CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS): Concept Note for 2015-2016

This concept note presents the new structure and function of CCAFS under a system of Results-Based Management (RBM), building on lessons learnt in CCAFS's 2013/14 RBM trial for Flagship 4. Lessons from three external evaluations have been used to improve efficacy of management and delivery of outcomes.

The impact focus

Intermediate development outcomes (IDOs)

Climate change will have far-reaching consequences for agriculture that will disproportionately affect poor and marginalized groups who depend on agriculture for their livelihoods and who have a lower capacity to adapt. Agriculture and food systems also contribute to global warming by generating greenhouse gas (GHG) emissions. CCAFS tackles three of the greatest challenges facing humankind in the 21st century: food security, adaptation to climate change and mitigation of climate change. Thus CCAFS seeks to catalyse positive change towards climate-smart agriculture (CSA)[i], food systems and landscapes by focussing on five IDOs:

1. Increased and stable access to food commodities by rural poor ("**Food security**").
2. Increased control by women and other marginalized groups of assets, inputs, decision-making and benefits ("**Gender and social differentiation**").
3. Increased capacity in low income communities to adapt to climate variability, shocks and longer term changes ("**Adaptive capacity**").
4. Policies and institutions supporting sustainable, resilient and equitable agricultural and natural resources management developed and adopted by agricultural, conservation and development organizations, national governments and international bodies ("**Policies and institutions**").
5. Increased carbon sequestration and reduction of greenhouse gases through improved agriculture and natural resources management ("**Mitigation**")

Theory of change (ToC)

The complex, dynamic relationships among climate change, agriculture and the food security of poor households necessitate urgent transformation of food systems – major changes in farming practices and localities, landscape management, food storage and distribution, and consumption choices. CCAFS will capitalise on the strong and growing political imperative for solutions in agriculture under climate change. CCAFS's theory of change involves work with partners on three inter-dependent areas: (a) generating evidence from action research, (b) effecting policy and institutional change to support CSA, and (c) rolling out CSA (Fig. 1) (see "partnership" section for more details).

CCAFS will invest in impact pathways at multiple levels, informed by political and practical opportunities. At the global level, a post-2015 UNFCCC agreement may provide an over-arching global framework for CSA investment, but even in its absence, a new global CSA Alliance, backed by the UN, FAO, World Bank and the African Union, will provide a key mechanism to link research into emerging large investments and thus achieve IDOs at scale. CCAFS' vision is to be, with its key partners, the foremost global source of collaborative research that leads to strategies for tackling food insecurity in the face of climate change.

At the national level, the main policy targets are the national planning processes related to agriculture, development and food system policies. Also covered are cross-sectoral National Adaptation Plans (NAPs) and low emissions agricultural development policies, including National Appropriate Mitigation Actions (NAMAs). CCAFS anticipates that the national level will provide the most effective impact pathways and thus will invest strongly as this level. Therefore CCAFS regional programs will facilitate national science-

policy learning platforms in CCAFS target countries and "climate-smart villages"[1]. CCAFS scientists will also work directly with food security and CSA implementing agencies (e.g. World Food Program, IPC, African CSA Alliance {AU-NEPAD-iNGO Alliance for Scaling-Up Climate–Smart Agriculture Across Africa}, national meteorological services, private insurance providers, farmer organisations) to deliver IDOs through informing partners' interventions on the ground.[2] Where appropriate, regional bodies will be engaged to scale up action (e.g. ECOWAS, COMESA, ASEAN, SECAC, CECOCAFEN, FEDEARROZ, FENALCE). Regional impact pathways[3], with targets in specific countries, have been established (see "regional collaboration" section). These feed into the Flagship impact pathways.

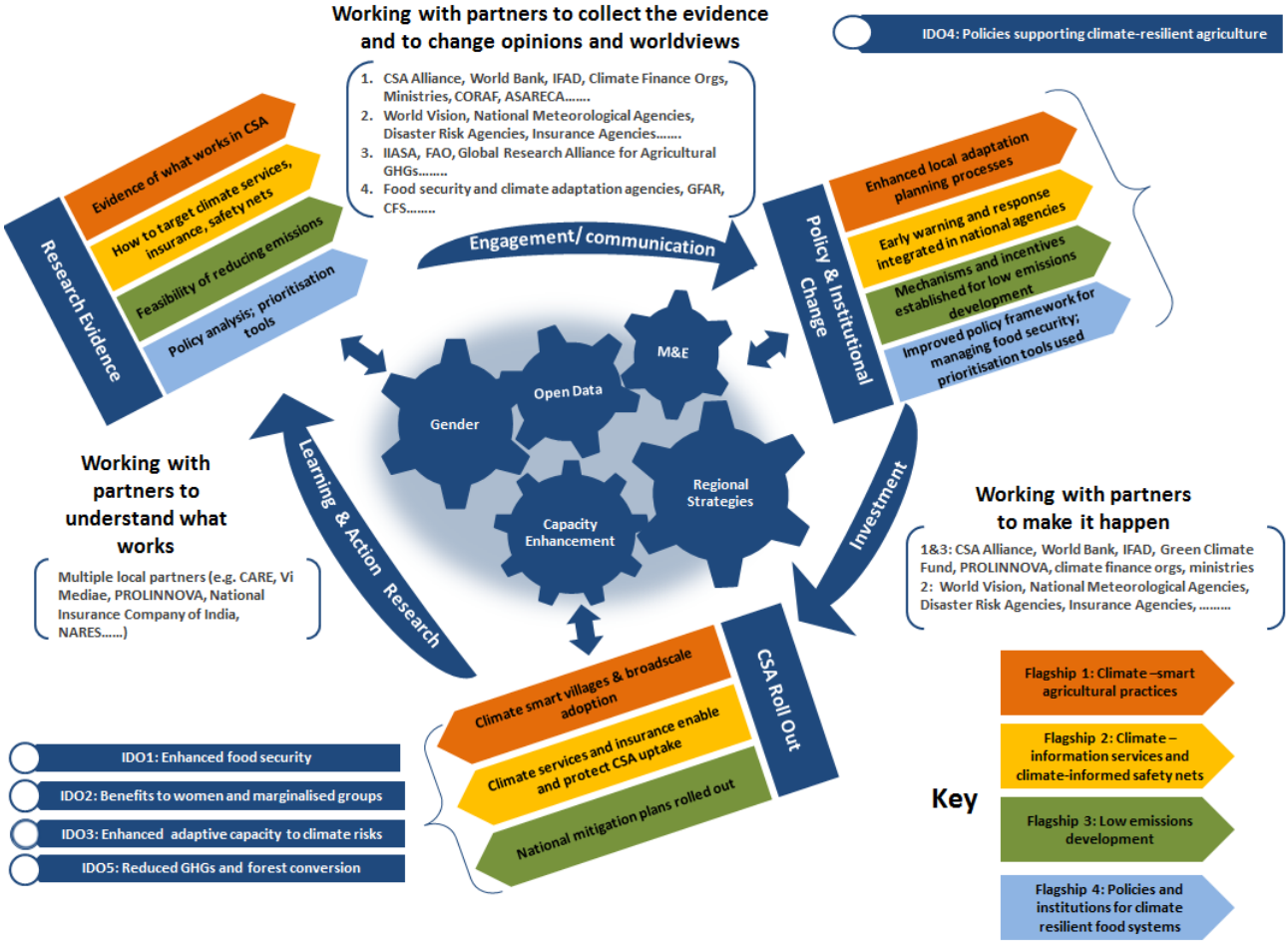

Figure 1. CCAFS Theory of Change

With all partners at all levels, particular emphasis will be placed on capacity enhancement to utilise agriculture-climate knowledge effectively. CCAFS will embrace social learning from field to policy level (e.g. action research with farmers, science-policy learning platforms). CCAFS will use M&E to enhance learning and sharpen efficacy. Innovative tools and approaches for creating knowledge-action linkages, such as time-bound learning groups, will be documented and fed into subsequent research cycles.

