumps." (from article: Karnataka's Smart, New Solar Pump Policy for Irrigation).

This approach significantly contributes to addressing both the large shortfall in electricity supply to more than 400 million people currently without electricity in India, and CO_2 emissions in a country with an emerging economy. Without carefully designed programs, however, the pumps could threaten groundwater sustainability. The IWMI-Tata Water Policy Program supported by WLE has recommended policy reforms that enable farmers to sell back surplus solar power – a solar 'cash crop' that motivates farmers to use water efficiently and minimize the pumping of scarce water. In 2014, IWMI presented its proposed policy reforms to India's finance ministers and advocated for this approach by a number of means, including the placement of opinion pieces in major national papers.

The Indian government's 2014 budget provided US$67 million for a pilot solar pump promotion program along the lines recommended by IWMI. Subsequently, the Karnataka state government established *Surya Raitha,* a program enabling farmers using solar pumps to sell back surplus power to the grid at a guaranteed price. India Finance Minister Arun Jaitley is considering recommending a larger allocation of funds for a country-wide project in the 2015 budget.

IWMI's solar pump work was in response to India's National Solar Mission, which aspires to develop 22 gigawatts of solar power by 2020, largely by constructing massive solar power plants. WLE scientists

believe that India can achieve its solar goal with 2 million solar irrigation pumps instead and put cash in farmers' hands in the process.[1]

A3. Financial summary

Table A: Summary of WLE expenditures against budget in 2014.

2014 Approved budget inc.2013 carry over (USD 000's)				2014 Actual expenditures (USD 000's)			
W1/2	W3,bilateral, other	Total	Gender %	W1/2	W3,bilateral, other	Total	Gender %
39 182 *Of which:* *2014 alloc. 27 850* *2013 c/f 11 152* 180k allocated to WLE for ICARDA relocation	31 124	70 303	12%	25 081	30 132	55 213	11%

WLE's plan of activities for the year was based on a W1 and W2 budget of US$30.95 million. The CGIAR financing plan ultimately reduced 2014's W1/2 funding to WLE to US$27.85 million. Partners altered work plans and reduced budgets accordingly, with the result that a number of planned deliverables had to be adjusted, postponed or cancelled. The under-spend in 2014 can be attributed to the delay in implementing the emerging IES flagship. The start of the flagship projects was delayed due to the fact that the additional allocation of funds to WLE as an adjustment to the 2013 fund allocation was received only in 2014, coupled with the lengthy process required to establish the flagship, including open and competitive bidding, participatory planning, designing, and finalizing the portfolio of projects and conducting contract negotiations. The IES projects have now been initiated by partners and will be implemented during 2015 and 2016 using the earlier carry forward in full.

Total program expenditure was US$55.21 million, of which W1 and W2 expenditures were US$25.08 million; W3, bilateral and other expenditures were US$30.13 million. The gender budget target was set at 12% of all expenditures in 2014; financial reports show total gender expenditures of US$6.54 million, or 11% of the total program expenditure. With the implementation of IES projects, all of which include a significant gender component, gender expenditures are forecast to rise significantly to at least 20% of the program budget in 2015. WLE sees gender investment as a long term goal and is dedicated to implementing it through a grounded effort, which will see growth and sustained effort in gender work over the years[2].

Budgets for 2014 were developed based on the former strategic research portfolio (SRP) structure. As the SRPs are no longer valid, individual activities for 2014 and their budgets were remapped to the new flagships and expenditures have been measured against these.

[1] Further details regarding solar irrigation and the potential of policy impact in India can be found in the following articles: 'Solar-Powered Pump Irrigation and India's Groundwater Economy', 'Solar Irrigation Pumps: Farmers' Experience and State Policy in Rajasthan' and 'Smart solar pump' solution gains foothold in India'.

[2] WLE has been working with the senior gender advisor and other CRPs to develop a robust gender approach. This is necessary if gender scoring is mainly decided on budgets. It is also important to note that the gender budgeting guidelines are based on work done in agriculture, and specifically the commodities. Therefore privileges, work and accounting are done at household level, whereas WLE works at community and levels above this domain.

B. Impact Pathway and Intermediate Development Outcomes (IDOs)

During 2014, the shift from strategic research portfolios to a flagship structure necessitated a revision of the WLE's theory of change, the impact pathways and the indicators and data upon which the program would be assessed. The establishment of a new Strategic Results Framework (SRF) for the CGIAR also provided a foundation for determining the strategic value and assessing the contribution of the CRPs to CGIAR goals. Drawing on these two positive changes, the WLE program-level theory of change is based on the flagships and core themes, linking to the new SRF sub-IDOs and IDOs[3]. For each flagship, such as Resource Recovery an Reuse, WLE prepared a detailed theory of change, location-specific impact pathways, a logical framework, performance and impact indicators, including the differential contribution and effects on women and men as appropriate[4]. This provides a firm and objective basis for assessing WLE. Figure 1 illustrates the pathways from the flagships to the IDOs.

[3] Four of five IDOs identified in the WLE extension proposal mapped directly to the IDOs in the new SRF. Hence it was not considered a case of shifting the goal posts to adopt the new SRF framework in the current program.

[4] The flagship specific theories of change, impact pathways, logical frameworks, indicator sets and metadata are currently being finalized and the links will be made available in July 2015.

Figure 1. Impact pathways for Water Lands and Ecosystems

* NB. The alignment illustrated above reflects the primary, but not sole relationship between activity clusters and sub-IDOs in the SRF. In many cases, clusters also contribute to other sub-IDOs. In addition, the relationship with cross-cutting sub-IDOs is not fully reflected in this representation. The view of the program is that cross-cutting sub-IDOs reflects, in the main, means and not ends, and hence they are a necessary lens through which the program should be guided and assessed.

C. Progress along Impact Pathway

C1. Progress towards outputs

Flagship 1: Integrating Ecosystem Solutions into Policy and Investments (IES)

WLE's flagship on Integrating Ecosystem Solutions into Policy and Investments (IES) seeks to demonstrate that ecosystem-based approaches are economically viable, scalable and equitable. WLE develops and provides knowledge, tools and methodologies that inform policies and investments.

The IES flagship builds upon experience from partnerships, research for development engagement structures and research carried out under the ten years of the CGIAR Challenge Program on Water and Food (CPWF) to test ecosystem solutions at a basin scale. The IES flagship focuses on two key initiatives: WLE focal regions (East Africa and the Nile/East Africa corridor, the Volta/Niger, the Ganges and the Greater Mekong), which were selected based on feedback from local and regional stakeholders and thought leaders from the regions and input from the WLE Steering Committee and the Management Committee; and the Innovation Fund (IF). In 2014, IES engaged in a series of dialogues to co-design the focal region research agenda with stakeholders and partners from each focal region. The flagship launched four open and competitive calls for funding and received more than 300 expressions of interest. In total 33 Projects were selected. In order to develop outcome oriented projects which contributed to regional goals, a series of innovative write-shops were held in each region. All projects were contracted by the end of 2014. WLE worked closely with the projects from the beginning to ensure that the proposals were ecosystem service focused and gender responsive. In 2014, the IF was launched to develop pioneering solutions to ecosystem-based approaches across the four focal regions.

Expenditures under this flagship were US$867 000 (fully financed by W1/2), from a budget of US$10.82 million after the W1/2 budget cuts. The late allocation of funding for this flagship constrained WLE's ability to plan, design and commit to the IES contracts until late in 2014 leading to a large carry forward. The remaining funding has been fully committed through project agreements for focal region and innovation fund projects that will be implemented in 2015 and 2016.

AC 1.1 Focal Regions

[Contribution to IDO: Enhanced benefits from ecosystem goods and services; equity and inclusion achieved; more sustainably managed agro-ecosystems]

The IES flagship covers four regions: the Volta/Niger region, the Nile/East Africa region, the Greater Mekong sub-region and the Ganges region. IES also includes the Innovation Fund which supports ecosystem-based solutions across the regions. Activities in 2014 were centered on supporting these key regions to maintain partnerships and finish programs of work related to the CGIAR Challenge Program on Water and Food (CPWF), while the new focal region program including the open and competitive calls and focus on ecosystem and gender approaches was developed and implemented. In the Volta/Niger work centered on developing a series of outputs from CPWF work with the Volta Basin Authority. In the Ganges, the CPWF work in Bangladesh was wrapped up and a major science forum held. In the Greater Mekong, WLE successfully secured more than US$ 5 million contribution from the Australian Department of Foreign Affairs and Trade (DFAT) to support the implementation of the WLE focal region. In addition, a major effort was carried out to put all of the CPWF research outputs on-line. In the Nile, a new initiative on Water Smart Agriculture was established with CARE and the Global Water Initiative. Activities, which began in January 2015, include strengthening regional and national policy platforms, such as through the science policy dialogue that was held in Lao PDR.

The new activities developed in IES began in January 2015. These new projects will shortly begin testing new methods, tools and approaches for improving land and water health indicators to use in decision-making. These new methods include agent-based models for addressing complex ecosystem service analyses in 14 countries and water accounting projects in East Africa and Vietnam, which draw on outputs from the DAI core theme. Furthermore, the flagship has a strong capacity building and gender focus in each focal region. In the Ganges, for example, the Poverty Squares and Gender Circles project has held a series of gender workshops for decision-makers in the region. In addition, IES is building on the work of the CPWF to roll out a fellowship program for young researchers in the Mekong region. IES works closely with other CRPs in the focal regions including through a joint project with AAS and GRiSP in the polders of Bangladesh. Furthermore, IES is working with The Global Resilience Partnership (GRP), funded by Rockefeller Foundation, SIDA and USAID. In 2014, the GRP adopted WLE's innovative write-shop process, which was developed to assist the IES focal regions in their own project development.

IES projects bring a diverse suite of partners (more than 80 new partners to WLE), which include the private sector, NGOs, governments, academia and communities. This diversity helps IES to deliver integrated and innovative ecosystem-based solutions to challenges related to water and land governance, infrastructure development, sustainable intensification, gender and equity, food and water security and livelihood resilience.

Flagship 2: Sustainably Increasing Land and Water Productivity (LWP)

This flagship aims to provide scientific and practical field-tested approaches to increasing land and water productivity and fostering more resilient, equitable, food secure farming communities that benefit from well-functioning ecosystems. For LWP, improved productivity is not simply about increasing output per unit of land or water, but rather producing more food, income and livelihood at less social, economic and environmental cost.

In 2014, this flagship invested in 33 research activities run by six centers, focusing on outcomes under two major activity clusters (AC): Agricultural Water and Land Management (AWLM) (24 activities) and Revitalizing Irrigation Systems (8 activities). Collectively, these activities committed to delivering 168 outputs in 2014, of which 82% were delivered, 16% were delayed, or cancelled due to budget reductions and work plan revision, while the status of the remaining 2% of outputs was not reported. The total expenditure for the flagship was US$18.12 million, or 99% of the budget. 58% of this amount came from bilateral funding and 11% from W3 while only 31% came from W1/2.

AC 2.1 Agricultural Water and Land Management (AWLM)

[Contribution to IDO: More sustainably managed Agro-ecosystems]

This activity cluster provides the knowledge, tools and tested solutions that public and private sector investors can use to leverage smallholder agriculture developments for the greatest livelihood and environmental benefits.

Five activities[5] in 2014, focused on *improving knowledge about agricultural water and land resource use and sustainability*. Smallholder water and land management have substantial potential for poverty

[5] Identification of sites for irrigation expansion (IWMI); AWM in rainfed landscapes (IWMI); Dynamics of rainfed landscapes (IWMI); Groundwater in Cambodia (IWMI); Groundwater-based agrarian change in Sri Lanka (IWMI).

alleviation and rural development. Smallholder management is an established trend in South Asia and gaining ground in sub-Saharan Africa, where small-scale irrigation in some countries employs more people and covers more land than do large, public irrigation schemes. Yet, its unchecked proliferation and lack of policy, strategy and institutional support mechanisms pose significant challenges to the sustainable management of natural resources. While past WLE-supported research revealed the scale and potential economic benefits of smallholder irrigation in sub-Saharan Africa and South Asia,[6] significant gaps remain in understanding the spatial and temporal dynamics of this trend and the implications for food security, equity and environmental sustainability.

To bridge these gaps, the LWP activities go beyond traditional land use/land cover mapping to: delineate the geographic extent of irrigated and rainfed areas (both large- and small-scale) in relation to broader landscape processes and environmental boundaries; assess knowledge and perceptions of resource use and access; and monitor changes in practices and perceptions over time. The activities are generating the knowledge that governments and local communities need to sustainably manage irrigated and rainfed agro-ecosystems for the greatest livelihood and environmental benefits.[7] Key outputs in 2014 included publically available maps of irrigated and rainfed areas for Asia (at 250 meter resolution) and South Asia (at 60 meter resolution); participatory mapping tools (P3D mapping) applied in Ethiopia to assess gendered perceptions of land and water resource use and access;[8] and a database of groundwater wells potentially vulnerable to overdraft in Cambodia. Together, these products offer critical, heretofore missing decision-making tools to enable better targeted and tailored sustainable AWLM policy and investment strategies. In 2015, the regional mapping work will be extended to sub-Saharan Africa; the P3D mapping work will be incorporated into LWP projects in East Africa piloting promising AWLM solutions; and groundwater monitoring will continue in Cambodia, supporting existing and future groundwater strategies and regulations.

Thirteen activities[9] in 2014 focused on *agricultural water and land management solutions*. Working with key partners, these activities aimed to promote sustainable AWLM investments that provide timely and reliable access to water resources, improved soil and nutrient management, strengthened smallholder value chains, and supportive institutional and policy environments. This work builds on a large body of past and present small-scale AWLM activities at the field and watershed scale that have been carried out by LWP partners. Among the 2014 outputs include a Water Impact Calculator (WIC) that allows better scheduling of irrigation. In India, results from WIC show that water use can be reduced by 30-40% without compromising crop yields. WIC training is underway in Karnataka, India with a target of reaching 10 000 farmers by 2016.
Gender research by AWLM in Nepal highlighted the importance of irrigation scheduling for access to water by women, particularly if irrigation is done at night when women are often not able to go out to the field. Similarly, a multi-scale water and nutrient model – which helps irrigators design efficient, economic and sustainable strategies that optimize water productivity and minimize impacts to the environment – was launched on13 canals in the Nile Basin, with the potential to benefit some 20 000

[6] See, e.g., AgWater Solutions: http://awm-solutions.iwmi.org/
[7] This work builds on the Global Irrigation Area Mapping program (www.iwmigiam.org/) and complements a set of activities within MRV to assess sustainable groundwater use potential and thresholds.
[8] This work is carried out in collaboration with the Humid Tropics CRP.
[9] Innovation lab for SSI (IWMI); Low cost runoff harvesting (ICRISAT); Green water use efficiency (ICRISAT); Integrated management for productivity and livelihoods (ICRISAT); Water management solutions for flood recession and dry season agriculture (IWMI); Multi-scale water and nutrient models (ICARDA); Biofertilizers for crop productivity and soil health (IITA); Integrated soil fertility management (ISFM), maize (IITA); ISFM, root crop (IITA); ISFM impacts on soil productivity (IITA); Dissemination of soil management practices (IITA); Small-scale irrigation options for livestock (ILRI); LIVES (IWMI).

smallholder farmers. The IWMI-Tata Water Policy Program in India developed policy recommendations that offer incentives for improving water use efficiency and reducing abstraction rates while providing cash to farmers who sell back excess solar power into the grid. The Karnataka state government has adopted these recommendations (see Section A above) and, together with CCAFS, WLE will launch a new pilot in 2015 in Gujarat to explore climate smart agriculture with solar pump irrigators' cooperatives. A key objective for this grouping of activities in 2015 is to move from a pilot phase conducted with development partners to activities that produce actionable policies, technologies and business models to support future investments in sustainable AWLM solutions.

The remaining six activities[10] focus on quantifying and managing the potential impacts (positive and negative) from upscaling AWLM solutions. While impact assessments and performance indicators have long been part of WLE's research, the flagship is responding to a critical need and growing demand for tools that assess not only productivity gains but also the broader equity and ecosystem benefits and trade-offs arising from AWLM interventions. In 2014, AWLM produced a gender performance tool to assess the extent to which women are involved in and benefiting from irrigated systems. This tool, which will be piloted in East and West Africa and South and Central Asia in 2015, responds to an explicit request from donors (e.g., IFAD) and natural resource management project implementers for a practical instrument to guide future management and policy decisions for improving gender equitable outcomes from irrigation investments.

AC 2.2 Revitalizing Irrigation Systems

[Contribution to IDO: Enhanced benefits from ecosystem goods and services]

This activity cluster aims to unlock the value of irrigated agro-ecosystems and the distribution of their benefits in terms of food, income and ecosystems services.

The activities[11] focus on: technologies and institutions to enhance crop yields and incomes and promote water savings; indicators to monitor changes in system performance and the impacts of such changes on the social and ecological landscape; and innovative mechanisms for providing timely and credible information to all users. While many of the activities only commenced in 2014, some key developments are already emerging in each of these areas. In the Sharkia Governorate in the Nile Basin, for example, researchers supported by WLE are studying the yield, income and environmental benefits and costs of mechanized raised bed technology (MRB). The environmental benefits have been found to include reduced soil salinity and soil and water pollution. This will result in the improvement in the quality of drainage water that is being reused by other ecosystem services, such as aquaculture in the Delta. Preliminary results suggest that MRB also lowers the cost of cultivation
(inputs, machinery operation) and increases crop yields (for wheat by 20-25%). The net financial benefits from the use of MRB technology over conventional planting are estimated to be around US$346/ha/year. The technology has been adopted on 1,616 ha in the Sharkia Governorate, and researchers are examining opportunities for further upscaling.

[10] Impact of AWM in different rainfall zones (ICARDA); Energy use in irrigated agriculture (IFPRI); Innovation lab for SSI (IFPRI); Gender equitable wealth creation (IWMI); IMAWESA (IWMI)

[11] Institutions and policies for improved water allocation (ICARDA); Impact of irrigation on ecosystem services and smallholder resilience (IFPRI); Drivers of canal performance (IWMI); Improving canal performance (IWMI); Water governance through dialogue (IWMI); Understanding past and present water control strategies (IWMI); Irrigation water use improvement (IWMI); More food, less water (IWMI).

In Pakistan, research on precision grading for surface irrigation is demonstrating that more uniform surface irrigation applications, which result in less tail-water run-off and deep percolation, are possible without investment in pressurized sprinkler irrigation. Field trials have shown an increase in productivity of cotton by almost 12%, water productivity by approximately 11% and, according to anecdotal reports from well operators, reduced energy consumption for groundwater extraction by about 15-20%. Replication – with minimal assistance of researchers or extension workers – by local farmers is indicative of the potential for wider upscaling.

WLE researchers in India have compiled a comprehensive dataset on benchmarking indicators from over 2 000 irrigation projects in the state of Maharashtra and have published a global synthesis report on improving cost recovery of irrigation. These outputs will form the basis for recommending improvements in the performance indicators for public irrigation schemes in the state (and elsewhere) that assess and monitor not only aggregate irrigation supply and resulting production, but the broader social and ecosystem impacts as well.

Finally, information and communication technologies (ICT) have been deployed to monitor large-scale irrigation systems in Pakistan (Hakra Branch – 200 000 ha) and Sri Lanka (System H – 11 000 ha). These ICTs are providing system operators and, for the first time, water users with the opportunity to receive semi-real time information on actual water supplies in the systems. For example, in the Pakistan Hakra 5R distributary command, an online inventory of over 110 tubewells was created in partnership with members of the local farmers' institution using a GPS-enabled camera to record each site. Groundwater observations are now logged by sensor-based instruments in nine monitoring wells, providing more detailed knowledge of groundwater use in the irrigation command area. While online use of information remains limited, the capacity to provide more detailed monitoring and reporting of water service information has enabled better informed discussions between officials and water users in the Hakra Area Water Board. In 2015, three additional projects will be added to strengthen and extend the institutional aspects of the activity cluster, with a particular focus on strengthening farmer institutions and creating new public-private partnership models for sustainable irrigation development and management in Asia and Africa.

Flagship 3: Regenerating Degraded Agricultural Ecosystems (RDE)

The objective of the RDE flagship is to help public and private decision-makers at all levels to invest in and rebuild ecosystem services in degraded landscapes. To do so, RDE works across sectors and scales and engages in global processes to support change. The overall aim is to reduce rates of degradation of natural capital to benefit local communities and society at large.

In 2014, this flagship invested in 26 research activities run by 9 centers and focused on outcomes under three interrelated activity clusters: 3.1 Landscape restoration interventions (16 activities), 3.2 Ecosystem services assessment, trade-offs and equitable planning (6 activities), and (a new activity cluster) 3.3 Economic solutions and incentives (3 activities).

In addition, RDE invested in an activity dedicated to flagship management and engagements in global initiatives and dialogues, such as the Economics of Land Degradation, the Global Soil Forum and the Global Landscape Forum (GLF).

The 26 RDE activities committed to delivering 171 outputs in 2014, of which 79% were delivered, 18 % were delayed, or cancelled due to budget reductions and work plan revision, while the status of the remaining 3% of outputs was not reported. The total expenditure for the flagship was US$8.43 million.

Of this, the largest part – 50% -- was financed by W1/2 funding, followed by bilateral (41%), W3 (7%) and center funds (2%).

AC 3.1 Landscape Restoration Interventions

[Contribution to IDO: Natural capital enhanced and protected especially from climate change]

In this cluster of activities, WLE demonstrates, evaluates and monitors interventions in landscapes to slow and reverse degradation processes and restore degraded ecosystem services.

RDE includes six activities on degradation processes such as soil erosion, nutrient depletion and forest loss; the aim is to increase the provision of food and energy and clean water and to improve nutrient and water cycling and climate resilience through sustainable land management. In 2014, CIAT continued to build on work started by the Challenge Program on Water and Food (CPWF) in Honduras, Nicaragua and El Salvador, focusing on the restoration of degraded landscapes. The activity strengthens networks of farmers, who co-design and monitor field trials that mimic natural systems in structure but integrate crops, forages and multipurpose trees. In 2014, this work was extended to Paraguay. In 2014, monitoring measured the impact of these systems on yields and landscape biodiversity, datasets on above and belowground carbon were collected, a baseline landscape assessment of ecosystem services was completed and a study explored methodological challenges to using remote sensing for impact assessment.

Work continued in the Tana Basin in Kenya within the framework of the Upper Tana Water Fund with the implementation of a water quality monitoring scheme for Kenya's Water Resource Management Authority and the completion of a study on the feasibility that sorghum production could support increased linkages between downstream water fund partners (East Africa Breweries Ltd) and upstream farmers, who will be able to produce sorghum for the Breweries. Another water quality monitoring scheme was initiated in Babati, Tanzania to investigate the impact of various intensification scenarios on water quality and nutrient flows. Two new activities were initiated in Africa during the year. Outputs included baseline studies on social and institutional drivers of unsustainable land use in Ghana, Tanzania and Malawi. A preliminary framework for gender landscape analysis was also applied in the same countries. It highlighted potential areas of intervention that would benefit women, including a hypothesis that off-farm work producing Shea (tree) butter could benefit both women and the environment.

Six RDE activities, work in landscapes in which agricultural and landscape-diversity are threatened and the aim is to improve production, increase pollinator services and pest and disease resistance and build climate resilience primarily through increasing and restoring agrobiodiversity. In 2014, Bioversity helped to establish a community seed bank with more than 200 farmers in Uganda. In addition, local partners were able to use their experience to influence the Uganda National Seed Policy. A new book, Conservation of fruit tree diversity in Central America, journal articles, and blogs summarized and disseminated results of a UNEP-GEF/Bioversity project. In Cuba, researchers from Bioversity have identified crop varieties with distinctive traits that have shown resilience to climate change as well as high economic potential. In addition, trials of intraspecific crop mixtures that may reduce the incidence of pests and diseases and reduce crop loss were implemented and monitored in Uganda, China, Ecuador, and Morocco.

RDE has four activities in three regions where the salinization of agricultural lands is causing degradation and affecting production. The aim is to restore the lands' capacity to provide food and clean water by restoring degraded soils and improving the management of water. In 2014, ICARDA

implemented three activities to develop and implement salinity management frameworks in the Nile, Iraq and Central Asia. Each of these activities included the development of RS/GIS databases on the impacts of various practices on salinity, drainage and productivity and the implementation of associated websites and stakeholder processes. Activity in Iraq has been discontinued due to: a cut in budget that arose over 2014, the security issues that emerged during 2014 that prevent partners based in Iraq to undertake field activities, and a bilateral project associated with this activity coming to an end. The key issue was the deteriorating security situation in Iraq, which made closing this activity preferable compared with the Nile and Central Asia.

AC 3.2 Ecosystem Services Assessment, Trade-offs, and Equitable Planning

[Contribution to IDO: Enhancing benefits from ecosystems goods and services]

The overall aim of this activity cluster is to improve the design of restoration initiatives. Two activities advanced the knowledge base on soil quality with significant implications for addressing yield gaps in nutrient-limited soils of Africa. They included work by CIAT to demonstrate that the newly available AfSIS soil data can significantly improve yield simulation as well as to calibrate the DSSAT model for soil phosphorus, a first, which will assist with the estimation of actual yield gaps and their solutions. In addition, 'non-responsiveness' to blanket fertilizer inputs was evaluated in 130 field trials in Kenya, DR Congo, Nigeria and Tanzania by IITA, revealing non-responsiveness in 15% to 30% of tested soils. The efficacy of liming, manure and micronutrients in improving soil response was demonstrated on some of these soils. Two additional activities focused on soil carbon. In collaboration with CCAFS, CIP produced a summary report on simulation modeling to assess soil carbon and land use dynamics in the Central Peruvian Andes; and sampling for a dataset on soil carbon stocks was completed for 516 sampling points. CIAT produced digital maps of soil carbon for a region in Colombia, demonstrating that improved and deep root systems are able to store soil carbon at similar levels as are natural systems.

Soil and Water Assessment Tool (SWAT) modeling and a new software tool 'Soil-Landscape Estimation and Evaluation Program (SLEEP') developed by ICARDA were used to assess an integrated watershed management project in Ethiopia. As a result, soil and water conservation activities were supported by the distribution of fuel-efficient cook stoves as an incentive mechanism, with potential positive feedbacks on fuel demand. In Cambodia, Vietnam and China, IFPRI collected social and ecological data for modeling how pest control and pollination services impact landscape diversity. Publications and a short film were produced.

AC 3.3 Economic Solutions and Incentives

[Contribution to IDO: Enabling environment improved]

Important outputs in 2014 – the first year of these new activities – included (i) the framework developed by CIAT, Bringing the economics of land degradation (ELD) back to the farm level, which will be the basis for incorporating economic approaches into sustainable land management (SLM) projects; (ii) a priority conservation portfolio for threatened agrobiodiversity and the implementation of a payments for agrobiodiversity conservation scheme by Bioversity for four threatened maize varieties, involving 100 households in Ecuador; and (iii) an analytical framework and land use land cover change analysis, to assess ecosystem services in pastoral lands in Kenya by ILRI.

Flagship 4: Recovering and Reusing Resources in Urbanized Ecosystems (RRR)

This flagship is providing public and private sector decision-makers with viable and sustainable investment options that turn otherwise wasted resources into economic and financial assets in support of food security. RRR operates in the context of rapid urbanization and the need for strong rural-urban linkages in support of urban resilience and a green economy. The overall aim is to reduce the negative footprint of cities on ecosystems and human health while improving agricultural production.

In 2014, after the budget cuts, this flagship planned to invest US$ 4.9 million on nine research activities by three WLE partners focusing on outcomes under two major ACs: 4.1 Business opportunities in nutrient, water and energy recovery and reuse (US$ 2.6 million; 3 activities) and 4.2 Support for healthy ecosystem services under urban growth (US$ 1.5 million; 4 activities). A third AC did not gain critical mass and was merged with AC 4.2. The flagship also invested US$ 0.8 million on two activities dedicated to flagship management, publications, capacity building and database development. While 65% of the budget supported output development, it is important to note that about 35% of the overall 2014 flagship budget went into the direct support of outcomes.

The two ACs 4.1 and 4.2 are closely linked, with the former attempting - through the valorization of waste - to prevent environmental pollution, while the latter addresses already occurring urban trade-offs in the food chain, human and ecosystem health. The activities committed to delivering 35 sets of outputs in 2014, of which 87% were delivered, 8% are partly delivered and 5% were delayed or cancelled due to budget reductions and work plan revision. The total spending was US$ 4.53 million, which is 75% of the original budget or 92% of the revised budget. Just over half (54%) of the expenditure was funded from bilateral sources, 4% came from W3 and the remainder (42%) came from W1/2.

