



2020

# CCAFS PLAN OF WORK AND BUDGET (POWB)

## Flagship lead institutions:

### Flagship 1:

ILRI - International Livestock Research Institute



### Flagship 2:

The Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT)

#### Alliance



### Flagship 3:

UVM - University of Vermont



### Flagship 4:

IRI – International Research Institute for Climate and Society, Earth Institute, Columbia University



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## Participating CGIAR Centers:

AfricaRice - Africa Rice Center



The Alliance of Bioversity International  
and the International Center for  
Tropical Agriculture (CIAT)



CIFOR - Center for International  
Forestry Research



CIMMYT - Centro Internacional de  
Mejoramiento de Maíz y Trigo



CIP - Centro Internacional de la Papa



ICARDA - International Center for  
Agricultural Research in the Dry Areas



ICRAF - World Agroforestry Centre



ICRISAT - International Crops Research  
Institute for the Semi-Arid Tropics



IFPRI - International Food Policy  
Research Institute



IITA - International Institute of Tropical  
Agriculture



ILRI - International Livestock Research  
Institute



IRRI - International Rice Research  
Institute



IWMI - International Water  
Management Institute



WorldFish



## Strategic partners:

CARE



IIRR - International Institute of Rural Reconstruction



IRI - Columbia University



UNIQUE - Unique Forestry and Land Use GmbH



University of Leeds



University of Makerere  
RAN - Research Action Network



UVM - University of Vermont



Utrecht University



WUR - Wageningen University and Research



WISAT - Women in Global Science and Technology



WUSC – World University Service Canada





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## List of Acronyms

ACCRA	Africa Climate Change Resilience Alliance
ADB	Asia Development Bank
AGN	Africa Group of Negotiators
BMGF	Bill & Melinda Gates Foundation
BMZ	Federal Ministry of Economic Cooperation and Development
CAAS	Chinese Academy of Agricultural Sciences
CARE	Cooperative for Assistance and Relief Everywhere
CC	Cross-cutting
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CCARDESA	Centre for Coordination of Agricultural Research and Development for Southern Africa
CIAT	Centro Internacional de Agricultura Tropical
CIFOR	Center for International Forestry Research
CIMMYT	Centro Internacional de Mejoramiento de Maíz y Trigo
CIP	Centro Internacional de la Papa
CIRCASA	Coordination of International Research Cooperation on Soil Carbon Sequestration in Agriculture
CLIFF-GRADS	Climate Food and Farming - Global Research Alliance Development Scholarships
CoA	Cluster of activity
CRP	CGIAR Research Program
CSA	Climate-smart agriculture
CSP	Cost-sharing percentage
CSV	Climate-Smart Village
DFID	Department for International Development
EA	East Africa
FP	Flagship
FP1	Flagship 1 (Priorities and Policies for CSA)
FP2	Flagship 2 (Climate-Smart Technologies and Practices)
FP3	Flagship 3 (Low Emissions Development)
FP4	Flagship 4 (Climate Services and Safety Nets)
GCA	Global Center on Adaptation
GCF	Green Climate Fund
GHG	Greenhouse gas
GIZ	German Corporation for International Cooperation GmbH
GRA	Global Research Alliance for Agricultural GHGs
GSI	Gender and social inclusion
GYGA	Global Yield Gap Atlas
ICARDA	International Center for Agricultural Research in the Dry Areas
ICCASA	Inclusive Climate Change Adaptation for a Sustainable Africa
ICRAF	World Agroforestry
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICT	Information and communication technology
IDRC	International Development Research Centre
IFA	International Fertilizer Association
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute

IIASA	International Institute for Applied Systems Analysis
IIRR	International Institute of Rural Reconstruction
IITA	International Institute of Tropical Agriculture
ILRI	International Livestock Research Institute
INRA	Institut National de la Recherche Agronomique
IRI	International Research Institute for Climate and Society
IRRI	International Rice Research Institute
IWMI	International Water Management Institute
LAM	Latin America
LAPA	Local Adaptation Plan of Action
LED	Low emissions development
LP	Learning platform
LTAC	Local Technical Agroclimatic Committees
MAGNET	Managing Global Negative Emissions Technologies
MARLO	Managing Agricultural Research for Learning and Outcomes
MEL	Monitoring, evaluation and learning
MRV	Monitoring, reporting and verification
NAMA	Nationally Appropriate Mitigation Action
NAP	National Adaptation Plan
NEPAD	New Partnership for Africa's Development
NGO	Non-governmental organization
NORAD	Norwegian Agency for Development Cooperation
NUE	Nitrogen use efficiency
NWO	The Netherlands Organisation for Scientific Research
PICSA	Participatory Integrated Climate Services for Agriculture
PIM	CGIAR Research Program on Policies, Institutions, and Markets
PMU	Program Management Unit
POWB	Plan of Work and Budget
R4	The World Food Programme R4 Rural Resilience Initiative
RAN	Research Action Network (University of Makerere)
RPL	Regional Program Leader
SA	South Asia
SADC	Southern African Development Community
SEA	Southeast Asia
SIDPI	Sustainable Intensification of Dairy Production Indonesia
SMS	Short Message Service
Sub-IDO	Sub-intermediate development outcome
ToC	Theory of change
UNFCCC	United Nations Framework Convention on Climate Change
UNIQUE	Unique Forestry and Land Use GmbH
USAID	United States Agency for International Development
USD	United States dollar
USDA	United States Department of Agriculture
UVM	University of Vermont
W1	Portfolio window funding
W2	Program window funding
W3	Project window funding



WA	West Africa
WB	World Bank
WFP	World Food Programme
WISAT	Women in Global Science and Technology
WLE	CGIAR Research Program on Water, Land and Ecosystems
WMO	World Meteorological Organization
WUR	Wageningen University and Research
WUSC	World University Service Canada

## **1. Adjustments/changes to your theories of change (ToC)**

No substantial changes have been made to the overall balance of CCAFS or to the theory of change. Nevertheless, the following two minor changes are worth mentioning:

- Some milestones have been brought forward and some targets have undergone minor adjustments to take into account the one-year shortening of CCAFS, with an end date of 2021 instead of 2022.
- Following the plan, the program in general has evolved to focus more on scaling activities.

## **2. Plans and expected progress towards outcomes**

### **Flagship 1 (FP1): Policies and Priorities for Climate-Smart Agriculture (CSA)**

During 2020, FP1 projects in all regions will continue to focus on addressing the demand for CSA and bringing promising interventions to scale. A portion of this work revolves around climate risk analysis and priority setting. FP1 foresight work in 2020 includes activities around breeding foresight and forage suitability analyses in collaboration with eight CGIAR Centers and five CRPs and platforms. FP1 projects will continue to contribute to policy design and implementation at the international level, with a focus on UNFCCC processes on agriculture. In particular, in a few countries FP1 will be working to help inform the updating of NDCs that will happen in 2020. Significant outcomes with respect to the latter are likely in Costa Rica and Cambodia. New policy dialogues will be established on the advantages of streamlining national seed policies and multi-country seed sharing agreements in Southeast Asia, to increase resilience. Projects in all regions will aim to influence the scaling out of investments in climate-resilient food systems by public and private actors. This work will contribute to developing capacity and providing technical support to access climate finance.

The focus on gender and social inclusion (GSI) in different policy processes continues to strengthen. GSI issues in policy formulation and implementation will continue to be addressed in several countries in Central America, now including El Salvador. Scenario processes will continue to focus on both the inclusion of gender concerns in policy development as well as the inclusion of stakeholders representing gender equality needs in the policy process. Research will include mapping out nutritional needs, opportunities and constraints for men, women and youth along the systems pathway based on the impact of climate change on their livelihoods. Indicators will continue to be developed to track progress toward CCAFS gender-related policy sub-IDOs and gender transformation in target countries. Training materials on gender mainstreaming in climate change negotiations will continue to be developed for the Africa Group of Negotiators (AGN). New work in 2020 on the use of gaming methods will be undertaken, involving testing the effectiveness of different game prototypes in different situations in engaging young people and developing their capacity. A case study will be undertaken in Nigeria on youth aspirations in agriculture under climate change.