Another key strategy in the ToC is to ensure that benefits reach both women and men, and differentiated social groups (e.g. youth). Gender and social differentiation will be mainstreamed into all Flagships and regional impact pathways, with a specific gender IDO (see "gender" section). A further strategy is on open

[1] Learning platforms among multiple partners at local level, often encompassing large landscapes
[2] For all acronyms see Annex 1.
[3] CCAFS will focus on the following target regions, selected through a prioritisation exercise: East Africa, West Africa, South Asia, South East Asia, and Latin America. In addition, work will be initiated in the Pacific given the particular climate challenges faced by small island states.

data – where data and information are made publicly available in the shortest possible time, so that research partnerships and additional outputs are fostered and information is available to the technical specialists feeding into policy processes.

Flagship impact pathways

CCAFS will generate equitable and gender-sensitive technologies, practices, and institutional and policy options related to four Flagships:

1. **Climate-smart agricultural practices**. This Flagship will test and scale up technologies and practices to build adaptive capacity, profitability and food security, and to generate mitigation co-benefits. CCAFS will collaborate with the major agencies facilitating CSA (e.g. African CSA Alliance, FAO, World Bank, national agricultural agencies, local and national government, private sector) to develop the tools needed to prioritise, plan and bring CSA practices to scale across landscapes, countries, regions and the globe. Through collaboration with the commodity CRPs, CCAFS will help set the agenda for the next generation of climate-smart crops and animals, and collaboration with systems CRPs will help to bring about system-wide as well as on-farm adaptation.
2. **Climate information services and climate-informed safety nets**. This Flagship will work closely with climate scientists and meteorological services to deliver improved farmer advisories and better management of safety nets. Major humanitarian agencies (international, national and civil society) will be engaged to foster impact around climate-informed safety nets. CCAFS will partner with the insurance industry to improve insurance for farmers.
3. **Low-emissions agricultural development.** This Flagship will focus on the GHG measurement challenges in small-scale farming systems, the trade-offs and synergies amongst adaptation, incomes, food security and mitigation, and the necessary incentives, institutions and policies for low emission actions. Agricultural and environmental ministries from countries that have shown interest in developing agricultural NAMAs or low emission development policies will be targeted as partners (e.g. Colombia, Vietnam, Kenya).
4. **Policies and institutions for climate-resilient food systems**. This Flagship will address adaptation and food system policies, largely at the national level but also up to the global level. It will also address cross-scale linkages for enhanced climate governance and increased equitable investments to support climate smart food systems. Through close engagement with decision-makers (e.g. via learning alliances, stakeholder platforms), policy analysis and co-development of knowledge, scenario assessment and trade-off analysis, this Flagship will provide information and tools to target support for agriculture and food security under climate change. This Flagship will work closely with the agricultural negotiators at the UNFCCC, and international (e.g. World Bank, FAO, CARE), regional (e.g. ASEAN, COMESA, SECAC) and national agencies involved in food system policy processes.

Each Flagship will contribute to a number of IDOs, but with responsibility to deliver (bold lines in Fig. 2) on targets for a smaller subset of IDOs.

1. **Food security IDO:** Solutions to hunger and nutrition in a warmer era have to go far beyond production, and may involve transformative adaptation and thus CCAFS takes a food system approach. Flagships 1 and 2 both focus on building adaptive capacity, with important impacts on food security and incomes. Through Flagship 1, CCAFS will promote CSA practices and diversified portfolios which are productive, profitable and resilient, resulting in increased food availability and incomes, regardless of climate variability. Flagship 2 will investigate, together with early warning and humanitarian agencies, options for climate-informed safety nets and regional food systems (distribution, trade, storage, emergency response).

2. **Gender and social differentiation IDO:** Gender and other inequalities undermine innovation and food security, and women and marginalised people are often more vulnerable to climate change. Therefore, CCAFS will address gender and social differentiation in all its Flagships (see “gender” section). CCAFS will embrace strategies to reach woman farmers in male-headed households, asset-poor female-headed households, young women and men in agriculture, and marginalised social groups.

3. Adaptive capacity IDO: Flagship 1 will focus on local knowledge for adaptation, expanding the choices of practices available to farmers, enhancing diversification where appropriate, improving farmer incomes and integration of crop, livestock, fish, agroforestry and NRM approaches. Through decision support tools, knowledge and capacity strengthening, the adaptive capacity of institutions will also be enhanced. Flagship 2 will advance scalable institutional services that build capacity to adapt to climate risk: climate information services that enable a range of risk management interventions, improved climate-related food security safety nets and weather-related insurance.

4. Policies and institutions IDO: CCAFS will focus effort on formal government policies covering climate change adaptation and mitigation, agriculture, development and food security, and on the much wider set of strategies, norms and procedures, including those of producer organizations, NGOs, local governance structures, civil society, and businesses. Flagship 2 focuses on the implementation strategies around safety net policies, while Flagship 3 deals with policies linked to low emissions development. Flagship 4, where the bulk of policy work is conducted, focuses on adaptation, development and food policies.

5. Mitigation IDO: Flagship 3 will contribute the tools and methods to measure GHG emissions in small-scale farming systems, and identify the technical, policy and institutional options to incentivize low emissions development. Flagship 1 aims to scale up the adoption of technologies and practices that have high emissions efficiency (as identified by Flagship 3).