AC 4.1 Business Opportunities in Nutrient, Water and Energy Recovery and Reuse

[Contribution to IDO: National Partners and Beneficiaries Enabled]

This AC was established at the inception of WLE. It has a strong emphasis on economics and the business side of RRR. All activities are aligned and aimed at improving nutrient, water and energy recovery and reuse from domestic and agro-industrial waste through scalable business models using three strategies and associated change agents:

1. Investors: Advising banks, donors and private/public sector on RRR investment options;
2. Policy-makers: Advising authorities on policy revision, strategies and guidance notes;
3. Business schools: Enhancing capacities through the development of online RRR curricula.

Most activities in 2014 and 60% of the AC budget targeted the first strategy and tested several of the business models developed the previous year. Feasibility studies were conducted in 11 locations in seven countries and were accompanied by stakeholder consultations, training in business modeling, workshops and 'green' investment climate studies for RRR. Several of these studies will continue in 2015. With the support of about one third of the AC budget the flagship went one step further to learn from the actual implementation of selected business models through four new private-public partnerships seeking to turn waste into a resource for agriculture.

The main output of the AC in support of the second and third strategies was a draft catalogue of RRR business cases and models that is now being edited for (open access) publication. With 10% of the budget dedicated to gender, all business models were analyzed for gender-inclusiveness, including

possible obstacles to engagement as well as stakeholder benefits. Other outputs were the first three volumes of the new RRR publication series with five more in the pipeline.

AC 4.2 Safe Waste Water Reuse

[Contribution to IDO: Improved food security]

This activity cluster has its roots in IWMI's long-term partnership with the World Health Organization (WHO) to improve food safety and safeguard public health where untreated wastewater is threatening ecosystems and used for irrigation. The activities target national authorities using two strategies:

1. Directly advising national authorities and policy-makers on risks of wastewater use and the options for risk mitigation;
2. Reaching national authorities indirectly through UN agencies and their regional and global normative products, advocacy activities, capacity development and outreach to sector ministries.

Three CGIAR centers contributed to this activity cluster in 2014. Forty-seven percent of the AC budget went into the establishment and assessment of wetlands for wastewater treatment and irrigation in different locations in India, an activity led by ICRISAT. This is an ongoing activity whose first results on treatment performance were reported in 2014. The work gained momentum with the approval of a new WLE-funded project in the Ganges focal region, where the anticipated outputs will be advice to the National Mission for Clean Ganga (NMCG) on investment in wastewater management.

About 17% of the budget went to an assessment of health risks and risk mitigation options where wastewater is used in vegetable production in Ghana, an analysis of urban dependency on urban, peri-urban and rural food supply and related safety issues in Ghana and Burkina Faso and the mapping of changes in ecosystem services (ES) in urbanizing areas for six cities in South Asia over the past 20 years. Models for quantification and valuing ES change are being applied, and will be compared with stakeholder perceptions across an urban–rural transect. This is work in progress with a strong focus on gender and poverty implications, given the common male migration to urban jobs.

To support the promotion of safe reuse with scientific data, a key 2014 output was the summary of a decade of research on pathogenic and chemical risks for the food chain in urban Ghana including the gender implications of risk mitigation. A particular milestone in advancing our knowledge on the global scale of wastewater use was the first global assessment of the area under rainfed and irrigated urban and peri-urban agriculture, a study which was reported by BBC News and National Geographic. Additional work on wastewater use in peri-urban areas was started by ICARDA in Egypt.

The flagship invested about 20% of the AC budget on outreach to WHO, FAO, UNEP and UNU. IWMI is a member of the UNEP-led steering committee of the global wastewater initiative and supports several UNEP-led water quality reports. A new book by WLE and UNU on the economics of wastewater reuse was written in 2014. Among other issues, the book pays due attention to cultural issues affecting wastewater reuse, including gender-related issues. To address safety concerns related to RRR, the flagship assisted WHO to develop a first draft of the Sanitation Safety Plan (SSP) manual, which is designed to complement the RRR business models on wastewater and fecal sludge with the required risk mitigation measures and protocols.

Flagship 5: Managing Resource Variability and Competing Uses (MRV)

This flagship aims to assist decision-makers to significantly enhance the ecosystem services provided by surface and subsurface water storage; reduce human and economic losses from water-related disasters; establish mechanisms for the governance and benefit sharing of natural resources as well as thresholds of sustainable groundwater and surface water use; and develop solutions that take into account water, energy and food interactions.

In 2014, this flagship invested in 44 research activities run by seven centers, focusing on outcomes under three major ACs: 5.1 Managing water variability (19 activities), 5.2 Resource allocation and sharing of benefits for all (16 activities) and 5.3 Water and energy for food (6 activities). The flagship also invested in three activities dedicated to flagship management, publications and capacity building. These activities were expected to deliver 218 products and outputs of which 87% were delivered, including 27 journal articles with a total expenditure of US$ 12.96 million, of which 45% was W1/2 funding, 50% bilateral funding and 5% from W3.

AC 5.1 Managing Water Resource Variability and Rethinking Storage

[Contribution to IDO: More sustainably managed agro-ecosystems]

In 2014, 19 activities focused on improving the knowledge base for managing the spatial and temporal variability of water to alleviate the negative impacts of floods and droughts through harnessing ecosystem services provided by surface and subsurface sources and storages. A key aspect of managing water variability, with a focus on floods and droughts, is information for decision-making to increase resilience of rural livelihoods and agricultural systems, which are particularly vulnerable to variability. Outputs included an economic flood damage assessment tool, which has been evaluated in Sri Lanka, and spatial products that illustrate the frequency and extent of catastrophic flooding in South and Southeast Asia, produced in collaboration with CCAFS. Some of these products are now available online, and are, collectively, expected to assist in planning for disaster preparedness and assessment of flood impacts.

A comprehensive set of modeling tools and water resources data were developed for sustainable basin planning in the Koshi Basin in Nepal. Exploring the potential of underground storage solutions to water variability throughout the Ganges Basin and Sri Lanka resulted in the development of tools for reduced flooding impacts and improved access to water for irrigation during the dry-season from rehabilitated or commissioned abandoned dug-wells and village tanks. Complementing this work, an analysis of biophysical, institutional and economic suitability, along with targeted stakeholder engagement, was undertaken for parts of the Ganges (Ramganga sub-basin, India) to assess, in more detail, the feasibility of innovative underground water storage options at the basin scale. These outputs are part of a basin-level approach to managing water variability, improving agricultural productivity upstream and reducing flooding downstream. The latter research effort has attracted the interest of CCAFS and will be further advanced jointly by the two CRPs from 2015 onwards. A key attribute of this work is that it is taking a basin-level approach to mitigating flood and drought impacts and improving livelihoods by capturing monsoon runoff underground through recharge ponds. A film was produced that has helped promote the approach to investors, insurance agents and government.

Improved reservoir management, and recommendations for re-operation of reservoirs in Laos (Nam Gnumg) and Ghana (Akosombo) focus on improving livelihood outcomes and reducing health risks. In Laos, the concept of enhancing fisheries in the drawdown area of large storage structures through the introduction of constructed wetlands is being explored by the private sector as an option for diversifying the livelihoods of resettled communities. The value of environmental releases for diversifying the livelihoods of downstream communities in Ghana was demonstrated and the impact of dams on malaria burden in sub-Saharan Africa was quantified. Similarly, ecosystem services provided by green (natural) and grey (built) infrastructure were mapped in the Volta and Tana River basins. This

approach explicitly introduces environmental and alternative livelihood dimensions into existing water infrastructure operations and contributes to planning future development projects.

A cross-flagship collaboration with the LWP was requested by the Nigerian Government to support flood and drought risk monitoring efforts. The activity is using satellite-based tools to assess areas of flood risk as well as opportunities for dry-season agriculture. The effort is being combined with the development of a mobile app that will allow users to monitor river flows throughout the Niger-Benue basin – a powerful and pioneering addition to the toolbox of flood management. In addition, collaboration with the AAS CRP in the Barotse floodplain in Zambia is exploring the impacts of extreme events on local livelihoods and the participatory mapping of ecosystem services driven by flood pulse systems.

AC 5.2 Resource Allocation and Sharing of Benefits for All

[Contribution to IDO: Enhanced benefits from ecosystems goods and services]

Activities under this cluster concentrated on managing the competing uses of ecosystem services with a focus on socially and environmentally equitable allocation and governance of natural resources for the benefit of rural men and women. Key outputs over the reporting period included the preparation of gendered indicators for larger-scale water assessments for the four WLE focal regions with the production of a preliminary set of over 120 mapped indicators. At a global scale, the environmental flow assessment tool, a key component in water allocation, was refined and automated to work with a set of large and high spatial resolution river flow data. WLE continues to be instrumental in influencing wetland management policies at the global level, through its research and involvement in the Ramsar Convention on Wetlands. The efforts of two working groups of the Ramsar Scientific and Technical Review Panel resulted in guidelines and tools for addressing poverty eradication in relation to wetlands (awaiting publication as part of the Ramsar Technical Reports series).

A SWAT community of practice was established and met in October 2014 in Ethiopia. It involves SWAT modelers from various CGIAR centers and aims to develop protocols and guidelines for modeling ecosystems and their services. SWAT has become a common tool that CGIAR researchers use to assess alternative land use management scenarios at multiple spatial and temporal scales and under expected potential future climates. The guidelines will be released at the 2015 International SWAT Conference in Sardinia, Italy. The guidelines are likely to influence hundreds of future SWAT analyses well beyond CGIAR.

MRV also collaborated with the Humid Tropics CRP to develop participatory methods that help assess how ecosystem services are valued differently by men and women. The methods were tested in a small catchment of the Ethiopian highlands. The use of simulated SWAT models based on input data from men versus women, respectively, resulted in markedly different land and water availabilities, suggesting that land and water resource planning should involve women's and men's groups.

Additional activities in this cluster focused on reducing groundwater depletion by improving groundwater governance and management. Establishing strong evidence on the role of groundwater in food security is critical for managing growing pressures on this resource. A joint initiative between WLE and PIM is assessing the role of groundwater for and the impact of groundwater depletion on future food security for the CGIAR Global Future and Strategic Foresight Initiative. Furthermore, case studies in Asia (Lao PDR and India), the Middle East and North Africa, and Sub-Saharan Africa are evaluating a variety of approaches to support the more sustainable use of groundwater resources. As a complement to the case studies, a global review of groundwater governance patterns will be published in 2015. For Sub-Saharan Africa, this AC assessed the extent and distribution of groundwater irrigation potential, with some of the most promising areas found in the Sahel and eastern Africa. In addition, a new methodology to determine environmental thresholds for sustainable groundwater use

from stream flows has been designed and tested in 21 small catchments in South Africa. Preliminary results suggest that groundwater development potential exist in 19 of these areas. Sustainable groundwater use in Laos is being guided by pioneering MRV research on quantifying the resource, and improving the technical and institutional capacity of national stakeholders tasked with the development and management of groundwater.

AC 5.3 Water and Energy for Food

[Contribution to IDO: Enhanced benefits from ecosystem goods and services]

Six activities focus on developing tools, investments and case-specific solutions and holding policy dialogues with the goal of reducing pressures on natural resources and increasing overall resource-use efficiency and sustainability. Activities include global analyses of the tradeoffs between energy developments and irrigated agriculture and food security and case studies from the Eastern Nile, Central Asia and the Mekong region on the range of approaches, institutions, policies and investments used to increase the efficiency of resource use across the water-energy-food nexus.

Research in northern Tajikistan has demonstrated that groundwater development and managed aquifer recharge in lift irrigated areas improved both the water and energy efficiency of the irrigation schemes. A policy brief was on this finding developed and shared with the Ministry of Energy and Water Resources of Tajikistan.

Core Theme [6]: Decision Analysis and Information Systems (DAI)

This core theme aims to improve the quality of decisions on agro-ecosystem research and development by promoting the wider use of decision analysis and risk assessment methods and well-targeted information systems. Improving decision quality would help to better target research, avoid waste, improve implementation designs, generate greater commitment to action and improve the measurement of success. These improvements would in turn increase project impacts and ensure greater value for money with lower risks.

In 2014, this core theme invested in ten research activities run by five centers, focusing on outcomes under two major ACs: 6.1 Decision Analysis and Risk Assessment (4 activities) and 6.2 Information Systems for Land, Water and Ecosystems (6 activities). These 10 activities committed to delivering 52 outputs in 2014, of which 88% were delivered, and 12% were delayed or cancelled due to budget reduction or work plan revision. The total expenditure was US US$ 6.75 million, or 89% of the original budget. Of this, just over half (53%) was bilaterally funded, with a third (36%) from W1/2. The remainder was sourced from CGIAR centers (9%) and from W3 (2%).

AC 6.1 Decision Analysis and Risk Assessment

[Contribution to IDO: Enhanced benefits from ecosystem goods and services]

This is a crosscutting initiative that addresses how CGIAR and its stakeholders can improve the prioritization, planning, monitoring and evaluation of its work. The overall aim is to mainstream the use of decision analysis under uncertainty in agricultural research and development.

In 2014, researchers developed a conceptual framework for decision analysis under uncertainty in agricultural development. Known as the Stochastic Impact Evaluation, the tool extends WLE's previous work on applied information economics. Tools were developed to help implement the approach,

including a prototype for Monte Carlo simulation and a Bayesian modeling frameworks planning and evaluating agricultural development interventions.

An example of implementing a Stochastic Impact Evaluation was published in a technical report, a journal article and a WLE blog post. Decision models were established for four interventions in a dryland project in Kenya. The modelling has been validated in the published study on the Habaswein-Wajir Water Supply Project in Northern Kenya. In addition, a report on modeling resilience in the Horn of Africa was delivered to the Technical Consortium for Ending Drought Emergencies and Building Resilience to Drought in the Horn of Africa. This approach is being used to guide WLE initiatives in the Northern Volta. Stochastic Impact Evaluation is also promoted by CCAFS as a way to help governments prioritize and target climate smart agriculture practices.

Fifty stakeholders were involved in participatory workshops on decision analysis and a total of 27 trainees (15 men, 12 women) from CGIAR, private sector and NARS took part in training webinars on applied information economics. Young scientists seconded to ICRAF by the Kenya Government's Ministry of Devolution and Planning were trained to use Stochastic Impact Evaluation to support planning in that country.

AC 6.2 Information Systems for Water, Land and Ecosystems

[Contribution to IDO: Natural Capital is enhanced and protected especially from climate change]

WLE has prioritized the development of information systems that target critical areas of uncertainty in water, land and ecosystem management and have the potential to contribute to shaping policies and programs at international, basin, national and sub-national scales. Priorities include land/soil, water and biodiversity information systems.

Land health surveillance focuses on designing cost-effective methods to determine land health, with a focus on soil properties. A landmark paper articulating an evidence-based framework for land health surveillance and response, based on scientific principles used in public health surveillance, was published with open access. The paper suggests that current approaches that focus on land degradation hot spots may be misplaced and proposes that greater impact may be obtained by strategies to address the risk factors associated with land degradation (e.g. permanent soil cover in landscapes, farming profitability).

The Africa Soil Information Service (AfSIS) continues to provide timely information on soil properties and to develop capacity in new soil surveillance methods. ICRAF's Soil-Plant Spectral Diagnostics Laboratory is a co-founder and key contributor to AfSIS. Its geo-referenced spectral libraries, based on a sample of 60 sentinel sites across sub-Saharan Africa, was posted to a Kaggle open competition to improve the machine learning algorithms for predicting soil properties from lab spectral data and remote sensing data. The competition attracted 1 233 data science teams from around the world and led to better algorithms and an active learning exchange. Through partnership with ISRIC, predictions of soil properties in Africa at one km resolution for Africa were released using an automated mapping framework (3D regression kriging). This was accompanied by a soil health and cropping survey that provided tailored recommendations that could help both cropping preferences of men and women.

Digital soil maps are currently generated by calibrating ground data to remote sensing data from satellites. There is, however, there is the potential to generate higher resolution products using new drone technology. The International Potato Center developed and tested a drone in Peru to monitor potato and sweet potato crops. Drones will provide new information about weather, crop performance,

resource use and the improved genetic traits sought by crop breeders. CIP also formed a UAV (unmanned aerial vehicle) community of practice.

WLE is developing a global information and monitoring system for agrobiodiversity. A vision paper was developed in 2014 by Bioversity, CIP, CIAT, Agropolis, and GBIF on a global information system for in situ conservation and on-farm management and a first list of NRM indicators were developed in collaboration with PIM. IWMI together with the World Bank and the US Department of Agriculture organized an international workshop entitled Going Beyond Agricultural Water Productivity, which brought together leading experts from different disciplines with the objective of reaching more clarity -- and a more integrated view -- on agricultural water productivity and to consider how to address rising water and food security concerns. In addition, IWMI worked together with UNESCO-IHE and FAO to continue to implement a global Water Accounting Platform and completed an analysis of the Nile Basin water accounts, which was published in an open access ISI journal. The results will be presented to stakeholders in the basin for feedback and subsequent refinement in 2015.

C2. Progress towards Research Outcomes

As the IES flagship has just begun progress in this section is not reported

Flagship 2: Sustainably Increasing Land and Water Productivity

AC 2.1 Agricultural Water and Land Management

Building on past successes, the following section describes some emerging outcomes from recent WLE research on smallholder AWLM.

Improved knowledge base on agricultural water and land resources and their potential: Important outcomes are emerging from in-country assessments of groundwater resources. While the results in Cambodia are still preliminary, early results suggest a rapid decline in water levels, which, if confirmed, could have significant consequences for the sustainability of groundwater for agriculture, domestic use and wetland ecosystems. To integrate this work with policy and regulatory decision-making, a partnership on data collection and analysis is being built with the Cambodian Ministry of Water Resources and Meteorology. An MOU was signed with the Ministry in 2014. In Sri Lanka, researchers have found significant potential in groundwater-driven high value cropping to alleviate poverty in the country's dry zones. The government has asked WLE to scale out the research and replicate an adapted version of the research methodology in other regions.

Of the activities focused on *AWLM Solutions*, evidence of new investments by donors and government agencies, which build on past research supported by WLE, are already emerging.[12] Other outcomes include research to develop and promote low-cost decentralized runoff harvesting in India, which promises to provide smallholder farmers with timely and reliable access to water. Nearly 250 000 m^3 of runoff water was harvested from the 2014 monsoon in three villages covering 1 200 hectares in the water-stressed and poor Bundelkhand region of Central India. As a result, the groundwater table in the pilot watershed increased by three to four and a half meters and cropping intensity grew from 80-160%. The Government of Karnataka has requested further piloting of the approach.

Smallholder value chain improvements are emerging through the ongoing LIVES project,[13] where researchers are identifying opportunities to enhance the economic and environmental benefits from AWLM interventions. In 2014, positive economic and environmental returns arose from the introduction of high-yielding varieties of cauliflower and popcorn in areas where farmers have traditionally focused on water-intensive cereal production (e.g. of green maize, barley and wheat). The project also helped to link these producers to established consumers, such as hotels, retailers and wholesalers. A total of 2 310 farm households were involved in the implementation stage of the project, 311 of which were headed by women.

Finally, efforts to create supportive policy and institutional environments led to the adoption of a pilot sustainable solar pump promotion program in the Indian state of Karnataka along the lines of WLE recommendations (for more details, see Impact Story 2 in Section A). Research on an LWP project (Gender-equitable Wealth Creation through Optimized Value Chains in Tanzania and South Africa) greatly influenced the Ministerial Declaration at the global conference, Gender, Water and

[12] For example, in 2013 USAID invested US$12 million investment in a program to improve the effective use of scarce water supplies in sub-Saharan Africa through interventions in small-scale irrigation involving several WLE partners; and in 2014, the Government of Nigeria invested over US$2 million in a program focused on AWM solutions for flood recession and dry season partners

[13] ILRI is the key partner implementing the livestock value chain components of the LIVES, and is ensuring that the LIVES research also contributes to the Livestock and Fish CRP.

Development: The Untapped Connection, from 2-7 November in South Africa. Subsequently, the African Ministers' Council on Water (AMCOW) adopted a policy and strategy for mainstreaming gender in the water sector in Africa.

Seven activities focused on quantifying and managing the potential impacts from upscaling AWLM solutions in 2014. WLE researchers completed an ex-post impact assessment (epIA)[14] of a groundwater policy change in West Bengal, India, which itself was the result of past research by WLE partners.[15] The epIA concluded that the policy change, which expanded farmer access to groundwater in areas with annually recharged aquifers, had resulted in over 140 000 new electric connections for tubewells, improved irrigation on 250 000 ha, and improved access to irrigation by approximately 1.3 million water buyers (mostly smallholders). The analysis also highlighted potential sustainability concerns, prompting researchers to suggest modifications to the policy. As the flagship moves forward, further investment in monitoring and ex-post evaluations of recommended solutions with key partners[16] will be essential to assess changing circumstances and adapt accordingly. Other forms of evaluation are critical for long-term learning at the project and program level. For example, WLE is building on lessons from an internal review of the engagement process adopted by the AgWater Solutions project and this project, together with the IWMI-Tata Water Policy program, have been identified as high priority candidates for future impact assessment work.[17]

AC 2.2 Revitalizing Irrigation Systems

In 2014, partnerships with key implementing agencies illustrated the uptake, application and demand for further WLE research. Work in Maharashtra, India, for example, was initiated at the request of the Principal Secretary of Irrigation to strengthen irrigation benchmark indicators. This demand-led process is providing an opportunity to extend the existing suite of indicators from traditional metrics to include those that integrate gender equity and agro-ecosystem considerations. While the work is ongoing, if a more gender and ecosystem approaches to irrigation benchmarking are adopted, it could impact more than 3000 irrigation projects in Maharashtra alone covering more than 1 million ha of net irrigated area.

IWMI has been working with other partners (World Bank, IPTRID, ICID, FAO) in India on irrigation benchmarking for several years. The Indian State of Maharashtra embraced the approach, and by 2012 had benchmarked over a third of the State's irrigation systems (around 1300 irrigation systems covering approximately 1 M ha). As part of this on-going effort, IWMI was approached by the Secretary Department of Water Resources, Government of Maharashtra, to analyze the benchmarking data and improve system performance by incorporating gender, equity and ecosystem analysis into the more traditional metrics of irrigation performance. Thus, the 1 M ha that is already under benchmarking is benefiting from IWMI/WLE's past and present work.

In Pakistan, new volumetric performance measures were developed for evaluating large public irrigation schemes. These include measures of equity and aspects of this research are being

[14] This research was carried out as part of a larger MRV flagship project entitled Water resources in prospects for Indian agriculture.
[15] The original research and policy recommendation emerged from the IWMI-led AgWater Solutions project, which was funded by the Bill & Melinda Gates Foundation with support from WLE.
[16] Where activities cut across CPRs, additional opportunities for cross learning exist, e.g., the LIVES value chain work in Ethiopia that cuts across WLE and the Fish and Livestock CRP; and the pilot program on solar pump irrigators' cooperatives with CCAFS.
[17] See Merrey, D. J. 2014. An Evaluation of CGIAR Centers' Impact Assessment Work on Irrigation and Water Management Research.

incorporated in the World Bank-funded Punjab Barrages Improvement Project Phase II. Finally, research on the potential for volumetric management and volumetric billing in Pakistan led to a request from the government for a study on payment of water charges. The study showed that the current cost of collecting irrigation fees exceeds the levied fees and, as a result, alternate strategies are being explored concerning the provision of adequate funding for sustainable operations and maintenance, including ways to reduce the cost of collecting water charges by the irrigation and revenue departments.

Outcomes from research on information technologies and platforms are also starting to emerge in Pakistan and Sri Lanka. The ICT approaches that were piloted are being replicated through a World Bank project in Pakistan and a private sector initiative with the Mahaweli Authority of Sri Lanka. Furthermore, in Pakistan, a series of multi-stakeholder water dialogues are being used to develop consensus action plans for flood adaptation and productivity enhancement. A total of 40 dialogues have been held in Karachi, Quetta, Peshawar, Lahore and Islamabad, The dialogues have contributed to a marked improvement in the quality of discussion and debate and have allowed sharing of knowledge and information across provinces, an opportunity that is not often available.

Flagship 3: Regenerating Degraded Agricultural Ecosystems

AC 3.1 Landscape Restoration Interventions

Activities in this cluster work in landscapes with communities and local implementing agencies to achieve: i) the local adoption of improved practices, and ii) innovation in program design and outscaling. Progress towards outcomes in 2014 is described below.

The Nairobi Water Fund has made tremendous strides towards having legal framework for implementation as a charitable trust. This is changing how water is used and managed by a diverse group of stakeholders including upstream farming communities, and downstream government agencies, municipalities and companies such as Coca-Cola. CIAT and TNC have provided research on land use and water quality and assisted Kenya's Water Resource Management Authority to implement monitoring schemes that will be central to success of the Water Fund. This has changed the stakeholders understanding of the costs and benefits of different development options. It has also led to further engagement. The East Africa Breweries Limited (EABL) approached CIAT to conduct a feasibility study for upstream farmers to produce Sorghum so that the breweries would have a ready supply of Sorghum as raw material at reasonable prices, thus increasing their profit margin while farmers would obtain higher economic returns per unit area of land. A number of key organizations for the Water Fund have now signed on and many have already committed funds.

Since its establishment in 2010, a community seed bank in Uganda has been distributing seed to farmers. In 2014, 1 760 kg of seed of 20 common bean varieties were distributed, directly benefiting 200 farmer households in 32 villages. The community seed bank is predominantly run and used by women, as women perform most of the agricultural work in Uganda. In addition, according to farmers, the community seed banks have increased social cohesion within families (husbands and wives within the users). They have brought a new activity into the community that is improving access to quality planting material of diversity varieties.

Maintaining species and genetic diversity at landscape scales is a natural control mechanism that increases the resilience of cropping systems to pest and disease outbreaks. The seed bank is part of on-going WLE research on ecosystem service based approaches to pest and disease regulation. WLE researchers from Bioversity have helped further strengthen the capacity of the seed bank by organizing a series of discussions on business management for seed bank managers and relevant actors at local level. This led to a business plan that seeks to ensure the seed bank's economic autonomy and sustainability in the long term. As part of this plan, the seed bank has started the process to open two

new distribution centres, at the Itendero town council and Sheema town council. Inspired by the activity's success in Kiziba, farmers and farmers' associations requested the opening of a community seed bank in the city of Nakaseke. In 2014, Nakaseke farmers multiplied 379kg of common bean seeds of 37 varieties that formed the starting seed capital for the seed bank. Just in September 2014 alone the seed bank distributed 318 kg of bean seed.

The first site in Uganda is now providing more than 30% of the seeds to the community, replacing the local markets (which neither provide good quality seed, nor the seed varieties that farmers are requesting). Community seed banks are shown to be extremely successful when they are farmer run and have national program buy in. For the second seed bank established, the new community itself provided the land (a high cost item in Uganda) for free after seeing the success of the first community seed bank in the south. Additionally, the returning of twice the amount of seeds borrowed, which are sold (like interest on a loan), support the running of the seed bank. The main initial cost is the building and training of farmers. After that, it becomes sustainable if the community seed bank is requested and managed by the local community.

Thanks to this work and ongoing research on local seed systems in the country, together with inputs from national partners, varietal diversity and informal seed systems are now recognized in Uganda's draft National Seed Policy, which recognizes the existence of multiple seed systems comprising formal and informal seed systems, the different players in these systems and the government's commitment to support the production and distribution of quality seed under both systems.

In Cuba, as part of the Bioversity/WLE led UN GEF program on Man and the Biosphere, agrobiodiversity has now been included as a specific resource of interest in the National System of Protected Areas Strategic Plan 2015 – 2020. The main objective of this new program is to recognize the role that agricultural biodiversity plays in the provisioning of ecosystem services and livelihood improvement, including the promotion of "landscape certification" of biosphere reserves and biological corridors as a means of adding value to specific landscapes that jointly tackle ecosystem conservation and livelihood development goals.