Major outcomes concerning CGIAR science input to investment plans for more climate-resilient agriculture in Bhutan and Bangladesh are likely in 2020. An initiative will start in 2020 with support from GLZ, involving a new partnership to support the Southern African Development Community (SADC) and its member states to develop plausible future-oriented climate-resilient pathways for sustainable and equitable economic growth and socio-economic development, to assist in regional investment planning in the next 15 years (CCARDESA, ACCRA, SADC).

Scenario quantification work with an increased focus on food and nutrition security and capacity development for key stakeholders is planned in two countries at multiple scales, using enhanced integrated assessment models as well as microsimulation models to explore the distributional effects of alternative scenarios. Syntheses will be published on what is known about the relationships between climate change and nutrition from an equity perspective, and on nutrition work undertaken across the CCAFS Climate Smart Villages (CSVs) in all focus regions. FP1 projects will aim to influence global dialogues about sustainable and nutritious diets and their likely benefits and costs, and to assess the climate sensitivity of key commodity value chains with respect to food and nutrition outcomes in target countries.

### **Flagship 2 (FP2): Climate-Smart Technologies and Practices**

The research focus in 2020 will be on synthesizing lessons learned on the most effective CSA practices and technologies that have been evaluated including GSI, and commissioning a set of studies to examine the scaling successes to date across a range of different institutional contexts. The research for development focus will be on action research around the enabling environment to better understand and create the policy, institutional, financial and business context needed to effectively scale CSA options. Action-based research in CSVs will continue in 2020, albeit at a lower level of activity (especially in Southeast Asia and South Asia). A global synthesis will examine how farms, landscapes and rural households have benefitted from CSA options that have been deployed in CSVs over the past 4 years. In East Africa, research will develop new knowledge on scalable CSA technologies and institutional options for women and men farmers, youth employment, climate resilience, low-emissions development (LED) and youth migration. Efforts will also strengthen men and women farmers' planning capacities and improve decision-making processes related to CSA implementation. Gender dimensions will include gender division of labor and time-use aspects.

Significant effort will go into engaging with the private sector to mainstream risk assessment and adaptation measures into their value chains. A guidance document will be co-published with the World Business Council for Sustainable Development (WBCSD), and a range of private sector actors in important value chains for West Africa and East Africa will be engaged to adopt better business practices, and thus provide the right incentives for farmers to adapt to climate change.

Work on financial incentives will continue with a focus in 2020 on impact investing and providing technical assistance to blended finance instruments that have the potential to incentivize CSA adoption at scale. At local scales, work under NWO-funded projects will use financial diaries to understand financial capital needs for CSA adoption, and at the rural entrepreneurship level will examine how local institutions can better provide support services that enable CSA adoption.

Work will continue to build the business case for CSA at a range of scales, with different investment planning approaches being developed and applied in Africa and Asia. This will help to shape the development investment landscape to better target effective CSA options. In Latin America support will be provided to regional, national and local adaptation planning initiatives to ensure CSA is appropriately included and targeted, with special emphasis on gender-related dimensions of adaptation planning (Guatemala). In South Asia, age- and gender-specific factors contributing to or limiting CSA indicators (yield, profitability, GHG emission intensity, resilience) will be included in big data analytical tools.

### **Flagship 3 (FP3): Low Emissions Development (LED)**

FP3 will continue to support countries and investors to improve emissions estimates for mitigation



planning and reporting. For the first time, FP3 will support improved accounting in the private sector through mitigation metrics for bond investors and through nitrogen fertilizer use efficiency (NUE) benchmarks, developed by WUR, CIMMYT and the International Fertilizer Association (IFA). Other key outputs include monitoring, reporting and verification (MRV) of soil carbon for public and private investors; improved methods, and application of higher tier estimates and improved activity data, for livestock (China, Ethiopia); a GHG footprint of DFID's global agricultural investments, a food loss and waste GHG emissions calculator, and CLIFF-GRADS PhD research (approximately 20 students' theses/articles).

To improve technical options and priority setting, FP3 will produce a policy roadmap for donors to show the action needed to reach UNFCCC targets. FP3 will collaborate with CCAFS' Learning Platform 6 (LP6) to enhance NDCs with a synthesis of past results on country targets, hotspots and GHG accounting methods. With Impossible Foods, International Institute for Applied Systems Analysis (IIASA) and FP1, FP3 will explore scenarios for plant-based meat production in developing countries. Work in China will expand significantly to support national research on best management practices for low-emission dairy, led by the Chinese Academy of Agricultural Sciences (CAAS) and WUR.

