

CCAFS Business Plan and Budget 2014

The format of the “Business Plan and Budget” has been altered, so that it more closely follows the now-standardised format required by the Consortium Office for the “Program of Work and Budget”.

A. Major planned work

In 2014 CCAFS will implement its 4th year of work in line with the original program plan (but with some changes as agreed in previous business plans prepared for the Independent Science Panel). The major programmatic change in 2014 is the additional work planned for the trial in performance-based management (PBM). This work forms part of “Flagship 4” of the proposed next phase of CCAFS. This trial has in effect caused a small budget reduction for some of the on-going research in CCAFS.

Theme 1 – Adaptation to Progressive Climate Change – will focus in 2014 on synthesis and coordination in Center-led activities. Specifically, Theme 1 will: (1) seek synthesis in 4 years of work on practices and technologies across the Center activity plans with a view to moving towards holistic adaptation portfolios; (2) seek to consolidate breeding strategy work into a set of tools and approaches that are common across many of the Center activities, in collaboration with the commodity based CRPs; and (3) engage proactively in policy processes on National Adaptation Plans (NAPs) in the agricultural sector and synthesise lessons learnt. Special attention in 2014 will also be given to prioritization tools for climate smart agriculture, and synthesis of benefits for a range of CGIAR climate smart practices and technologies, as part of a broadening partnership with the World Bank, FAO, CARE and others. Activities involving local adaptation planning processes with University of Oxford will also move into cross-regional synthesis, and taking a holistic view of social, environmental, economic and institutional dimensions.

In 2014, **Theme 2 – Managing Climate Risk** – will give special attention to: (1) scaling up climate information for agriculture and food security management; (2) strengthening work on climate-informed food security safety nets; and (3) consolidating work across Centers on index-based insurance, and on household modelling. CCAFS will work with major partners (e.g., World Vision, WMO) to scale up climate services that support smallholder communities in Tanzania and elsewhere. Crop forecasting tools (CRAFT) will be developed further and brought into broader use. Work on climate-informed food security safety nets will focus on bringing climate information into sub-national food security planning in Ethiopia, and extending this work elsewhere (Cambodia, Honduras); and on piloting modelling tools to bring a predictive component into food security information. Household bioeconomic modelling across several Centers will be applied to assess suites of risk management and adaptation interventions, through a livelihood resilience lens.

In 2014, **Theme 3 – Pro-poor Mitigation** – will (1) strengthen the quantitative basis for mitigation priorities with improved decision support; (2) finalize a protocol for low cost GHG quantification and start comparative analysis of mitigation options and trade-offs (5 Centers, 10 countries, WLE links); and (3) test promising entry points for implementing mitigation, including nationally appropriate mitigation actions (NAMAS, in Kenya and Colombia), sustainable commodity supply chains (Indonesia and Brazil, cross-CRP links) and gender-sensitive innovation systems (Honduras, Bangladesh and Cambodia). The decision-support research includes major partners in the global change community: land use scenarios (IIASA); spatial optimization of mitigation options (U. Aberdeen); carbon estimation tools for smallholder farms (U. Edinburgh); and data platforms with the Global Research Alliance and Climate and Clean Air Initiative.

For **Theme 4 – Integration for Decision Making** – 2014 will see national and regional stakeholders in CCAFS Regions launching more appropriate adaptation and mitigation strategies and policies with new knowledge inputs from CCAFS-led scenarios and other modelling efforts, incorporating important methodological developments in some of the tools being used (6 Centers, IIASA, U Oxford, Wageningen U, AgMIP). In EA, WA, SA and LAM this will involve new institutions (such as scenarios units) and investments by economic communities and international organizations in this innovative and inclusive forward planning process. This multi-Center, multi-scale scenarios, impact and foresight work will be widely reported on, published and disseminated, and will continue to involve capacity building for local and national partners. Innovative social learning and communication approaches being tested with CCAFS partners (including all 15 Centers and 5 CRPs) will spur further investments and efforts by international NGO and development partners and lead to tens of thousands of male and female farmers adopting CSA practices. There will be a focus in 2014

on training and dissemination through strategic partnerships (and with several CRPs) to scale out the use of CCAFS gender tools to design gender-targeted climate smart agriculture and development programs and to measure the overall benefits of CSA for vulnerable groups.

Flagship 4 – **Policies and Institutions for Climate-Resilient Food Systems** – will be initiated in 2014 through the performance-based trial. The trial covers national and regional outcomes. Six new projects will be launched in the five CCAFS target Regions, and 9 CGIAR Centers will be directly involved with national and regional partners in 18 countries in total. The projects differ in scale, scope and product focus, but all aim to mainstream climate change into, and link climate-smart agriculture with, national agricultural and food security planning processes.

CCAFS continues to do the bulk of its implementation of the thematic priorities in five Regions.

In **West Africa** the focus in terms of the potential outcomes will be on established national science-policy dialogue platforms. Through knowledge sharing on successful climate-smart agriculture options and the use of prioritization tools, they will guide the development of climate-smart investment plans at national level. The vision is that they become central to the development of NAPs and other national climate change policy plans. Partnerships with national agricultural development programs (e.g. PAFA, IFAD projects) are planned to insure large-scale implementation of successful climate-smart agriculture models, with a particular focus on women.

Focus in **East Africa** is on integrating work at the climate smart village sites into local district planning. Existing farmer experimentation and knowledge partnerships will be enhanced to give a greater role to women and youth in the uptake of climate smart technologies and services. The Centers will be linked up to support the implementation of priority adaptation actions in Kenya. Together with COMESA and the ACPC, a technical paper on the impacts of climate change on agriculture will be developed as a resource for African negotiators in the UNFCCC climate talks.

In **South Asia** the main area of work is on developing policy guidelines to ensure that the “climate-smart villages” approach becomes government-supported to facilitate large-scale adoption of CSA, with a focus in Nepal and India. Linked to this will be prioritization tools that can be used to facilitate quantitative national action plans for CSA. Work will be further developed with the insurance industry to evaluate community-based insurance for individual farmers. Capacity strengthening will be focused on climate literacy of rural women leaders, initiatives started last year.