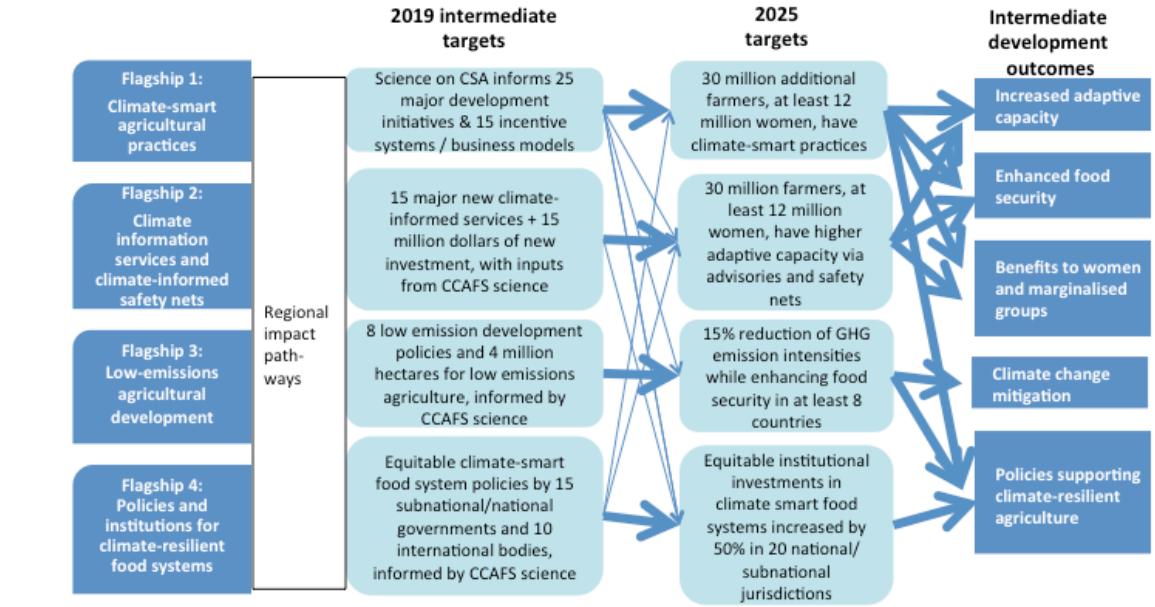

Figure 2. Intermediate targets (2019) and final program targets (2025) for the different Flagships, showing the inter-relationships amongst targets and IDOs

Measurability of the IDOs: indicators and targets

Each Flagship has an intermediate (2019) and final (2025) target (Fig 2). These targets were derived from targets proposed by the Regional Program Leaders (based on preliminary partner engagement), analysis of targets by international agencies with which CCAFS has established partnerships, and targets proposed by project partners for different projects within CCAFS. Achievement of final targets in one Flagship is often contingent on other Flagships achieving their targets, given the interrelationships among Flagships. The 2025 targets established for Flagships will contribute towards achieving the targets for IDOs. Baselines will be put in place to evaluate the progress towards the IDO targets. All targets have measurable indicators

that are also used by our major development partners. Common indicators addressing the attainment of the intermediate and longer-term targets are being defined for the Flagships that can be used across all regions, so that regional indicators can be aggregated appropriately to obtain a global measure for the overall Flagship. This will ensure that projects within Flagships are measuring the same things in all regions and that meaningful aggregation can be done.

Flagships

Flagship 1: Climate-smart agricultural practices

Contribution to IDOs: The vision is that all farmers, including women and marginalised groups, are resilient and food secure despite a variable and changing climate. By 2025, 30 million farmers, at least 12 million of whom are women, with strengthened adaptive capacity and food security as a result of programmatic CSA investment. By 2019, (a) 25 national and subnational[4] major development initiatives[5] and public institutions prioritize and inform project implementation of equitable best bet CSA options using CCAFS science and decision support tools; (b) 15 public-private actors at national and subnational levels are using new incentive mechanisms or business models that explicitly promote equitable climate smart approaches along the value chain, using CCAFS science.

Impact pathways: The adaptive capacity and food security of 20 million small-scale farmers can be enhanced, and their GHG emissions reduced, by adoption of CSA technologies and practices. Adaptive capacity will be achieved when support networks provide the necessary information, skills, inputs, markets, investments and institutions that allow farmers to build on current knowledge and adopt and adapt their production systems in ways that diversify choices, improve livelihoods and create a healthy natural resource base. New agricultural technologies, practices and information systems that enhance adaptive capacity need to be jointly developed with local partners, building on local knowledge where appropriate. CCAFS will assess the evidence of what works where for farmers and their supporting organisations and institutions (public, private and non-governmental actors). Capacity enhancement is key to achieving outcomes. As women farmers often have the least say in household decision-making processes regarding agriculture, yet are typically responsible for household food security, CCAFS will focus on improving their access to information and resources, including by enhancing their support networks (e.g. women's groups, farmer and producer organisations, civil society organisations) and prioritising gender-smart options. CCAFS will develop innovative means to support two-way information flows by encouraging creative use of new technologies. Some research will be conducted at climate-smart villages where integrated approaches to climate variability and change are tested in a participatory manner. Eighteen were established in CCAFS Phase 1, but additional sites are envisaged, especially where connected to major development initiatives. All learning sites are linked to strategies for scaling up and out, via development programs and support networks. Priorities for climate-smart practices will be regionally and nationally specific, depending on farming systems and climate challenges (e.g. rice-based systems and sea-level rise will receive a major focus in the deltas of Southeast Asia, while maize-bean based, pastoralist and highland mixed farming systems will be earmarked in East Africa).

Research areas: (1) Improved technologies, practices and portfolios for CSA that meet the needs of farmers, including women and marginalised groups; (2) Methods and approaches for equitable local adaptation planning and governance, including transformative options; (3) Innovative incentives and mechanisms for scaling up that address the needs of farmers, including women and marginalised groups.

[4] Subnational is used in the context of large countries such as India where State governments will be engaged
[5] Initiatives that have targets of at least 50,000 to 10 million beneficiaries

Flagship 2: Climate information services and climate-informed safety nets

Contribution to IDOs: The vision is that farmers are more resilient and food secure through support by effective climate information services, and protection by timely and well-targeted food security safety nets. By 2025, 30 million farmers, 12 million of whom are women, have improved capacity to adapt to climate related risk by accessing research-informed climate services and/or well-targeted safety nets. By 2019, (a) 15 major regional, national, and sub-national institutions develop or improve major demand-driven, equitable, climate informed services supporting rural communities using CCAFS research outputs.[6] ; (b) US$ 15 million increase, relative to 2014, in research-informed demand-driven investments in climate services for agriculture and food security decision-making, based on CCAFS science and engagement.

Impact pathways: CSA must be underpinned by effective climate information services and climate-informed safety nets as agriculture becomes increasingly information-dependent, and greater climatic extremes challenge capacity. Climate information services that are accessible, equitable, and aligned with agricultural advisory services and input markets will support small-scale farmers and the institutions that serve them. Flagship 2 will reach 20 million farmers through three impact pathways. First, CCAFS will build the capacity of meteorological institutions to provide information and services that are tailored to the needs of agricultural decision-makers, including farmers. Second, timely information about the upcoming growing season will build the capacity of farmers to intensify production, adopt improved technologies and practices, invest in their soils in favourable seasons; and to protect scarce assets in unfavourable seasons. Third, improved climate-related information will support public, private and civil society actors – whose decisions impact rural food security – to manage the impacts of climate shocks. The safety net aspect of the research involves the participation of public and private sectors, and actors involved in the management of the whole food chain and those involved in emergency relief, including WFP, FAO, IPC, and regional bodies. It will thus also have outcomes for food security and crisis management beyond the farm. Crucial to the impact pathway is close collaboration with the Climate Services Partnership (CSP). Focus areas and strategies will be tailored to regional and national contexts. For example, in Southeast Asia, risks of droughts and floods will be targeted through developing systems of water harvesting and banking, in association with WLE.

Research areas: (1) climate-based methods and tools for seasonal agricultural prediction and early warning; (2) knowledge and methods for designing and implementing equitable climate information and advisory services for smallholders; (3) food security safety nets and policy interventions for dealing with impacts of climate-related shocks; (4) knowledge and methods to design and target equitable insurance programs that benefit smallholder communities (in collaboration with PIM).