On gender and youth, FP3 and GSI will collaborate to produce a hotspot map of mitigation options in Africa. FP3 will assess links between investments in low-emission livestock and the impacts of intensification on gender to inform the BMZ's livestock and climate program in East Africa. In India, opportunities to reduce women's drudgery in rice while also reducing GHGs will be analyzed. In Colombia, FP3 will continue collaborating with the private sector to train youth in LED best practices for livestock.

During the next two years, FP3 will emphasize delivery of outcomes and scaling up mitigation through improved investment, government planning and information platforms. Highlights include a synthesis of mitigation co-benefits across agricultural donor programs (DFID, USAID, IFAD), identifying the finance needed for LED livestock, technical backstopping for a new Rice Fund, a study of carbon trading options in the rice sector and provincial-level LED planning for AWD. We will inform nitrogen efficiency at multiple levels, including guidance to the Abuja Fertilizer Summit (WUR), national policy for precision nutrient management uptake in India and advisory materials via mobile phones in Tanzania.

There will be new fire policy work with improved planning for fire management in Indonesia and avoided residue burning in India. Information platforms will include IRRI's Nationally Appropriate Mitigation Action (NAMA) Clearing House and an interactive platform with guidance on LED, including tools, metrics and priorities for private sector investors. FP3 will also continue to engage with the UNFCCC Koronivia Process through submissions, syntheses of FP3 findings and regional negotiators support.

#### **Flagship 4 (FP4): Climate Services and Safety Nets**

During 2020, FP4 will extend innovation, capacity, outreach, communication and assessment of climate services and safety nets to a growing set of farmers, fishers and other value chain actors. Innovations include food security early warning systems, bundled insurance/seed/climate information services, tailored decision support systems, services for fishers and insurance assessment tools. FP4 will support established participatory processes in implementation of climate services and insurance. The projects under FP4 will also support enhanced services through SMS, radio and ICT communications. In 2020, FP4 will build on strategic partnerships, and document program-wide learning over the past decade.

Engagement in the initiative on Digital Farmer Advisories under the Global Commission on Adaptation (GCA) will facilitate the development of a collective Blueprint for Action, guiding new collaboration and new investments in this area, to reach 100 million farmers by 2030.

Analysis of gender equality outcomes from a Rwanda climate services project and analysis of gender influences on farmers' perceived risks in Uganda will be conducted. Other activities include validation of a gender-sensitive scaling framework in Southeast Asia and validation of guidelines for index-based flood insurance and bundled insurance solutions to include disadvantaged groups in South Asia. Women-focused farmer organizations will provide gender-sensitive climate services to their farmers in Latin America.

During 2020, at least three national strategies will mainstream weather-related insurance to increase participation of farmers, including women and youth, in markets and value chains. In South Asia, bundled solutions and flood insurance will be adopted by government agencies or private companies. The global insurance project will target major initiatives and institutions to mainstream weather-related insurance and/or improve business models around distributing weather-related insurance. Earlier established climate services will be strengthened and scaled, with private-public partnerships delivering climate risk management services in West Africa and participatory approaches for index insurance development and implementation in Ethiopia and/or India strengthened, scaled up and evaluated. A total of eight institutions/initiatives will mainstream climate risk management services, drawing on CCAFS outputs, including continued engagement at national and local levels to scale out services and approaches in Latin America as well as collaboration with other institutions to scale out one of these initiatives in Honduras and Guatemala and develop a scaling framework that will provide inputs to agriculture ministries and meteorological agencies in Southeast Asia. Cost-benefit analyses will be advanced in Ethiopia and shared with major investors. In addition, six development organizations will adapt implementation strategies to increase women's participation in decision making, including women-focused farmer organizations in Latin America, through the partnership with the GCA, and validation of the gender-sensitive scaling framework in Southeast Asia. Finally, FP4 work will promote mainstreaming of climate services in agriculture sector policies in Rwanda and Ethiopia.