In 2014 the **Latin American** Region will greatly upscale the work started in 2013. Using the results from the diagnostic surveys, CCAFS will focus on the elaboration and implementation of tools to support the formulation of mitigation and adaptation strategies with an emphasis on investment decisions and a strong gender component. CCAFS will partner with the Central American Agricultural Council in order to understand the precise needs of decision-makers, the structure of decision-making processes and the formal and informal power relations that play a role in them. The continuous and close interaction between researchers and key stakeholders will be crucial to effectively use CCAFS science to inform decision makers in the Region.

The **South East Asian** Region will only reach full capacity in 2015 due to the lag time in the recruitment of the Regional Program Leader. The focus in 2014 will be on selecting countries and sites, initiating baseline surveys and identifying synergies in the work of the Centers in the Region. The regional scenarios will be implemented, and work will start on the use of a mobile app for climate-informed rice farmers. Work will be initiated with ASEAN on a decision-making platform for managing rice in relation to climate shocks.

In terms of **global-level policy engagement, communications and partnerships**, CCAFS will continue to pursue the CCAFS-wide objective of embedding climate change into policies and investments for agriculture and food security, through the impact pathway of targeting the major funds and development partners. Thus in 2014 partnership activities will focus on IFAD’s Adaptation for Smallholder Agriculture Program and the new Climate-Smart Agriculture Partnership in which the World Bank is a key player. CCAFS global synthesis products in 2014 will address the demands of these partnerships, with key planned products being a climate-smart agriculture readiness index and an economic valuation of climate risks to investments in agricultural development and food security. Global communications efforts will continue to be targeted at supporting regional events and policy processes, where the greatest impact on policies relevant smallholder farmers and food security can be achieved. In addition, CCAFS will link science and policy at the

global level via a high-profile event immediately after the release of the IPCC reports in early 2014. As Future Earth becomes fully established in 2014, CCAFS will forge a strong science partnership to improve the inter-disciplinary quality of research linkages with policy, including via the set of research activities under the Call on Food Security of the Belmont Forum, designed to align with CCAFS. CCAFS will also continue to pursue the objective of strengthening agriculture in climate change policy via engagement in UNFCCC, including COP, SBSTA and the dissemination of the new IPCC reports, in which CCAFS authors have been heavily involved.

Research related to **gender and social differentiation** is mainstreamed in all thematic and regional work. In 2014, Themes 1 and 4 (along with IFPRI, ILRI, ICRAF, CIAT, IITA, PIM, FTA, WLE, and AAS) will be building gender capacity in large NGO, development and government partners in the five Regions for using CCAFS tools to design gender-targeted climate smart agriculture and development programs and investments, and to measure the overall benefits of CSA for women and vulnerable groups. Theme 2, with ICRISAT, NARS and University partners, will be developing robust gender-responsive methods/tools to evaluate the impact of climate services on women farmers in three Regions. Theme 3, together with Theme 4, government and NGO partners, will test gender-sensitive innovation systems for supporting inclusive low emission practices in three Regions. Theme 4 will create a cross-CGIAR/CRP knowledge platform for scientists working on gender and social differentiation in a climate context, produce quarterly CCAFS gender blogs, and review gender efforts by Centers, Themes and Regions to identify remaining gaps and opportunities, and to improve gender reporting.

B. Main achievements targeted for 2014

Themes

Theme 1: Adaptation to Progressive Climate Change

- Proof of concept and trialling of CSA prioritization tools at the national level in at least two countries in two different Regions performed together with major multi-lateral organisations (World Bank, FAO)
- Compendium of climate-smart agricultural practices and technologies coming out from the CGIAR and other partner organisations published and being used to direct international climate finance for climate-smart agriculture (all Centers)
- Multi-Center initiatives on pest and disease vulnerability mapping comparing approaches (IITA, ICRISAT, ICARDA, CIMMYT, CIP, AfricaRice) and on targeting breeding strategies for climate change (CIMMYT, CIAT, ICRISAT, IRRI, University of Leeds)
- Review of national agricultural adaptation planning, including gender dimensions, and establishment of a learning platform for country delegates and national technicians
- Multi-regional analysis of farmer needs (including gender disaggregation) for adapted seed for adaptation (Ethiopia, Cambodia, India, Papua New Guinea, China, Nicaragua)
- Multi-partner and multi-sectoral strengthening of the adaptation process in Colombia together with the Ministry of Agriculture and Rural Development (MADR)
- Development of transformational adaptation framework for agriculture, and spatial analyses understanding types of transformations needed (with CSIRO)

Theme 2: Managing climate-risk

- A foundation for scaling up climate services for smallholder farmers (ICRISAT, CIMMYT, T2)
- Addressing gender equity in climate services to support smallholder farmer adaptation (ICRISAT, WorldFish, CIP, ICRAF, T2)
- Cross-Centre collaboration on household bioeconomic modelling of adaptation strategies through a livelihood resilience lens (ILRI, Bioversity, CIMMYT, IFPRI, ICRISAT, ICRAF, CIFOR, T2)
- Methodology for assessing current use and incorporating tailored climate information into sub-national planning expanded to three CCAFS Regions (IRRI, CIAT, CIMMYT, and T2)
- Cross-Centre collaboration and piloting of integrated food security modelling tools (IRRI, CIMMYT, T2, ICRISAT, FS4)
- Tools (e.g., CRAFT), methods and capacity for seasonal crop production forecasting
- Cross-Center collaboration on index-based insurance (IFPRI, AfricaRice, CIAT, ICRAF, IRRI, WorldFish)

Theme 3: Pro-poor mitigation

- Identification of global mitigation priorities and emissions hotspots (ILRI, IFPRI, T3)
- Low-cost protocol for quantification of emissions and mitigation options (ICRAF, ILRI)
- Cross-Center collaboration on GHG data and assessment of mitigation opportunities for strategic systems (ICRAF, ILRI, IRRI, CIAT, CIMMYT)
- Research by four Centers on trade-off analysis for intensified systems (CIAT, IWMI, CIMMYT, ICRISAT)
- Stakeholder engagement in development of national policy for low emissions agriculture (NAMAs in Columbia and Kenya) (CIAT, EA, LA, T3)
- Working with national decision makers to model low emissions development options (IFPRI)
- Challenges and opportunities for scaling up low emissions development in innovation systems, with attention to gender (T3)