WLE researchers from Bioversity are investigating how using diverse varieties of fruit tree species contributes to restoring ecosystem services in saline and moisture limited lands, including pest and disease regulation, soil rehabilitation and pollination services. More than 50 fruit tree nurseries have been established in central Asia, producing more than 1.5 million seedlings annually of traditional varieties of apple, grape, pomegranate and other fruit trees. Furthermore, five regional and eight national training centers have been established. As a result of the nurseries and farmer training, traditional fruit trees planted on dry, rocky slopes in several countries have managed to visibly restore the local ecosystem and improve crop productivity. Bioversity research in 2015 will work to identify specific farm locations in degraded landscapes where fruit tree varietal diversity has the greatest capacity to restore degraded lands, and will work with regional partners to develop market and not market incentive and awareness mechanisms that recognize the off farm services provided by diversifying the varieties of fruit trees in orchard establishment and management in degraded lands.

AC 3.2 Ecosystem Services Assessment, Trade-offs, and Equitable Planning

In this cluster of activities, RDE uses i) models and participatory approaches to develop scenarios and evaluate trade-offs with a focus on gender; and ii) targeted research to build evidence on the relationship between land use, soil quality and ecosystem services. The overall aim is to improve the design of restoration initiatives. To achieve this, RDE builds the capacity of program planners and implementers in development agencies, NGO's, and governments at district and higher scales.

It is too early in the activity cycles to report significant outcomes, given that projects started in 2013 and 2014.

AC 3.3 Economic Solutions and Incentives

In this new area, RDE addresses a major challenge to regenerating agricultural ecosystems: it is often not the technologies that are lacking but the absence of economic incentives for behavioral change and a shortage of investment in actions to address land degradation. The primary users of results from this cluster are government officials from agricultural and planning ministries and private sector entities with an interest in national food security and high value ecosystem services, such as clean water for hydropower generation and irrigation. The outcomes will be trials and investment in various incentive mechanisms.

It is too early in the activity cycles to report significant outcomes, given that projects started in 2013 and 2014.

Flagship 4: Recovering and Reusing Resources in Urbanized Ecosystems (RRR)

AC 4.1. Business Opportunities in Nutrient, Water and Energy Recovery and Reuse

In 2014 there was an increased interest in RRR work, with diverse partners seeking advice and expertise. About 50% of the AC budget supported work in this AC. The following progress has been made:

- In three cities in Ghana, RRR business models and staff are supporting the establishment of four public-private partnerships for turning human waste into resources, such as fertilizer pellets.
- In India, the World Bank Water Sanitation Program (WSP) asked RRR to assist the Government of Madhya Pradesh, to implement fecal sludge management (FSM) solutions in small towns, with a focus on resource recovery for agriculture. The investment plans developed through the effort are now being funded by the government while the WSP-IWMI collaboration will carry out similar work in 2015 in Tamil Nadu.
- The World Bank's Central Urban Advisory Unit asked WLE for an assessment of RRR experience in Ghana, Bangladesh, India and Sri Lanka to inform guidelines for better advising their partner countries.
- In Bangladesh, IWMI advised BRAC (formerly the Bangladesh Rural Advancement Committee) on FSM options and, in 2015, will conduct FSM feasibility studies funded by USAID.
- WSP invited RRR to develop two joint policy advisory notes on fecal sludge and wastewater reuse in India; these are being discussed with the Ministry of Urban Development.
- In Sri Lanka, IWMI assisted the government to revise the national sanitation policy to include FSM and reuse. The revised version is now with the Parliament.
- In Sri Lanka, the Ministry of Public Administration, Provincial, Council and Local Government, and Democratic Governance expressed the wish to have RRR's business expertise transformed into a curriculum. To do so, WLE established a new partnership with the Judge Business School at the University of Cambridge, with a MoU to be signed early in 2015.

AC 4.2 Safe Waste Water Reuse

In 2014, this AC supported a global dialogue on SDG indicators and fed research results into international databases through uptake partnership with different UN agencies. These outreach activities called on about 20% of the AC budget:

WLE/RRR was invited by WHO and UNEP to contribute to the UN GEMI[18] expert consultations, which formulated for the Open Working Group on the SDGs the indicators for SDG targets 6.3 on i) Ambient water quality management, and ii) Fecal sludge management, wastewater treatment and reuse, which are now with the UN Statistical Commission for finalization. These SDG targets will support safe wastewater management and reuse.

For global advocacy and to make RRR outputs more prominently accessible, FAO integrated WLE's wastewater database into their well-known AQUASTAT database.

Flagship 5: Managing Resource Variability and Competing Uses (MRV)

AC 5.1. Managing Water Variability

The examples of progress towards outcomes under this AC range from a high-level workshop and an intensive weeklong training course on flood risk mapping and modeling for the Ministry of Disaster Management of Sri Lanka (endorsed by and co-convened with the Ministry), to WLE joining several international initiatives, such as the UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER). The UN-SPIDER Regional Support Office in Colombo supports regional cooperation in major disaster management and emergency responses. UN-SPIDER provides universal access to space-based information and services relevant to disaster management, including floods and droughts. It is also a mechanism for widely disseminating WLE's decision support tools on water variability management.

The planning tools developed by researchers for the Koshi River Basin in Nepal are being used by the World Bank in its hydropower project planning in the basin with potentially positive impacts for millions of people. These tools evaluate, the feasibility of building water storage reservoirs and can guide future investments in water infrastructure. Specifically, they can help evaluate what combinations of Koshi water infrastructure perform well under a range of plausible climate scenarios and a range of social and ecological performance metrics in the evaluation of investments and regional water development plans.

Progress has been achieved by getting buy-in for piloting solutions for underground flood capture and storage in India. This was done through a series of high level presentations and discussions with the Principal Secretary, Secretary, Engineer-in-Chief and officers of the Department of Irrigation of the Government of Uttar Pradesh, India, as well as with the Chief General Manager of the National Bank for Rural Development (NABARD), the Director General of the State Rural Development Institute, Directors of the Ground Water Department, and the Secretary of the Ministry of Water Resources of India. All of these senior officials were highly supportive of the proposed solutions and pledged their commitment to the approach. In the case of NABARD, for example, investments were promised for pilot implementation (via a request from the state government) if funds from other channels were not identified.

AC 5.2. Resource Allocation and Sharing of Benefits for All

Under this AC, the Experimental Games for Strengthening Collective Action activity, which has a focus on Latin America and South Asia, aims to strengthen governance and the management of contested

[18] UN GEMI working groups are responsible for defining the indicators for the Post-2015 Global Expanded Water Monitoring Initiative (GEMI)

surface waters and depleting groundwater. In Colombia, attitudes and behavior reportedly improved after participating in the games, with no significant gender differences. In India, individuals with more education played more cooperatively, but neither gender nor method of payment had a significant effect on individual behavior. Three civil society organizations in India have used the games in 50 communities, reaching an estimated 5 000 people. The Foundation for Ecological Security, an Indian NGO, is moving forward its plans to use a version of the games in India as part of a hydrology project funded by the Hindustan Unilever Foundation.

WLE has been an active player in the SDG process, helping to design indicators for SDG targets and their monitoring procedures, particularly with regard to SDG 6 targets 6.4 on Water Use Efficiency, and 6.6 on Sustainable Ecosystems. The explicit inclusion of environmental flow requirement (EFR) was an important contribution gained through MRV-WLE expertise. The task team for target 6.4 suggested, as the primary indicator, "sustainable water withdrawal index" – a combination of sustainable surface and groundwater withdrawals, where EFR would be determined for these two primary sources in every country. The task team for target 6.6 suggested a new, but also primary indicator – "natural water capital." While the term natural capital is already widely used, the task team developed a measure specifically for water sources/bodies. Natural water capital is set as an inverse of the "environmental water stress" index proposed by IWMI in 2004. IWMI has also developed draft data sets to support the estimation of EFR for countries where capacity and information are limited. The implementation of the water-related SDGs in line with the WLE ESR framework can positively impact hundreds of millions of people. Depending on how the SDG process develops, and which indicators are eventually selected, the impact may or may not be directly attributed to a particular group, organization, or individual. As the process continues to evolve, and WLE engages with individual countries to support implementation, this will be more evident – by the end of 2015 and beyond.

Interest in applying environmental flow concepts and practices to improve river management decisions has progressed in South Asia. In India, for example, this new interest resulted from recent political changes, together with the establishment of a government program to rejuvenate the Ganges. WLE was invited to talk on this subject at a special Government of India task force consisting of representatives of the Ministry of Environment and Forests, the Ministry of Water Resources and Ganga Rejuvenation, the Central Water Commission and the Indian Institute of Technology. WLE was asked to contribute to the work of the task force in the future.

AC 5.3. Water and Energy for Food

Case studies in Central Asia and the Mekong have already led to a better understanding by local government agencies and stakeholders (farmers and hydropower agencies) of the benefits of taking a nexus approach so that the natural resource base and ecosystem services, such as energy and irrigation water supply (Central Asia) or energy and fisheries (Mekong), can be maintained while still reaping the benefits from development (irrigated food production and hydropower energy, respectively). For example, in Laos WLE researchers presented their work on the development of fish passages to a high-level panel from the Ministries of Agriculture and Investment, the National Assembly and UN agencies.

A WorldFish-led project on Trade-off analysis and mitigation strategies for fisheries and aquatic resources affected by water development infrastructure in the Mekong contributed, at the request of the Cambodian Technical Working Groups on Fisheries, to a science brief about the potential negative environmental impacts of a large infrastructure project that would cut a road through the UNESCO Tonle Sap Biosphere Reserve. Footage from a workshop on the preliminary results of a WLE study on the value of fisheries (in contrast to hydropower benefits) in the Lower Mekong Basin was broadcast by Cambodian TV networks TV5 and Hang Meas TV as part of the regular morning and evening news.

The Nile Basin Initiative's technical secretariat asked WLE partners to support their efforts to identify the economic benefits of investments along the water-energy food nexus with a focus on the Eastern Nile Basin.

Core Theme [6]: Decision Analysis and Information Systems (DAI)

AC 6.1 Decision Analysis and Risk Assessment

Decision-making in development rarely considers uncertainty in estimating project benefits and costs and risks of project failure. A lack of appropriate tools for ex-ante analysis under conditions of data scarcity constrains the ability of decision-makers to anticipate project outcomes. WLE successfully used Stochastic Impact Evaluation to develop a decision model for the Habaswein-Wajir Water Supply Project in Northern Kenya. The decision analysis indicated that the main risks to the project were saltwater intrusion into the Merti aquifer, the economic infeasibility of the water supply business and inadequate stakeholder involvement as a result of political interference (Luedeling et al., 2015). Initially, stakeholders had mainly focused on inadequate water supply, which was found to be a relatively minor risk. Presenting research findings to stakeholders during an outreach workshop had clear effects on their perception of the project plans: the risks identified by WLE analysis were now cited as the major remaining challenges to the project by key technical consultants and county government staff. Water subsidies were discussed for the first time and the importance of involving all stakeholders was recognized by the government

The analysis improved the understanding of the intervention decision by all stakeholders. Specifically, the analysis highlighted that fact that the value of the proposed intervention depended to a large degree on judgments by the decision-makers on non-monetary benefits associated with the intervention, such as reduced infant mortality. The research also drew attention to critical project risks, such as political interference or the economic infeasibility of the water supply business, which had not been considered previously. Seeing that some decision outcomes were much less clear than had been initially thought, many stakeholders changed their opinions and requested more measurements, or proposed alternative water supply options, which has delayed actual implementation (Luedeling et al., 2015).

At the request of the Cabinet Secretary's office at the Office of the President of Kenya, a MoU was signed between ICRAF and Webuye East Constituency, Bungoma County to provide advisory and capacity training services in decision analysis. This is a pilot project that may be extended to other Kenyan Counties.

AC 6.2 Information Systems for Water, Land and Ecosystems

Out-scaling the CGIAR's land health surveillance work continued with the Africa Soil Information Service Soil-Plant Spectral Diagnostics Lab extending its lab network to 30 spectrometers distributed among ten countries in Africa. In addition, a request was received by the Indian Agricultural Research Council to establish a new soil spectroscopy research program for India. The Bill & Melinda Gates Foundation funded a second phase of the Africa Soil Information Service Project to build capacity in the use of new soil information systems based on soil spectroscopy in Ghana, Nigeria and Tanzania, in addition to the system already established for Ethiopia.

While the development of the agrobiodiversity facility and the implementation of the Water Accounting+ framework in the WLE Basins are progressing, outcomes are emerging from the review of water productivity/water use efficiency. The review was produced at an opportune time, given the evolving Sustainable Development Goals (and the inclusion of a proposed target: substantially increasing water-use efficiency across all sectors and ensuring sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reducing the number of people suffering from

water scarcity). More specifically, through our involvement with different flagships, DAI has had an opportunity to interact and brainstorm with researchers and development practitioners with the overall goal of identifying opportunities to clarify concepts and how they are applied (in both research and practice) to help address water and food security concerns. The impact of these interactions could be quite significant by potentially influencing not only World Bank operations (a stated, proposed outcome from the World Bank Flagship proposal) but more broadly how selected SDG targets (like increasing water use efficiency) are applied in different national contexts.

While the Water Accounting (WA+) work is at the technical implementation stage, one outcome has been a growing interest in the application of the framework and requests for the development of water accounts outside of the WLE regions. For example, FAO has requested implementation in the Helmand Basin (Afghanistan), the Arab Water Council has expressed interest in its application in the MENA region, the Water Research Commission in South Africa has embarked on a nationwide water accounting system and is assessing the WA+ framework as a potential approach and the Asian Development Bank has requested UNESCO-IHE to assist with the preparations of the Vietnam national water resources plan, for which WA+ will form the basis. In addition, the Nile Basin case study has led to an invitation to take part in the public sessions of the Arab Water Council during WWF7 in Korea in 2015. The WLE work is thus triggering other research with partners, which is likely to result in outcomes beyond the WLE focal regions.

C3. Progress towards Impact

This section presents credible evidence from 2014 on progress towards program impacts and a description of how these impacts have been measured through rigorous impact evaluations.

The Land and Water Productivity flagship aims to have an impact on household food production, nutrition and human health by promoting the uptake of innovations in small-scale agricultural, water and land management practices. Such impact is typically measured by local and national institutions responsible for public and private works. Credible evidence of LWP's impact was presented in 2014 through the impact evaluation of West Bengal's revised groundwater and electrification policies. Groundwater has emerged as the main source of irrigation for smallholder farmers in India and much of infrastructure has been through private investments. West Bengal is no exception. Here, revising groundwater policy as well as strategies for providing and pricing electricity could propel smallholder farmers on a path to agricultural growth and poverty alleviation. The impact evaluation carried out by WLE researchers found that approximately 1.3 million water buyers – mostly smallholders – benefited from improved access to irrigation and approximately 250 000 ha benefited from improved irrigation as a consequence of the amendments. The amendment to the Groundwater Act, which occurred in 2011, was the consequence of research carried out by IWMI and WLE's predecessor programs on the potential benefits of liberalizing the policy and allowing further – though controlled and monitored – tapping and use of groundwater.

WLE's work on Resource Recovery and Reuse (RRR) aims to reduce the negative urban footprint on ecosystems and human health and improve agricultural production. The flagship's impact is measured in terms of the reduction in biological hazards in food and water and the share of waste recovered and reused in target regions. Progress towards this impact was evident in West Africa and South Asia during 2014. In Tema, Ghana, a joint venture agreement has been signed with a private firm and the government to build a plant to convert human fecal sludge into fertilizer pellets for farmers. Three other public-private partnerships (PPPs) with similar aims are being developed. In India, together with the World Bank (Water and Sanitation Program, WSP) and the Government of Madhya Pradesh, RRR is undertaking a project to implement FSM solutions in small towns. RRR's focus is on resource recovery for agriculture. The investment plans developed for the project are being funded by the Indian Government. The World Bank-WLE collaboration is carrying out similar work in Tamil Nadu. Legislation

related to resource recovery is being formulated by WSP and WLE, on behalf of the Governments of India and Sri Lanka. Ex-ante impact assessment studies have been designed to evaluate the implementation of different RRR business models. These studies will also model and cost the environmental and health benefits obtained from restoring ecosystem services and incentivizing waste management using those business models, with results due in 2016/17.

The Managing Water Resource Variability and Competing Uses Flagship (MRV) aims to increase the supply and reliability of water for crop production, livelihoods and ecosystems. As reported in 2013, WLE contributed to Peru's law on Rewards for Ecosystems Services (RES), which was officially passed in 2014, by providing technical advice as well as scientific evidence based on a number of studies. As part of the process, WLE and CONDESAN produced a video for policy-makers to explain the concept of practical benefit sharing mechanisms. WLE continues to contribute to the implementation of the law by providing support to the Peruvian Ministry of Environment (MINAM) in formulating rules for implementation and through events organized by MINAM to communicate the law throughout the country.

Another area it provided support to implementing the law was in response to the legal stipulation that an information system must be developed to register ongoing initiatives on rewards for ecosystem services related to the new law, WLE and the CGIAR Research Program on Forest Trees and Agriculture provided support to CIAT staff for the development of an information systems platform to promote follow up, target support and ensure learning from such initiatives This system will also facilitate evaluation and impact assessment under the law. A novel part of this platform is that it is open access in nature and will work across sectors by including climate change mitigation information (e.g. on REDD+ projects). This is a big change from previously siloed information systems and could have wide scale application across sectors, donors and government agencies.

D. Gender Research Achievements

Gender is a core WLE theme, which is embedded in the choice and selection of projects, the manner in which they are carried out and in the identification of desired outcomes and impacts. WLE's research seeks to improve gender and equity dynamics in environmental and agricultural systems with the aim of ensuring that women have greater decision-making power and receive more benefits from agriculture and natural resources. This focus is central to WLE's primary objective of learning more about the possibilities for sustainable agricultural intensification (SAI) through applying a multidisciplinary ecosystems approach.

2014 was an important year for gender in WLE. A system was put in place, with clear baselines, outputs and outcomes and a mechanism, to track progress on whether and how projects are mainstreaming gender into their work. The system revealed that three-quarters of WLE's projects reported good progress towards reaching their gender-related objectives in 2014 (see Table 1 for details). This is a significant achievement for WLE's research as a whole and it in is line with its gender strategy, which outlines a comprehensive approach over the life of the program. The high level of engagement by researchers and partners across WLE is indicative its evolution towards a fully gender responsive research program.

The rollout of the focal regions under the new IES flagship provided a new modus operandi for gender. As required in the call for proposals, gender issues were thoroughly addressed in the problem statements and extensively outlined in the project design documents prepared during a series of write-shops. Central to this process was the need to specify the role of context and culture germane to each region, and hence provide the real possibility for the projects to be transformative. Though the projects only began in late 2014, interesting results are expected on the gendered aspects of water accounting,

giving women a head start on accessing water and land technologies, and understanding how ecosystems are perceived and used by women.

In the Mekong focal region, building on work initiated prior to 2014, WLE was able to move the gender agenda forward in the hydropower sector, where gender issues are marginalized in planning.[19] Building upon the project Gender Justice in Hydropower - Balancing the Scales, led by Oxfam Australia, which focused on promoting the use of gendered impact assessment in assessing the effectiveness of hydropower development, WLE contributed to the establishment of the Mekong Inclusion Project. WLE Greater Mekong continues to work closely with Oxfam Australia on the project to promote the relevance of gender in assessing hydropower and its sustainability.

Gender is central to sustaining land and water productivity, the aims of the LWP flagship, recognizing that improving productivity is not simply about increasing output per unit of land or water resources, but also about strengthening access to resources and the benefits of having more food, incomes and livelihoods. Work under the IWMI-TATA Water Policy Program has demonstrated, through working with Adivasi women dairy farmers, that those with access to minimal supplemental irrigation were able to maintain a significantly larger herd of more productive milk animals as compared to rainfed farmers. Improving data and evidence on gender roles and the benefits of irrigation is also an important research area for LWP. WLE developed a tool to assess gender performance on irrigation projects in 2014. This was initiated based on demand from both government agencies in Africa responsible for managing irrigation schemes who struggle to implement practical measures to improve gender outcomes, and from IFAD. This demand emerged from the Improved Management of Agricultural Water in Eastern Africa (IMAWESA) project. The tool will be further tested and used to identify ways to increase gender-responsive actions and recommendations for irrigation systems, which, historically, are a strongly male-dominated domain.

WLE's work on rebuilding ecosystem services in degraded landscapes addresses how men and women identify and apply different priorities related to their land and environment. In 2014, researchers under the RDE flagship developed a preliminary framework for gender landscape analysis, which was applied in Malawi, Tanzania and Ghana. In each case, researchers identified the key human/environmental dynamics that will be used to design interventions addressing different beneficiaries' needs and choices. Additional tools will be added to the framework in 2015. In Ghana, researchers are testing the hypothesis that off-farm work producing Shea (tree) butter, which is used in cosmetics and food, can increase women's incomes as well as help to protect the forests. The Gumara-Maksegnit Watershed Project in Ethiopia has tested an interesting experiment of trading free cook stoves for labor, including the maintenance of soil and water conservation structures. Gender mainstreaming training was extended to participants as it relates to degradation and resiliency to climate change and a film was produced support gender advocacy efforts.

Business models are central to the work on the recovery and reuse of waste products and water as carried out by the RRR flagship. In 2014, all business models were screened for gender inclusiveness, finding quite a number of business opportunities that could serve to empower women. For example, work in East Africa suggests that support for women cooperatives engaged in converting agro-industrial waste into fuel briquettes is having a substantial impact on their incomes and welfare, and hence represents an opportunity for gender-based targeting in the future.

[19] The World Commission on Dams notes: "Given the gender-blindness of the planning process large dam projects typically build on the imbalance in existing gender relations. For affected communities dams have widened gender disparities either by imposing a disproportionate share of social costs on women or through an inequitable allocation of the benefits generated"

Of the five WLE flagships, the Managing Resource Variability and Competing Uses of Water (MRV) flagship made the greatest progress in 2014 in its research to better understand the different effects of water use on men and women at a basin scale. Four basin gender profiles were initiated in 2014 aimed at providing an evidence base for the analysis of gender disparities and new development opportunities in the four focal regions. IWMI and IFPRI are implementing this project to improve access by policy-makers and development investors to gender related data. In 2014, maps of the four profiles were compiled in a data portal. These maps are unique in providing granularity down to the district level in a number of areas.

E. Partnership Building Achievements

WLE's theory of change recognizes the critical role that partners play in achieving its vision of sustainable and equitable agricultural intensification. Partnership approaches are used at all stages of WLE's impact pathway, from setting the agenda, to generating evidence, engaging multiple sectors to contribute to and influence decision-making and shifting mind-sets in how people view agricultural development and the environment.

In 2014, WLE finalized its Partnership Strategy, which defines partnership categories; describes how each type of partner will contribute to expected outcomes and impact; and defines principles and approaches for developing and improving WLE partnerships. As noted in the strategy, WLE is developing a number of new strategic partnerships including with WHO and FAO for water safety (RRR); The Nature Conservancy for water funds (RDE); investors/foundations such as IFAD and the Rockefeller Foundation (IES) and for water resilience (UNESCO-IHE and SEI). Below describes examples of how WLE's partnerships help move the program along the impact pathway.

Partnerships for research

Global research partnerships help to strengthen the evidence base for WLE ecosystems based approach and bring in new perspectives from other international research leaders.

WLE continued to develop coalitions focused on integrating the concepts of ecosystem services into agricultural production systems. At the Global level, WLE engaged in the Inter-governmental Panel on Biodiversity and Ecosystems (IPBES), which is the leading intergovernmental body for assessing the state of the planet's biodiversity, its ecosystems and the essential services they provide to society. WLE provided inputs into the scoping studies that were carried out for the Africa Regional Assessment as well as the Thematic Assessment on Land Degradation. These efforts resulted in the inclusion of food-energy-environment nexus and environmental health and zoonotic diseases. This engagement demonstrated CGIAR and WLE capacity to provide strong intellectual support to IPBES, and to collaborate with African delegations.

To integrate ESR into WLE's newly established flagships, the ESR core theme conducted one workshop on "Groundwater and ESR" and the GPI core theme conducted a second workshop on "Institutions and Ecosystems" jointly with PIM and FTA. These were important workshops to open up new lines of research and gain insights as to how the ESR approach can be applied to different situations. Two other workshops are planned next year.

In order to advance landscape-level approaches (the scale that is key to ensure functioning ecosystems), WLE, in collaboration with CIAT, played a critical role in the Global Landscape Forum (GLF) which is the premier forum to discuss landscape level initiatives. This included a partnership with five Latin American Government and international organizations to launch the 20x20 initiative the initiative aims to get the restoration of 20 million hectares of degraded land on track by 2020. For CIAT and the RDE Flagship this is a major initiative to support and demonstrate the role of research in monitoring

and understanding the changes such initiatives bring. It also organized a session on 'creating conditions for success in large scale land initiatives' that brought together private sector, government and NGOs to make recommendations on how large scale land initiatives can successfully go to scale. From this session, discussions are underway with Terra Global an international financing firm to do rapid assessment of a variety of land restoration opportunities to characterize their investment potential (specially relevant to private Impact Investment firms) in the RDE portfolio.

In order to build synergies and design innovative research and partnerships for gender and ecosystems WLE has initiated research with institutions such as Wageningen University and UNESCO-IHE. For instance, a one-day workshop was held in December 2014 in Wageningen, looking at the issue of masculinities in water, both a special journal issue will come out of this, and a series of research issue have been identified. In addition, UNESCO-IHE is playing a major role in the Focal regions with a focus on gender in the Ganges.

Partnerships for enabling and leveraging

The Partnerships Strategy recognizes the need to help build capacity to carry out partnerships effectively as well as to support capacity development of WLE partners.

WLE made major gains in partnerships at the regional and national levels through the initiation of its focal regions. In 2014, an open call for new projects was launched. The call explicitly required a partnership-based approach comprising no less than three partners, with at least 40% of the budget to be allocated for national and regional organizations. This netted more than 80 new partners for the program but it also linked back to older CPWF related partnerships. For example, in the Greater Mekong, WLE was able to successfully obtain five million AUD funding from the Australian Department for Foreign Affairs and Trade to match funding for the WLE Greater Mekong Focal Region Program. Moreover, projects in the Volta, Ganges and Nile all continued to build on successful activities from CPWF.

At the national level, WLE has forged a number of important partnerships for scaling up technologies and approaches.

The RRR flagship seeks to scale up business models through a number of public-private partnerships to improve recycling and reuse of fecal sludge matter. These partnerships are important because there are technologies already in place for waste treatment but scaling has been a problem. PPPs help solve this problem, as they are innovative, self-replicating and self-scaling. In Ghana, two Memoranda of Understanding (MoU) have been signed with national agencies, a further indication of readiness and ownership to upscale composting activities under the Pilisaru program.

WLE also works with government agencies to influence policies and engage in dialogue. In Ethiopia, building on the work by CPWF, WLE has established a Multi-stakeholders' National Platform on Agricultural Water Management (AWM). The first meeting was held in January 2015. As noted in the Solar Power Impact Story in Section A, WLE has been supporting the IWMI-TATA partnership to evolve fresh perspectives and sustainable solutions by drawing from the vast research carried out across India and take these in the form of policy recommendations to policy-makers at the national, state and local levels.

WLE continued to develop coalitions tasked with integrating the concepts of ecosystem services and agricultural production systems in development processes. In 2014, WLE strengthened its engagement with the Intergovernmental Panel on Biodiversity and Ecosystems (IPBES), the leading intergovernmental body for assessing the state of the planet's biodiversity, its ecosystems and the essential services they provide to society. WLE provided inputs to the IPBES scoping studies that were carried out for the Africa Regional Assessment as well as the Thematic Assessment on Land

Degradation. These efforts resulted in the inclusion of the food-energy-environment nexus and environmental health and zoonotic diseases in the studies. This engagement demonstrated CGIAR and WLE capacity to provide strong intellectual support to IPBES and to collaborate with African delegations.

Partnerships to influence investments

WLE recognized the importance of influencing how different public and private sector investments are made, as opposed to focus on only receiving funds. In 2014, WLE continued its partnership with IFAD through the development of a new partnership called "WLE in Africa". The project focuses on providing new solutions and support to IFAD investment projects. The IWMI-Tata partnerships is another effort to influence large scale investments on agriculture investment in India (see Section A on solar power story). The partnership is a collaborative initiative between a research institution and a corporate body, the International Water Management Institute (IWMI) and the Sir Ratan TATA Trust (SRTT).

Partnerships with CGIAR Research Programs

Across the CGIAR, WLE continues to closely cooperate with a number of CGIAR research programs (CRPs) to maximize the potential for strong outcomes and impacts.