### **3. Financial plan for the coming year, including use of W1/W2**

For year 2020, CCAFS has planned all Flagship project portfolios and CRP Management activities with USD 18.25 million of W1/W2 funds. In addition, USD 1.056 million, to reach the amount of funding confirmed in the 2019–2021 Financing Plan (19.7M gross of 2% CSP that translates to 19.306 million), have been set aside within all Flagships as contingency funds with the hope that it materializes during the course of the year.

As an exception, in comparison with previous POWB documents, the 2020 plan includes extraordinary additional W2 funding from the Norwegian Agency for Development Cooperation corresponding to a Flagship 2 project led by IITA on conservation agriculture, adoption and adaptation in smallholder farming systems of Southern Africa. This additional W2 funding, which started in late 2019, has been confirmed for year 2020 for USD 1.647 million. With this additional funding, the total amount of W1/W2 funds presented in this document adds up to USD 20.953 million.

The focus of budgeting for year 2020 is the continuation of projects in Flagship portfolios, which were refreshed in 2019. As in previous years, all 15 CGIAR Centers, five universities (Columbia, Leeds, Vermont, Utrecht and Wageningen) and three international organizations (CARE, IIRR and UNIQUE

Forestry and Land Use), along with CCAFS Flagship Leaders and Regional Program Leaders, participated in the 2020 planning process. The budget and project portfolios were presented to the Independent Steering Committee in late September 2019.

The planned W3/bilateral budget contribution by CCAFS Program Participants reached USD 41.9 million, a ratio of 2 times the amount of assumed W1/W2 funds. This W3/Bilateral amount only includes ongoing projects, high-probability proposals and concept notes.

The new 2020 portfolio is composed of 49 projects in total with different proportions of funding from W1/W2 funds and W3/Bilateral. Bilateral projects were only accepted if aligned with the strategy as outlined in the Phase II proposal. All five regions of CCAFS (Latin America, West Africa, East Africa, South Asia and Southeast Asia), along with global projects, received relatively similar allocations of W1/W2 funds, while the distribution among Flagships was the following: 23% FP1, 35% FP2, 21% FP3 and 21% FP4. After CGIAR Centers mapped their W3/Bilateral contributions, the distribution of total budgets was: 14% FP1, 53% FP2, 11% FP3 and 21% FP4.



## TABLES

**Table 2A: Planned milestones**

FP	Mapped to Sub-IDO	2022 FP outcomes	Milestones	Indicate of the following	Means of verification	CGIAR Cross-Cutting Markers for the milestone				Assessment of risk to achieve that milestone (L/M/H)	For medium/high please select the main risk from the list
						for gender	for youth	for cap dev	for CC		
FP1	<ul style="list-style-type: none"> <li>{primary} CC Increased capacity for innovation in partner development organizations and in poor and vulnerable communities</li> </ul>	FP1 Outcome: # of policy decisions taken (in part) based on engagement and information dissemination by CCAFS	2020 - National/state level planners are trained in designing and monitoring climate-smart food and nutrition security portfolios that meet the criteria for climate finance, CSA and sustainable development; guidelines developed for climate-smart institutions and enabling policy environments that can effectively support responses to climate change	Identical to proposal	Policy briefs, guidelines for CSA program portfolio management and monitoring, guidelines for 'good enough' enabling environments and institutional change, workshop reports, journal articles and reports	0	0	1	2	Low	
	<ul style="list-style-type: none"> <li>{primary} Optimized consumption of diverse nutrient-rich foods</li> </ul>	FP1 Outcome: # of organizations and institutions in selected countries/states adapting plans and directing investment to optimize consumption of diverse nutrient-rich foods, with all plans and investments examined for their gender implications	2020 - New scenarios tools for devolved policy implementation are finalized and disseminated to key next users in selected countries	Identical to proposal	High-impact journal articles and reports, modified scenarios tools and guides for different audiences on the website	1	1	1	2	Medium	Partnership