Theme 4: Integration for decision-making

- CCAFS scenarios quantified and used by appropriately-trained policy champions involved in regional and global climate change processes, and scenarios publications cited in national and regional adaptation and mitigation strategy and policy documents (T4, IFPRI, CIAT, ICRISAT, CIMMYT, ILRI)
- Tens of thousands of farmers adopting CSA practices that they learned about through CCAFS-catalyzed research and communication efforts (ILRI, ICRISAT, CIMMYT, T4, EA)
- Scientists in CGIAR engaging with key external gender actors and initiating new research and scaling out the use of CCAFS gender tools to target CSA knowledge and practices to women and vulnerable groups (ICRAF, ILRI, T4, CARE, FAO, IFAD)
- CCAFS-generated data and information products downloaded and utilised by hundreds of users (CIAT, ILRI, CIP, Bioversity, CIMMYT, IRRI)
- A systematic evidence-gathering initiative to track projects across a range of institutional settings that incorporate social learning approaches using a common evaluative framework (ILRI, ICRAF, T4, CSIRO, ACIAR, IDRC/CARIAA, PROLINNOVA)
- Agricultural household systems data from all CCAFS sites being used to evaluate scenarios-generated adaptation options across scales (ILRI, CIFOR, ICRAF, ICRISAT, CSIRO)
- Methodological developments in global and regional assessment tools (water, livestock, aquaculture, human nutrition, agroforestry, neglected crops), providing information on vulnerability and economics of adaptation in diverse production systems (FAO, IIASA, PIK, MIT, ILRI, PIM, T4, IFPRI, CIAT, CIP, ICRAF, WorldFish).

Flagship 4: Policies and Institutions for Climate-Resilient Agriculture

- Launching of a trial in performance-based management for six new multi-year projects in the five CCAFS Regions (FP4), as below:
- In EA, influencing national planning processes in relation to climate-smart agriculture in Kenya, Uganda and Tanzania (IITA, CIAT, Bioversity, ICRISAT, IFPRI, ICRAF, ILRI, EA)
- In WA, mainstreaming climate change into national agricultural and food security planning processes in Mali, Ghana and Senegal (WA, ICRISAT, IFPRI, ICRAF, ILRI)
- In SA, linking climate-smart agriculture with national agendas on food security in Bangladesh, India and Nepal (IFPRI, ICRISAT, Bioversity, SA)
- In SEA, addressing the implications of climate change for the agriculture sector in the Philippines (IFPRI, SEA); and setting up a policy information and climate change response platform for key staple crops in Vietnam, Cambodia, Lao, Myanmar, Philippines (IRRI, IFPRI, ASEAN, SEA)
- In LAM, influencing policy and institutions for climate-resilient food systems in Colombia, Nicaragua and Peru (CIAT, Bioversity, CIP, IFPRI, ICRAF, LAC)

Regional programs

West Africa

- National sectoral policy plan for the agriculture sector initiated through the national science-policy platform in Mali
- Scaling-up climate information and services to benefit three agricultural sub-sectors (Millet-sorghum, cowpea, bissap) in four districts of Senegal
- Assessment of the adoption potential of conservation agriculture, a proven CSA technology in Ghana

- Joint-CRPs project implementation in Burkina Faso (CCAFS-WLE-FTE-DS)
- Invited contribution to design Nigeria's new policy for climate-smart agriculture
- Large-scale piloting of the climate-smart village model through IFAD-funded projects in Niger
- Sub-national level partnership established in Senegal, Burkina, and Ghana around the climate-smart village model to play the role of conduit between community level needs and national level decision-making

East Africa

- Moving beyond the villages: portfolios of climate-smart interventions and their uptake accelerated through district and county level adaptation plans in Kenya
- Upscale and monitor farmer experimentation and knowledge exchange platforms to double the participation of women and youth in climate-smart agriculture at CCAFS sites in Kenya, Uganda and Tanzania
- Increased CGIAR Center engagement in the science-policy dialogue, using targeting tools, to support the implementation of agriculture adaptation actions in Kenya and Ethiopia
- Extend the work of ICRISAT and the national meteorological agencies to develop seasonal weather forecasts for improved decision making from one to three countries
- Complete the Africa Group of Negotiators technical background paper on the impacts of climate change on agriculture in Africa
- Dedicate communication to wide-scale dissemination of the Africa Group of Negotiators papers as input for seeking agreement on an agriculture work program in the UNFCCC talks

South Asia

- Increased engagement of stakeholders in India and Nepal to make climate-smart villages a government supported scheme
- Pilots around community based individual farmer crop insurance completed with full involvement of relevant stakeholders
- ICT-based dissemination of climate services to farmers in Nepal strengthened in cooperation with the government
- Quantitative national action plans for climate-smart agriculture developed for India and Nepal using CCAFS prioritization tools
- Capacity of stakeholders enhanced to use seasonal weather forecasts linked to crop yield forecasts
- Climate literacy of women farmers and rural leaders enhanced in South Asia
- Atlas of climate change impacts and adaptation strategies developed for major crops of South Asia

South East Asia

- (forthcoming due to recent start of Regional Program Leader)

Latin America

- Project initiated where relevant climate change information is prepared as part of the process of developing two NAMAs in the region
- Integrate climate-smart agriculture into policy and planning by piloting a climate-smart agriculture prioritization tool that helps decisions regarding investments
- Case studies across LAM on the consequences of inclusion and exclusion of gender and social differentiation in NAMAs and NAPs
- Two sets of socio-economic scenarios will be developed with key stakeholders (Central America and Andean Region), first in a qualitative fashion and then using quantitative agricultural economic models
- Identify and implement farmer-driven, development-focused processes for generating tailored index insurance products for the region
- Climate data reconstruction and downscaling so that national meteorology services in LAM use the temperature and rainfall reconstruction of historical data, and downscaling and impact modeling tools provided by CCAFS
- Monitoring of GHG emissions in traditional and improved (agroforestry and silvopastoral) smallholder production systems, and in surrounding natural ecosystems (secondary forests) in two countries of LAM, in collaboration with partners from local universities to be trained in sampling, sample analysis and data analysis.