In 2014, WLE, CCAFS and FTA combined forces to develop a monitoring instrument that enables implementers of development interventions to monitor changes in resilience. FTA, PIM and WLE worked together to apply and be awarded a Consortium-funded post-doc, who will work on gender and large-scale land and water issues. The partners are also jointly supporting a PhD student, who will start in 2015.

As part of the WLE Ganges program in Southern Bangladesh, the Aquatic Agricultural Systems CRP and the Global Rice Science Partnership are working together to test innovative ways to improve water management for rice and aquaculture production. This builds upon previous CPWF work.

The MRV flagship works closely with CCAFS on variability work, particularly around the underground taming of floods (UTFI) activity, to address the dual challenges of urban/rural flooding and groundwater depletion. WLE and CCAFS have agreed on shared co-attribution of activities to make this possible. This builds on WLE investments to expand the scope of work, partnerships and geographic areas involved in flood mapping. In addition, MRV collaborated with Humid Tropics CRP to develop participatory methods that help assess how ecosystem services are valued by men and women. The methods were tested in a village in the Ethiopian highlands (see Section C.1, Flagship 5)

The DAI core theme supported the development of a vision paper by WLE partners, Agropolis and GBIF, on the global information system for *in situ* conservation and on-farm management, and a first list of NRM indicators was developed in collaboration PIM.

Building on lessons from the last two years, WLE changed how it goes about partnerships. Work through the IES flagship in the focal regions and Innovation Fund has provided new opportunities to engage a whole new crop of partners. In addition, new global partnerships are extending the influence and scope of WLE's message and providing a boost to its overall profile. At the national level, innovative think tank-related initiatives such as the IWMI-TATA project are providing mechanisms to feed research into policy and planning processes.

F. Capacity Building

WLE addresses the capacity constraints of individuals, organizations and institutions so they can more effectively utilize research in decisions that contribute to CGIAR IDOs. WLE's focus on capacity strengthening for ecosystem resilience is unique; it enables decision-makers at different levels (farm, landscape, and/or national) to develop innovative responses that improve livelihoods and reduce risk while maintaining critical ecosystem services. Performance delivery against plans is summarized below.

At CGIAR level, in 2014 WLE provided leadership in the CGIAR Capacity Development Community of Practice; contributed to the CGIAR Capacity Development Guidelines; participated in a special session at the November 2014 FARA@15 Conference in South Africa; and shared best practices from capacity development initiatives and platforms (e.g. IMAWESA; Ghana Dams Dialogue; WAT A GAME case studies; AfroMaison).

At the flagship and AC level, capacity development is integrated into each flagship's impact pathways as a key strategic enabler of outcomes (see Section C for more details). Examples of major capacity development contributions to impact pathway progress included the following:

- IES has capacity development projects in each of its focal regions. These projects link fellowships and research to policy action. In Laos, WLE and IWMI supported a series of research-to-policy dialogues, which have built a platform for discussing evidence-based research. In February 2014, a high-level dialogue was held for vice-ministers to directly comment on key research from two WLE researchers. In December 2014, WLE provided organizational support to the first Lao Research for Development Forum. WLE researchers made four presentations at the workshop.
- LWP conducted training on integrated soil fertility management for the sustainable intensification of maize-based systems in farming landscapes for 158 extension agents, 1 010 lead farmers, a M.S and PhD student. It conducted more than 500 field demonstrations in 150 communities in northern Nigeria, which is directly contributing to their capacity to identify and evaluate yield gaps and diagnose soil health constraints.
- DAI partnered with the Government of Karnataka State, India and Digital Green to strengthen the capacity of agricultural extension personnel and farmers in four benchmark locations in the state through the use of mobile tablets to disseminate and collect agricultural information. RDE developed a capacity building action plan for improving ecosystem services and resilience through the use of agricultural biodiversity within production systems in Nepal and Sri Lanka.

In 2015, WLE's monitoring and evaluation will examine the outcomes of specific capacity development initiatives, with a particular focus on the contribution of capacity development to flagship impacts.

Capacity development within WLE was also important to deeply embed WLE's core theme objectives of improving intervention decisions and strengthening ecosystems services, resilience, gender and equity. The following internal capacity development progress occurred in 2014:

- To build the capacity of development decision makers to integrate uncertain information and leverage information systems technology to improve intervention decisions, the DAI core theme training increased on applied information economics tools for conducting risk/reward investment analyses of major natural resource projects. Fifty researchers were involved in participatory workshops on decision analysis and 27 trainees from WLE and its partners participated in training webinars.
- Scientists and practitioners in WLE flagships and focal region projects participated in the ESR-organized first joint CGIAR/NatCap training course on InVest and Rios, with 20 participants in the Turrialba Costa Rica region.
- To ensure that WLE gender and equity goals are integrated into WLE's new partner-led focal region projects, the GPI core theme supported planning workshops in all WLE focal regions. In addition, in Ethiopia and Pakistan, the GPI core theme joined with ICARDA to hold workshops with local partners highlighting gender aspects that may influence the successful outcomes of projects.

At the individual level, WLE developed future leaders through short-term training for 14 287 individuals (34% female), improving on 2013's number of 8 107 trainees (28% female) and provided long-term training to 306 individuals (31% female) compared to 197 (27% female) individuals in 2013. WLE established 81 multi-stakeholder research-for-development platforms that integrate capacity strengthening in targeted agro-ecosystems.

G. Risk Management

Financial Risks

As with other CRPs, there continues to be uncertainty and instability in funding for WLE. At the Fund Council (FC) meeting in November 2014, the FC approved the extension budgets for 2015-16, reducing the WLE's W1/2budget by 15% just as new initiatives associated with the IES flagship were being finalized for implementation by partners. This, along with the additional cut of 19% imposed on all CRPs in early 2015, will have a dramatic impact on the program with respect to the generation of outputs and outcomes over the next two years, including through the IES portfolio. This lack of stability holds significant reputational risk for CGIAR with external implementation and funding partners. To mitigate this risk, WLE has been exploring new program-level funding opportunities with foundations such as the Rockefeller Foundation and bilateral donors at the regional level. In addition, WLE has discussed the budget cuts openly with its partners, including notifying new IES partners at the outset of the lack of certainty of allocated funding. WLE continues to look for ways to cost share and reduce costs.

To date, it has been essential for WLE to plan the program on a year-by-year basis, with each activity being assessed by the Management Committee not just for quality but also for alignment with the program's impact pathways. This can lead to a protracted process where some plans are not approved until late in the year. This will be mitigated to a degree in 2015-2016, with WLE now comprising an established portfolio of flagships.

Programmatic risks

An important aspect that will need to be further worked on in 2015 is the development of a comprehensives data support system in-line with the CGIAR Open Access and Data Management Policy. This is likely to be one a critical activity for providing evidence of change in the field and ensuring the continuation of the CRP in 2017. For an integrated research program, the risk of having data held by individual scientists is enormous. In order to address this, WLE has been developing an Open Access and Data Management Plan in-line with the Consortium Office plans.

Another risk, discussed previously, is continuing resistance to the WLE ecosystem-based approach. Though ecosystem services are now a cornerstone of the SRF, it is a challenge to sell the concept to national politicians and decision-makers, who are focused on economic growth. WLE mitigates this risk by continually addressing national policy-makers' concerns and engaging regularly with them to discussing the trade-offs and benefits of an ecosystem-based approach. Similar issues play out in the gender arena as not all partners are willing to engage. WLE mitigates this by working closely with local partners, who can champion and work within the system to highlight the importance of gender.

A related risk is the contentious politicization of natural resources and ecosystems. Addressing issues of governance, access and decision-making can be fraught with peril. In one project on water user associations (WUA), one of the local WUA facilitators was subjected to significant political interference following training and participation in the WLE learning alliance. In the Mekong, WLE addresses the contentious issue of sustainable hydropower development. It has mitigated political risk by engaging intensely with all stakeholders, particularly governments and the private sector, and using the evidence base to engage in discussions rather than simply stating positions. This is a model that has the potential to be replicated by WLE activities on other contentious issues.

H. Lessons Learned

Overall level of confidence/uncertainty of the indicators provided in Table

Data provided by partners on publications, deliverables and outreach activities has been of a higher standard in 2014 and the level of confidence in indicators relating to journal articles, trainees, tools and technologies can be said to be good. Of those areas showing a need for improvement, the set of indicators relating to populations, users and beneficiaries have been subject to varying interpretations by partners and WLE will develop a more stringent set of criteria in order to harmonize these. The same can be said for selecting the most relevant stage or phase for a technology. The gender related indicators provided in the indicator template are different from those given in the CGIAR draft guidelines on gender reporting, which has made it difficult to report accurately on the indicators relating to women-farmers/NRM managers and gender disaggregated impacts. WLE will work to refine its own criteria for each indicator and further increase the guidance and support offered to partners to improve the accuracy of reporting. Refer to Table 1 for further details.

New lines of research

The development of the extension phase proposal was an opportune moment to assess how some elements of the structure of the program were either not fully aligned with its central tenets or needed redefining to better explain the fit with WLE. All SRPs were replaced with more integrative flagships and, in particular, the Irrigation and Rainfed SRPs were revised substantially. By their nature, irrigation and rainfed systems are a continuum and it became apparent over the first two years of the program that there was little integration and that the distinction was not useful, either from a programmatic or conceptual perspective.[20] The new LWP flagship encompasses agriculture production issues across the spectrum of rainfed and irrigated activities with a focus on natural resources management, productivity, income, gender and equity, adaptation and resilience. The RDE flagship demonstrates, evaluates and monitors ecosystem-based interventions that restore degraded landscapes and the ecosystem services they provide for agriculture.

Two activity clusters, on resource management in intensified peri-urban ecosystems and water data and accounting, did not have significant momentum or scope to operate separately and were integrated into related clusters. The information SRP became a core theme to enable the support and metrics work to better support the rest of the program.

A key action in 2014 was to transform the gender work from being mainstreamed to being responsive. This implies that more work is done to underpin research with appropriate entry points to gender through adequate gender analysis already at the problem statement. This allows projects to develop informative research questions, solutions and develop a resource strategy that ensures that the work can be done. This approach was pioneered by the IES flagship and, based on its success, has since been taken up in the Rockefeller-supported Global Resilience Partnership.

Based on discussions in 2013, WLE saw the need to open up new lines of research that could bring in new partners and focus to test the main hypotheses of the program. This resulted in the development of the IES flagship, and its portfolio of 36 new projects. As demonstrated in this report, WLE significantly expanded its non-CGIAR partnership base in 2014. This enabled WLE to both leverage local partners' long-term relationships from the community level to international levels and across the research and

[20] A number of scientific papers point out the need to take a more holistic view of irrigated and rainfed systems, i.e Molden, David, Theib Oweis, Pasquale Steduto, Prem Bindraban, Munir A Hanjra, and Jacob Kijne. 2010. Improving agricultural water productivity: between optimism and caution. Agricultural Water Management 97 (4):528-535 and Rockström, J., L. Karlberg, S.P. Wani, J. Barron, N. Hatibu, T. Oweis, A. Bruggeman, J. Farahani, Z. Qiang. 2010. Managing water in rainfed agriculture—The need for a paradigm shift. Agricultural Water Management 97 (2010) 543-550

development spectrum so that WLE contributes effectively to critical development decisions at multiple scales; and draw on a wider range of skills and experience, which is critical for WLE's strong interdisciplinary solutions-oriented research program. While the time and financial resources taken to establish this strong network, WLE anticipates that these investments in partners will have a demonstrable effect on the outcomes and impacts realized over the life of the program and beyond.

Lessons from monitoring qualitative progress

In 2014, project teams identified a range of lessons that provide invaluable insight into how and where improvements can be made, both within the projects themselves and more widely across the program. These lessons can be identified in three categories; data and systems; protocols and practices; collaboration and partnership.

Data and Systems. A range of projects noted that there are efficiencies in data management that need to be carefully considered ex-ante. In some cases, appropriate budgets for data processing were not incorporated in budget planning; in others, more data was collected and analyzed than was required to draw the conclusions needed to move forward. This implies the need for careful planning and delimitation of the data, with appropriate software and hardware needed to answer particular questions. A second set of issues surrounded specificity. In some cases, not having sufficiently disaggregated data to make informed decisions was identified as an issue, in other cases the pros and cons of increasingly refined models that provide more accurate data but restrict time series analysis were noted. A balance has to be struck in these cases between level of specificity and accuracy and the need to monitor changes over time.

Protocols and Practices. The importance of CGIAR's Open Access and Data Management Policy, as well as CGIAR's position on sharing intellectual property rights was highlighted by a number of projects. For an integrated research program, the risk of having data held by individual scientist is significant, and centers should be encouraged to share their metadata. In addition, providing the opportunity for joint publication with partners is critical to building relationships, capacity and confidence. More needs to be done in both of these areas in 2015.

Collaboration and Partnership. A number of projects identified that the failure to properly define formal collaboration at the start of projects can lead to challenges downstream. When working with government partners in particular, the responsibilities of public servants within projects needs to be clear and in line with the rules and regulations governing their own employment.

I. Financial Report

Financial report is attached to the end of this report

Annex 1: WLE Indicators of Progress for 2014

Indicator	Deviation narrative (if 10% from 2014 target)	2013	2014		2015
		Actual	Target	Actual	Target[21]
KNOWLEDGE, TOOLS, DATA					
1. Number of flagship "products" produced by CRP .	-	**9 Flagship products** 1. Suitability analysis of underground solutions in terms of mitigation of flood risks (UTF) 2. Draft ecosystem and resilience framework; 3. Catalogues of promising RRR business cases and models for nutrient, water and energy (to be published in 2014); 4. Water Accounting (WA+) framework that summarizes water resources conditions and management at the basin level (draft website & two journal papers); 5. Probabilistic Intervention Decision Modeling Platform 6. Global Information and Knowledge Facility for Agrobiodiversity Conservation and Usage 7. Targeting AGwater Management Interventions (TAGMI) - decision support tool 8. CPWF engagement platforms/innovation platforms 9. WLE Gender Strategy	**9**	**12 Flagship products** 1. Ecosystem and resilience framework.[22] 2. SDG report developed by two task forces on Goals 6.4 and 6.6 submitted for inclusion in the SDGs. 3. Scoping document for the African Regional Assessment of Biodiversity and Ecosystem Services cleared by IPBES 4. Deployment of nationally developed information and communication technologies (ICT) to improve monitoring of large-scale irrigation systems at pilot scale in Pakistan and Sri Lanka 5. Conceptual framework for practitioners working on the economics of land degradation on addressing the costs and benefits of sustainable land management: 6. First global assessment of urban and peri urban agriculture 7. Characteristics benefits and risk mitigation of irrigated urban vegetable production in Ghana 8. Flood mapping database 9. Book : Water Scarcity, Livelihoods and Food Security: Research and Innovation for Development 10. Lessons learned on agricultural water management 11. Mapping of Aquifers of Sub Saharan Africa 12. Peruvian national platform on ecosystem services	**8**

21 Tentative targets for 2015 are provided where possible. In some cases these are lower than in 2014, due to budget cuts. In others as appropriate, they are higher due to the addition of the new IES flagship suite of projects in 2015-2016. Targets may be adjusted once WLE's guidance for reporting and data collection for 2015 is finalized.

22 The draft ESR framework was included in the list of flagship products in 2013, however it is very much a 2014 product, having been published amid a number of activities to put it into action and embed its principles into WLE

2. % of flagship products produced that have explicit target of women farmers/NRM managers		**44% (4 from 9)** ● Global Information and Knowledge Facility for Agrobiodiversity Conservation and Usage ● Targeting AGwater Management Interventions (TAGMI) - decision support tool ● CPWF engagement platforms/innovation platforms ● WLE Gender Strategy	20%	33% (4 from 12)[23] • Characteristics benefits and risk mitigation of irrigated urban vegetable production in Ghana • Book : Water Scarcity, Livelihoods and Food Security: Research and Innovation for Development • Lessons learned on agricultural water management Peruvian national platform on ecosystem services	**20%**
3. % of flagship products produced that have been assessed for likely gender-disaggregated impact		**33% (3 from 9)** ● Socially-explicit integrated solutions to increase eco-efficiency of production systems and enhance ecosystem services and livelihoods; ● Probabilistic Intervention Decision Modeling Platform; ● WLE Gender strategy	20%	25% (3 from 12) • Characteristics benefits and risk mitigation of irrigated urban vegetable production in Ghana • First global assessment of urban and peri urban agriculture • Lessons learned on agricultural water management	20%
4. Number of ”tools” produced by CRP	-	**51 tools** Examples include: ● Tools for designing crop varietal mixtures for pest and disease management; ● manual “Safety guidelines for grey and waste water use in Palestine”; calibrated SWAT model for use in arid environments (Jordan and Ethiopia); ● Booklet on community based approach for reuse of Grey-Water at the farm household and Video film on community based approach for reuse of Grey-Water at the farm household; ● Water Impact Calculator (WIC) for irrigation scheduling ● Experimental games protocols to measure--and strengthen--collective action for water management (India and Colombia)	56	**64** Examples include: ● LANDREST tool ● AUV based remote sensing tools for crop phenotyping and surveillance and monitoring, including crop statistics ● Soil-Landscape Estimation and Evaluation Program (SLEEP) ● Decision support tool to assess water productivity at the Branch Canal level ● Laboratory protocols for soil infrared species ● Online spectral prediction app ● Soil carbon online measurement guidance ● Water and carbon footprint of Colombian agriculture ● Tablet-based extension system and farmer-to-farmer videos ● Training manuals for extension agents in Ethiopia and Uganda ● Improved Environmental Flow Calculator: ● Baseline GAMES model (Gangetic Aquifer Management for Ecosystem Services) ● RADAR - Rapid Agriculture Disaster Assessment Routine - flood impact tool ● Earth Observation Technologies for Flood Risk Mapping, Modeling and Management training manual	61

[23] It has become clear that the definitions of the indicators on targeting women farmers/managers and assessing gender disaggregated impact are subject to varying interpretations, and require further definition and guidance by WLE in order for project partners to be able to report accurately. This is being further developed.

				• Power-law models to predict flow metrics for water resource and risk management along the Mekong tributaries • Android app for ground truthing data • Set of tools for on-farm wastewater treatment • Tools for production of certified seed and ecological management practices, Bolivia • Web based tool for ES (agriculture – LULC) visualization over time • Model of aquifer storage recharge and recovery • Groundwater model of Karshi Steppe • Hydrological and water systems models for the Koshi basin • Community seed banks • Tools and approaches for soil carbon determination • Tools for policy analysis	
5. % of tools that have an explicit target of women farmers	Target consistent with gender budget target for WLE. The 16% may be an underestimate as this indicator has been subject to different interpretations	35%	20%	16%[24]	20%
6. % of tools assessed for likely gender-disaggregated impact	Target consistent with gender budget target for WLE. The 16% may be an underestimate as this indicator has been subject to different understanding	20%	20%	16%	20%
7. Number of open access databases maintained by CRP	Some databases may not have been reported. WLE is developing improved guidance on	**50 databases** Examples of databases maintained by WLE partners include:	50	**38 open access databases**[25] Examples include: • Online AQUASTAT Wastewater	45

[24] It has become clear that the definitions of the indicators on targeting women farmers/managers and assessing gender disaggregated impact are subject to varying interpretations, and require further definition and guidance by WLE in order for project partners to be able to report accurately. This is being further developed.

[25] This indicator refers to databases "maintained", therefore will include some databases included in the 2013 report. WLE will develop further guidance on reporting for this indicator in 2015, particularly regarding databases vs. datasets.

	criteria for reporting under this indicator.	• Database on soil and nutrient losses via runoff in potato-pasture rotations (Colombia) • Global Weather Data for SWAT http://globalweather.tamu.edu/ • AfSIS spectral and reference library • Land health surveillance databases • Data from field experiments at micro-watersheds, water use efficiency, varietal performance and conservation agriculture • National databases on diversity and disease field measurements assessment; • 4 on farmer access to seed sources for traditional varieties • 2 community seed bank data sets (China and Uganda) • 4 on farmer diversity management practices • Water accounting portal • TAGMI		• Database on morphology and functional traits of fruit tree species and related socio-economic survey data, Central Asia • Catalogues of seed varieties • Database on pest control functions in agricultural landscapes • GeoDatabase (GDB) on land degradation in Africa • AfSIS Kaggle challenge • COMPRO-II website – data on commercial products dissemination • N2Africa website – data on nitrogen fixation • Environmental Flow based on management class data • Database of flow measurement across distributary canals, weather data, groundwater data, tubewell data; geospatial coordinates; Databases on Crop yield, Flood Extent, Flood forecasting. Available on Water Data Portal • Data on CAADP core indicators available at ReSAKSS website • Flow data available on Water Information System of Sri Lanka (WISSL) • wateraccounting.org database, including datasets on water accounts, precipitation, land cover, etc) • Online map of irrigated and rainfed areas for Asia • National irrigation schemes databases for Tanzania and Zimbabwe	
8. Total number of users of these open access databases	It was not possible to set an accurate target given a) that some systems do not include the function to record numbers of users and b) the difficulties in defining "users" in some cases.	105 users 12000 downloads confirmed		1643[26] users accounted for 20000 visitors to AQUASTAT Wastewater database	
9. Number of publications in ISI journals produced by CRP	-	76 ISI Publications 235 peer reviewed publications	143	150 ISI Publications[27] 191 Peer Reviewed Publications, not published in ISI	120

[26] The figure provided is based user data provided for 42% of the databases. 58% of the databases reported were unable to generate data on the number of users. Given these issues, it is not possible at this stage to set a target for 2015

[27] 7 of the articles published in ISI journals in 2014 were included in the figure provided for 2013 peer reviewed publications

10.Number of strategic value chains analyzed by CRP		Not applicable to WLE			
11. Number of targeted agro-ecosystems analysed/characterised by CRP	Target	**96 targeted agro-ecosystems.** Examples include: ● Floodplains/delta rice and fish of Southern Bangladesh and Mekong ● Plains of West India (Bengal and Bihar) ● Maize & bean systems Ecuador highlands; ● Traditional rice diversity upland and lowland zones; ● Traditional maize diversity upland and tropical maize; ● Bolivia, mixed cropping dominated by potato in upland and subtropical areas. ● Burkina Faso, mixed crop, livestock systems in sub-Sudanian, sub-Sahelian and Sahelian areas. ● Nepal, mixed cropping dominated by rice in upland (2500 masl) and subtropical areas. ● Uganda, mixed crop and livestock system in highlands, medium high farmlands and wooded savannah. ● Mixed crop-livestock system: potato - pasture rotation (Colombia) in Tropics-cold ● Forest and mixed cropping in the Amazon (Colombia and Peru). ● Rangeland in marginal areas (Jordan). ● Highland rainfed systems of Ethiopia ● Guinea savannahs mix crop systems of maize/cowpea or maize/soybean, ● DR Congo, Kenya, Tanzania and Nigeria; grain and legume cropping systems	96	**101 targeted agro-ecosystems.** Examples include: ● Irrigated cotton-wheat rotation agro-ecosystem of Syr Darya and Amu Darya. ● West Bengal Terai, Old alluvial zone, Red and laterite zone ● Rainfed Irrigated; Surface/continuous Irrigated System; Orchards; Mixed cropping; Sorghum (Africa) ● Ethiopian highlands mixed crop and livestock systems; Mixed crop livestock system, Amhara, Ethiopia ● North Central Sri Lanka mixed cropping (rice and field crops); ● Tonle Sap, Cambodia rice– fish systems and flooded forests ● Urban and peri-urban systems (various locations) ● Salinity affected drylands (Central Asia) ● Bolivia, mixed cropping dominated by potato in upland (3000-4500 masl) and subtropical areas. ● Burkina Faso, mixed crop, livestock systems in sub-sudanian, sub-sahelian and sahelian areas. ● Nepal, mixed cropping dominated by rice in upland (2500 masl) and subtropical areas. ● Uganda, mixed crop and livestock system in highlands, medium high farmlands and wooded savannah. ● Uzbekistan, mixed cropping dominated by fruit and vegetable production in semi-arid and arid areas. ● DR Congo, Kenya, Tanzania and Nigeria; grain and legume cropping systems	100
12. Estimated population of above-mentioned agro-ecosystems	A target was not set for this indicator			548,527,860 [28]	

[28] Interpretation of this indicator has varied significantly and therefore this figure generated from partner reports is not considered reliable. A methodology for harmonized monitoring of indicator 12 on populations is being developed for application both in the coming year and retroactively.

CAPACITY ENHANCEMENT AND INNOVATION PLATFORMS					
13. Number of trainees in short-term programs facilitated by CRP (male)	This significant increase on the number of trainees compared to 2013 can be explained by a) Training programs reported in more detail than in previous year and b) in some areas, farmers and those responsible for natural resource management at the local level participated in more than one course	**5,875 male trainees** Examples of training topics include ● Gender in WLE ● Crop model validations, trade-off analysis model Salinity sampling and measurement, ● GIS/GPs for data management; ● Remote sensing in irrigated agriculture ● How to run experimental games, ● Debriefing communities on how they can manage water better collectively ● Integrated farming techniques ● Mekong Regional Forum on Water, Food and Energy (250)	5023	9287 male trainees Examples of training topics include ● Establishment, management and utilization of cultivated forage to target seasonal livestock markets in Ethiopia ● Principles of Integrated Soil Fertility Management (ISFM) ● Salinity management ● Soil amendment techniques ● Greywater use ● Aqua Crop Model ● Promising agricultural practices in Central America ● Ecosystem services and rural landscapes ● Integrated approaches to watershed development planning ● Remote sensing data, flood modeling and management and rapid emergency flood mapping. ● RRR business development training ● SWAT watershed modelling ● Mechanized raised bed technology	7430
14. Number of trainees in short-term programs facilitated by CRP (female)	See No. 13	**2,232 female trainees**	1935	5000 female trainees[29]	4000
15. Number of trainees in long-term programs facilitated by CRP (male)		**Total long term male trainees in 2013: 144** These were: 1. PhD – 10 2. Master's – 27 3. Other (includes Bachelors) – 107	214	209 These were: ● PhD – 33 ● Master's – 150 ● Other (includes Bachelors) – 26	167
16.Number of trainees in long-term programs facilitated by CRP (female)		**Total long term female trainees in 2013: 53** These were: 1. PhD – 3 2. Master's – 8 3. Other (includes Bachelors) - 42	75	97 These were: ● PhD – 17 ● Master's -48 ● Other (includes Bachelors) – 32	78

[29] Gender disaggregated participant data is now generally standard practice for training courses, however there is a limited number of cases in which it is not clear how many females took part in courses.

17. Number of multi-stakeholder R4D innovation platforms established for the targeted agro-ecosystems by the CRPs	Actual reported number was higher. Only those with full details provided have been reported here.	**22 Stakeholder Platforms:** These include: ● Mekong platform on sustainable hydropower ● Local innovation platforms on rainwater management in Nile Basin Development Challenge ● Local innovation platforms on goat markets in Zimbabwe ● Integrated Water Resource Platform in Ghana and Burkina Faso ● Community seed banks (Uganda, China) ● Legume and Inoculant Technology platforms ● Field days; DR Congo radio broadcasts to showcase N2Africa legume technologies (estimated two million listeners). ● Intervention decisions with sufficient representation from multiple stakeholders to fulfill the criteria (Sasumua, rainfed, Merti)	29	24 **Stakeholder Platforms:** [30] ● Task force for developing targets for SDG goal 6.4: Water-use efficiency, sustainable withdrawals and water scarcity; ● Task force for developing targets for SDG goal 6.6: Protection and restoration of water ecosystems to allow sustained withdrawal ● Multi-stakeholder R4D platform on Groundwater development /Lift irrigation in northern Tajikistan ● Multi-stakeholder R4D platform on Lift irrigation in northern Tajikistan aimed to improve performance of lift irrigation schemes. ● 4 Area Water Board meetings, Asia ● Dialogue process on water governance in Pakistan, with authorities, technical experts, service providers and users across the entire geographic area of Pakistan and in the cities of Karachi, Peshawar, Quetta, Lahore, and Islamabad ● New collaboration between MUS Group and Rural Water Supply Network Gender conference as new, unique platform ● Strategic Analysis and Knowledge Support (SAKSS) nodes operating in Zambia, Mozambique and Malawi are three multi-stakeholder platforms that bring together knowledge generators, consumers and policy makers to advancing evidence-based policy planning and implementation ● Innovation Platform established in Fogera under NBDC, used as the platform for work under Afromaison ● Multi-stakeholder platform for the Ramotswa Aquifer ● Stakeholder platform for Privately managed open wells and; Community managed drilled wells, Lao PDR ● IWMI-India Water Policy Program will work with Bharatiya Rural Livelihoods Foundation (BRLF) to activate and energize its policy advocacy for kickstarting India's second White Revolution to empower and strengthen livelihoods of Adivasi women in central India's tribal heartland along the Vasudhara model. ● RRR stakeholder platform on resources under multiple pressure in urban and peri-urban areas ● platform of 15 community seed banks	30

[30] The actual number reported was higher, but only those platforms for which details have been provided are reported here. Not included in this figure is engagement with existing platforms set up by third parties. It is noted that the focus of this indicator does not encourage engagement with existing platforms set up by third parties.