Flagship 3: Low-emissions agricultural development

Contribution to IDOs: The vision is that agricultural development produces mitigation co-benefits without compromising development targets, including better incomes for farmers. By 2025, a 15% reduction of GHG emissions intensities has been achieved compared with business as usual projections, while enhancing food security in at least eight countries. By 2019, (a) 8 low emissions plans developed for implementation that have significant mitigation potential, i.e. will contribute to a reduction of at least 5% GHG emissions intensities or reach at least 10,000 farmers, including at least 10% women; (b) 4 million hectares targeted by research-informed initiatives for scaling up low-emissions agriculture and preventing deforestation.

Impact pathways: Agriculture's 10-12% direct and 17% indirect contributions to global anthropogenic GHG emissions are an opportunity for a transition to more efficient economic growth and agricultural production and improved conservation of natural resources. Some national governments have an incentive to reduce GHGs in agriculture to meet their national emissions targets and commitments, access climate

[6] 2019 targets of institutions do not generally overlap, as the institutions targeted in Flagship 1 usually differ from those in Flagship 2, or if it is the same institution, then generally different parts within the institution are targeted.

finance, and become more globally competitive in production. Countries need enhanced capacity to make and implement informed decisions: information, policies and practical systems for implementing low emissions strategies. Decision support will require scenarios about future food and energy demand, adaptation to climate change, and land use; robust measurement techniques and data on GHG emissions from small-scale farms to target priorities for mitigation; and tools for integrated assessment of trade-offs and synergies. Implementation of mitigation will require adaptive innovation systems that involve farmers, technical advisors, finance providers and national policy makers, with capacity building at all levels. Women and men smallholders will need to access the finance, information and resources they need for new practices. Linking finance and investment to emissions reductions and strengthening support for innovation will be critical. Carbon markets and private sector actors may provide incentives in certain contexts, but investing in low emissions agricultural development will likely have the broadest impacts. For indirect emissions related to deforestation, sustainability initiatives among major commodities producers of palm oil, cattle, soy, rubber and cocoa provide an opening for improved accountability in performance. Collaboration with FTA will be fostered, given the role of agriculture in driving deforestation and thus GHG emissions. Prioritisation will be regional; for example in South Asia CCAFS will help provide the evidence for a more informed analysis of the region's emissions patterns for deciding priorities.

Research areas: (1) decision support for assessing mitigation priorities, baselines and trade-offs, (2) methods and data for quantifying small-scale farming emissions and mitigation options, (3) analysis for improved mitigation implementation mechanisms, with a focus on NAMAs and climate finance, accountability for sustainable commodities, and innovation systems for the scaling up of mitigation, with attention to gender.

Flagship 4: Policies and institutions for climate-resilient food systems

Contribution to IDOs: The vision is that national, regional and global policies and institutions enable equitable food systems that are resilient to a variable and changing climate. By 2025, equitable institutional investments in climate smart food systems will have increased in 20 national/subnational jurisdictions, compared with 2014. By 2019, (a) 15 equitable national/subnational food system policies enacted that take into consideration climate smart practices and strategies, informed using knowledge, tools and approaches derived from CCAFS science; (b) 10 regional/global organisations inform their equitable institutional investments in climate smart food systems using CCAFS outputs.

Impact pathways: Millions of farmers practising CSA can only be achieved through an enabling institutional environment. Given that adaptation requires widespread behavioural changes, this Flagship will consider a wide set of formal and informal strategies, norms and procedures, including those of producer organizations, non-governmental organizations, government structures, civil society, and businesses. International climate finance and global investment in climate smart food systems could overcome constraints that limit the adoption of CSA, if considering target country's priorities and if channelled appropriately. CCAFS' main focus will be at the national level, given that national policies set the context for the incentives that govern most food system participants. Innovative tools and mechanisms for supporting decision-making processes must be identified, tested and scaled up, making effort to engage farmer and community-level organisations, as well as policy makers and technical ministry staff meaningfully in these processes, and to raise their capacities to participate fully, set priorities, and iteratively implement best options. CCAFS will analyse the strengths and weaknesses of current national policies on food systems for climate adaptive capacity (e.g. those related to input subsidies, trade, strategic stocks, safety nets, land rights etc.). Research on decision processes and cross-scale governance will assist in framing and supporting policy interventions as well as investment priorities and verifying the impact of policy interventions post facto, including impacts on gender equity and social differentiation. Decision-makers need evidence, but they also need soft skills to use evidence. Therefore, we emphasize partnerships for change, establishing learning alliances and building capacity at all levels to co-create and use evidence and advocate for a

climate-resilient future. This Flagship will also examine how local perspectives and those of marginalised groups can be taken into account to foster inclusiveness in decision-making, support the development and enactment of equitable food system policies and increase investment in equitable food system institutions that take into consideration climate smart practices and strategies. Global-level work will enable CCAFS to influence at least 25 countries, via policy engagement to integrate climate change, agriculture and food security priorities into at least ten major organisations such as the Green Climate Fund, World Bank, IFAD, UNFCCC, CFS, AU/NEPAD, ITPGRFA and key NGOs (PROLINNOVA, CARE), and to support international organisations in engaging member countries to learn what their climate smart food system priorities are, and in appropriately directing their investments.

Research areas: (1) data, models and scenarios to understand the impact of climate change on agriculture (PIM will be actively engaged in the global modelling work); (2) decision support tools for targeting policy development and making investment choices in CSA from national to global level; (3) analysis of strengths and weaknesses of current and emerging policy with pilot policy intervention case studies, with particular attention to social differentiation and gender issues; (4) analysis and experimentation concerning novel decision-making processes, up-scaling and cross-scale methodologies, policy making networks, learning alliances, visioning, capacity enhancement, to bridge the science-policy-user divides.

Gender and social differentiation

In the research agenda

Gender is consistently and substantively addressed across all CCAFS Flagships, with a clearly defined gender IDO and pathway from outputs to outcomes and impact. In 2013, CCAFS established a Gender and Climate Change Network and facilitated the formation of region-specific gender impact pathways in a highly participative approach with CCAFS partners in five regions, who also received training in different gender analysis approaches. These impact pathways generate indicators of progress towards our gender IDO, and plans for monitoring them with partners working on the ground.

Baseline surveys in all CCAFS sites include gender-related information, and findings from the baselines, and subsequent gender-disaggregated quantitative research, are being used by our partners to design action research that addresses gender constraints to adoption of adaptation and mitigation practices. The gender IDO indicators related to access to resources and decision-making will be measured in CCAFS sites in 2015. We are also supporting Center-led quantitative research that addresses our key gender questions as outlined in the CCAFS gender strategy (e.g. gender differentiated adoption potential of CSA practices in different agricultural systems). In 2013 CCAFS began working to expand the 'Gender and Climate Change Research in Agriculture and Food Security for Rural Development Training Guide' into a flexible group of participatory research tools to support partners in gathering information for designing inclusive and gender sensitive CSA programs. Social learning will be used in the participatory co-development of the manual, including experts, technical personnel, and farmers. A strategic group of partners will work on the revisions (FAO, CCAFS, CARE) and build capacity globally.