Coordinating and cross-cutting activities

Global engagement, partnerships and communications

- Global event in response to IPCC reports, in partnership with IFAD, DFID and Future Earth
- Support for regional event in Latin America in the run-up to UNFCCC COP20 in Peru
- Support for the major stakeholder event on West African National Adaptation Planning
- Development and release of a climate-smart agriculture index for inter-country comparison
Establishment of working relationship with the new global Climate-Smart Agriculture Partnership to be launched in December 2013
- Economic valuation of climate risks to rural development investments by governments and development agencies
- Strengthened integration of the global and regional communications team and prioritization of strategic priorities (Coordinating Unit, Regions and Themes), with special focus on ensuring capacity enhancement and integration of new regional communicators
- Strategic demand-driven upkeep of CCAFS online and social media communication, including revision and re-launch of Big Facts in wake of IPCC
- Continued development of strategic CCAFS outputs, with focus on reports, policy briefs, AgClim Letters and two-page brand leaders
- Continued issuing of Program Director's monthly and quarterly bulletin
- Continuation of live-streamed video science seminars linked to strategic CCAFS priorities
- Media outreach campaigns linked to strategic priorities, with primary focus on strengthening outreach in CCAFS regions and ensuring links to the global level
- Implement the integrated CCAFS knowledge management coordination mechanism

Global stakeholder capacity enhancement

- Series of events to build private sector capacity on implementation of climate-smart agriculture to benefit smallholders and food security
- Knowledge partnership with IFAD to increase IFAD knowledge capacity plus researcher capacity to deliver knowledge products relevant to global investments in climate-smart agriculture
- New intra-household gender-CC tools & training materials freely downloadable and implemented in 5 Regions (IFPRI, ILRI, CIAT, CG gender network)
- Evidence of gender impacts of CSA practices in CCAFS sites/regions published (IFPRI, ILRI, CIAT, NARS)
- Capacity built in 5 CCAFS Regions in gender research and analyses related to climate change, agriculture and food security (CARE, IFAD, all Centers, NARS, local Universities)
- Evidence regarding research frameworks and institutional arrangements for enhanced social learning and targeted approaches to addressing social differentiation (ILRI, ICRAF, T4, CSIRO, ACIAR, IDRC/CARIAA, PROLINNOVA)
- Strategic university, NARS and NGO gender partners initiating new research and scaling out the use of CCAFS gender tools to target CSA knowledge and practices to women and vulnerable groups through new gender platforms (ICRAF, ILRI, T4, CARE, FAO, IFAD)
- Planning for high profile global gender conference highlighting CCAFS strategic gender partners and new gender-CSA related evidence from CCAFS research
- Innovative communication approaches highlighting social differentiation and gender issues and changing cultures and norms starting to scale out through CCAFS partners in all Regions.

Priority Setting, Monitoring & Evaluation

- Priority setting for Flagships in Phase 2
- Baselines established in Latin America and South East Asia
- At least three CCEEs concluded (this includes 2013 evaluation of the CCAFS matrix management)
- External evaluation of CCAFS

C. 2014 Budget (Expressed in US thousands)

The 2014 budgeting process began early in July 2013 when Participating Centres, Theme Leaders, Regional Program Leaders and the Coordinating were given budget envelopes for 2014. CCAFS has assumed a conservative Window 1, 2 & 3 budget of \$44.5 million (\$41.5 million W1&2 and \$3 million W3). Allocation of W1&2 funds was made based on the current proportional distribution amongst the above cost centres as we believe that all centres are rising to the challenges and so major differences are no longer justified. US\$24.4 million is expected from bilateral sources from Center Activities.

In order to be able to build a budget for the Flagship 4 trial in 2014 4% was subtracted from all cost Centers plus an additional sum from Regional Program Leaders (\$600k). We also assume new income of \$1.5 million from the Consortium will contribute to build the total FP 4 trial budget (\$3.7 million). Furthermore an extra 6% was subtracted from Center's budgets for a performance pool, to be allocated to Participating Partners using exactly the same criteria as in 2013. Such funds will be allocated after Theme Leaders and Regional Program Leaders have reviewed all Centers' proposed 2014 Activity Plans. With the total W1, 2 & 3 budget figures provided plus the estimated bilateral funding, each Participating Center, Theme Leader, Regional Program Leader and Coordinating Unit updated their budgets in conjunction with their 2014 activity plans.

Given that CCAFS has not yet been provided by the Consortium with the final budget figure for Window 1&2 for 2014, we may have to return to Centers to revise their initial budget submissions. Thus the detailed breakdown by themes and budget lines may slightly vary. Should more Window 1&2 funds become available it is suggested that these are included in the performance bonus pool and distributed as mentioned above.

The budget for gender and social differentiation activities is mainstreamed into Centers, Theme and Regional budgets. Total budget amounts to \$7.96 million (or 12% out of total budget). We continue to work with the Center's climate focal points, together with the CRP gender network to strengthen the gender and social-differentiated work, particularly in our joint sites.

The tables below illustrate the different components of CCAFS' 2014 budget.

The 2014 CCAFS total budget is US\$68.9 million, including Coordinating & Management costs and funds yet to be allocated. Table 1 shows the budget distribution per budget line and cost center. 73% of the total budget goes to Center Activity Plans, 10% to Theme Leaders, 10% to Regional Program Leaders and 7% to Coordination and Management (this includes global engagement, synthesis and capacity strengthening activities)

CCAFS	Subtotal Center Activity	Theme Leaders	Regional Program Leaders	Subtotal TL & RPL	Coordination, Synthesis & Outreach and Management	TOTAL	Share
Personnel	17,392	1,358	1,686	3,044	495	20,931	33%
Collaborators/Partnership Costs - CG Centers	646	100	570	670	-	1,316	2%
Collaborators/Partnership Costs - Others	7,542	3,609	2,159	5,768	1,851	15,161	24%
Supplies and services	9,892	741	1,267	2,008	607	12,507	20%
Operational travel	3,044	273	508	781	65	3,890	6%
Depreciation	443	-	-	-	-	443	1%
Contingency (only for budgeting purposes)	72	-	-	-	40	112	0%
Subtotal	39,031	6,080	6,191	12,271	3,058	54,360	85%
Indirect costs	6,432	755	1,002	1,757	1,324	9,513	15%
TOTAL	45,463	6,835	7,193	14,028	4,382	63,873	100%