				● Engagement with Barotse communities on ecosystem services ● National Platform to support mechanisms of rewards for ecosystem services in Peru. ● 20-24 5 country soil health consortia established in 5 countries of West Africa	
TECHNOLOGIES/ PRACTICES IN VARIOUS STAGES OF DEVELOPMENT					
18. Number of technologies/NRM practices under research in the CRP (Phase I)		**140 technologies/ NRM practices under research in WLE** Examples of these technologies and practices include: ● Knowledge and practices, where intra-specific diversity is being used to manage pest and disease pressures, gives global trend that increased on-farm crop varietal diversity reduces variance in pest and disease damage – a measurement of reduced likelihood (reduced vulnerability) to crop loss from crop varietal diversity; ● On-farm and on-station experiences identified high and medium resistance in traditional varieties of target crops; ● New guidelines developed for mixture experiments to better test whether increasing the level of diversity in a field, in a controlled selected repeatable way, with well chosen components, gives a benefit over monocultures, or treatments with less diversity crop varietal mixtures to manage pest and diseases; on farm plots; experimental station plots. raised bed, deficit irrigation, nitrogen management, salinity management, water harvesting in Jordan, graded contour bunds and diversification options in Ethiopia. ● Holistic assessment of the costs and benefits of technologies is a main component of all intervention decision models, with all models made in 2013 evaluating a particular practice. ● Optimizing the available natural resources; sustainable crop intensification in development; crop diversification with high value crops; safe wastewater use in agriculture.	84	**106 technologies/ NRM practices under research in WLE** Examples of these technologies and practices include: ● irrigated cultivation of oats/vetch forage and cultivation of indigenous grasses on field margins and bunds of irrigated areas for fattening small ruminants for seasonal markets ● Bayesian Belief Network and R package prototypes for probabilistic evaluation of agricultural interventions on livelihoods and environment ● Mirt Stove Technology in Ethiopia ● Non-tangible technology transfer i.e. Conservation of ecosystem services by means of incentives that reward the activities that enhance the provision of the services ● Water and Carbon footprint of the Colombian Agriculture; ● Potato farmers field techniques ● Threatened genetic resources prioritization protocol further adapted ● Payments for agrobiodiversity conservation services scheme initiated for four threatened maize varieties ● Simple wastewater treatment system as a barrier for health hazards using synergistic effects of selected low-cost treatment options; Soil management practices using different soil amendments e.g. biochar ● ICT application for irrigation system management	106

		● GAMES: sustainable groundwater management practices (India) and surface water management (Colombia) ● Underground Taming of Floods for Irrigation			
19. % of technologies under research that have an explicit target of women farmers		**6% (8 technologies)**	20%	19%[31]	20%
20. % of technologies under research that have been assessed for likely gender-disaggregated impact	Target was consistent with gender budget target for WLE. It is likely that the reported figure is an underestimate due to lack of data	**9% (12 technologies)**	20%	14%	20%
21 Number of agro-ecosystems for which CRP 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	-	**49 agro-ecosystems** (See indicator 11 for examples)	63	54 (See indicator 11 for examples)	54
22. Number of people who will potentially benefit from plans, once finalised, for the scaling up of strategies	Further guidance is needed on estimating beneficiary numbers at scale	**Potential population of 19,192,766 that could benefit from the plans.**		721,398,000 [32]	

[31] It has become clear that the definitions of the indicators on targeting women farmers/managers and assessing gender disaggregated impact are subject to varying interpretations, and require further definition and guidance by WLE in order for project partners to be able to report accurately. This is being further developed.

[32] Interpretation of this indicator has varied significantly and therefore this figure generated from partner reports is not considered reliable. A methodology for estimating potential beneficiaries that will allow for improved, harmonized monitoring of indicator 22 is being developed

23. Number of technologies /NRM practices field tested (phase II)	The actual number reported was 74, higher than the target, but details have been provided for 54	**70 technologies /NRM practices field tested** Examples include: ● Community seed banks, enhanced varietal mixtures; improved agronomic practices use crop varietal diversity. ● Conservation agriculture in potato-pasture rotation/ Improved water and soil management in rice systems in Colombia ● Model watersheds at 15 locations in India within different agro-ecological regions and rainfall zones; districts in Karnataka blue and Green water use efficiency;		54[33] Examples include: • Composted sludge pelletizing machine in Sri Lanka and Ghana • Cultivation of licorice as a bioremediation treatment of low-productivity salinity affected soils - draft policy recommendations produced; and farmer guides to technology for pilot application stage • Precision surface irrigation technology has moved into a field testing phase, east Punjab, Pakistan • Traditional and modern crop varieties of various crops in Bolivia, Burkina Faso and Nepal. Varieties developed through participatory plant breeding in Bara and Jumla regions of Nepal and currently tested for official registration and release. • Mechanized raised bed technology field tested in Sharkia, Egypt • NRM practices, maize varieties, herbicide resistant hybrids	43
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)		**52 Agro ecosystems in which innovations are being tested** Examples include ● Conservation agriculture in potato-pasture rotation ● Improved water and soil management in rice systems in Colombia ● Water harvesting in the rangeland system and graded contour in the rainfed highland system ● Watershed technologies have been developed to address various needs of different agro-ecological regions	29	30[34] (See indicator 11 for examples)	
25. % of above innovations/approaches/options that are targeted at decreasing inequality between men and women		**55%**	20%	36%	20%

[34] The number reported was 76. Details have been provided for 30. Further details are being sought

26. Number of published research outputs from CRP utilised in targeted agro-ecosystems		**23**	16	46[35]	
27.Number of technologies/NRM practices released by public and private sector partners globally (phase III)		12	12	10[36] Examples include: A US-based global solar major partnered with IWMI-Tata Program on SPaRC in several states including Karnataka, Rajasthan, Gujarat and Madhya Pradesh. A variety of pilots have been implemented by NGOs in Bihar and other eastern states. Partnership with public sector on bio-fertilizers in Ethiopia and Uganda.	
POLICIES IN VARIOUS STAGES OF DEVELOPMENT					
28. Numbers of Policies/ Regulations/ Administrative Procedures Analyzed (Stage 1)		**112 policies analyzed** Examples include: ● Synthesis of water policy research on i) human rights and gender dimensions of AWM in South Africa and ii) Politics of IWRM in Africa ● Analysis of irrigation Southern Africa Development Community policies and linkages with SADC MAAP and CAADP Pillar 1 processes ● Review of Irrigation policies in Cambodia ● Review of hydropower and land concession compensation mechanisms and relocation policies of Lao PDR (CPWF Mekong) ● Analysis of how national and institutional policies and national laws (seed laws, subsidies, credits, crop insurance schemes, etc.) influence: 1) crop diversity available to farmers for cultivation; 2) farmers' choices on what to acquire and from whom; 3) exchange	112	142[37] Examples include: ● More than 100 transboundary water treaties analyzed for work in Central Asia ● Imazpyr herbicide evaluated and registered by the National Drug Regulation industry ● National seed policies, laws and regulations in Bolivia, Burkina Faso, Uganda, Uzbekistan ● Kickstarting India's Second White Revolution in 95 tribal districts of central Indian plateau ● Policy on implementation of IWRM in Nepal ● Government policy on Irrigation Water User Association (IWUA) is reviewed in Ethiopia ● Policy and regulatory framework analysis and literature review: MENA region ● Amendment of the Groundwater Act - WRIDD, One Time Assistance for Electrification of Agricultural Pump-sets - OTA-EAP, Department of Agriculture, India	112

[35] This is an estimate based on figures provided by partners and is being verified

[36] Additional data is being sought from partners on the Phase 3 technologies and practices

[37] Analysis of the data related to policies in Stages 1-5 is ongoing.

		of knowledge and seed among actors (Bolivia, Burkina Faso, Nepal, Uganda, Uzbekistan). ● Understanding of policy formulation, and implementation of policy, better understanding of policy processes and decision making of bureaucracies within Uzbekistan ● Policy analysis undertaken in India of Underground Taming of Floods for Irrigation (UTFI) ● Policy analysis on Payments for Forest Environmental Services for Vietnam has been published in a peer-reviewed journal. ● ICRAF's Ecosystem Health program published 2 papers related China's environmental policy and India Hydropower policy			
29. Number of policies / regulations / administrative procedures drafted and presented for public/stakeholder consultation (Stage 2)		**5 policies presented, including:** ● Ministry of Agriculture in Sri Lanka interested to amend their current national policy to strengthen urban farming based on work with IWMI and Western Province of Sri Lanka ● Consultations held to improve policy dialogue on national irrigation policy in SADC region and linkages to CAADP ● Upper Tana Landscape level work on soils has led to consultations and discussions in how local level policy making is being carried out in relation to decisions on land use and water management	6	**11 policies presented, including:** ● Policies for transboundary water management presented to stakeholders in Malawi and Mozambique ● Report developed by the two task forces (Goals 6.4 and 6.6) submitted to the SDG working group for wider public consultation and finalization of the goals and targets to be included in the SDGs.	6
30. Number of policies / regulations / administrative procedures presented for legislation(Stage 3)	Policies did not reach Stage 3 as expected and are reported under Stage 2		8	1 policy reported: Policy for sustainable Groundwater allocation	5

31. Number of policies / regulations / administrative procedures prepared passed/approved (Stage 4)		**1 National Legislative Process influenced** As a result of previous and on-going initiatives within the framework of WLE, MINAM (since 2011) has been actively leading conversations about how to develop laws which might catalyze the creation and management of Payment for Ecosystem Services (PES)-type schemes. As part of these discussions, MINAM has met with some of its key partners in PES-type scheme development to discuss a draft-version of such a proposed Eco-System Services (ESS) Law.	2	2 policies reported: National Irrigation Management Fund of US US$ 1.2 billion incorporated in the 12th Five Year Plan of Government of India (IWMI-India) CIAT provided technical advice to the formulation of the specific ruling for the implementation of the Law on Rewards from Ecosystem Services in Peru. These rules have to be prescribed by mandate according to this Law. Technical advice is based on findings of the study conducted by CIAT in Peru and that aimed at identifying the bottlenecks in the effective implementation of schemes of Rewards for Ecosystem Services in the country.[38]	2
32. Number of policies / regulations / administrative procedures passed for which implementation has begun (Stage 5)			1	1 policy reported SPaRC policy implemented in Karnataka under Surya Raitha Program. SPaRC proposal was backed by a budget provision of INR 400 crore in 2014 budget.	1
33. Number of hectares under improved technologies or management practices as a result of CRP research	2013 figure not verified	**15,471,050ha**[39]		2096240[40]	
34. Number of farmers and others who have applied new technologies or management practices as a result of CRP research	2013 figure not verified	**35000**	352465	205,946[41]	

42

[38] Although reported in 2013, there has been further work done on PES in 2014.

[40] Based on estimates provided by partners. Interpretation of this indicator has varied significantly and therefore this figure generated from partner reports is not considered reliable. A methodology for estimating potential beneficiaries that will allow for improved, harmonised monitoring of indicator 33 is being developed

[41] This is a minimum amount, based on estimates provided by partners. Interpretation of this indicator has varied significantly and therefore this figure generated from partner reports is not considered reliable. A methodology for estimating potential beneficiaries that will allow for improved, harmonised monitoring of indicator 34 is being developed

[42] All annual center reports are accessible here

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	Total spending for the year by Center, including Gender expenditure
L121	CRP - Expenditure by Natural Classification Report	Included mainly for reconciliation purposes and to eliminate double counting of CGIAR collaboration costs; note that it is the *net* amount (i.e. expenses excluding CGIAR collaboration costs) which should be used as the total for L111 and L131
L131	CRP - Flagship Projects Report	Simplified - Source of funding no longer required; note that this report is still titled "Themes"; transition is underway and some CRPs are already recording costs by Flagship Project. If that is the case for your CRP, please change the title of the report.
L136	Gender Expenditure by Theme	
L141	CRP - Cluster of Activities 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. 5 - Water, Land and Ecosystems
Period: 01 Jan'12 - 31 Dec'14
Amounts in USD (000's)

Cumulative Financial Summary

Report Description

Name of Report:	Cumuative 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**		
	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 Fu**
1. AFRICA RICE	-	-	-	-	-	-	-	-	-	-	-	-	
2. BIOVERSITY	5,637	177	4,365	1,556	11,735	5,904	177	3,675	1,724	11,480	(267)	-	
3. CIAT	3,787	397	13,505	-	17,689	3,871	257	13,650	-	17,778	(84)	140	
4. CIFOR	-	-	-	-	-	-	-	-	-	-	-	-	
5. CIMMYT	-	-	-	-	-	-	-	-	-	-	-	-	
6. CIP	1,234	322	-	-	1,556	1,226	171	-	-	1,397	8	151	
7. ICARDA	3,039	1,468	3,716	-	8,223	2,901	1,348	3,863	-	8,112	138	120	
8. ICRAF	4,297	173	6,119	387	10,976	4,357	-	6,217	485	11,059	(60)	173	
9. ICRISAT	3,371	13	5,548	-	8,932	3,014	13	5,100	-	8,127	357	-	
10. IFPRI	3,613	-	1,506	1	5,120	3,152	-	1,459	1	4,612	461	-	
11. IITA	727	4,391	9,545	-	14,663	726	4,190	9,624	-	14,540	1	201	
12. ILRI	756	768	788	-	2,312	763	548	750	-	2,061	(7)	220	
13. IRRI	586	-	-	-	586	586	-	567	-	1,153	-	-	
14. IWMI	57,204	9,781	33,937	-	100,922	43,535	9,643	33,954	-	87,132	13,669	138	
15. WORLDFISH	1,063	-	462	3	1,528	1,178	-	517	3	1,698	(115)	-	
Total for CRP	**85,314**	**17,490**	**79,491**	**1,947**	**184,242**	**71,213**	**16,347**	**79,376**	**2,213**	**169,149**	**14,101**	**1,143**	
	46%	**9%**	**43%**	**1%**	**100%**	**42%**	**10%**	**47%**	**1%**	**100%**	**93%**	**8%**	

Note:

IWMI Includes Program Management, Focal Region & Innovation Fund, CPWF and IWMI Center

The Expenditure for all the cneters are based on the L series reports submitted and the Audit confirmation for W1 and W2 expenditure

ICARDA includes USD 180,000 for Decentralization funding

CRP No. 5 - Water, Land and Ecosystems
Period: 01 Jan'14 - 31 Dec'14
Amounts in USD (000's)

Annual Funding

CGIAR
Science for a food secure future

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)	42,282
Approved Level for Year - Final Amount	39,182

PART 2 - Funding Summary for Year

		2013 Actual Funding			
		Windows 1&2	**Window 3**	**Bilateral Funding**	**Total Funding**
1	CGIAR Fund	25,081			25,081
2	ACIAR		594	501	1,095
3	Action Contre la Faim (ACF), Zimbabwe		-	12	12
4	ADB		-	217	217
5	AfDB		-	3,769	3,769
6	Alliance for a Green Revolution in Africa		-	664	664
7	Arab Fund for Economic and Social Development (AFESD)		-	24	24
8	AusAID		-	1,029	1,029
9	Austrian Development Agency (ADA)		-	87	87
10	Belmont Forum		-	6	6
11	BMGF		1,888	613	2,501
12	Center for International Cooperation (CIC)		-	32	32
13	Central African Council for Agricultural Research and Developme		-	-	-
14	CIAT		-	1	1
15	CIMMYT/ ACIAR		-	5	5
16	Coca Cola		-	139	139
17	Colombia Global Centre Africa		-	598	598
18	Cornell University		-	91	91
19	CPWF-Bilateral		-	770	770
20	CPWF-Other		-	2,195	2,195
21	CSIRO		-	23	23
22	DFID		-	169	169
23	EC		-	199	199
24	EC/IFAD		833	-	833
25	EcoAgricultural Partners		-	1	1
26	Economic and Social Research Council		-	76	76
27	Esmee Fairbairn Foundation		-	-	-
28	FAO		-	277	277
29	Finland		-	731	731
30	Fondo Accion		-	73	73
31	Germany		-	1,599	1,599
32	GRID-Arendal		-	90	90
33	ICARDA/ ACIAR		-	262	262
34	ICRISAT		-	232	232
35	IFAD		-	826	826
36	IFDA		-	394	394
37	IFPRI		-	474	474
38	IITA/USAID		-	186	186
39	ILRI/ CIDA		-	335	335
40	ILRI/BMZ		-	66	66
41	India		-	1,811	1,811
42	International Water and Sanitation Centre		-	60	60
43	Irish Aid		-	26	26
44	IUCN		-	3	3
45	Japan		-	450	450
46	JICA		-	59	59
47	Jindal South West Foundation		-	130	130
48	Kano State Agricultural and Rural Development Authority		-	-	-
49	Kunming Institute of Botany		-	423	423
50	MADR-Ministerio de Agricultura - Colombia (MADR)		-	209	209
51	Makerere University		-	82	82
52	Margaret A. Cargill Philanthropies		-	51	51
53	Mars inc.		-	355	355
54	Multidonors		-	7	7
55	National Science Foundation		-	46	46
56	NERC		-	236	236
57	Nigeria		-	342	342
58	Norway		-	7	7
59	OFID		-	145	145
60	SAB Miller India		-	132	132
61	SDC		-	900	900
62	Sir Ratan Tata Trust		-	126	126
63	Stockholm International Water Institute		-	101	101
64	Swedish University of Agricultural Sciences		-	-	-
65	The Christensen Fund		-	227	227
66	The Leibniz Institute for Agricultural Engineering Potsdam-Borni		-	8	8
67	The Netherlands		-	1,013	1,013
68	The Research Institute of Organic Agriculture		-	21	21
69	UNDP		-	17	17
70	UNEP		-	699	699
71	UNESCO		-	43	43
72	United Nations University-Japan		-	51	51
73	University of Columbia		-	238	238
74	University of Oxford		-	87	87
75	USAID		784	1,568	2,352
76	USDA		-	763	763
77	Wageningen University and Research Centre		-	549	549
78	World Bank		-	267	267
79	WRC, Ghana		-	19	19
	Total for CRP 5: WLE	**25,081**	**4,099**	**28,037**	**57,217**
	CG Collaborators		(599)	(2,215)	(2,814)
	Net Funding	**25,081**	**3,500**	**25,822**	**54,403**
	Center expenditure				809
					55,212

CRP No. 5 - Water, Land and Ecosystems
Period: 01 Jan'14 - 31 Dec'14
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 2014 POWB approved budget (including 2013 carry over)					(b) CRP 2014 Expenditure					(c) Variance this Year			
	Windows 1 & 2	Window 3	Bilateral Funding	Center funds	Total Funding	Windows 1 & 2	Window 3	Bilateral Funding	Center funds	Total Funding	Windows 1 & 2	Window 3	Bilateral Funding	Center funds
1. AFRICA RICE					-	-	-	-	-	-	-	-	-	-
2. BIOVERSITY	1,944	-	2,337	543	4,824	2,211	-	1,647	711	4,569	(267)	-	690	(168)
3. CIAT	1,081	397	1,870	-	3,348	1,165	257	2,015	-	3,437	(84)	140	(145)	-
4. CIFOR					-	-	-	-	-	-	-	-	-	-
5. CIMMYT					-	-	-	-	-	-	-	-	-	-
6. CIP	469	296	-	-	765	461	145	-	-	606	8	151	-	-
7. ICARDA	1,424	676	750	-	2,850	1,286	556	897	-	2,739	138	120	(147)	-
8. ICRAF	1,466	173	2,627	-	4,266	1,526	-	2,725	98	4,349	(60)	173	(98)	(98)
9. ICRISAT	1,459	-	2,537	-	3,996	1,102	-	2,089	-	3,191	357	-	448	-
10. IFPRI	2,343	-	615	-	2,958	1,882	-	568	-	2,450	461	-	47	-
11. IITA	236	1,979	4,272	-	6,487	235	1,778	4,351	-	6,364	1	201	(79)	-
12. ILRI	204	327	222	-	753	211	107	184	-	502	(7)	220	38	-
13. IRRI					-	-	-	567	-	567	-	-	(567)	-
14. IWMI	28,320	796	10,412	-	39,528	14,651	658	10,429	-	25,738	13,669	138	(17)	-
15. WORLDFISH	236	-	295	-	531	351	-	350	-	701	(115)	-	(55)	-
Total for CRP	**39,182**	**4,644**	**25,937**	**543**	**70,306**	**25,081**	**3,501**	**25,822**	**809**	**55,213**	**14,101**	**1,143**	**115**	**(266)**
	56%	**7%**	**37%**	**1%**	**100%**	**45%**	**6%**	**47%**	**1%**	**100%**	**93%**	**8%**	**1%**	**-2%**

Annual Financial Summary by Natural Classification

CRP No. 5 - Water, Land and Ecosystems
Period: 01 Jan'14 - 31 Dec'14
Amounts in USD 000's

Report Description

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

	POWB Approved Budget					Actual					Unspent/Variance				
Total CRP"X.X"	**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**
Personnel	13,782	1,435	6,670	234	22,121	11,845	1,019	7,367	441	20,672	1,937	416	(697)	(207)	1,449
Collaborators Costs - CGIAR Centers	3,883	183	402	-	4,468	693	599	2,215	-	3,507	3,190	(416)	(1,813)	-	961
Collaborator Costs - Partners	6,417	1,295	5,713	-	13,425	1,430	909	6,401	-	8,740	4,987	386	(688)	-	4,685
Supplies and services	8,529	787	7,346	192	16,854	6,456	795	6,753	214	14,218	2,073	(8)	593	(22)	2,636
Operational Travel	2,712	315	2,392	30	5,449	1,429	266	1,916	28	3,639	1,283	49	476	2	1,810
Depreciation	310	152	812	-	1,274	228	92	844	12	1,176	82	60	(32)	(12)	98
Sub-total of Direct Costs	**35,633**	**4,167**	**23,335**	**456**	**63,591**	**22,081**	**3,680**	**25,496**	**695**	**51,952**	**13,552**	**487**	**(2,161)**	**(239)**	**11,639**
Indirect Costs	5,099	477	2,602	87	8,265	3,693	420	2,541	114	6,768	1,406	57	61	(27)	1,497
Adjustment: Budget Cut	(1,552)	-	-	-	(1,552)	-	-	-	-	-	(1,552)	-	-	-	(1,552)
Total - All Costs	39,180	4,644	25,937	543	70,304	25,774	4,100	28,037	809	58,720	13,406	544	(2,100)	(266)	11,584
LESS Coll Costs CGIAR Centers	(3,883.0)	**(183)**	**(402)**	-	**(4,468)**	**(693)**	**(599)**	**(2,215)**	-	**(3,507)**	**(3,190)**	**416**	**1,813**	-	**(961)**
Total Net Costs	35,297	4,461	25,535	543	65,836	25,081	3,501	25,822	809	55,213	10,216	960	(287)	(266)	10,623

Amounts for each participating center below:

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

	POWB Approved Budget					Actual					Unspent/Variance				
BIOVERSITY															
Personnel	1,160	-	166	234	1,560	1,180	-	138	321	1,639	(20)	-	28	(87)	(79)
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collaborator Costs - Partners	26	-	1,296	-	1,322	13	-	770	-	783	13	-	526	-	539
Supplies and services	563	-	395	192	1,150	633	-	406	264	1,303	(70)	-	(11)	(72)	(153)
Operational Travel	46	-	178	30	254	34	-	78	12	124	12	-	100	18	130
Depreciation	-	-	-	-	-	2	-	-	-	2	(2)	-	-	-	(2)
Sub-total of Direct Costs	**1,795**	**-**	**2,035**	**456**	**4,286**	**1,862**	**-**	**1,392**	**597**	**3,851**	**(67)**	**-**	**643**	**(141)**	**435**
Indirect Costs	341	-	302	87	730	349	-	255	114	718	(8)	-	47	(27)	12
Adjustment: Budget Cut	(192)	-	-	-	(192)	-	-	-	-	-	(192)				(192)
Total - All Costs	**1,944**	**-**	**2,337**	**543**	**4,824**	**2,211**	**-**	**1,647**	**711**	**4,569**	**(267)**	**-**	**690**	**(168)**	**255**
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Net Costs	**1,944**	**-**	**2,337**	**543**	**4,824**	**2,211**	**-**	**1,647**	**711**	**4,569**	**(267)**	**-**	**690**	**(168)**	**255**

	POWB Approved Budget					Actual					Unspent/Variance				
CIAT															
Personnel	800	197	565	-	1,562	627	176	644	-	1,447	173	21	(79)	-	115
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collaborator Costs - Partners	19	90	450	-	559	1	-	389	-	390	18	90	61	-	169
Supplies and services	178	33	490	-	701	353	40	595	-	988	(175)	(7)	(105)	-	(287)
Operational Travel	48	28	135	-	211	41	10	186	-	237	7	18	(51)	-	(26)
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total of Direct Costs	**1,045**	**348**	**1,640**	**-**	**3,033**	**1,022**	**226**	**1,814**	**-**	**3,062**	**23**	**122**	**(174)**	**-**	**(29)**
Indirect Costs	145	49	230	-	424	143	31	201	-	375	2	18	29	-	49
Adjustment: Budget Cut	(109)	-	-	-	(109)	-	-	-	-	-	(109)				(109)
Total - All Costs	**1,081**	**397**	**1,870**	**-**	**3,348**	**1,165**	**257**	**2,015**	**-**	**3,437**	**(84)**	**140**	**(145)**	**-**	**(89)**
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Net Costs	**1,081**	**397**	**1,870**	**-**	**3,348**	**1,165**	**257**	**2,015**	**-**	**3,437**	**(84)**	**140**	**(145)**	**-**	**(89)**

CIFOR	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adjustment: Budget Cut	-	-	-	-	-	-	-	-	-	-	-				-
Total - All Costs	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Net Costs	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

CIMMYT	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adjustment: Budget Cut	-	-	-	-	-	-	-	-	-	-	-				-
Total - All Costs	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Net Costs	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

CIP	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	198	94	-	-	292	189	35	-	-	224	9	59	-	-	68
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collaborator Costs - Partners	96	39	-	-	135	96	41	-	-	137	-	(2)	-	-	(2)
Supplies and services	120	47	-	-	167	106	40	-	-	146	14	7	-	-	21
Operational Travel	28	44	-	-	72	14	10	-	-	24	14	34	-	-	48
Depreciation	-	33	-	-	33	-	-	-	-	-	-	33	-	-	33
Sub-total of Direct Costs	**442**	**257**	**-**	**-**	**699**	**405**	**126**	**-**	**-**	**531**	**37**	**131**	**-**	**-**	**168**
Indirect Costs	70	39	-	-	109	56	19	-	-	75	14	20	-	-	34
Adjustment: Budget Cut	(43)	-	-	-	(43)	-	-	-	-	-	(43)				(43)
Total - All Costs	**469**	**296**	**-**	**-**	**765**	**461**	**145**	**-**	**-**	**606**	**8**	**151**	**-**	**-**	**159**
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Net Costs	**469**	**296**	**-**	**-**	**765**	**461**	**145**	**-**	**-**	**606**	**8**	**151**	**-**	**-**	**159**