		FP1 Outcome: # of organizations and institutions in selected countries/states adapting plans and directing investment to optimize consumption of diverse nutrient-rich foods, with all plans and investments examined for their gender implications	2020 - Combined climate and food and nutrition security scenarios are used for multilevel policy development and implementation in selected countries/states, with 4 countries/states effecting relevant policy change that includes consideration of gender issues	Reworded/ rephrased from proposal	Evidence of CCAFS science included in policy documents and implementation plans, with investment directed towards nutrition outcomes	1	1	1	2	High	Research/ science
	• {primary} CC Improved forecasting of impacts of climate change and targeted technology development	FP1 Outcome: # of countries/states where CCAFS priority setting used to target and implement interventions to improve food and nutrition security under a changing climate	2020 - New sets of integrated assessment model outputs are being produced that utilize next generation climate model outputs	Reworded/ rephrased from proposal	New datasets made available on suitable portals	0	0	1	2	Medium	Research/ science
		FP1 Outcome: # of countries/states where CCAFS priority setting used to target and implement interventions to improve food and nutrition security under a changing climate	2020 - Country level recommendations feed into a total of 13 national and state level policy processes in selected countries to inform climate-smart food and nutrition security policies	Identical to proposal	Evidence of CCAFS science included in policy processes, policy documents, media coverage and websites	1	0	1	2	Low	
	• {primary} CC Gender-equitable control of productive assets and resources	FP1 Outcome: # of national/state organizations and institutions adapting their plans and directing investment to increase women's access to, and control over, productive assets and resources	2020 - Gender- and youth-focused policy guidance for CSA is disseminated and taken into account in new policies informed by CCAFS science, while investment plans consider gender equity dimensions in 6 countries/states	Identical to proposal	Policy briefs, policy documents and investment plans make mention of specific gender considerations	2	1	1	2	Low	
	• {primary} CC Enabled	FP1 Outcome: \$ USD new investments by state, national, regional and global agencies,	2020 - Comparative analyses further strengthen the MEL	Reworded/ rephrased	Journal articles and reports, documented	1	0	1	2	Low	

	environment for climate resilience	informed by CCAFS science and engagement	frameworks and tools for tracking enabling policy environments	from proposal	testing of innovative ICT tools						
		FP1 Outcome: \$ USD new investments by state, national, regional and global agencies, informed by CCAFS science and engagement	2020 - Case studies from CSVs and enabling policy environments at multiple scales are increasingly supporting the scaling of CSA, and USD 250 million of new investments are being informed by CCAFS science	Identical to proposal	Policy briefs, media coverage, CSA investment plans and climate finance for CSA, evidence of CCAFS science informing investment decisions	1	0	1	2	Low	
FP2	• {primary} CC Increased capacity for innovation in partner development organizations and in poor and vulnerable communities	FP2 Outcome: # policy decisions taken (in part) based on engagement and information dissemination by CCAFS	2020 - National and sub-national agricultural entities in 3 countries investing and prioritizing the CSA-sensitive sub-national adaptation plans developed with CCAFS support	Reworded/ rephrased from proposal	Policy briefs, ministries' documents, workshop	0	0	1	2	Low	
	• {primary} CC Gender-equitable control of productive assets and resources	FP2 Outcome: 15 development organizations, with the focus on investments for CSA activities, adapting their plans or directing investment to increase women's access to, and control over, productive assets and resources	2020 - Policy guidance on CSA adoption incentives and investment opportunities for increasing resilience and adaptive capacity of women and youth within CSVs framework	Identical to proposal	Policy briefs, workshops, working paper	2	1	1	2	Medium	External environment (political, economic, legal, market)
	• {primary} Improved access to financial and other services	FP2 Outcome: 15 sub-national public/private initiatives providing access to novel financial services and supporting innovative CSA business models	2020 - Farmer field schools on climate change adaptation supported by private sector and NGO trainers	Identical to proposal	Report, sourcebook, working papers, websites	1	1	2	2	Low	