CCAFS and many of our Center partners will continue to engage in innovative gender-transformative research partnerships with communication agencies such as BBC-Media (Latin America), Mediae (East Africa), PANOS (East Africa and South Asia), Art for Change Trust (Nepal), and African Farm Radio Initiative (West Africa) to test crowdsourcing, social media, radio and television-based approaches to reaching millions of diverse farmers (female and youths in particular). We will synthesize knowledge on men and women farmers' adaptation strategies, and ensure this knowledge feeds into adaptation and mitigation strategies, national policies and economic development plans in at least three regions. We will build regional capacity in gender and climate change action research in at least three regions, so that our partner institutions are implementing more gender and pro-poor targeted activities.

CCAFS will also be contributing several case studies to a CGIAR-wide global comparative research initiative on 'Innovation through Transformation of Gender Norms in Agriculture and Natural Resource Management'. This will help identify broad patterns in the role of gender norms on innovation and adaptation in diverse agricultural systems, addressing a huge knowledge and evidence gap in this area. During 2015-2016 we will support the CCAFS regional teams as they work with their network members to implement their gender impact pathways, and continue to bring the network together using a variety of face-to-face and electronic platforms.

In the workplace

Since the beginning of CCAFS, both the number of female researchers and the diversity of researchers working in CCAFS management and governance have steadily increased. By the end of 2016, our objective is to improve by c. 10 percentage points on the current numbers, which stand at 23% women of the 13 core staff (coordinating unit, region and theme leaders), 33% in the 6-person Program Management Committee, and 33% in the 12-person International Science Panel (ISP) (inclusive of ex-officio members). CCAFS management has less control on the composition of scientists working within CCAFS who are selected by Centers. Only 20% of Contact Points in Centers are female, but we plan to significantly increase this.

Partnerships

A cornerstone of the CCAFS' theory of change (Figure 1) is partnerships for: (a) generating research evidence; (b) effecting policy and institutional change; and (c) implementing CSA on the ground. The cross-cutting strategies on gender and social differentiation, capacity enhancement and open data and dissemination also involve partnerships. Governance and management structures are based on a partnership model. Many partners receive funds via CCAFS funding mechanisms. Over the past three years CCAFS has passed 23-30% of its budget to partners annually. During the refresh period, CCAFS aims to spend 25-30% of its budget on partners. Yet many of the most critical partnerships do not entail financial transfers. In addition, through partnerships CCAFS leverages approximately 20% more funds – funds that go directly to partners (not through the CGIAR financial system).

Central partnership with Future Earth: CCAFS is a partnership of CGIAR and Future Earth. Future Earth is the umbrella organisation that is being established to lead global science initiatives on planetary change, including climate modelling, land cover change, earth system governance and greenhouse gas emissions – technical areas that are complementary to CGIAR core competencies. CCAFS has continued to enrich its partnership with Future Earth, including recruitment of a Future Earth representative as an *ex officio* member of the CCAFS Independent Science Panel (ISP), and contribution to the development of a EUR10.5 million Belmont Forum and FACCE-JPI call for proposals on Food Security and Land-use Change that are specifically aligned with CCAFS priorities.

Partnerships for research: The most common CCAFS research partners are academic institutions, followed closely by national agricultural research and extension services (NARES). NARES partners are fairly evenly distributed among the five CCAFS regions, and in 2012 26% of CCAFS journal papers were published with NARES co-authors. CCAFS is a member of key research partnerships working on climate change and agriculture. For example, CCAFS is on the steering committee of the Agricultural Model Intercomparison and Improvement Project (AgMIP) and is a partner of the Global Alliance for Research on Agricultural Greenhouse Gases (GRA). With partners, CCAFS is spearheading the CSA Advisory Services initiative to provide better climate information services to farmers on a large scale. In 2015-2016, CCAFS will continue to invest in building research partnerships with NARES and with global leaders in climate science and other key disciplines.

Partnerships for capacity enhancement: CCAFS has a strategy for capacity enhancement that mainstreams capacity enhancement within all research activities and impact pathways, and places emphasis on building

capacity both among researchers (academic institutions, NARES, students) and among users and co-generators of that research (farmers' organisations including WFO and regional and national bodies, policy makers, private sector, NGOs). CCAFS will work with partners to fill critical gaps in capacity needs, for example delivering training to journalists on climate change and agriculture with CTA, backstopping African policy-makers leading up to UNFCCC events with FANRPAN, COMESA and ACPC, supporting students working on emissions metrics with the CCAFS-established PhD network – Climate, Food and Farming Network (CLIFF), and producing guidance on climate-related gender research with FAO, CARE and other partners. CCAFS will continue to invest in mainstreamed capacity enhancement to deliver on its IDOs, and partner with other major capacity enhancement initiatives (e.g. WASCAL).

Partnerships for policy and institutional change, and implementing CSA: To deliver on ambitious IDOs, it is crucial to have effective partnerships with the major actors in the theory of change. Rather than having generic impact pathways and broad alliances, CCAFS is focussing on strategic engagement with key change agents. One example is IFAD, with a major program on climate change adaptation (ASAP) and targets of enhancing the adaptive capacity of 10 million farmers. CCAFS and IFAD are building a "knowledge partnership" that will include CCAFS research at IFAD sites, and co-delivery of global policy engagement activities. Another example is the World Bank, where, for example, CCAFS is partnering on the development of prioritisation tools for CSA in support of the efforts of the emerging CSA Alliance. FAO and CCAFS will jointly lead the knowledge action group of the proposed CSA Alliance. This global alliance will have ambitious targets that CCAFS will help set and deliver. CCAFS will also strengthen collaboration with NGOs, such as through the African CSA Alliance, providing research support in their efforts to achieve broad-scale CSA adoption in Africa. Similar impact pathway mapping processes have been followed at national level within each country where CCAFS regional work is focused, as outlined in the next section on regional collaborations.

Partnerships in open data and information dissemination: CCAFS will continue to strengthen its open access policy, which invariably involves partnerships to enhance quality and maximise reach. For example, the CCAFS GCM downscaled data portal (with 135,000 downloads of files in 2013) includes the Potsdam Institute for Climate Impact Research (PIK), while the CCAFS household data portal is maintained through a partnership with a leading statistical department (Statistical Services Centre, University of Reading). CCAFS will regularly partner with institutions whose mandate includes knowledge management and information dissemination, both globally (e.g. CTA, GFAR) and nationally.

Partners in management and governance: The CCAFS governance and management system has been favourably reviewed and will be maintained, inclusive of the changes made as a result of the external reviews. There will be an Independent Science Panel (ISP) of seven independent members (i.e. not from CGIAR) and three *ex officio* members (CIAT board member, Future Earth nominee, Program Director). The seven members will cover diverse scientific fields and regional expertise, and include technical specialists from development agencies, civil society organisations and the private sector. The ISP will have a major role in priority setting, partnership strategies and on the strategic allocation of resources, to ensure that the needed set of partners and Centers participate in CCAFS in order to achieve the stated IDOs. Partners were competitively selected to participate in the management of the initial phase of CCAFS, and these will be maintained in Phase 2, with two universities (Vermont and Copenhagen) represented on the 6-person Program Management Committee, and two other universities participating in leading portions of the Flagships (Columbia, Leeds). The University of Copenhagen will continue to employ and support some members of the Coordinating Unit of CCAFS.