ICARDA	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	425	178	183	-	786	539	101	164	-	804	(114)	77	19	-	(18)
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	68	-	-	68	-	(68)	-	-	(68)
Collaborator Costs - Partners	230	108	135	-	473	197	85	349	-	631	33	23	(214)	-	(158)
Supplies and services	255	125	140	-	520	171	156	157	-	484	84	(31)	(17)	-	36
Operational Travel	144	92	100	-	336	143	98	108	-	349	1	(6)	(8)	-	(13)
Depreciation	65	60	67	-	192	22	52	38	-	112	43	8	29	-	80
Sub-total of Direct Costs	**1,119**	**563**	**625**	**-**	**2,307**	**1,072**	**560**	**816**	**-**	**2,448**	**47**	**3**	**(191)**	**-**	**(141)**
Indirect Costs	223	113	125	-	461	214	64	81	-	359	9	49	44	-	102
Adjustment: Budget Cut+ Decentralizatio	82	-	-	-	82	-	-	-	-	-	82				82
Total - All Costs	**1,424**	**676**	**750**	**-**	**2,850**	**1,286**	**624**	**897**	**-**	**2,807**	**138**	**52**	**(147)**	**-**	**43**
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	**(68)**	-	-	**(68)**	-	**68**	-	-	**68**
Total Net Costs	**1,424**	**676**	**750**	**-**	**2,850**	**1,286**	**556**	**897**	**-**	**2,739**	**138**	**120**	**(147)**	**-**	**111**

ICRISAT	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	649	-	354	-	1,003	347	-	503	-	850	302	-	(149)	-	153
Collaborators Costs - CGIAR Centers	97	-	152	-	249	-	-	409	-	409	97	-	(257)	-	(160)
Collaborator Costs - Partners	195	-	790	-	985	181	-	450	-	631	14	-	340	-	354
Supplies and services	97	-	238	-	335	331	-	758	-	1,089	(234)	-	(520)	-	(754)
Operational Travel	208	-	672	-	880	67	-	126	-	193	141	-	546	-	687
Depreciation	52	-	155	-	207	20	-	29	-	49	32	-	126	-	158
Sub-total of Direct Costs	**1,298**	**-**	**2,361**	**-**	**3,659**	**946**	**-**	**2,275**	**-**	**3,221**	**352**	**-**	**86**	**-**	**438**
Indirect Costs	266	-	176	-	442	156	-	223	-	379	110	-	(47)	-	63
Adjustment: Budget Cut	(105)	-	-	-	(105)	-	-	-	-	-	(105)				(105)
Total - All Costs	**1,459**	**-**	**2,537**	**-**	**3,996**	**1,102**	**-**	**2,498**	**-**	**3,600**	**357**	**-**	**39**	**-**	**396**
LESS Coll Costs CGIAR Centers	(97.0)	**-**	**(152)**	**-**	**(249)**	**-**	**-**	**(409)**	**-**	**(409)**	**(97)**	**-**	**257**	**-**	**160**
Total Net Costs	**1,362**	**-**	**2,385**	**-**	**3,747**	**1,102**	**-**	**2,089**	**-**	**3,191**	**260**	**-**	**296**	**-**	**556**

IFPRI	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	905	-	289	-	1,194	681	-	250	-	931	224	-	39	-	263
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collaborator Costs - Partners	478	-	100	-	578	495	-	119	-	614	(17)	-	(19)	-	(36)
Supplies and services	555	-	107	-	662	394	-	102	-	496	161	-	5	-	166
Operational Travel	179	-	28	-	207	76	-	29	-	105	103	-	(1)	-	102
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total of Direct Costs	**2,117**	**-**	**524**	**-**	**2,641**	**1,646**	**-**	**500**	**-**	**2,146**	**471**	**-**	**24**	**-**	**495**
Indirect Costs	349	-	91	-	440	236	-	68	-	304	113	-	23	-	136
Adjustment: Budget Cut	(123)	-	-	-	(123)	-	-	-	-	-	(123)				(123)
Total - All Costs	**2,343**	**-**	**615**	**-**	**2,958**	**1,882**	**-**	**568**	**-**	**2,450**	**461**	**-**	**47**	**-**	**508**
LESS Coll Costs CGIAR Centers	-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Net Costs	**2,343**	**-**	**615**	**-**	**2,958**	**1,882**	**-**	**568**	**-**	**2,450**	**461**	**-**	**47**	**-**	**508**

IITA	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	110	406	1,117	-	1,633	211	345	941	-	1,497	(101)	61	176	-	136
Collaborators Costs - CGIAR Centers	-	183	250	-	433	-	168	972	-	1,140	-	15	(722)	-	(707)
Collaborator Costs - Partners	23	622	616	-	1,261	8	655	1,732	-	2,395	15	(33)	(1,116)	-	(1,134)
Supplies and services	55	382	1,322	-	1,759	(39)	378	868	-	1,207	94	4	454	-	552
Operational Travel	20	125	451	-	596	20	121	322	-	463	-	4	129	-	133
Depreciation	18	59	156	-	233	1	39	428	-	468	17	20	(272)	-	(235)
Sub-total of Direct Costs	**226**	**1,777**	**3,912**	**-**	**5,915**	**201**	**1,706**	**5,263**	**-**	**7,170**	**25**	**71**	**(1,351)**	**-**	**(1,255)**
Indirect Costs	33	202	360	-	595	34	240	60	-	334	(1)	(38)	300	-	261
Adjustment: Budget Cut	(23)	-	-	-	(23)	-	-	-	-	-	(23)				(23)
Total - All Costs	**236**	**1,979**	**4,272**	**-**	**6,487**	**235**	**1,946**	**5,323**	**-**	**7,504**	**1**	**33**	**(1,051)**	**-**	**(1,017)**
LESS Coll Costs CGIAR Centers	-	**(183)**	**(250)**	**-**	**(433)**	**-**	**(168)**	**(972)**	**-**	**(1,140)**	**-**	**(15)**	**722**	**-**	**707**
Total Net Costs	**236**	**1,796**	**4,022**	**-**	**6,054**	**235**	**1,778**	**4,351**	**-**	**6,364**	**1**	**18**	**(329)**	**-**	**(310)**

ILRI	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	149	181	51	-	381	98	55	88	-	241	51	126	(37)	-	140
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collaborator Costs - Partners	-	27	30	-	57	17	-	-	-	17	(17)	27	30	-	40
Supplies and services	28	94	91	-	213	58	43	48	-	149	(30)	51	43	-	64
Operational Travel	18	25	17	-	60	10	9	24	-	43	8	16	(7)	-	17
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total of Direct Costs	**195**	**327**	**189**	**-**	**711**	**183**	**107**	**160**	**-**	**450**	**12**	**220**	**29**	**-**	**261**
Indirect Costs	29	-	33	-	62	28	-	24	-	52	1	-	9	-	10
Adjustment: Budget Cut	(20)	-	-	-	(20)	-	-	-	-	-	(20)				(20)
Total - All Costs	**204**	**327**	**222**	**-**	**753**	**211**	**107**	**184**	**-**	**502**	**(7)**	**220**	**38**	**-**	**251**
LESS Coll Costs CGIAR Centers	-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Net Costs	**204**	**327**	**222**	**-**	**753**	**211**	**107**	**184**	**-**	**502**	**(7)**	**220**	**38**	**-**	**251**

IRRI	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	-	-	-	-	-	-	-	165	-	165	-	-	(165)	-	(165)
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collaborator Costs - Partners	-	-	-	-	-	-	-	231	-	231	-	-	(231)	-	(231)
Supplies and services	-	-	-	-	-	-	-	90	-	90	-	-	(90)	-	(90)
Operational Travel	-	-	-	-	-	-	-	34	-	34	-	-	(34)	-	(34)
Depreciation	-	-	-	-	-	-	-	3	-	3	-	-	(3)	-	(3)
Sub-total of Direct Costs	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**523**	**-**	**523**	**-**	**-**	**(523)**	**-**	**(523)**
Indirect Costs	-	-	-	-	-	-	-	44	-	44	-	-	(44)	-	(44)
Adjustment: Budget Cut	-	-	-	-	-	-	-	-	-	-	-				-
Total - All Costs	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**567**	**-**	**567**	**-**	**-**	**(567)**	**-**	**(567)**
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Net Costs	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**567**	**-**	**567**	**-**	**-**	**(567)**	**-**	**(567)**

IWMI	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	7,131	206	2,906	-	10,243	5,835	213	3,270	-	9,318	1,296	(7)	(364)	-	925
Collaborators Costs - CGIAR Centers	2,904	-	-	-	2,904	81	-	834	-	915	2,823	-	(834)	-	1,989
Collaborator Costs - Partners	4,991	409	2,213	-	7,613	176	128	2,126	-	2,430	4,815	281	87	-	5,183
Supplies and services	5,023	106	3,164	-	8,293	3,218	131	2,830	-	6,179	1,805	(25)	334	-	2,114
Operational Travel	1,396	1	673	-	2,070	479	14	728	-	1,221	917	(13)	(55)	-	849
Depreciation	55	-	210	-	265	12	1	289	-	302	43	(1)	(79)	-	(37)
Sub-total of Direct Costs	**21,500**	**722**	**9,166**	**-**	**31,388**	**9,801**	**487**	**10,077**	**-**	**20,365**	**11,699**	**235**	**(911)**	**-**	**11,023**
Indirect Costs	2,856	74	1,246	-	4,176	1,805	66	1,186	-	3,057	1,051	8	60	-	1,119
Adjustment: Budget Cut	(858)	-	-	-	(858)	-	-	-	-	-	(858)				(858)
Total - All Costs	**23,498**	**796**	**10,412**	**-**	**34,706**	**11,606**	**553**	**11,263**	**-**	**23,422**	**11,892**	**243**	**(851)**	**-**	**11,284**
LESS Coll Costs CGIAR Centers	(2,904)	**-**	**-**	**-**	**(2,904)**	**(81)**	**-**	**(834)**	**-**	**(915)**	**(2,823)**	**-**	**834**	**-**	**(1,989)**
Total Net Costs	**20,594**	**796**	**10,412**	**-**	**31,802**	**11,525**	**553**	**10,429**	**-**	**22,507**	**9,069**	**243**	**(17)**	**-**	**9,295**

WORLD AGROFORESTRY	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	974	173	832	-	1,979	780	-	1,034	120	1,934	194	173	(202)	(120)	45
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collaborator Costs - Partners	119	-	78	-	197	30	-	155	-	185	89	-	(77)	-	12
Supplies and services	152	-	1,368	-	1,520	290	-	869	(50)	1,109	(138)	-	499	50	411
Operational Travel	57	-	125	-	182	74	-	254	16	344	(17)	-	(129)	(16)	(162)
Depreciation	98	-	224	-	322	153	-	57	12	222	(55)	-	167	(12)	100
Sub-total of Direct Costs	**1,400**	**173**	**2,627**	**-**	**4,200**	**1,327**	**-**	**2,369**	**98**	**3,794**	**73**	**173**	**258**	**(98)**	**406**
Indirect Costs	210	-	-	-	210	199	-	356	-	555	11	-	(356)	-	(345)
Adjustment: Budget Cut	(144)	-	-	-	(144)	-	-	-	-	-	(144)				(144)
Total - All Costs	**1,466**	**173**	**2,627**	**-**	**4,266**	**1,526**	**-**	**2,725**	**98**	**4,349**	**(60)**	**173**	**(98)**	**(98)**	**(83)**
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Net Costs	**1,466**	**173**	**2,627**	**-**	**4,266**	**1,526**	**-**	**2,725**	**98**	**4,349**	**(60)**	**173**	**(98)**	**(98)**	**(83)**

WORLDFISH	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	117	-	207	-	324	200	-	170	-	370	(83)	-	37	-	(46)
Collaborators Costs - CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collaborator Costs - Partners	60	-	5	-	65	38	-	80	-	118	22	-	(75)	-	(53)
Supplies and services	27	-	31	-	58	51	-	30	-	81	(24)	-	1	-	(23)
Operational Travel	16	-	13	-	29	20	-	27	-	47	(4)	-	(14)	-	(18)
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total of Direct Costs	**220**	**-**	**256**	**-**	**476**	**309**	**-**	**307**	**-**	**616**	**(89)**	**-**	**(51)**	**-**	**(140)**
Indirect Costs	33	-	39	-	72	42	-	43	-	85	(9)	-	(4)	-	(13)
Adjustment: Budget Cut	(17)	-	-	-	(17)	-	-	-	-	-	(17)				(17)
Total - All Costs	**236**	**-**	**295**	**-**	**531**	**351**	**-**	**350**	**-**	**701**	**(115)**	**-**	**(55)**	**-**	**(170)**
LESS Coll Costs CGIAR Centers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Net Costs	**236**	**-**	**295**	**-**	**531**	**351**	**-**	**350**	**-**	**701**	**(115)**	**-**	**(55)**	**-**	**(170)**

PMU	POWB Approved Budget					Actual					Unspent/Variance				
Personnel	1,164	-	-	-	1,164	1,158	94	-	-	1,252	6	(94)	-	-	(88)
Collaborators Costs - CGIAR Centers	882	-	-	-	882	612	363	-	-	975	270	(363)	-	-	(93)
Collaborator Costs - Partners	180	-	-	-	180	178	-	-	-	178	2	-	-	-	2
Supplies and services	1,476	-	-	-	1,476	890	7	-	-	897	586	(7)	-	-	579
Operational Travel	552	-	-	-	552	451	4	-	-	455	101	(4)	-	-	97
Depreciation	22	-	-	-	22	18	-	-	-	18	4	-	-	-	4
Sub-total of Direct Costs	**4,276**	**-**	**-**	**-**	**4,276**	**3,307**	**468**	**-**	**-**	**3,775**	**969**	**(468)**	**-**	**-**	**501**
Indirect Costs	544	-	-	-	544	431	-	-	-	431	113	-	-	-	113
Adjustment: Budget Cut	-	-	-	-	-	-	-	-	-	-	-				-
Total - All Costs	**4,820**	**-**	**-**	**-**	**4,820**	**3,738**	**468**	**-**	**-**	**4,206**	**1,082**	**(468)**	**-**	**-**	**614**
LESS Coll Costs CGIAR Centers	(882)	**-**	**-**	**-**	**(882)**	**(612)**	**(363)**	**-**	**-**	**(975)**	**(270)**	**363**	**-**	**-**	**93**
Total Net Costs	**3,938**	**-**	**-**	**-**	**3,938**	**3,126**	**105**	**-**	**-**	**3,231**	**812**	**(105)**	**-**	**-**	**707**

CRP No. 5 - Water, Land and Ecosystems
Period: 01 Jan'14 - 31 Dec'14
Amounts in USD 000's

Annual Financial Summary by Flagship Project

CGIAR
Science for a food secure future

Report Description

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

	POWB Approved	Current Year Actual Expenditures	Unspent Budget
Summary Report - by Flagship Project			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	11,992	867	11,125
Flagship 2. Sustainably increasing land and water productivity (LWP)	18,266	18,108	158
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	11,638	8,432	3,206
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	6,030	4,530	1,500
Flagship 5. Managing resource variability and competing use (MRV)	11,764	12,969	(1,205)
Theme 1. ESR: Ecosystem services and resilience	465	260	205
Theme 2. GPI: Gender, Poverty & Institutions	638	454	184
Theme 3. DAI: Strengthening decision analysis and information systems	7,588	6,754	834
PMEC 1: Management	1,426	1,246	180
PMEC 2: Communication	1,029	813	216
PMEC 3: Research Support	1,019	781	238
Budget Cut + Decentralization Funds (ICARDA)	(1,552)	-	(1,552)
Total - All Costs	**70,303**	**55,214**	**15,089**
AFRICA RICE			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)			-
Flagship 2. Sustainably increasing land and water productivity (LWP)			-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)			-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)			-
Flagship 5. Managing resource variability and competing use (MRV)			-
Theme 1. ESR: Ecosystem services and resilience			-
Theme 2. GPI: Gender, Poverty & Institutions			-
Theme 3. DAI: Strengthening decision analysis and information systems			-
PMEC 1: Management			-
PMEC 2: Communication			-
PMEC 3: Research Support			-
Budget Cut			-
Total - All Costs	-	-	-
BIOVERSITY			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	4,604	3,678	926
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	260	(260)
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	411	631	(220)
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Budget Cut	(192)	-	(192)
Total - All Costs	4,823	4,569	254
CIAT			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	2,439	2,565	(126)
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	1,017	787	230
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	13	(13)
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	71	(71)
Budget Cut	(109)	-	(109)
Total - All Costs	3,347	3,436	(89)

CIFOR			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Budget Cut	-	-	-
Total - All Costs	-	-	-

CIMMYT			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Budget Cut	-	-	-
Total - All Costs	-	-	-

CIP			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	222	205	17
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	586	402	184
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Budget Cut	(43)	-	(43)
Total - All Costs	765	607	158

ICARDA			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	468	784	(316)
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	1,201	504	697
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	268	314	(46)
Flagship 5. Managing resource variability and competing use (MRV)	831	1,091	(260)
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	30	(30)
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	18	(18)
Budget Cut + Decentralization Funds	82	-	82
Total - All Costs	2,850	2,741	109

ICRISAT			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	2,437	1,881	556
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	260	201	59
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	717	562	155
Flagship 5. Managing resource variability and competing use (MRV)	514	395	119
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	175	138	37
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	1	(1)
PMEC 3: Research Support	-	15	(15)
Budget Cut	(105)	-	(105)
Total - All Costs	3,998	3,193	805

IFPRI			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	887	795	92
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	620	595	25
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	1,574	981	593
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	12	(12)
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	10	(10)
PMEC 3: Research Support	-	57	(57)
Budget Cut	(123)	-	(123)
Total - All Costs	2,958	2,450	508

IITA			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	6,306	6,181	125
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	204	184	20
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Budget Cut	(23)	-	(23)
Total - All Costs	6,487	6,365	122

ILRI			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	221	184	37
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	326	107	219
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	224	185	39
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	24	(24)
Budget Cut	(20)	-	(20)
Total - All Costs	751	500	251

IRRI			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	567	(567)
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Budget Cut	-	-	-
Total - All Costs	-	567	(567)

IWMI			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	11,992	743	11,249
Flagship 2. Sustainably increasing land and water productivity (LWP)	7,947	8,283	(336)
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	1,762	393	1,369
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	5,045	3,654	1,391
Flagship 5. Managing resource variability and competing use (MRV)	7,056	8,387	(1,331)
Theme 1. ESR: Ecosystem services and resilience	465	-	465
Theme 2. GPI: Gender, Poverty & Institutions	638	399	239
Theme 3. DAI: Strengthening decision analysis and information systems	2,005	1,295	710
PMEC 1: Management	1,426	1,246	180
PMEC 2: Communication	1,029	802	227
PMEC 3: Research Support	1,019	536	483
Budget Cut	(858)	-	(858)
Total - All Costs	39,526	25,738	13,788

WORLD AGROFORESTRY CENTRE (ICRAF)			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	4,411	4,288	123
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	60	(60)
Budget Cut	(144)	-	(144)
Total - All Costs	4,267	4,348	(81)

WORLDFISH			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	124	(124)
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	548	576	(28)
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Budget Cut	(17)	-	(17)
Total - All Costs	531	700	(169)

CRP No. 5 - Water, Land and Ecosystems
Period: 01 Jan'14 - 31 Dec'14
Amounts in USD 000's

Annual Financial Summary of Gender by Flagship Project

CGIAR
Science for a food secure future

Report Description

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

	POWB Approved	Current Year Actual Expenditures	Unspent Budget
Summary Gender Report - by Flagship Project			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	1,842	74	1,768
Flagship 2. Sustainably increasing land and water productivity (LWP)	2,264	2,218	46
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	1,681	1,222	459
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	516	415	101
Flagship 5. Managing resource variability and competing use (MRV)	1,472	1,276	196
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	638	442	196
Theme 3. DAI: Strengthening decision analysis and information systems	363	566	(203)
PMEC 1: Management	143	125	18
PMEC 2: Communication	257	201	56
PMEC 3: Research Support	-	-	-
Total - All Costs	**9,176**	**6,539**	**2,637**
AFRICA RICE			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	-	-	-
BIOVERSITY			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	891	685	206
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	41	163	(122)
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	932	848	84
CIAT			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	350	298	52
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	40	110	(70)
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	13	(13)
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	390	421	(31)

CIFOR			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	-	-	-

CIMMYT			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	-	-	-

CIP			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	67	58	9
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	67	58	9

ICARDA			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	23	(23)
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	100	28	72
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	27	8	19
Flagship 5. Managing resource variability and competing use (MRV)	53	28	25
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	30	(30)
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	180	117	63

ICRISAT			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	172	159	13
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	16	14	2
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	43	39	4
Flagship 5. Managing resource variability and competing use (MRV)	33	30	3
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	11	10	1
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	275	252	23

IFPRI			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	225	151	74
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	72	67	5
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	220	175	45
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	517	393	124

IITA			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	363	741	(378)
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	363	741	(378)

ILRI			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	8	(8)
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	16	(16)
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	9	(9)
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	-	33	(33)

IRRI			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	-	-	-

IWMI			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	1,842	74	1,768
Flagship 2. Sustainably increasing land and water productivity (LWP)	1,504	1,136	368
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	185	56	129
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	446	368	78
Flagship 5. Managing resource variability and competing use (MRV)	1,063	873	190
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	638	399	239
Theme 3. DAI: Strengthening decision analysis and information systems	236	117	119
PMEC 1: Management	143	125	18
PMEC 2: Communication	257	201	56
PMEC 3: Research Support	-	-	-
Total - All Costs	6,314	3,349	2,965

WORLD AGROFORESTRY CENTRE (ICRAF)			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	-	-	-
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	75	276	(201)
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	75	276	(201)

WORLDFISH			
Flagship 1. Integrating Ecosystem Solutions into Policy and Investments (IES)	-	-	-
Flagship 2. Sustainably increasing land and water productivity (LWP)	-	-	-
Flagship 3. Regenerating degraded agricultural ecosystems (RDE)	-	-	-
Flagship 4. Recovering and reusing resources in urbanized ecosystems (RRR)	-	-	-
Flagship 5. Managing resource variability and competing use (MRV)	63	51	12
Theme 1. ESR: Ecosystem services and resilience	-	-	-
Theme 2. GPI: Gender, Poverty & Institutions	-	-	-
Theme 3. DAI: Strengthening decision analysis and information systems	-	-	-
PMEC 1: Management	-	-	-
PMEC 2: Communication	-	-	-
PMEC 3: Research Support	-	-	-
Total - All Costs	63	51	12

CRP No. 5 - Water, Land and Ecosyste
Period: 01 Jan'14 - 31 Dec'14
Amounts in USD 000's

CRP Partnership Report

CGIAR
Science for a food secure future

Report Description

Name of Report: CRP Partnerships Report
Frequency/Period: Annual
Deadline: Every April 15th

TOTAL FOR CRP "5"

Item	Institute Acronym	Institute Name	Country	Actual Expenses - This Year				
				Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1	AJSVSS	Adarsh Jal Sangrahan Vikas Samiti-Saram	India	-	-	8	-	**8**
2		Adarsh Jala Grahan Vikas Committee	India	-	-	18	-	**18**
3	AWDSP	Adarsh Watershed Development Samiti "Pragati"	India	-	-	8	-	**8**
4	AJVSD	Adarsha Jalsangrahan Vikas Samiti, Domagorpahu	India	-	-	5	-	**5**
5	A2N	Africa 2000 Network Uganda	Uganda	-	17	2	-	**19**
6	Africa Rice	Africa Rice Center	Benin	-	-	753	-	**753**
7	AfDB	African Development Bank	Nigeria	-	-	236	-	**236**
8	AFAP	African Fertilizer Agrobusiness Partnership	Tanzania, United Repu	-	15	-	-	**15**
9		AGENA LIMITED	United Kingdom	8	-	-	-	**8**
10	ARC	Agricultural Research Center (ARC)	Egypt	-	51	-	-	**51**
11	ARC	Agricultural Research Center (ARC)	Iraq	-	17	-	-	**17**
12	ARC	Agricultural Research Center (ARC)	Pakistan	-	-	308	-	**308**
13	ARC	Agricultural Research Council	South Africa	-	-	257	-	**257**
14	ARI	Agricultural Research Insitute Naliendele (ARI-TANZANIA)	Tanzania, United Repu	-	-	10	-	**10**
15	ARI Makutupora	Agricultural Research Institute, Makutupora (ARI Makutupora)	Tanzania, United Repu	-	-	6	-	**6**
16	ARI-UYOLE	Agriculture Research Institue -Uyole (ARI-UYOLE)	Tanzania, United Repu	-	-	11	-	**11**
17		ALEMU, TEKIE	Ethiopia	9	-	-	-	**9**
18	Ambo	Ambo University	Ethiopia	-	-	5	-	**5**
19	ARARI	Amhara Regional Agricultural Research Institute (ARARI)	Ethiopia	34	-	27	-	**61**
20		Ammaiyanaickanur Model Watershed Development Sangham	India	-	-	18	-	**18**
21	ARDAP	Appropriate Rural Development Agriculture Programme	Kenya	-	-	16	-	**16**
22	ATEEC	Arab Technologists for Economical and Environmental Consulta	Jordan	-	-	15	-	**15**
23	AMU	Arba Minch University	Ethiopia	-	-	16	-	**16**
24	AIT	Asian Institute of Technology	Thailand	-	-	151	-	**151**
25	ACOSYF	Association Coopérative en Synergie Féminine (ACOSYF)	Congo, The Democratic	-	-	2	-	**2**
26	AMEED	Association Malienne d'Eveil au Development Durable (AMEDD	Mali	24	-	-	-	**24**
27	ACDEP	Association of Church Development Projects (ACDEP)	Ghana	-	-	1	-	**1**
28	AEMFI	ASSOCIATION OF ETHIOPIAN MICROFINANCE	Ethiopia	-	-	50	-	**50**
29	BDU	Bahir Dar University	Ethiopia	-	-	35	-	**35**
30	BAIF	BAIF Development Research Foundation Madhya Pradesh	India	-	-	15	-	**15**
31	BAIF	BAIF Development Research Foundation-Gujarat	India	17	-	16	-	**33**
32	BAIF	BAIF Development Research Foundation-Madhya Pradesh	India	17	-	-	-	**17**
33	BFRI	Bangladesh Fisheries Research Institute	Bangladesh	-	-	10	-	**10**
34	BRRI	Bangladesh Rice Research Institute	Bangladesh	-	-	32	-	**32**
35		BASHYAL, AMBIKA	Nepal	-	-	-	-	-
36	BSADP	BAUCHI STATE AGRICULTURAL DEVELOPMENT PROGRAMME	Nigeria	-	-	3	-	**3**
37	BUK	Bayero University Kano (BUK)	Nigeria	-	-	2	-	**2**
38	BAU	Beirut Arab University	Lebanon	-	-	4	-	**4**
39	Bypass Samsthan	Bhopal Yuwa Paryavaran Shikshan & Samajik Sansthan	India	-	-	8	-	**8**
40	BIRDS	Bijapur Integrated Rural Development Society -BIRDS, Karnataka	India	18	-	15	-	**33**
42		BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS	United States	10	-	-	-	**10**
43	BRAC	BRAC	Bangladesh	-	-	97	-	**97**
44		BRUNS, BRYAN	United States	9	-	-	-	**9**
45	CABI - Africa	CABI - Africa	Kenya	-	45	-	-	**45**
46	CARITAS - Rwanda	CARITAS - Rwanda	Rwanda	-	-	1	-	**1**
47		CENTER FOR CHINESE AGRICULTURAL POLICY	China	42	-	-	-	**42**
48	CIRHEP	Center for Improved Rural Health and Environmental Protection	India	-	-	8	-	**8**
49	CIBA	Central Institute of Brackishwater Aquaculture	India	-	-	8	-	**8**
50	CRIDA	Central Research Institute for Dryland Agriculture	India	-	-	73	-	**73**
51	CSSRI	Central Soil Salinity Research Institute	India	-	-	37	-	**37**
52	CIRAD	Centre de Cooperation Internationale en Recherche Agronomique P	France	-	-	(44)	-	**(44)**
53	CEDER	Centre de Développement Rural (CEDER)	Congo, The Democratic	-	-	1	-	**1**
54		Centre for Sustainable Agriculture	India	-	-	(4)	-	**(4)**
55	CENESTA	Centre for Sustainable Development	Iran	-	-	4	-	**4**
57	CMU	Chiang Mai University	Thailand	-	-	-	-	-
58	China Dialogue Trust Ltd	China Dialogue Trust Ltd	United Kingdom	-	-	3	-	**3**
59	CIRAD	CIRAD - Agricultural Research for Development	France	37	-	-	-	**37**
60	CADS	Cluster Agricultural Development Services	Zimbabwe	-	-	3	-	**3**
61		College of Agricultural & Environmental Sciences	Uganda	-	-	50	-	**50**
62		COLLEGE OF AGRICULTURE AND NATURAL RESOURCES	Ghana	-	49	7	-	**56**
63	CU	Columbia University	USA	-	-	111	-	**111**
64	CTDO	Community Technology Development Organization	Zimbabwe	-	-	6	-	**6**
65	Confluvium	Confluvium Cooperative Group	Canada	-	-	6	-	**6**
66	CONDESAN	Consorcio para el Desarrollo Sostenible de la Ecorregión Andina	Peru	4	-	-	-	**4**
67	CWSRI	Coordinator Watershed Surveillance Research Institute, Jalgaon	India	-	-	12	-	**12**
68	CRI-GHANA	Crops Research Institute, Ghana (CRI - GHANA)	Ghana	-	-	10	-	**10**
69		Dangishita Farmers Association, Rural Credit Cooperative	Ethiopia	-	3	-	-	**3**
70		Debere Tseyon Agricultural Multi-Purpose Cooperative	Ethiopia	-	6	-	-	**6**
71		Department of Agricultural Land Management (DALaM), Ministry of	Lao, PDR	-	-	7	-	**7**
72		Department of Irrigation	Lao, PDR	-	72	-	-	**72**
73	DLF	Department of Livestock and Fisheries	Lao, PDR	11	-	-	-	**11**
74		Development Alternatives	India	18	-	-	-	**18**
75		Digital Green	India	-	-	6	-	**6**
76		EcoAgriculture International	USA	15	-	-	-	**15**
77	EGU	Egerton University	Kenya	-	56	-	-	**56**
78	JASIL	Environment and Development Association	Mongolia	-	-	20	-	**20**
79	EIAR	Ethiopian Institute of Agricultural Research	Ethiopia	-	85	-	-	**85**
80		F&S SCIENTIFIC LTD	Kenya	-	45	-	-	**45**
81		FARMERS MANAGED IRRIGATION SYSTEMS	Nepal	4	-	-	-	**4**
82	FUT(Minna)	Federal University of Technology Minna (FUT Minna)	Nigeria	-	-	3	-	**3**
83	FRI	Food Research Institute (FRI)	Ghana	-	-	13	-	**13**
84	FANRAPAN	Food, Agriculture and Natural Resources Policy Analysis Network	South Africa	-	-	26	-	**26**
85	FES	FOUNDATION FOR ECOLOGICAL SECURITY	India	90	-	-	-	**90**
86	GP	Gaia Pacha	Peru	-	-	4	-	**4**
87	GSTS	GENERAL SCIENCE AND TECHNOLOGY SOLUTIONS	United States	16	-	-	-	**16**
88	GAEC	Ghana Atomic Energy Commission	Ghana	-	-	1	-	**1**
89		GHANA IRRIGATION DEVELOPMENT AUTHORITY	Ghana	-	-	8	-	**8**
90		Grupo Gea	Peru	-	-	17	-	**17**
91	HUA	Hanoi University of Agriculture	Vietnam	-	-	21	-	**21**
92		Horticoop Ethiopia	Ethiopia	8	-	-	-	**8**
93	HURREDO	Human Resource and Rural Economic Development Organization	Cambodia	7	-	-	-	**7**