Performance bonus pool 1,272

Flagship 4 trial 3,770

Table 1: 2014 CCAFS Budget by Natural Classification

TOTAL 68,915

Table 2 shows the budget per CCAFS Theme and Objective broken down by Center, Theme Leaders and Regional Program Leaders. The larger portion of the Center Activity budgets goes to Theme 1 (37%), then to Theme 3 and 4 (24% each) and the smallest portion goes to Theme 2 (15%). The budget per objective shows that under Theme 1 the larger portion goes towards Objective 1.1, under Theme 2 towards Objective 2.1, under Theme 3 towards Objective 3.3 and under Theme 4 towards Objective 4.2

Center	Theme 1	Theme 2	Theme 3	Theme 4	TOTAL	Share (%)
AfricaRice	125	233	-	114	472	1%
Bioversity	4,384	-	-	310	4,694	8%
CIAT	2,766	488	1,450	1,043	5,748	10%
CIFOR	-	-	2,383	-	2,383	4%
CIMMYT	2,955	946	1,419	591	5,911	10%
CIP	346	250	-	1,070	1,665	3%
ICARDA	784	651	-	-	1,435	2%
ICRAF	2,702	1,062	2,781	1,795	8,341	14%
ICRISAT	1,422	755	411	1,249	3,837	6%
IFPRI	-	265	647	464	1,376	2%
IITA	1,290	-	1,055	-	2,345	4%
ILRI	924	428	1,120	696	3,168	5%
IRRI	387	218	273	90	969	2%
IWMI	1,356	388	194	-	1,938	3%
WorldFish	-	956	-	228	1,184	2%
Center subtotal	19,443	6,639	11,732	7,650	45,463	76%
Theme Leaders	1,370	976	1,260	3,229	6,835	11%
Regional Program Leaders	1,219	1,500	1,107	3,367	7,193	12%
Total	22,032	9,115	14,099	14,245	59,491	100%

Objective #	Theme 1	Theme 2	Theme 3	Theme 4	TOTAL	Share
Objective 1	13,964	5,066	3,095	5,193	27,318	46%
Objective 2	5,617	1,141	2,187	7,194	16,140	27%
Objective 3	2,451	2,907	8,816	1,858	16,033	27%
Total	22,032	9,115	14,099	14,245	59,491	100%

Table 2: 2014 CCAFS Budget per Theme and Objective

Table 3 shows the budget for 2014 by Center and the projected source of funding. The budgeted amounts for (a) Coordination, Synthesis, Capacity Building, Communication, and (b) CIAT management costs are also shown. Six of the fifteen Centers are heavily dependent on Windows 1&2 funds with 70% or more of their total funding requested from the CGIAR Fund. It is estimated that the 2014 budget will be funded 60% with W1&2 funds and 40% with W3 and bilateral.

Center	TOTAL	Source of funds			
		W1 & W2	%	Bilateral & W3	%
AfricaRice	472	369	78%	103	22%
Bioversity	4,694	2,895	62%	1,799	38%
CIAT	10,744	5,782	54%	4,962	46%
CIFOR	2,383	394	17%	1,989	83%
CIMMYT	5,911	2,831	48%	3,080	52%
CIP	1,665	1,362	82%	303	18%
ICARDA	1,435	935	65%	500	35%
ICRAF	9,629	3,253	34%	6,376	66%
ICRISAT	5,501	2,999	55%	2,502	45%
IFPRI	1,801	1,335	74%	466	26%
IITA	2,345	620	26%	1,725	74%
ILRI	6,201	4,928	79%	1,273	21%
IRRI	1,896	1,707	90%	189	10%
IWMI	3,632	2,553	70%	1,079	30%
WorldFish	1,184	443	37%	741	63%
Center subtotal	59,491	32,406	54%	27,085	46%
Coordination, Synthesis,	3,239	3,052	94%	187	6%
CIAT Management	1,143	1,000	88%	143	13%
SUBTOTAL	63,873	36,458	57%	27,415	43%
Performance bonus pool	1,272	1,272	100%	-	0%
Flagship 4 trial	3,770	3,770	100%	-	0%
TOTAL	68,915	41,500	60%	27,415	40%

Table 3: 2014 CCAFS Budget by Center by Source of funding

A budget of approximately \$3.7 million Window 1/2 funds for 2014 will be earmarked for the Flagship 4 trial. As explained above in order to create this pool of funds, we have carved out some funds from the current CCAFS portfolio and we assume new income of US\$1.5 million from the Consortium will contribute to the \$3.7 million. The selected Centers to participate in the FP4 trial and their corresponding budgets are shown in table 4.

Center	Region	Budget
IITA	East Africa	1,000
ICRISAT	West Africa	600
IFPRI	South Asia	400
FPRI	South East Asia	250
IRRI	South East Asia	370
CIAT	Latin America	1,100
Contingency		50
TOTAL		3,770

Table 4: 2014 CCAFS Flagship 4 trial budget per Center

Table 1 - Planned key activities for 2014 to produce IDOs and outputs, with associated planned budgets