Partnership among CGIAR Centers and CRPs: All 15 CGIAR Centers have previously participated in CCAFS. Under the new proposal, most CGIAR Centers will participate in CCAFS, though the final constellation of Centers in the different Flagships and regions will only be decided in late 2014, based on past performance, strategic fit and the ISP discussion on the detailed workplan for 2015-2016. Global plans for collaboration with FTA and WLE have been established, to define boundaries and synergies. Boundaries have also been

defined with the commodity CRPs, in terms of breeding for climate futures. Collaborations with other CRPs will be fostered particularly at the regional level (see below).

Regional collaborations

Collaborations within countries and regions are the engine for CCAFS to achieve IDOs and SLOs. Regional collaborations have been established around the impact pathways for each region and flagship, tailored to the national realities of the focus countries. Where appropriate, we have established partnerships with regional organisations (e.g. FARA and its constituent regional organizations ASARECA and CORAF) for joint efforts in research, capacity enhancement, knowledge management and advocacy will be fostered (across all Flagships).

Collaborations at regional level among CRPs: In areas where there is overlap of countries and research sites among CRPs, CCAFS is committed to establishing joint impact pathways, as is currently happening in Burkina Faso with FTA, WLE, Grain Legumes and Dryland Systems. In systems where drought and heat are increasing problems (i.e. mostly in East and West Africa and South Asia), collaborations include the Dryland Systems and MAIZE, as well as particular partners dealing with such systems (e.g. crop and livestock insurance industry players, and those dealing with early warning systems and social safety nets such as WFP). Where CCAFS deals with tree crop systems (e.g. East Africa, Southeast Asia and Latin America) partnerships have been established with the Humidtropics and FTA. In South Asia and Southeast Asia rice-based systems and rising sea water and salinity issues are a focus. The impact pathways here involve national planning agencies, the AAS and GRiSP, and national research and water institutions dealing with rice and sea level rise. Impact pathways around floods include WLE. The impact pathways for Southeast Asia and Latin America place a focus on commodity agriculture as a driver of deforestation, and in these regions the partnerships include the relevant private sector actors, sustainability initiatives for the specific commodities, local advocacy NGOs and FTA.

Flagship 1 regional collaborations: Scaling up mechanisms will also be context-specific. For example use of advisories through television will be explored in western Kenya. To reach wider viewership, CCAFS will partner with Mediae on 'Shamba Shape Up' episodes that are broadcast widely in East Africa. In Latin America a partnership hub system will be assessed as an innovative approach to develop and scale-out locally adapted technology and build local capacity. Special attention will be placed on the development of knowledge platforms through mobile and ICT technologies to support innovation in the hub system. In South Asia, the concept of climate-smart villages will be rigorously tested together with state governments and agricultural universities; scaling up through a national program will be explored in India. CCAFS has so far established learning platforms at 18 climate smart villages following a partnership model, and these will be strengthened and expanded. To illustrate the partnership model, the partners at the Nyando site in Western Kenya include NGOs (e.g. Vi Agroforestry and World Neighbors), local organisations (e.g. FOKODEP community), the private sector (e.g. MAGOS Farm Enterprises), national agencies (e.g. Kenya Agricultural Research Institute), Universities (e.g. Maseno University) and CGIAR Centers.

Flagship 2 regional collaborations: In India mobile phone based dissemination of information is well advanced and CCAFS will work with Indian Meteorology Department and ICT service providers on co-identified priorities, such as enhancing precise short-term and seasonal weather forecasts linked to value-added advisories. In West Africa CCAFS will work with AGRHYMET and National Meteorological Offices to provide downscaled historic and forecast climate information, and communicate these widely and regularly to farmers in the form of agro-advisories, via working groups that include local stakeholders, using radio, cell phones and television. In Latin America CCAFS will work with CATIE and CRRH to demonstrate the value of integrating information on weather variability and extremes into agro-meteorological packages, including a methodology for communicating climate information at scale to farmer communities. In East Africa one priority will be the management of food security safety nets and humanitarian response in relation to extreme weather events, where CCAFS will work with FAO, WFP, FEWSNet and ICPAC (IGAD

Climate Prediction and Applications Center). Early warning systems for climate change impacted pests and diseases in crops and livestock driven is a focus in South East Asia.

Flagship 3 regional collaborations: CCAFS will work with national agencies in Vietnam to meet GHG emissions targets and support Vietnam to become the cutting-edge regional and world example for reducing emissions from rice-based production systems. In other parts of Southeast Asia CCAFS will stimulate the participation of oil palm companies and consumer groups in evaluations of sustainability initiatives to identify innovations. In Africa, CCAFS will work with Kenya's county governments and Ministry of Agriculture together with Unique Forestry and Land Use to develop guidelines for quantification and monitoring of GHG fluxes to support policies and finance that enable adaptation to climate change with mitigation co-benefits. In Latin America, CCAFS will collaborate with national agricultural ministries on decision-support tools for agricultural development policy, with a focus on commodity agriculture and avoided conversion of forest lands.

Flagship 4 regional collaborations: In all the regions where CCAFS works, CCAFS has forged partnerships with the regional economic and development bodies and major regional organisations (NEPAD, COMESA, ECOWAS, ASEAN, and SECAC). Similarly, partnerships have been established with regional farmers' organisations (e.g. SACAU, EAFF, ROPPA, and with selected regional advocacy organisations (e.g. FANRPAN). CCAFS has also partnered with regional meteorological agencies (e.g. AGRHYMET, ICPAC, IMD and DHM of Nepal, RIMES and Manila Observatory in South East Asia), and regional research organisations (e.g. CORAF, ASARECA, APAARI), which facilitate access to NARS partners.

Phased workplan (2015-2016)

2015

Area of work	**Major outputs**	**Outcomes**
Flagship 1: Climate-smart agricultural practices	Compendium of CSA practices and technologies, with associated costs, benefits and constraints to adoption	Decision support tools being used to prioritise CSA investments in at least 2 major development initiatives
Flagship 2: Climate information services and safety nets	Methods and tools to use climate information for farm and food security decision-making	Use of enhanced climate services by boundary organizations in at least 6 countries
Flagship 3: Low-emissions agricultural development	Comparable, robust estimates of emissions from major smallholder systems, decision tools for integrated analysis	Science-informed national planning of mitigation priorities in at least 4 countries
Flagship 4: Policies and institutions for climate-resilient food systems	Improved decision tools to model agricultural impacts and prioritise investment choices	Enhanced knowledge and use of CCAFS outputs by technical next users in at least 4 countries
	Activities; Deliverables	**Lower-level outcomes**
1.1 Improved technologies, practices and portfolios for CSA	Participatory action research platforms for CSA options in 3 regions (based on a critical understanding of problems and opportunities)	Successful CSA pilot activities identified by local and national institutions for scale-out
1.2 Methods and for equitable local adaptation planning and governance	CSA decision support tools for prioritizing technologies and practices	CSA investors, local and national policy prioritising best-bet CSA options in at least 4 countries
1.3 Innovative incentives and mechanisms for scaling up	Novel ICT approaches for climate-sensitive advisories	Uptake of ICT approaches by producer organisations in at least 4 countries
2.1 Climate-based seasonal ag. prediction and early warning	Tools and analysis for seasonal prediction and early warning tailored for users	Uptake of improved tools and analysis by partners in at least 4 countries
2.2 Knowledge and methods	Tools for equitable dissemination of climate	Use of improved methods in at least