94		Hydraulics Research Station, Ministry of Water Resources, Sudan	Sudan	-	-	10	-	**10**
95	ICEM	ICEM - International Center for Environmental Management	Vietnam	-	-	250	-	**250**
96	IISc	Indian Institute of Science	India	-	-	34	-	**34**
97	ISANDA	Initiatives de Secours Alimentaire Normal et de Développement Aut	Congo, The Democratic	-	-	2	-	**2**
98	IAVH	Institut Agronomique at Veterinaire Hassan II	Morocco	-	-	18	-	**18**
99	INERA	Institut de l'Environnement et de Recherches Agricoles	Burkina Faso	-	-	-	-	**-**
100	IRD	Institut de Recherche pou Développement	Vietnam	-	-	4	-	**4**
101	IER-MALI	Institut d'Economie Rurale du Mali	Mali	-	-	99	-	**99**
102	INRA	Institut National de la Recherche Agronomique (INRA)	Morocco	-	-	14	-	**14**
103	INRAN	Institut National de la Recherches Agronomiques du Niger (INRAN)	Niger	-	-	86	-	**86**
104	INRGREF	Institut National de Recherche en Génie Rural, Eaux et Forêts	Tunisia	-	-	10	-	**10**
105	INERA	Institut National pour l'Etude et la Recherche Agronomiques Centre	Congo, The Democratic	-	-	84	-	**84**
106	IASS	Institute for Advanced Sustainability Studies e.V.	Germany	-	-	35	-	**35**
107	IAE	INSTITUTE FOR AGRICULTURAL ENVIRONMENT	Viet Nam	83	-	-	-	**83**
108	IAR	Institute for Agricultural Research	Nigeria	-	-	100	-	**100**
109	IGSD	Institute for Governance and Sustainable Development	USA	24	-	-	-	**24**
110	IDS	Institute of Development Studies, University of Dar es Salaam	Tanzania, United Republ	-	-	3	-	**3**
111	IRA	INSTITUTE OF RESOURCE ASSESSMENT	Tanzania, United Republ	-	-	39	-	**39**
112	IWM	Institute of Water Modelling	Bangladesh	-	-	168	-	**168**
113	IWRP	Institute of Water Resources Planning	Vietnam	-	-	138	-	**138**
114	IIAP	Instituto De Investigacion de la Amazonia Peruana	Peru	-	-	66	-	**66**
115	INIFAT	Instituto de Investigaciones Fundamentales en la Agricultura Tropic	Cuba	-	-	52	-	**52**
116	INTERMECH	Intermech Engineering Limited	Tanzania, United Republ	-	-	9	-	**9**
119	ICBA	International Center for Biosaline Agriculture	UAE	-	-	32	-	**32**
121	CEWAS	International Centre for Water Management Services	Switzerland	-	-	208	-	**208**
122	ICIPE	International Centre of Insect Physiology and Ecology (ICIPE)	Kenya	-	-	66	-	**66**
124	IDE	International Development Enterprises	Burkina Faso	15	-	-	-	**15**
125	IDE	International Development Enterprises	Ghana	19	-	-	-	**19**
127	IIED	International Institute for Environment and Development	United Kingdom	(14)	-	14	-	**-**
134	SIC ICWC	Interstate Commission for Water Coordination of Central Asia	Uzbekistan	-	-	28	-	**28**
135	JMCWSRI	Jalasri - Maharashtra - Coordinator Watershed Surveillance Researc	India	-	-	8	-	**8**
136	JalaSRI	JalaSRI Wetershed Surveillance & Research Institute	India	20	-	-	-	**20**
137	JIRKUR SEED	Jirkur Seed Cooperative Biu (JIRKUR SEED)	Nigeria	-	-	2	-	**2**
138	KADP	Kaduna State Agricultural Development Project (KADP)	Nigeria	-	-	3	-	**3**
139		Kalabhairavanath Watershed Committee	India	-	-	18	-	**18**
140	KNARDA	Kano State Agricultural and Rural Development Authority (KNARDA	Nigeria	-	-	3	-	**3**
141	KTARDA	Kastina state Agricultural and Rural Authority (KTARDA)	Nigeria	-	-	3	-	**3**
142	KEPHIS	Kenya Agricultural Research Institute-Kenya Plant Health Inspectio	Kenya	-	13	-	-	**13**
143	KESOFA	Kenya Soybean Farmers Association	Kenya	-	-	9	-	**9**
144	KKU	Khon Kaen University	Thailand	-	38	-	-	**38**
145	KCL	Kings College Londo	United Kingdom	-	-	(38)	-	**(38)**
146	KHG	Kleenhomes and Gardens	Kenya	-	-	8	-	**8**
147	KNUST	Kwame Nkrumah University of Science and Technology	Ghana	-	28	7	-	**35**
148	KWADP	Kwara State Agricultural Development Project (KWADP)	Nigeria	-	-	3	-	**3**
149	LUMS	Lahore University of Management Sciences	Pakistan	-	-	35	-	**35**
150		LIAO, DANDAN	United States	1	-	-	-	**1**
151	LUANAR (Formerly BUNDA)	Lilongwe University of Agriculture and Natural Resources, Bunda Ca	Malawi	-	-	18	-	**18**
152	Lisode	Lisode	France	-	-	15	-	**15**
153	LEGD	Local Government Engineering Department	Bangladesh	-	-	28	-	**28**
154	LI-BIRD	Local Initiatives for Biodiversity, Research, and Development	Nepal	-	-	83	-	**83**
155	LGDA	Lower Guruve Development Association	Zimbabwe	-	-	3	-	**3**
156	MSC	Maina Seeds Company Ltd (MSC)	Nigeria	-	-	1	-	**1**
157	MAKERERE	Makerere University	Uganda	14	56	-	-	**70**
158	La Montañona	Manc. La Montañona	El Salvador	-	-	10	-	**10**
159	MDC	Mekong Development Center	Lao, PDR	-	-	100	-	**100**
160	MMNVMS	Melakari Madhiri Neer Vadipakuthi Membatu Sangam	India	-	-	3	-	**3**
161	MARI	Mikocheni Agricultural Research Institute (MARI), Tanzania	Tanzania, United Republ	-	-	2	-	**2**
162	MP Tanzania	Millenium Promise Tanzania Limited (MP Tanzania)	Tanzania, United Republ	-	-	18	-	**18**
163		MISHRA, PRAKASH	Nepal	-	-	-	-	**-**
164	MWC	Model Watershed Committee	India	-	-	8	-	**8**
165		Model Watershed Development Project	India	-	-	18	-	**18**
166	MVWDM	Motta Vadala Watershed Development Main	India	-	-	8	-	**8**
167	MMU	Mountains of the Moon University	Uganda	-	-	2	-	**2**
168		Mysore Resettlement and Development Agency (MYRADA), Banga	India	-	-	6	-	**6**
169	NADP	Nasarawa State Agricultural Development Project	Nigeria	-	-	3	-	**3**
170	NAERLS	National Agricultural Extension and Research Liaison Services (NAI	Nigeria	-	-	4	-	**4**
171	NARO	National Agricultural Research Organization	Uganda	-	-	167	-	**167**
172	NAFRI	National Agriculture & Forestry Research Institute	Lao, PDR	-	-	-	-	**-**
173	NAFRI	National Agriculture and Forestry Research Institute	Lao, PDR	-	-	29	-	**29**
174	NIH	National Institute of Hydrology, Roorkee	India	20	-	-	-	**20**
175	NASFAM	National Smallholder Farmers' Association of Malawi (NASFAM)	Malawi	-	-	1	-	**1**
176	NUOL	National University of Laos	Lao, PDR	-	-	60	-	**60**
177	NWRC	National Water Research Center	Egypt	-	17	-	-	**17**
178		Natural Resources and Environment Institute	Lao, PDR	-	7	-	-	**7**
179	NM-AIST	Nelson Mandela Africa Institute of Science and Technogy (NM-AIST	Tanzania, United Republ	-	-	14	-	**14**
180	NARC	Nepal Agricultural Research Council	Nepal	-	-	92	-	**92**
181	NESFAS	North East Slow Food and Agrobiodiversity Society	India	-	-	4	-	**4**
182	NOTORE	Notore Chemical Industry Limited	Nigeria	-	33	-	-	**33**
183	NRCAF	NRCAF - Jhansi	India	-	-	2	-	**2**
184		Other in BGD (including students)		-	-	11	-	**11**
185		Other Partners Expenses	Kenya	20	-	11	-	**31**
186		Others		42	-	15	-	**57**
187		OUEDRAOGO, NASSIROU	Tunisia	3	-	-	-	**3**
188	ODI	Overseas Development Institute	United Kingdom	-	-	42	-	**42**
189	OYSADEP	Oyo State Agricultural Development Project (OYSADEP)	Nigeria	-	-	3	-	**3**
190	PMWDS	Padmalaya Model Watershed Development Sanstha	India	-	-	8	-	**8**
191	Parasai	Parasai Sindu Watershed, Jhansi	India	-	-	25	-	**25**
192	PDT	Participatory Development Training Centre	Lao, PDR	-	-	15	-	**15**
193	PEDO	Peoples Education and Development Organisation -PEDO, Rajasth	India	-	-	15	-	**15**
194	PEDO	People's Eduction and Development Organization (PEDO)	India	18	-	-	-	**18**
195	PASD	Pgaz K'Nyau Association for Sustainable Development	Thailand	-	-	4	-	**4**
196	PICOTEAM	PICO Knowledge-Net	Kenya	-	-	16	-	**16**
197	PPRSD-Ghana	Plant Protection and Regulatory Services Directorate, Ghana	Ghana	-	15	-	-	**15**
198	DIOBASS	Plate-Forme Diobass au kivu	Congo, The Democratic	-	-	3	-	**3**
199	PRDS	PRANATI RURAL DEVELOPMENT SOCIETY	India	-	-	5	-	**5**
200	PAMWN	Program Account- Model Watershed Naugaon	India	-	-	8	-	**8**
201	PIDR	Programme Intégré de Développement Rural (PIDR)	Congo, The Democratic	-	-	1	-	**1**
202	Rapha	Rapha Consult	Ghana	-	-	10	-	**10**
203	CAREC	Regional Environmental Center for Central Asia (CAREC)	Kazakhstan	104	-	-	-	**104**
204	RIH	Research Institute of Horticulture	Uzbekistan	-	-	110	-	**110**
205	RIPI	Research Institute of Plant Industry	Uzbekistan	-	-	(39)	-	**(39)**
206	RPK	Resource Projects Kenya	Kenya	-	-	14	-	**14**
207	RIMISP	RIMISP Centro Latinoamericano para el Desarrollo Rural	Chile	-	-	-	-	**-**
208	READ	Rural Education and Agricultural Development (READ), Andhra Pra	India	-	-	4	-	**4**
209	READ	Rural Education and Agricultyral Development	India	-	-	26	-	**26**
210	READ	Rural Education and Agricultural Development (READ)	India	19	-	-	-	**19**

211	RU	Rutgers University	United States	36	-	-	-	**36**
212	RAB	Rwanda Agriculture Board	Rwanda	-	-	27	-	**27**
213		S3IDF-Biome Environmental Trust Partners	India	-	-	4	-	**4**
214	SACAN	SACAN Services	Pakistan	-	-	5	-	**5**
215	SARI	Savanna Agricutural Research Institute, Ghana (SARI, Ghana)	Ghana	-	-	6	-	**6**
216	SIC ICWS	SCIENTIFIC-INFORMATION CENTER OF THE INTERSTATE COOF	Uzbekistan	42	-	-	-	**42**
217	SARI	Selian Agricultural Research Institute	Tanzania, United Republ	-	-	15	-	**15**
218	SARCAF	Service d accompagnement et de Renforcement des Capacites d a	Rwanda	-	-	2	-	**2**
219		SEYMOUR, GREGORY	United States	14	-	-	-	**14**
220	SHRISTI	SHRISTI, Orissa	India	-	-	15	-	**15**
221	SANS	Sichuan Academy of Agricultural Sciences	China	-	-	20	-	**20**
222	SLeCAD	Sierra Leone Chamber for Agribusiness Development	Sierra Leone	-	-	6	-	**6**
223	SDA	Society Development Alternatives ,DA, Uttar Pradesh	India	-	-	13	-	**13**
224	SOFDEC	SOCIETY FOR COMMUNITY DEVELOPMENT IN CAMBODIA	Cambodia	74	-	-	-	**74**
225	SHRISTI	Society for Harmonious Renaissance of Simple Technological Initiat	India	17	-	-	-	**17**
226	SRI	Soil Research Institute (SRI)	Ghana	8	-	77	-	**85**
227	SRDI	Soil Resource Development Institute	Bangladesh	-	-	33	-	**33**
228	SFRI	Soils and Fertilizers Research Institute	Vietnam	-	-	44	-	**44**
229	SMMJAS	Sri Madivaleshwara Madari Jalanayana Abhivrudhi Sangha	India	-	-	8	-	**8**
230		Stanford University Development Services	USA	47	-	-	-	**47**
231		Stanford University	United States	1	-	-	-	**1**
232	SEI	Stockholm Environment Institute	Sweden	67	-	13	-	**80**
233		Stockholm University	Sweden	5	-	-	-	**5**
234		STOPNITZKY, YANIV	United States	5	-	-	-	**5**
235	EAWAG	Swiss Federal Institute of Aquatic Science and Technology	Switzerland	-	-	29	-	**29**
236	TFRA	Tanzania Fertilizer Regulatory Authority	Tanzania, United Republ	-	51	-	-	**51**
237		TAUBE, ADAM	United States	1	-	-	-	**1**
238		TESSEMA, MASRESHA	Ethiopia	-	-	5	-	**5**
239	AASD-SL	The Advocacy and Action for Sustainable Development -Sierra Leon	Sierra Leone	-	-	6	-	**6**
240	AATF	The African Agricultural Technology Foundation	Kenya	-	83	-	-	**83**
241	DF	The D Foundation for Doing Good Work	Thailand	-	-	52	-	**52**
243	NAFDAC	The National Agency for Food and Drug Administration and Control	Nigeria	-	64	-	-	**64**
244	TNC	The Nature Conservancy	United States	1	-	-	-	**1**
245	UAF	The University of Agriculture, Faisalabad (UAF) - Pakistan	Pakistan	7	-	-	-	**7**
246	USL	The University of Sierra Leone (USL)	Sierra Leone	-	-	10	-	**10**
247		The University of York	United Kingdom	4	-	-	-	**4**
248	AVRDC	The World Vegetable Center	Taiwan	-	-	105	-	**105**
249		THOMPSON, JACOB BART	United States	9	-	-	-	**9**
250	TSA	Tonle Sap Authority	Cambodia	20	-	2	-	**22**
251	TLC	Total Land Care	Malawi	-	-	9	-	**9**
252		TREND Group	Ghana	-	-	50	-	**50**
253	UNORCAC	Union de Organizaciones Campesinas Indigenas de Cotachi	Ecuador	9	-	38	-	**47**
254	USER	Unit for Social and Environmental Research	Thailand	-	-	13	-	**13**
255	UNU-INWEH	United Nations University - Institute for Water, Environment and Hea	Canada	25	-	-	-	**25**
256	UNU	United Nations University	Canada	10	-	-	-	**10**
257	UF	Univerity of Florida	United States	60	-	-	-	**60**
258		UNIVERSIDAD DELOS ANDES	Colombia	30	-	-	-	**30**
259	UNAL	Universidad Nacional de Colombia Sede BogotáFacultad de Agrono	Colombia	-	-	17	-	**17**
260	UTEQ	Universidad Tecnica Estatal de Quevedo	Ecuador	-	-	33	-	**33**
261	UCB	Universite Catholique de Bukavu	Rwanda	-	-	29	-	**29**
262	UDS	UNIVERSITY FOR DEVELOPMENT STUDIES	Ghana	-	-	10	-	**10**
263	WOCAT Secretariat	University of Bern, Centre for Development and Environment	Switzerland	-	-	32	-	**32**
264	UC	University of Canterbury	New Zealand	-	-	40	-	**40**
265		UNIVERSITY OF CENTRAL FLORIDA	United States	8	-	-	-	**8**
266		University of Ghana	Ghana	-	-	7	-	**7**
267	UH	University of Helsinki	Finland	-	-	136	-	**136**
268	UH	University of Hohenheim - Institute for Social Sciences of the Agricu	Germany	-	-	65	-	**65**
269	UHOH	University of Hohenheim (UHOH)	Germany	-	-	8	-	**8**
270	UOH	University of Hohenheim	Germany	-	-	4	-	**4**
271	UNILORIN	University of Ilorin (UNILORIN)	Nigeria	-	-	5	-	**5**
272	UJ	University of Jordan	Jordan	-	-	5	-	**5**
273	UM	University of Missouri	United States	-	41	-	-	**41**
274	UoN	University of Nairobi	Kenya	-	-	8	-	**8**
275	BOKU	University of Natural Resources and Life Sciences, Vienna	Austria	-	-	-	-	-
276	DIBAF	University of Tuscia DIBAF	Italy	30	-	-	-	**30**
277	VFI	Village Focus International	Lao, PDR	52	-	38	-	**90**
278	VBA	Volta Basin Authority	Burkina Faso	-	-	14	-	**14**
279	VECO Uganda	Vredeseilanden Kampala, Uganda (VECO Uganda)	Uganda	-	-	3	-	**3**
280		WAGENINGEN UNIVERSITY	Netherlands	43	-	-	-	**43**
281		Water Resources Engineering Department	Lao, PDR	-	-	-	-	-
282	WOTR	Watershed Organisation Trust	India	-	-	8	-	**8**
283		WaterWatch	Netherlands	-	-	35	-	**35**
284	WU	Wollega University	Ethiopia	3	-	-	-	**3**
285	WU	Wollo University	Ethiopia	14	-	-	-	**14**
286	WfWI	Women for Women International (WfWI)	United States	-	-	8	-	**8**
288	WVU	World Vision Uganda (WVU)	Uganda	-	-	2	-	**2**
290	YAAS	Yunnan Academy of Agricultural Sciences	China	-	-	28	-	**28**
291	YAU	Yunnan Agricultural University	China	-	-	20	-	**20**
292	ZARI	Zambia Agriculture Research Institute, Mt. Makulu Research Statio	Zambia	-	-	23	-	**23**
293	ZADP	Zamfara State Agricultural Development (ZADP)	Nigeria	-	-	3	-	**3**
	Total for CRP			**1,428**	**907**	**6,402**	**-**	**8,737**

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. BIOVERSITY

Item	Institute Acronym	Institute Name	Country	Actual Expenses - This Year: Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1	UNORCAC	Union de Organizaciones Campesinas Indigenas de Cotachi	Ecuador	9	-	38	-	**47**
2	NARO	National Agricultural Research Organization	Uganda	-	-	167	-	**167**
3	JASIL	Environment and Development Association	Mongolia	-	-	20	-	**20**
4	INIFAT	Instituto de Investigaciones Fundamentales en la Agricultura Tr	Cuba	-	-	52	-	**52**
5	NARC	Nepal Agricultural Research Council	Nepal	-	-	92	-	**92**
6	LI-BIRD	Local Initiatives for Biodiversity, Research, and Development	Nepal	-	-	83	-	**83**
7	SANS	Sichuan Academy of Agricultural Sciences	China	-	-	20	-	**20**
8	YAAS	Yunnan Academy of Agricultural Sciences	China	-	-	28	-	**28**
9	YAU	Yunnan Agricultural University	China	-	-	20	-	**20**
10	IAVH	Institut Agronomique at Veterinaire Hassan II	Morocco	-	-	18	-	**18**
11	RIH	Research Institute of Horticulture	Uzbekistan	-	-	110	-	**110**

12	ICARDA	International Center for Agricultural Research in the Dry Areas	Lebanon	-	-	2	-	**2**
13	CU	Columbia University	USA	-	-	111	-	**111**
14	GP	Gaia Pacha	Peru	-	-	4	-	**4**
15	CENESTA	Centre for Sustainable Development	Iran	-	-	4	-	**4**
16	INERA	Institut de l'Environnement et de Recherches Agricoles	Burkina Faso	-	-	-	-	**-**
17	PASD	Pgaz K'Nyau Association for Sustainable Development	Thailand	-	-	4	-	**4**
18	NESFAS	North East Slow Food and Agrobiodiversity Society	India	-	-	4	-	**4**
19	UTEQ	Universidad Tecnica Estatal de Quevedo	Ecuador	-	-	33	-	**33**
20	RIPI	Research Institute of Plant Industry	Uzbekistan	-	-	(39)	-	**(39)**
21	CONDESAN	Consorcio para el Desarrollo Sostenible de la Ecorregión Andina	Peru	4	-	-	-	**4**
		Total for CRP		**13**	**-**	**771**	**-**	**784**

3. CIAT				**Actual Expenses - This Year**				
Item	**Institute Acronym**	**Institute Name**	**Country**	**Windows 1 & 2**	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1	ARDAP	Appropriate Rural Development Agriculture Programme		-	-	16	-	**16**
2	CARITAS - Rwanda	CARITAS - Rwanda		-	-	1	-	**1**
3	CADS	Cluster Agricultural Development Services		-	-	3	-	**3**
4	CTDO	Community Technology Development Organization		-	-	6	-	**6**
5	IASS	Institute for Advanced Sustainability Studies e.V.		-	-	35	-	**35**
6	IIAP	Instituto De Investigacion de la Amazonia Peruana		-	-	66	-	**66**
7	KESOFA	Kenya Soybean Farmers Association		-	-	9	-	**9**
8	KHG	Kleenhomes and Gardens		-	-	8	-	**8**
9	LUANAR (Formerly BUNDA)	Lilongwe University of Agriculture and Natural Resources, Bunda Campus		-	-	18	-	**18**
10	LGDA	Lower Guruve Development Association		-	-	3	-	**3**
11	La Montañona	Manc. La Montañona		-	-	10	-	**10**
12	DIOBASS	Plate-Forme Diobass au kivu		-	-	3	-	**3**
13	RPK	Resource Projects Kenya		-	-	14	-	**14**
14	RAB	Rwanda Agriculture Board		-	-	27	-	**27**
15	SARI	Selian Agricultural Research Institute		-	-	15	-	**15**
16	SARCAF	Service d accompagnement et de Renforcement des Capacites d auto promotion de la		-	-	2	-	**2**
17	TNC	The Nature Conservancy		1	-	-	-	**1**
18	TLC	Total Land Care		-	-	9	-	**9**
19	UNAL	Universidad Nacional de Colombia Sede BogotáFacultad de Agronomía		-	-	17	-	**17**
20	UCB	Universite Catholique de Bukavu		-	-	29	-	**29**
21	WOCAT Secretariat	University of Bern, Centre for Development and Environment		-	-	32	-	**32**
22	UH	University of Hohenheim - Institute for Social Sciences of the Agricultural Sector		-	-	65	-	**65**
		Total for CRP		**1**	**-**	**388**	**-**	**389**

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

5. CIMMYT				**Actual Expenses - This Year**				
Item	**Institute Acronym**	**Institute Name**	**Country**	**Windows 1 & 2**	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1								**-**
								-
		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	UF	Univerity of Florida	United States	60	-	-	-	**60**
2	RU	Rutgers University	United States	36	-	-	-	**36**
3	UM	University of Missouri	United States	-	41	-	-	**41**
		Total for CRP		**96**	**41**	**-**	**-**	**137**

7. ICARDA				**Actual Expenses - This Year**				
Item	**Institute Acronym**	**Institute Name**	**Country**	**Windows 1 & 2**	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1	ARARI	Amhara Regional Agricultural Research Institute (ARARI)	Ethiopia	34	-	27	-	**61**
2	UNU	United Nations University	Canada	10	-	-	-	**10**
3	CAREC	Regional Environmental Center for Central Asia (CAREC)	Kazakhstan	104	-	-	-	**104**
4	ARC	Agricultural Research Center (ARC)	Iraq	-	17	-	-	**17**
5	ARC	Agricultural Research Center (ARC)	Egypt	-	51	-	-	**51**
7	BOKU	University of Natural Resources and Life Sciences, Vienna	Austria	-	-	-	-	**-**
8	INRA	Institut National de la Recherche Agronomique (INRA)	Morocco	-	-	14	-	**14**
9	ARC	Agricultural Research Center (ARC)	Pakistan	-	-	308	-	**308**
10	SIC ICWS	SCIENTIFIC-INFORMATION CENTER OF THE INTERSTATE COORDI	Uzbekistan	42	-	-	-	**42**
11	UAF	The University of Agriculture, Faisalabad (UAF) - Pakistan	Pakistan	7	-	-	-	**7**
12	NWRC	National Water Research Center	Egypt	-	17	-	-	**17**
								-
		Total for CRP		**197**	**85**	**349**	**-**	**631**

8. ICRAF				**Actual Expenses - This Year**				
Item	**Institute Acronym**	**Institute Name**	**Country**	**Windows 1 & 2**	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1		Stanford University	United States	1	-	-	-	**1**
2		AGENA LIMITED	United Kingdom	8	-	-	-	**8**
3	UH	University of Helsinki	Finland	-	-	136	-	**136**
4		Other Partners Expenses	Kenya	20	-	11	-	**31**
5	UoN	University of Nairobi	Kenya	-	-	8	-	**8**
		Total for CRP		**29**	**-**	**155**	**-**	**184**