FOR REFERENCE ONLY Level as described by OCS	Level of organisation within the CRP	Description of planned key activities at each level of internal organisation	Expected results of planned key activities	Planned budget (\$ 000s)
Level 3: Theme	Level n-1: Flagship Project	<i>Theme 1: Adaptation to Progressive Climate Change (EA, WA, SA, SEA, LAM)¹</i>	<i>This level of expected result was not defined in the current Program Plan; instead each Theme had three Outcomes to be achieved (as indicated below, under level 4)</i>	\$23,583
		<i>Theme 2: Adaptation through Managing Climate Risk (EA, WA, SA, SEA, LAM)</i>		\$10,308
		<i>Theme 3: Pro-Poor Climate Change Mitigation (EA, WA, SA, SEA, LAM)</i>		\$15,435
		<i>Theme 4: Integration for Decision Making (EA, WA, SA, SEA, LAM)</i>		\$15,467
		<i>Flagship 4 (PBM trial): Policies and institutions for climate-resilient food systems (EA, WA, SA, SEA, LAM)</i>		<ul style="list-style-type: none"> • By 2018, five major regional and global organisations using knowledge, tools and approaches derived from CCAFS science to inform their investments in climate-smart technologies and practices and in broader food system actions • By 2024, 25 countries will have increased their investments in climate-smart agricultural institutions, technologies and practices by 50% compared with 2016
Level 4: outcomes	Level n-1: Flagship Project	<i>1.1: Analyze and design processes to support adaptation of farming systems in the face of future uncertainties of climate in space and time</i>	<i>Number of flagship technical and/or institutional approaches identified and developed with farmers, key development and funding agencies (national and international), civil society organizations and private sector in three Regions, which would directly enhance the adaptive capacity of the farming systems to the climate change conditions</i>	\$14,481
		<i>1.2: Develop breeding strategies for addressing abiotic and biotic stresses induced by future</i>	<i>Number of target Regions where breeding strategies of regional and national crop breeding institutions are coordinated and</i>	\$6,134

¹Themes and Flagship 4 will be implemented in the five CCAFS targeted Regions (East Africa EA, West Africa WA, South Asia SA, South East Asia SEA and Latin America LAM). About 20% of the total budget is executed in other Regions.

		<i>climatic conditions, variability and extremes, including novel climates</i>	<i>informed by CCAFS-led crop modelling approaches that are developed and evaluated for biotic and abiotic constraints for the period 2020 to 2050</i>	
		<i>1.3: Integrate adaptation strategies for agricultural and food systems into policy and institutional frameworks</i>	<i>Number of policy or institutional processes at regional, national or sub-national level where CCAFS research outputs have been used to insert Integrated adaptation strategies for agricultural and food systems into policy and institutional frameworks related to the development of NAPAS, sector specific adaptation plans, or germplasm benefit sharing policies</i>	<i>\$2,968</i>
		<i>2.1: Identify and test innovations that enable rural communities to better manage climate-related risk and build more resilient livelihoods</i>	<i>Number of flagship risk management interventions evaluated and demonstrated by farmers and agencies at benchmark locations</i>	<i>\$5,464</i>
		<i>2.2: Identify and test tools and strategies to use advance information to better manage climate risk through food delivery, trade and crisis response</i>	<i>Number of crisis response, post-crisis recovery, and food trade and delivery strategies tested and evaluated with partner crisis response organizations at benchmark locations</i>	<i>\$1,539</i>
		<i>2.3: Support risk management through enhanced prediction of climate impacts on agriculture, and enhanced climate information and services</i>	<i>Number of national meteorological services and regional climate centers trained and equipped to produce downscaled seasonal forecast products for rural communities, and number of countries where this is occurring</i>	<i>\$3,305</i>
		<i>3.1: Inform decision² makers about the impacts of alternative agricultural development pathways</i>	<i>Number of countries in target Regions where findings and evaluation tools on mitigation and livelihoods benefits of alternative agricultural development pathways are being used by decision-makers and number of global agencies using such tools</i>	<i>\$3,541</i>
		<i>3.2: Identify institutional arrangements and incentives that enable smallholder farmers and common-pool resource users to reduce GHGs and improve livelihoods</i>	<i>Number of target Regions where decision-makers are better informed re options and policy choices for incentivizing and rewarding smallholders for GHG emission reductions</i>	<i>\$2,633</i>
		<i>3.3: Test and identify desirable on-farm practices and their landscape-level implications</i>	<i>Degree to which global standards are being informed by CCAFS-developed project design and monitoring guidelines for smallholder agriculture in developing countries</i>	<i>\$9,262</i>
		<i>4.1: Explore and jointly apply approaches and</i>	<i>Degree to which agriculture is mainstreamed into the global</i>	<i>\$5,600</i>

		<i>methods that enhance knowledge to action linkages with a wide range of partners at local, regional and global levels</i>	<i>climate change policies, and degree to which major international food security initiatives fully incorporate climate change concerns</i>	
		<i>4.2: Assemble data and tools for analysis and planning</i>	<i>Number of key international and regional agencies using the global database and set of tools for climate-smart agriculture established by CCAFS</i>	\$7,602
		<i>4.3: Refine frameworks for policy analysis</i>	<i>Number of national agencies and number of international and regional agencies that incorporate new knowledge on how alternative policy and program options impact agriculture and food security under climate change into their strategy development</i>	\$2,265
		<i>FP 4: National, regional and global institutions enable food systems that are resilient to a variable and changing climate</i>	<i>Defined at the higher level (see above)</i>	\$4,121
Level 5: outputs	Level n-2: Cluster of activities For Theme 1	<i>1.1.1. Analogue based evaluation and conservation of germplasm of at least 2 crops supported in a minimum of 6 analogue sites.</i>	<i>Development of farming systems and production technologies adapted to climate change conditions in time and space through design of tools for improving crops, livestock, agronomic and natural resource management practices</i>	N/A
		<i>1.1.2 (1). Researchers and development agents trained on socially and gender-sensitive strategies for the conservation and use of local biodiversity within the climate change context.</i>	<i>Building of regional and national capacities to produce and communicate socially inclusive adaptation and mitigation strategies for progressive climate change at the national level (e.g. through NAPAs)</i>	
		<i>1.1.2 (2). Gender-sensitive and socially differentiated strategies developed for conservation and use of local biodiversity within the climate change context; findings presented in journal article and policy brief</i>		
		<i>1.1.3 (1). Accessions identified with potential adaptive traits for climate change adaptation for at least 5 crops using innovative methods and prioritized on the basis of traits with potential benefits for the poor and women users. Methodology to select gene bank material adapted to local current climate conditions and future climate shifts developed and tested and crop suitability atlases for priority crops (as defined by fraction of</i>	<i>New knowledge, guidelines and access to germplasm are provided for using genetic and species diversity to enhance adaptation, productivity and resilience to changing climate with benefits for socially marginal groups</i>	