for equitable climate services	services to farmers tailored to known needs	4 countries
2.3 Food security safety nets and policy interventions	Tools and processes for incorporating climate into food security information systems	Co-design of tools with national/regional partners in at least 2 countries
2.4 Knowledge and methods for equitable weather insurance	Methods for index-based insurance	Methods tested with partners in at least 2 countries
3.1 Decision support for assessing mitigation priorities, baselines and trade-offs	Scenarios, suitability assessments, and integrated assessment for policy makers, including state-of-the art syntheses on scalable mitigation options	Decision makers in 3 countries integrate mitigation into agricultural development policy
3.2 Methods/data for quantifying small-scale farming emissions and mitigation options	Protocol and improved emissions factors	National governments use improved emissions factors to inform mitigation decisions and national inventories
3.3 Analysis for improved mitigation implementation mechanisms	Action research assessing NAMA monitoring, reporting and verification (MRV)	Improved national systems for NAMA implementation in 3 countries
4.1 Equitable food system policies for climate smart practices and strategies	Case studies, road maps, workshops, capacity building for policy makers and multi-stakeholder learning alliances, including state-of-the art climate impact information	Policy makers in 4 countries seek out the latest information on climate change impacts on food systems
4.2 Increased investment in equitable food system institutions	Improved prioritization tools, models and scenarios for enhanced decision making	Action initiated on informing investment decisions in equitable food system institutions in 4 countries
4.3 Global bodies engaging member countries on climate smart food system priorities	Engagement with the CSA Alliance, including key development partners like IFAD and the World Bank	Actions identified leading to more appropriate investment targeting
4.4 RBM trial management and evaluation	Reflections on lessons learned	Improved RBM in CCAFS and lessons incorporated in Phase 2 planning

2016

Area of work	**Major outputs**	**Outcomes**
Flagship 1: Climate-smart agricultural practices	Regionally and locally specific comprehensive evidence base of CSA options produced	Use of decision support tools to prioritise CSA investments in at least three additional major development initiatives
Flagship 2: Climate information services and safety nets	Co-designed climate service tools and products	Use and ownership of tools and products by national/regional partners
Flagship 3: Low-emissions agricultural development	National mitigation assessments and identified incentives for mitigation practices	Agricultural development policy includes practices yielding mitigation benefits in three countries
Flagship 4: Policies and institutions for climate-resilient food systems	Functioning learning alliances in 5 regions help to bridge the gap between policy makers and scientists	Increased number of requests for science outputs arising from strengthened relationships between scientists and policy makers
	Activities; Deliverables	**Lower-level outcomes**
1.1 Improved technologies, practices and portfolios for CSA	Participatory action research platforms trial mixes of CSA practices and technologies in crop-livestock systems; results feeding into CSA compendium	Enhanced CSA evidence improving business models for CSA adoption, increasing CSA investment by multi-lateral agencies
1.2 Methods and approaches for	Enhanced knowledge on LAPA	Learning from pilot LAPA activities

equitable local adaptation planning and governance	concepts for sub-national CSA planning	informing adaptation approaches in at least three countries
1.3 Innovative incentives and mechanisms for scaling up	Identification of value chain and novel PPP approaches to incentivize CSA in target regions	New value chain business models that explicitly address CSA established in 2 commodity chains in 4 countries
2.1 Climate-based seasonal ag. prediction and early warning	Scalable ag. production and early warning tools and products	Co-designed tools and products in at least 6 countries
2.2 Knowledge and methods for equitable climate services	Scalable methods for equitable climate services to farmers	Co-production of improved methods in at least 6 countries
2.3 Food security safety nets and policy interventions	Decision support tools to incorporate climate information into safety net decision-making	Co-production of support tools in at least 4 countries
2.4 Knowledge and methods for equitable weather insurance	Methods for weather based insurance design	Methods implemented with partners in at least 4 countries
3.1 Decision support for assessing mitigation priorities, baselines and trade-offs	Maps, regional information networks, socioeconomic and biophysical assessments	Vietnam, Bangladesh and Colombia identify regional priorities for mitigation action
3.2 Methods/data for quantifying small-scale farming emissions and mitigation options	Synthesis of emissions and mitigation options for intensified agricultural systems	Interventions supporting intensification modified to reduce emissions in 3 countries
3.3 Analysis for improved mitigation implementation mechanisms	Evaluation of initiatives for sustainable commodities, water saving in rice, NAMA finance	Improved certification, extension of rice technologies and use of finance for mitigation
4.1 Equitable food system policies for climate smart practices and strategies	Communication products co-developed and shared with policy makers in five regions	6 national/subnational food system policies up for revision to include climate smart practices and strategies
4.2 Increased investment in equitable food system institutions	Case studies to prioritize climate smart investments	"Climate Smart Agriculture for Development" adopted in 1 country in South Asia
4.3 Global bodies engaging member countries on climate smart food system priorities	Stocktaking of post-2015 position of agriculture in UNFCCC in relation to key development partners	In 2 regions, country CSA priorities starting to influence investments by key development partners
4.4 RBM trial management and evaluation	Reflections on lessons learned	Improved RBM in CCAFS informing Phase 2 planning

Budget 2015-2016

Table 1 shows the overall budget to Flagship Projects. The largest budget, at around $30 million per annum, goes to Flagship 1. The other three Flagships are similar in size ($13-17 million per annum).

Table 1. Flagship budget per source of funding (US$ millions)

	2015			2016		
Flagship	W1&2	Bilateral & W3	TOTAL	W1&2	Bilateral & W3	TOTAL
1. Climate-smart practices	18.4	11.0	**29.3**	19.3	10.9	**30.1**
2. Climate information services	10.3	5.1	**15.4**	10.8	5.0	**15.8**
3. Low-emissions agricultural development	9.7	6.9	**16.6**	10.2	6.9	**17.1**
4. Policies and institutions	10.1	3.0	**13.0**	10.6	3.7	**14.3**
TOTAL	**48.4**	**26.0**	**74.4**	**50.8**	**26.5**	**77.3**

Notes: Window 1 and 2 amounts for 2015 follow the Consortium Financing Plan. The Bilateral and Window 3 amounts for 2015 are based on the assumption of having similar amounts to those in 2014. For 2016 we have assumed a modest growth of 5% for W1&2 and 2% for Bilateral and W3.

Each of the Flagships contributes to IDOs as shown in Table 2, and thus an indicative allocation per IDO is estimated. The adaptive capacity and food security IDOs receive the largest allocation, followed by the policies and institutions IDO. The gender and social differentiation IDO receives $9.1 million in 2015 (12% on the overall budget) – the research effort is mainstreamed in all Flagships. Indicators will be in place by 2015 to measure progress towards IDO targets.