9. ICRISAT				**Actual Expenses - This Year**				
Item	**Institute Acronym**	**Institute Name**	**Country**	**Windows 1 & 2**	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1	AMEED	Association Malienne d'Eveil au Development Durable (AMEDD	Mali	24	-	-	-	**24**
2	BAIF	BAIF Development Research Foundation-Gujarat	India	17	-	-	-	**17**
3	BAIF	BAIF Development Research Foundation-Madhya Pradesh	India	17	-	-	-	**17**
4	BIRDS	Bijapur Integrated Rural Development Society -BIRDS, Karnatak	India	18	-	-	-	**18**

5		Development Alternatives	India	18	-	-	-	**18**
6	JalaSRI	JalaSRI Wetershed Surveillance & Research Institute	India	20	-	-	-	**20**
7	PEDO	People's Eduction and Development Organization (PEDO)	India	18	-	-	-	**18**
8	READ	Rural Education and Agricultural Development (READ)	India	19	-	-	-	**19**
9	SHRISTI	Society for Harmonious Renaissance of Simple Technological In	India	17	-	-	-	**17**
10	WU	Wollo University	Ethiopia	14	-	-	-	**14**
11	AJSVSS	Adarsh Jal Sangrahan Vikas Samiti-Saram	India	-	-	8	-	**8**
12		Adarsh Jala Grahan Vikas Committee	India	-	-	18	-	**18**
13	AWDSP	Adarsh Watershed Development Samiti "Pragati"	India	-	-	8	-	**8**
14	AJVSD	Adarsha Jalsangrahan Vikas Samiti, Domagorpahu	India	-	-	5	-	**5**
15		Ammaiyanaickanur Model Watershed Development Sangham	India	-	-	18	-	**18**
16	BAIF	BAIF Development Research Foundation-Gujarat	India	-	-	16	-	**16**
17	BAIF	BAIF Development Research Foundation Madhya Pradesh	India	-	-	15	-	**15**
18	Bypass Samsthan	Bhopal Yuwa Paryavaran Shikshan & Samajik Sansthan	India	-	-	8	-	**8**
19	BIRDS	Bijapur Integrated Rural Development Society -BIRDS, Karnatak	India	-	-	15	-	**15**
20	CIRHEP	Center for Improved Rural Health and Environmental Protectio	India	-	-	8	-	**8**
21	CWSRI	Coordinator Watershed Surveillance Research Institute, Jalgaor	India	-	-	12	-	**12**
22		Digital Green	India	-	-	6	-	**6**
28	JMCWSRI	Jalasri - Maharashtra - Coordinator Watershed Surveillance Res	India	-	-	8	-	**8**
29		Kalabhairavanath Watershed Committee	India	-	-	18	-	**18**
30	MMNVMS	Melakari Madhiri Neer Vadipakuthi Membatu Sangam	India	-	-	3	-	**3**
31	MWC	Model Watershed Committee	India	-	-	8	-	**8**
32		Model Watershed Development Project	India	-	-	18	-	**18**
33	MVWDM	Motta Vadala Watershed Development Main	India	-	-	8	-	**8**
34		Mysore Resettlement and Development Agency (MYRADA), Ba	India	-	-	6	-	**6**
35	NRCAF	NRCAF - Jhansi	India	-	-	2	-	**2**
36	PMWDS	Padmalaya Model Watershed Development Sanstha	India	-	-	8	-	**8**
37	Parasai	Parasai Sindu Watershed, Jhansi	India	-	-	25	-	**25**
38	PEDO	Peoples Education and Development Organisation -PEDO, Raja	India	-	-	15	-	**15**
39	PRDS	PRANATI RURAL DEVELOPMENT SOCIETY	India	-	-	5	-	**5**
40	PAMWN	Program Account- Model Watershed Naugaon	India	-	-	8	-	**8**
41	READ	Rural Education and Agricultural Development (READ), Andhra	India	-	-	4	-	**4**
42	READ	Rural Education and Agricultyral Development	India	-	-	26	-	**26**
43	SHRISTI	SHRISTI, Orissa	India	-	-	15	-	**15**
44	SDA	Society Development Alternatives ,DA, Uttar Pradesh	India	-	-	13	-	**13**
45	SMMJAS	Sri Madivaleshwara Madari Jalanayana Abhivrudhi Sangha	India	-	-	8	-	**8**
47	AVRDC	The World Vegetable Center	Taiwan	-	-	105	-	**105**
48	WOTR	Watershed Organisation Trust	India	-	-	8	-	**8**
								-
		Total for CRP		**182**	**-**	**448**	**-**	**630**

10. IFPRI

Actual Expenses - This Year

Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
1		TAUBE, ADAM	United States	1	-	-	-	**1**
2		SEYMOUR, GREGORY	United States	14	-	-	-	**14**
3	IAE	INSTITUTE FOR AGRICULTURAL ENVIRONMENT	Viet Nam	83	-	-	-	**83**
4		THOMPSON, JACOB BART	United States	9	-	-	-	**9**
5	SOFDEC	SOCIETY FOR COMMUNITY DEVELOPMENT IN CAMBODIA	Cambodia	74	-	-	-	**74**
6	GSTS	GENERAL SCIENCE AND TECHNOLOGY SOLUTIONS	United States	16	-	-	-	**16**
7	FES	FOUNDATION FOR ECOLOGICAL SECURITY	India	90	-	-	-	**90**
8		WAGENINGEN UNIVERSITY	Netherlands	43	-	-	-	**43**
9		BRUNS, BRYAN	United States	9	-	-	-	**9**
10		UNIVERSITY OF CENTRAL FLORIDA	United States	8	-	-	-	**8**
11		STOPNITZKY, YANIV	United States	5	-	-	-	**5**
12		CENTER FOR CHINESE AGRICULTURAL POLICY	China	42	-	-	-	**42**
13		OUEDRAOGO, NASSIROU	Tunisia	3	-	-	-	**3**
14		FARMERS MANAGED IRRIGATION SYSTEMS	Nepal	4	-	-	-	**4**
15		UNIVERSIDAD DELOS ANDES	Colombia	30	-	-	-	**30**
16		ALEMU, TEKIE	Ethiopia	9	-	-	-	**9**
17		BASHYAL, AMBIKA	Nepal	-	-	-	-	-
18		MISHRA, PRAKASH	Nepal	-	-	-	-	-
19		LIAO, DANDAN	United States	1	-	-	-	**1**
20		BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS	United States	10	-	-	-	**10**
21	AEMFI	ASSOCIATION OF ETHIOPIAN MICROFINANCE	Ethiopia	-	-	50	-	**50**
22		TESSEMA, MASRESHA	Ethiopia	-	-	5	-	**5**
23	IRA	INSTITUTE OF RESOURCE ASSESSMENT	Tanzania, United Repu	-	-	39	-	**39**
24		GHANA IRRIGATION DEVELOPMENT AUTHORITY	Ghana	-	-	8	-	**8**
25	UDS	UNIVERSITY FOR DEVELOPMENT STUDIES	Ghana	-	-	10	-	**10**
26		Others		42	-	8	-	**50**
								-
		Total for CRP		**493**	**-**	**120**	**-**	**613**

11. IITA

Actual Expenses - This Year

Item	Institute Acronym	Institute Name	Country	Windows 1 & 2	Window 3	Bilateral	Center Funds	TOTAL
6	EGU	Egerton University	Kenya	-	56	-	-	**56**
7		COLLEGE OF AGRICULTURE AND NATURAL RESOURCES	Ghana	-	49	7	-	**56**
8	AATF	The African Agricultural Technology Foundation	Kenya	-	83	-	-	**83**
9	MAKERERE	Makerere University	Uganda	-	56	-	-	**56**
10		F&S SCIENTIFIC LTD	Kenya	-	45	-	-	**45**
11	NOTORE	Notore Chemical Industry Limited	Nigeria	-	33	-	-	**33**
12	CABI - Africa	CABI - Africa	Kenya	-	45	-	-	**45**
13	A2N	Africa 2000 Network Uganda	Uganda	-	17	2	-	**19**
14	EIAR	Ethiopian Institute of Agricultural Research	Ethiopia	-	85	-	-	**85**
15	TFRA	Tanzania Fertilizer Regulatory Authority	Tanzania, United Repu	-	51	-	-	**51**
16	AFAP	African Fertilizer Agrobusiness Partnership	Tanzania, United Repu	-	15	-	-	**15**
17	KEPHIS	Kenya Agricultural Research Institute-Kenya Plant Health Inspe	Kenya	-	13	-	-	**13**
18	NAFDAC	The National Agency for Food and Drug Administration and Con	Nigeria	-	64	-	-	**64**
19	PPRSD-Ghana	Plant Protection and Regulatory Services Directorate, Ghana	Ghana	-	15	-	-	**15**
20	KNUST	Kwame Nkrumah University of Science and Technology	Ghana	-	28	-	-	**28**
21	MARI	Mikocheni Agricultural Research Institute (MARI), Tanzania	Tanzania, United Repu	-	-	2	-	**2**
22	INTERMECH	Intermech Engineering Limited	Tanzania, United Repu	-	-	9	-	**9**
23	SLeCAD	Sierra Leone Chamber for Agribusiness Development	Sierra Leone	-	-	6	-	**6**
24	ZARI	Zambia Agriculture Research Institute, Mt. Makulu Research Sta	Zambia	-	-	23	-	**23**
25	ACOSYF	Association Coopérative en Synergie Féminine (ACOSYF)	Congo, The Democratic	-	-	2	-	**2**
26	INERA	Institut National pour l'Etude et la Recherche Agronomiques Ce	Congo, The Democratic	-	-	84	-	**84**
27	IDS	Institute of Development Studies, University of Dar es Salaam	Tanzania, United Repu	-	-	3	-	**3**
28	CEDER	Centre de Développement Rural (CEDER)	Congo, The Democratic	-	-	1	-	**1**
29	ISANDA	Initiatives de Secours Alimentaire Normal et de Développemer	Congo, The Democratic	-	-	2	-	**2**
30	PIDR	Programme Intégré de Développement Rural (PIDR)	Congo, The Democratic	-	-	1	-	**1**
31	FRI	Food Research Institute (FRI)	Ghana	-	-	13	-	**13**
32	AASD-SL	The Advocacy and Action for Sustainable Development -Sierra L	Sierra Leone	-	-	6	-	**6**
33	USL	The University of Sierra Leone (USL)	Sierra Leone	-	-	10	-	**10**

34	Africa Rice	Africa Rice Center	Benin	-	-	753	-	**753**
35	NADP	Nasarawa State Agricultural Development Project	Nigeria	-	-	3	-	**3**
36	IAR	Institute for Agricultural Research	Nigeria	-	-	100	-	**100**
37	ZADP	Zamfara State Agricultural Development (ZADP)	Nigeria	-	-	3	-	**3**
38	KWADP	Kwara State Agricultural Development Project (KWADP)	Nigeria	-	-	3	-	**3**
39	NAERLS	National Agricultural Extension and Research Liaison Services (I	Nigeria	-	-	4	-	**4**
40	OYSADEP	Oyo State Agricultural Development Project (OYSADEP)	Nigeria	-	-	3	-	**3**
41	KADP	Kaduna State Agricultural Development Project (KADP)	Nigeria	-	-	3	-	**3**
42	UNILORIN	University of Ilorin (UNILORIN)	Nigeria	-	-	5	-	**5**
43	KTARDA	Kastina state Agricultural and Rural Authority (KTARDA)	Nigeria	-	-	3	-	**3**
44	CRI-GHANA	Crops Research Institute, Ghana (CRI - GHANA)	Ghana	-	-	10	-	**10**
45	SARI	Savanna Agricutural Research Institute, Ghana (SARI, Ghana)	Ghana	-	-	6	-	**6**
46	IER-MALI	Institut d'Economie Rurale du Mali	Mali	-	-	36	-	**36**
47	ICIPE	International Centre of Insect Physiology and Ecology (ICIPE)	Kenya	-	-	66	-	**66**
48	AfDB	African Development Bank	Nigeria	-	-	236	-	**236**
49	UHOH	University of Hohenheim (UHOH)	Germany	-	-	8	-	**8**
50	BUK	Bayero University Kano (BUK)	Nigeria	-	-	2	-	**2**
51	JIRKUR SEED	Jirkur Seed Cooperative Biu (JIRKUR SEED)	Nigeria	-	-	2	-	**2**
52	MSC	Maina Seeds Company Ltd (MSC)	Nigeria	-	-	1	-	**1**
53	KNARDA	Kano State Agricultural and Rural Development Authority (KNA	Nigeria	-	-	3	-	**3**
54	BSADP	BAUCHI STATE AGRICULTURAL DEVELOPMENT PROGRAMME (BS.	Nigeria	-	-	3	-	**3**
55	FUT(Minna)	Federal University of Technology Minna (FUT Minna)	Nigeria	-	-	3	-	**3**
56	NASFAM	National Smallholder Farmers' Association of Malawi (NASFAM	Malawi	-	-	1	-	**1**
57	ACDEP	Association of Church Development Projects (ACDEP)	Ghana	-	-	1	-	**1**
58	WfWI	Women for Women International (WfWI)	United States	-	-	8	-	**8**
59	MP Tanzania	Millenium Promise Tanzania Limited (MP Tanzania)	Tanzania, United Repu	-	-	18	-	**18**
60	NM-AIST	Nelson Mandela Africa Institute of Science and Technogy (NM-/	Tanzania, United Repu	-	-	14	-	**14**
61	ARI-UYOLE	Agriculture Research Institue -Uyole (ARI-UYOLE)	Tanzania, United Repu	-	-	11	-	**11**
62	IER-MALI	Institut d'Economie Rurale du Mali	Mali	-	-	62	-	**62**
63	SRI	Soil Research Institute (SRI)	Ghana	8	-	77	-	**85**
64	INRAN	Institut National de la Recherches Agronomiques du Niger (INR	Niger	-	-	86	-	**86**
65	ARI	Agricultural Research Insitute Naliendele (ARI-TANZANIA)	Tanzania, United Repu	-	-	10	-	**10**
66	WVU	World Vision Uganda (WVU)	Uganda	-	-	2	-	**2**
67	VECO Uganda	Vredeseilanden Kampala, Uganda (VECO Uganda)	Uganda	-	-	3	-	**3**
68	ARI Makutupora	Agricultural Research Institute, Makutupora (ARI Makutupora)	Tanzania, United Repu	-	-	6	-	**6**
69		Others		-	-	7	-	**7**
		Total for CRP		**8**	**655**	**1,733**	**-**	**2,396**

12. ILRI				**Actual Expenses - This Year**				
Item	**Institute Acronym**	**Institute Name**	**Country**	**Windows 1 & 2**	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1	WU	Wollega University	Ethiopia	3	-	-	-	**3**
2	MAKERERE	Makerere University	Uganda	14	-	-	-	**14**
								-
		Total for CRP		**17**	**-**	**-**	**-**	**17**

13. IRRI				**Actual Expenses - This Year**				
Item	**Institute Acronym**	**Institute Name**	**Country**	**Windows 1 & 2**	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1	SRDI	Soil Resource Development Institute	Bangladesh	-	-	33	-	**33**
2	IWM	Institute of Water Modelling	Bangladesh	-	-	55	-	**55**
3	LEGD	Local Government Engineering Department	Bangladesh	-	-	28	-	**28**
4	BRRI	Bangladesh Rice Research Institute	Bangladesh	-	-	32	-	**32**
5	BRAC	BRAC	Bangladesh	-	-	17	-	**17**
6	BFRI	Bangladesh Fisheries Research Institute	Bangladesh	-	-	10	-	**10**
7	CSSRI	Central Soil Salinity Research Institute	India	-	-	37	-	**37**
8	CIBA	Central Institute of Brackishwater Aquaculture	India	-	-	8	-	**8**
9	-	Other in BGD (including students)		-	-	11	-	**11**
		Total for CRP		**-**	**-**	**231**	**-**	**231**

14. IWMI				**Actual Expenses - This Year**				
Item	**Institute Acronym**	**Institute Name**	**Country**	**Windows 1 & 2**	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1	ARC	Agricultural Research Council	South Africa	-	-	257	-	**257**
2	Ambo	Ambo University	Ethiopia	-	-	5	-	**5**
3	ATEEC	Arab Technologists for Economical and Environmental Consulta	Jordan	-	-	15	-	**15**
4	AMU	Arba Minch University	Ethiopia	-	-	16	-	**16**
5	AIT	Asian Institute of Technology	Thailand	-	-	151	-	**151**
6	BDU	Bahir Dar University	Ethiopia	-	-	35	-	**35**
7	BAU	Beirut Arab University	Lebanon	-	-	4	-	**4**
9	CRIDA	Central Research Institute for Dryland Agriculture	India	-	-	73	-	**73**
10	CIRAD	Centre de Cooperation Internationale en Recherche Agronomic	France	-	-	(44)	-	**(44)**
11		Centre for Sustainable Agriculture	India	-	-	(4)	-	**(4)**
12	CMU	Chiang Mai University	Thailand	-	-	-	-	-
13	China Dialogue Trust Ltd	China Dialogue Trust Ltd	United Kingdom	-	-	3	-	**3**
14	CIRAD	CIRAD - Agricultural Research for Development	France	37	-	-	-	**37**
15		College of Agricultural & Environmental Sciences	Uganda	-	-	50	-	**50**
16	Confluvium	Confluvium Cooperative Group	Canada	-	-	6	-	**6**
17		Dangishita Farmers Association, Rural Credit Cooperative	Ethiopia	-	3	-	-	**3**
18		Debere Tseyon Agricultural Multi-Purpose Cooperative	Ethiopia	-	6	-	-	**6**
19		Department of Agricultural Land Management (DALaM), Ministr	Lao, PDR	-	-	7	-	**7**
20		Department of Irrigation	Lao, PDR	-	72	-	-	**72**
21		EcoAgriculture International	USA	15	-	-	-	**15**
22	FANRAPAN	Food, Agriculture and Natural Resources Policy Analysis Netwo	South Africa	-	-	26	-	**26**
23	GAEC	Ghana Atomic Energy Commission	Ghana	-	-	1	-	**1**
24		Grupo Gea	Peru	-	-	17	-	**17**
25	HUA	Hanoi University of Agriculture	Vietnam	-	-	21	-	**21**
26		Horticoop Ethiopia	Ethiopia	8	-	-	-	**8**
27		Hydraulics Research Station, Ministry of Water Resources, Suda	Sudan	-	-	10	-	**10**
28	ICEM	ICEM - International Center for Environmental Management	Vietnam	-	-	250	-	**250**
29	IISc	Indian Institute of Science	India	-	-	34	-	**34**
30	IRD	Institut de Recherche pou Développement	Vietnam	-	-	4	-	**4**
31	INRGREF	Institut National de Recherche en Génie Rural, Eaux et Forêts	Tunisia	-	-	10	-	**10**
32	IGSD	Institute for Governance and Sustainable Development	USA	24	-	-	-	**24**
33	IWM	Institute of Water Modelling	Bangladesh	-	-	113	-	**113**
34	IWRP	Institute of Water Resources Planning	Vietnam	-	-	138	-	**138**
36	ICBA	International Center for Biosaline Agriculture	UAE	-	-	32	-	**32**
38	CEWAS	International Centre for Water Management Services	Switzerland	-	-	208	-	**208**
40	IDE	International Development Enterprises	Burkina Faso	15	-	-	-	**15**
41	IDE	International Development Enterprises	Ghana	19	-	-	-	**19**
43	IIED	International Institute for Environment and Development	United Kingdom	(14)	-	14	-	-

46	SIC ICWC	Interstate Commission for Water Coordination of Central Asia	Uzbekistan	-	-	28	-	**28**
47	KKU	Khon Kaen University	Thailand	-	38	-	-	**38**
48	KCL	Kings College Londo	United Kingdom	-	-	(38)	-	**(38)**
49	KNUST	Kwame Nkrumah University of Science and Technology	Ghana	-	-	7	-	**7**
50	LUMS	Lahore University of Management Sciences	Pakistan	-	-	35	-	**35**
51	Lisode	Lisode	France	-	-	15	-	**15**
52	MDC	Mekong Development Center	Lao, PDR	-	-	100	-	**100**
53	MMU	Mountains of the Moon University	Uganda	-	-	2	-	**2**
54	NAFRI	National Agriculture & Forestry Research Institute	Lao, PDR	-	-	-	-	**-**
55	NAFRI	National Agriculture and Forestry Research Institute	Lao, PDR	-	-	29	-	**29**
56	NIH	National Institute of Hydrology, Roorkee	India	20	-	-	-	**20**
57	NUOL	National University of Laos	Lao, PDR	-	-	60	-	**60**
58		Natural Resources and Environment Institute	Lao, PDR	-	7	-	-	**7**
59	ODI	Overseas Development Institute	United Kingdom	-	-	42	-	**42**
60	PDT	Participatory Development Training Centre	Lao, PDR	-	-	15	-	**15**
61	PICOTEAM	PICO Knowledge-Net	Kenya	-	-	16	-	**16**
62	Rapha	Rapha Consult	Ghana	-	-	10	-	**10**
63	RIMISP	RIMISP Centro Latinoamericano para el Desarrollo Rural	Chile	-	-	-	-	**-**
64		S3IDF-Biome Environmental Trust Partners	India	-	-	4	-	**4**
65	SACAN	SACAN Services	Pakistan	-	-	5	-	**5**
66	SFRI	Soils and Fertilizers Research Institute	Vietnam	-	-	44	-	**44**
67		Stanford University Development Services	USA	47	-	-	-	**47**
68	SEI	Stockholm Environment Institute	Sweden	67	-	13	-	**80**
69		Stockholm University	Sweden	5	-	-	-	**5**
70	EAWAG	Swiss Federal Institute of Aquatic Science and Technology	Switzerland	-	-	29	-	**29**
71	DF	The D Foundation for Doing Good Work	Thailand	-	-	52	-	**52**
72		The University of York	United Kingdom	4	-	-	-	**4**
73	TSA	Tonle Sap Authority	Cambodia	-	-	2	-	**2**
74		TREND Group	Ghana	-	-	50	-	**50**
75	USER	Unit for Social and Environmental Research	Thailand	-	-	13	-	**13**
76	UNU-INWEH	United Nations University - Institute for Water, Environment an	Canada	25	-	-	-	**25**
77	UC	University of Canterbury	New Zealand	-	-	40	-	**40**
78		University of Ghana	Ghana	-	-	7	-	**7**
79	UOH	University of Hohenheim	Germany	-	-	4	-	**4**
80	UJ	University of Jordan	Jordan	-	-	5	-	**5**
81	DIBAF	University of Tuscia DIBAF	Italy	30	-	-	-	**30**
82	VFI	Village Focus International	Lao, PDR	52	-	38	-	**90**
83	VBA	Volta Basin Authority	Burkina Faso	-	-	14	-	**14**
84		Water Resources Engineering Department	Lao, PDR	-	-	-	-	**-**
85		WaterWatch	Netherlands	-	-	35	-	**35**
		Total for CRP		**354**	**126**	**2,128**	**-**	**2,608**

15. WORLDFISH				**Actual Expenses - This Year**				
Item	**Institute Acronym**	**Institute Name**	**Country**	**Windows 1 & 2**	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1	DLF	Department of Livestock and Fisheries	Lao, PDR	11	-	-	-	**11**
2	TSA	Tonle Sap Authority	Cambodia	20	-	-	-	**20**
3	HURREDO	Human Resource and Rural Economic Development Organizatio	Cambodia	7	-	-	-	**7**
4	BRAC	BRAC	Bangladesh	-	-	80	-	**80**
								-
		Total for CRP		**38**	**-**	**80**	**-**	**118**

TOTAL FOR CRP "X.X"	**Actual Expenses - This Year**				
	Windows 1 & 2	**Window 3**	**Bilateral**	**Center Funds**	**TOTAL**
1. AFRICA RICE					**-**
2. BIOVERSITY	13	-	771	-	**784**
3. CIAT	1	-	388	-	**389**
4. CIFOR					**-**
5. CIMMYT					**-**
6. CIP	96	41	-	-	**137**
7. ICARDA	197	85	349	-	**631**
8. ICRAF	29	-	155	-	**184**
9. ICRISAT	182	-	448	-	**630**
10. IFPRI	493	-	120	-	**613**
11. IITA	8	655	1,733	-	**2,396**
12. ILRI	17	-	-	-	**17**
13. IRRI	-	-	231	-	**231**
14. IWMI	354	126	2,128	-	**2,608**
15. WORLDFISH	38	-	80	-	**118**
Total for CRP	**1,428**	**907**	**6,403**	**-**	**8,738**

Notes:
CG Partnership details excluded

Notes

All figures shown here are illustrative only, and are in USD 000's
Amounts reported are for actual expenditure, so unliquidated advances not included.
Institutes should be clearly identifiable by name and/or acronym, plus country.
Totals within this report must agree with amounts reported in L121 "Collaborator Costs - Partners".

Annex 2: WLE Performance Indicator on Gender for 2014

2014 PERFORMANCE INDICATOR/CRP						
	GENDER EQUALITY TARGETS			INSTITUTIONAL ARCHITECTURE		
Level	Approaches	Meets	Exceeds	Approaches	Meets	Exceeds
Def.	Minimum: 1- Sex-disaggregated social data is being collected **and used** to diagnose important gender-related constraints in at least one of the CRP's main target populations	And; 2 - The CRP has defined and collected baseline data on the main dimensions of gender inequality in the CRP's main target populations relevant to its expected outcomes (IDOs)	And; 3 - CRP targets **changes** in levels of gender inequality to which the CRP is or plans to contribute, with related numbers of men and women beneficiaries in main target populations	Minimum: 1 - CRP scientists and managers with responsibility for gender in the CRP's outputs are appointed, have written TORS. 2 - Procedures defined to report use of available diagnostic or baseline knowledge on gender routinely for assessment of the gender equality implications of the CRP's flagship research products as per the Gender Strategy 3 - CRP M&E system has protocol for tracking progress on integration of gender in research	And; 3* - CRP M&E system has protocol for tracking progress on integration of gender in research AND **Funds allocated to support their interaction**.	And; 4 - A CRP plan approved for capacity development in gender analysis 5 - The CRP uses feedback provided by its M&E system to improve its integration of gender into research
WLE – core theme GPI	In terms of defining gender inequity targets, WLE performance meets requirements. WLE is working with researchers to ensure gender analysis is being used to help identify the gender issue within the problem statement of the research questions. This will allow WLE's research to be gender responsive. It does this through: • Ensuring any WLE-led call-for-proposal has done a gender analysis and it is reflected in the problem statement of the call. • Working closely with researchers to identify the data needed and the capacity needed to do • Provide technical backstopping in the development and implementation of survey instruments, tools, for gender			In terms of defining institutional architecture for integration of gender in place, WLE performance meets, and in some cases exceeds requirements. Implementing the WLE gender strategy has allowed the institutional architecture to be clearly embedded within WLE. Maintaining the gender coordinator within the management committee has been one effective approach. Important in 2014 has also been the increased human resources available. The team has expanded to include gender specialists in the focal regions. Reporting on gender has been part of WLE from the beginning, but 2014 has been dedicated to developing better systems for reporting and also understanding the link between reporting and the dedicated gender budgeting. With reporting came a demand for a better and more coherent approach to monitoring which is being trailed now. Linked with the budget, implementation is under way to request very specific gender outputs/deliverables from 10-20% budget, dedicated by flagship, and to be able to		

	analysis and sex-disaggregated baseline data • Harnessing and building a sex-disaggregated date-base across WLE projects • Developed gender option papers for each of the flagships to identify gender intrinsic issues within the research areas, specifically on: o Gender and land regeneration o Gender and water governance/allocation o Gender and water variability o Gender and water and land technologies o Gender and reuse/recycle • Gather gender disaggregated through the focal region gender profiles, to inform the prioritization of research in the focal regions	track and monitor that. Thus, writing a paragraph on gender in a report will not be enough in the future. Other inputs on institutionalizing at program level have been (a few highlights): • Gender was adequately mainstreamed in the WLE extension proposal and pre-proposal • To ensure that gender remains a core theme within WLE and is not seen as only being cross-cutting • Increasing the emphasis of gender in the focal regions, by being involved with each of the write shops, and ensuring that 20% of their budget is spend on gender • Work is on-going on a framework on gender and access/control/decision making and relevant indicators are being developed, so that engagement by researchers on gender is not only accommodative, but also an agenda in its own rights. • Ensured that partners also had expertise at institutional level, i.e. have a gender theme • Increased the engagement at a global level to provide examples and buy in for other researchers