		<i>total production accounted for) produced; findings presented in reports and journal articles</i>		
		<i>1.1.3 (2). Methods and tools for participatory, gender-responsive monitoring of deployment of biodiversity and knowledge by communities for climate change adaptation tested out in at least 5 countries (including gender-disaggregated community surveys); findings synthesized in a report</i>		
		<i>1.2.1. Set of “virtual crops” designed and assessed for their efficacy in addressing the likely future conditions in terms of the economic, social, and cultural benefits expected; findings presented in summary report and journal article. Engagement of ARI modelling groups (e.g. Leeds University), NARES scientists.</i>	<i>Understanding and evaluating the response of different varieties/crops to climate change in time and space, and generating comprehensive strategies for crop improvement through a combination of modelling, expert consultation and stakeholder dialogue</i>	
		<i>1.3.1 (1). Socially and gender- disaggregated participatory methods tested for grounding climate change model results to community-level decision making processes that address food security issues</i>	<i>Improved institutional arrangements and socially differentiated adaptation planning approaches at the local level to enable farming system adaptation</i>	
		<i>1.3.1 (2). Community-based holistic adaptation options trialed in at least three sites, in order to understand the social (including gender), cultural, economic and institutional barriers to effective adaptation; outcomes presented in summary report</i>		
		<i>1.3.2. Sector specific adaptation strategies and plans produced based on socially and gender-differentiated adaptation options using cost/benefit analysis in at least 5 countries, results shared with key policy makers in target countries</i>	<i>Public and private sector policies and strategies at the national level to enable farming communities and the food system to adapt to predicted future conditions</i>	
		<i>1.3.3. Technical contributions to international processes support the development of international policies enabling access to and use of genetic resources in climate change research and adaptation strategies</i>	<i>Policies to enable access to and use of genetic resources for climate change adaptation research, and diffusion of adapted germplasm</i>	
Level 5: outputs	Level n-2: Cluster of activities for Theme 2	<i>2.1.1. Synthesized knowledge incorporated into climate risk management good practice guidelines that addresses social and gender equity, and communicated to development and policy stakeholders in 4 locations; Analyses of climate-related</i>	<i>Synthesized knowledge and evidence on innovative risk management strategies that foster resilient rural livelihoods and sustain a food secure environment</i>	<i>N/A</i>

	<i>vulnerabilities of 3 key agricultural commodities and/or systems incorporated into strategic planning and policy dialog</i>	
	<i>2.1.2. Methodology for designing and targeting comprehensive and equitable agricultural risk management strategies implemented, documented and applied at 4 locations; One model-based climate risk management decision support tool prototype developed</i>	<i>Analytical framework and tools to target and evaluate risk management innovations for resilient rural livelihoods and improved food security</i>
	<i>2.1.3. Results, evidence and lessons, from participatory, gender-sensitive evaluation of impacts of promising risk management interventions (production technologies, production systems, institutional services, policy interventions) on rural communities documented at shared with relevant stakeholders at 6 locations; Potential up-scaling mechanisms and partners identified and engaged in 3 locations</i>	<i>Development; and demonstration of the feasibility, acceptability and impacts; of innovative risk management strategies and actions for socially-differentiated rural communities</i>
	<i>2.2.1. Enhanced food system interventions or information systems for responding to climate shocks tested in four countries; Integration of new climate-related information or decision support tools into national food security decision-making processes</i>	<i>Enhanced knowledge, tools and evidence to support improved management of the food system (e.g., food delivery, trade, crisis response, post-crisis recovery) in the face of climate fluctuations</i>
	<i>2.3.1. Crop and rangeland production forecasting platform, documentation and training materials developed and disseminated; Accuracy of crop forecasting methods assessed and reported; Crop and rangeland forecasting capacity developed in 6 countries or regional institutions; Tools developed and institutional capacity enhanced to downscale seasonal forecasts for local agricultural decision-making in 2 countries or regional institutions</i>	<i>Improved, value-added climate information products, knowledge, tools, methods; and platforms for monitoring and predicting impacts of climate fluctuations on agricultural production and biological threats; to support management of agricultural and food security risk</i>
	<i>2.3.2. Curriculum developed on designing and communicating salient climate information with rural communities, including overcoming gender and social inequities; Capacity of communication intermediaries enhanced at 4 locations; Demonstration and evaluation of gender- and socially-equitable climate service delivery for rural communities at 4 locations; Roadmaps developed for strengthening climate services for agriculture and food security in 2 Regions</i>	<i>Synthesized knowledge and evidence on institutional arrangements and communication processes for enhancing climate services for agriculture and food security, including services that reach marginalized farmers and women</i>

Level 5: outputs	Level n-2: Cluster of activities for Theme 3	<i>3.1.1. Comparative analysis of mitigation trade-offs for agricultural development pathways across 3-6 countries (IFPRI, CIAT, ICRAF, T3). Linked to CRP6 and CRP5.</i>	<i>Analysis of agricultural development pathways and trade-offs</i>
		<i>3.1.2. Capacity building of decision makers and national stakeholders in use of appropriate tools, data, and knowledge (ILRI, T3).</i>	<i>Enhanced tools, data, and analytic capacity in regional and national policy and research organizations to analyze mitigation sectors and agricultural development options</i>
		<i>3.2.1 (1). Analysis of economic incentives and benefits for mitigation practices, including analysis of social and gender differentiation. Linked to Milestone 3.3.1 (2013-2015). (CIMMYT, IFPRI, IITA, T3)</i>	<i>Evidence, analysis, and trials to support institutional designs, policy, and finance that will deliver benefits to poor farmers and women, and reduce GHG emissions</i>
		<i>3.2.1 (2). Testing of institutional arrangements for carbon finance and markets and mitigation standards (T3, ILRI, ICRAF, IITA, CIAT) Linked to CRP6.4</i>	
		<i>3.2.2. Decision-makers in target Regions better informed about policy options and gender implications for incentivizing smallholders for GHG emission intensity reductions (EA, LA, T3)</i>	<i>Improved capacity to increase the uptake and improve the design of incentives, mechanisms, and institutional arrangements to deliver benefits to poor farmers and women</i>
		<i>3.3.1. Impact and trade-off analysis of farm management strategies, for C sequestration and nutrient management in rice-wheat and maize-legume systems (IGP, EA, Mexico) (CIMMYT); (ii) water and nutrient management and avoided straw burning in rice-based production systems (IRRI), (iii) coffee and cocoa agroforestry (IITA), (iv) pasture and coffee systems (CIAT, with IFPRI); (v) land use change, land rehabilitation, and peatland management under oil palm (CIFOR), (vii) wood energy and agroforestry, analysis of biomass for efficient pyrolysis liquid fuel production (ICRAF), low-input fruit production (CIAT); coffee and cocoa systems at landscape level (CIAT); and pasture, rangelands (ILRI)</i>	<i>Analysis of mitigation biophysical and socioeconomic feasibility for different agricultural practices and regions, and impacts on emissions, livelihoods, and food security</i>
		<i>3.3.2. Draft protocol and data for whole farm and landscape GHG emission quantification (ICRAF, ILRI, IRRI, CIMMYT, CIAT, T3). Linked to Milestones 3.3.1 2013-15 and T4.2.</i>	<i>Methods developed and validated for GHG monitoring and accounting at farm and landscape level to contribute to compliance and voluntary market standards</i>