Table 2. Flagship budget contributions to IDOs (US$ millions)

IDO	Contribution by Flagships to the IDO (%)				2015	2016
	Flagship 1	Flagship 2	Flagship 3	Flagship 4		
Food security	30%	30%	25%	10%	**18.9**	**19.5**
Gender and social differentiation	15%	15%	5%	10%	**9.1**	**9.4**
Adaptive capacity	35%	45%	10%	10%	**20.1**	**20.7**
Policies and institutions	15%	10%	10%	60%	**15.4**	**16.3**
Mitigation	5%	0%	50%	10%	**11.0**	**11.4**
TOTAL	**100%**	**100%**	**100%**	**100%**	**74.4**	**77.3**

Notes: Percentage allocation amongst IDOs is indicative as the IDOs are highly interrelated. On the other hand, the funds for gender and social differentiation are set and will be monitored. For all percentages above 10%, indicators are being put in place to measure progress towards IDO targets.

The budget for each Flagship includes all costs related to achieving the proposed outcomes and impacts, including an allocation to gender and social differentiation. Other funds cover the activities needed for building the impact pathways: partnerships, capacity enhancement and communications. Flagships also contribute to cross-cutting activities (4% of their budget) and to an Innovation Fund (4%) (Table 3). The cross-cutting budget includes data management, M&E and management and governance. The Innovation Fund will be used in the results-based management system to allocate to high performing partners.

Table 3. Cross cutting activities and Innovation Fund

Cross cutting activities & Innovation Fund	2015	2016	TOTAL
Data Management	**0.40**	**0.42**	**0.82**
M&E	**0.33**	**0.34**	**0.67**
Directorate & administration	**0.90**	**0.95**	**1.85**
Governance	**0.23**	**0.24**	**0.47**
CIAT Management costs	**1.20**	**1.26**	**2.46**
Innovation Fund	**2.69**	**2.82**	**5.51**
TOTAL	**5.7**	**6.0**	**11.8**

The regional distribution of Flagship funds is shown in Table 4. CCAFS is largely implemented in five target regions, with similar budget sizes. There is also some global work linked to global impact pathways, and a small amount of work in other regions, including the Pacific.

Table 4. Regional distribution (US$ millions)

Region	2015	2016	%
East Africa	13.4	14.0	18%
West Africa	15.5	16.1	21%
South Asia	13.2	13.7	18%
South East Asia	12.4	12.9	17%
Latin America	12.1	12.6	16%
Global & other	7.7	8.0	10%
TOTAL	**74.4**	**77.3**	**100%**

Annex 1. Acronyms and abbreviations

AAS	CRP on Aquatic Agricultural Systems
ACPC	Africa Climate Policy Centre
AgMIP	Agricultural Model Intercomparison and Improvement Project
AGRHYMET	Centre Regional de Formation et d'Application en Agrométéorologie et Hydrologie Opérationnelle (the Mali Institute for Rural Economy)
APAARI	Asia-Pacific Association of Agricultural Research Institutions
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AU/NEPAD	Africa Union's New Partnership for Africa's Development
ASAP	Adaptation for Smallholder Agriculture Programme
ASEAN	Association of Southeast Asian Nations
CARE	Christian Action Research and Education
CATIE	Tropical Agricultural Research and Higher Education Centre
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CECOCAFEN	Coffee Cooperatives Central Association in the Northern Regions, Nicaragua
CFS	Committee on Food Security
CLIFF	Copenhagen University-initiated Climate Food and Farming Network
COMESA	Common Market for Eastern and Southern Africa
CORAF	West and Central African Council for Agricultural Research and Development
CRP	CGIAR Research Program
CRRH	Regional Water Resources Committee
CSA	Climate-smart agriculture
CTA	Technical Centre for Agricultural and Rural Cooperation
DHM	The Department of Hydrology and Meteorology
Dryland Systems	CRP on Integrated Agricultural Production Systems for the Poor and Vulnerable in Dry Areas
EAFF	Eastern Africa Farmers Federation
ECOWAS	Economic Community of West African States
FACCE JPI	Joint Programming Initiative Agriculture, Food Security and Climate Change
FANRPAN	Food, Agriculture and Natural Resources Policy Analysis Network
FAO	Food and Agriculture Organization of the United Nations
FEDEARROZ	La Federación Nacional de Arroceros
FENALCE	La Federación Nacional de Cultivadores de Cereales y Leguminosas
FEWSNET	Famine Early Warning Systems Network
FOKODEP	Friends of Katuk Odeyo Development Project
FTA	CRP on Forests, Trees and Agroforestry
GCM	Global climate model
GFAR	Global Forum on Agricultural Research
GHG	Greenhouse gas
GRA	The Global Alliance for Research of Agricultural Greenhouse Gases
Grain Legumes	CRP on Grain Legumes: enhanced food and feed security, nutritional balance, economic growth and soil health for smallholder farmers
GRiSP	The Global Rice Science Partnership
Humidtropics	CRP on Integrated Systems for the Humid Tropics
ICPAC	IGAD Climate Prediction and Applications Center
ICRAF	World Agroforestry Centre
ICT	Information and communication technology
IDO	Intermediate development outcome

IFAD	International Fund for Agricultural Development
IGAD	Intergovernmental Authority on Development
IMD	India Meteorology Department
iNGO	International non-governmental organization
IPC	Food Security Integrated Phase Classification
ILRI	International Livestock Research Institute
ISP	Independent Science Panel
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
LAPA	Local Adaptation Plans of Action
M&E	Monitoring and evaluation
MAIZE	CRP on Global Alliance for Improving Food Security and the Livelihoods of the Resource-poor in the Developing World
MRV	Measuring, Reporting and Verification
NAMA	National Appropriate Mitigation Action
NAP	National Adaptation Plan
NARES	National agricultural research and extension system
NARS	National Agricultural Research Systems
NEPAD	New Partnership for Africa's Development
NGO	Non-governmental organization
NRM	Natural Resource Management
PANOS	Global communications network of institutes, focused on international development
PIK	Potsdam Institute for Climate Impact Research
PIM	Policies, Institutions and Markets
PPP	Public-Private Partnerships
PROLINNOVA	Promoting local innovation in ecologically-oriented agriculture and natural-resource management
RBM	Results Based Management
RIMES	The Regional Integrated Multi-Hazard Early Warning System for Africa and Asia
ROPPA	Réseau des organizations paysannes et des producteurs agricoles de l'Afrique de l'Ouest (Network of Farmers' and Agricultural Producers' Organisations of West Africa)
SACAU	South African Confederation of Agricultural Unions
SEA	South East Asia
SECAC	South East Climate Action Coalition
SLO	System Level Outcomes
ToC	Theory of Change
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
WASCAL	West African Science Service Center on Climate Change and Adapted Land Use
WFO	World Farmers Organisation
WFP	World Food Programme
WLE	CRP on Water, Land and Ecosystems

[i] A key focus is on CSA, defined as agriculture that "sustainably increases productivity, enhances adaptive capacity, reduces/removes greenhouse gas emissions, and enhances achievement of national food security and development goals" (FAO, 2010). CCAFS includes a focus on the synergies and trade-offs amongst these objectives of CSA.