		3.3.3. Regional working groups test and refine monitoring and measurement methods (EA, SA, T3).	Enhanced capacity for the use and development of monitoring and accounting methods and assessing feasibility and impacts in regional and national research institutions	
Level 5: outputs	Level n-2: Cluster of activities for Theme 4	4.1.2. Trainings and action research implemented in all Regions, with continued learning & evaluation of climate smart village approach; hundreds of women's and other groups trained in CSA practices across 5 Regions; development of scaling up of PAR approaches and synthesis of insights widely disseminated into regional and national policy processes, with explicit recognition of social differentiation and gender. Partners monitoring indicators measuring uptake and benefits of CSA practices	Evidence on, testing and communication of, successful strategies, approaches, policies, and investments contributing to improved science-informed climate change-agricultural development-food security policies and decision making	
		4.1.3. Regional capacity in gender and climate change action research, and new qualitative and quantitative tools being implemented by partners in at least 3 Regions, and partner institutions implementing more gender and pro-poor targeted activities	Analyses providing evidence of the benefits of, strategies for, and enhanced regional capacity developed in, gender and pro-poor climate change research approaches that will increase the likelihood that CCAFS-related research will benefit women and other vulnerable as well as socially differentiated groups	
		4.1.4. Support to regional and global processes to clarify the ecological footprint of agriculture and the ways it can be reduced, without compromising poverty and equity objectives; and building the links to the post Rio+20 process. Many and diverse sub-nat'l and nat'l partners are using CCAFS scenarios and related K in adaptation and mitigation forward-planning exercises and in engagement in global climate change and food security processes	Strengthening capacities to effectively engage in global policy processes and mainstreaming risk, adaptation and mitigation strategies into national policies, agricultural development plans, and key regional and global processes related to agriculture and rural development, food security and climate change	
		4.2.1 (1). Regional site characterizations and baseline data analyses completed and cross-regional comparisons initiated including all five target Regions at three levels: household, village, and institution	Integrated assessment framework, toolkits and databases to assess climate change impacts on agricultural systems and their supporting natural resources	
		4.2.1 (2). Downscaled climate data and methods are being applied in CCAFS Regions to help set priorities and evaluate national and local impacts of climate change		

		<p>4.2.1 (3). Based on interaction with and feedback from users, databases and tools are being modified to enable stakeholders to assess impacts of climate change and evaluate options for strengthening the resilience of agricultural and food systems</p>		
		<p>4.2.1 (4). Innovative decadal/near-term climate data products to improve near-term climate prediction investigated and developed</p>		
		<p>4.2.1 (5). Assessment toolkits being refined and starting to be used in target Regions; engagement with key users initiated to build capacity in use of tools and data</p>		
		<p>4.2.2. Selected approaches to information provision for making decisions evaluated at different scales in selected sites and countries in target Regions that engage socially- and gender differentiated target groups as key stakeholders in the process</p>	<p>Socially-differentiated decision aids and information developed and communicated for different stakeholders</p>	
		<p>4.3.1 (1) Improvements (water model, new livestock, aquaculture, nutrition modules) to a modelling environment for ex-ante assessment and policy evaluation and, designed to examine alternative futures for global food supply, demand, trade, prices, and food security, under different climate change, population and GDP growth scenarios Connection to a land use module to augment the ex-ante assessment policy evaluation tools with the capacity of analyzing food security/adaptation/GHG emissions trade-offs</p>	<p>Climate change impacts assessed at global and regional levels on agricultural systems (socially and gender differentiated producers and consumers, and their natural resources), national/regional economies, and international transactions. Potential of international and regional policy changes to enhance adaption and support agricultural greenhouse gas emissions mitigation, analyzed</p>	
		<p>4.3.1 (2). Global Report on Food Security, Farming and Climate Change to 2050 (scenarios, modelling results, policy options) using IPCC AR5 scenarios, new SSPs, estimates of GHG emissions, and updated scenarios for population and GDP growth. Regional assessments of the impact of changing socio-economic conditions and climates on production, prices, food availability and nutritional security (dry-land crops in Africa and Asia/ rice, cassava, beans in Latin America)</p>		
		<p>4.3.2. Regional and national studies complementary to the global policy study, in Latin America, South East Asia and Central Asia (tbc). Gender analysis of agroforestry adaptation options in Africa. Study of aquaculture adaptation options in</p>	<p>Analyses of the likely effects of specific adaptation and mitigation options, national policies (natural resource, trade, macroeconomic, international agreements)</p>	

		<i>South East Asia (Cambodia and Vietnam). Analysis of Technology, Production and Trade scenarios for cassava and potato in the global economy</i>	<i>including gender/livelihood groups, and communicated to key local, national and regional agencies and stakeholders.</i>	
		<i>4.3.3. Capacity building activities held at CGIAR Centers, national/ regional/ international organizations, to utilize the modeling tools developed under milestone 4.3.1.</i>	<i>Capacity built at CGIAR Centers, national and/or regional and /or international organizations to perform global and regional analyses of the effects of policy changes using tools developed in output 4.3.1.</i>	
Level 5: outputs	Level n-2: Cluster of activities for Flagship 4 trial	<i>Flagship 4 planning still in progress</i>		