		FP2 Outcome: 15 sub-national public/private initiatives providing access to novel financial services and supporting innovative CSA business models	2020 - Comparative analysis, enabling environments and implementation constraints of financial mechanisms across geographies and farmer typologies	Identical to proposal	Reports and policy briefs available, journal article	0	0	N/A	2	Medium	Partnership
	<ul style="list-style-type: none"> <li>• CC Improved forecasting of impacts of climate change and targeted technology development</li> <li>• {primary} Increased household capacity to cope with shocks</li> </ul>	FP2 Outcome: 50 site-specific targeted CSA options (technologies, practices and services) tested and examined for their gender implications	2020 - State of the art on the evidence base and lessons learned across time-scales and geographies of adaptation benefits of a range of CSA practices in collaboration with FP3 and agri-food system CRPs	Identical to proposal	Journal article, technical reports	1	N/A	N/A	1	Medium	Partnership
	<ul style="list-style-type: none"> <li>• {primary} Reduced smallholders production risk</li> </ul>	FP2 Outcome: 6 million farm households receiving incentives (training, financial, programmatic, policy-related) for adopting CSA related practices and technologies that potentially reduce production risks with increased benefits for women	2020 - New generation of support tools, approaches, guidelines for CSA targeting/prioritization and local adaptation and investment planning developed and "hands-on" tools training workshop to subnational governments, development agencies and grower associations	Identical to proposal	Workshop and technical reports, websites, new tools made available	0	N/A	1	2	Low	
		FP2 Outcome: 6 million farm households receiving incentives (training, financial, programmatic, policy-related) for adopting CSA related practices and technologies that potentially reduce production risks with increased benefits for women	2020 - Recommendations for sub-national policies and adaptation plans to provide incentive mechanisms for wide CSA adoption, training and capacity building products developed to sensitize government extension	Identical to proposal	Policy briefs, case studies, training materials, websites	1	1	1	2	Low	

			services and establish information networks								
FP3	• {primary} CC Reduced net greenhouse gas emissions from agriculture, forests and other forms of land-use (Mitigation and adaptation achieved)	FP3 Outcome: # of low emissions plans developed that have significant mitigation potential for 2030, i.e. will contribute to at least 5% GHG emissions reduction or reach at least 10,000 farmers, with all plans examined for their gender implications	2020 - Lessons learned on NAMA and LED implementation and finance shared with country and global partners, including lessens related to the gender impacts	Identical to proposal	Workshop exchanges with country partners for sharing NAMA/LED experiences	1	1	1	2	Low	
		FP3 Outcome: # of low emissions plans developed that have significant mitigation potential for 2030, i.e. will contribute to at least 5% GHG emissions reduction or reach at least 10,000 farmers, with all plans examined for their gender implications	2020 - Methods for MRV of agricultural emission reductions developed with focal countries and donors	Identical to proposal	MRV methods publicized on web platforms, shared with donors and NAMA preparers	0	0	1	2	Low	
	• {primary} CC Improved capacity of women and young people to participate in decision-making	FP3 Outcome: # of organizations adapting their plans or directing investment to increase women's participation in decision-making about LED in agriculture	2020 - Lessons learned and best practices on increasing women's and men's participation in NAMAs and LEDs disseminated	Identical to proposal	Working paper on best practices, disseminated to NAMA and LED implementers in focal countries	1	1	1	2	Low	
	• {primary} CC Increased capacity for innovation in partner development organizations and in poor and	FP3 Outcome: # of policy decisions taken (in part) based on engagement and information dissemination by CCAFS	2020 - Improved capacity at municipal, state and national levels for commodity sustainability standards and implementation of mitigation technologies	Identical to proposal	Reports documenting improved knowledge and institutional capacity for LED	0	0	1	2	Medium	External environment (political, economic, legal, market)

	vulnerable communities										
	<ul style="list-style-type: none"> <li>{primary} More efficient use of inputs</li> </ul>	FP3 Outcome: # of agricultural development initiatives where CCAFS science is used to target and implement interventions to increase input efficiency	2020 - Technical and policy guidance on more efficient management options with mitigation co-benefits, including impacts on women, synthesized and disseminated to focus countries, supply chains and donors	Identical to proposal	Policy briefs or other reports addressing input efficiency, etc. published on CCAFS website, disseminated via social media and newsletters	1	1	1	2	Low	
		FP3 Outcome: # of agricultural development initiatives where CCAFS science is used to target and implement interventions to increase input efficiency	2020 - Review of existing policies and programs and synergies with other policy domains (e.g. animal health, food security, feed hygiene and safety, trade) to support scaling up of LED	Identical to proposal	Journal article on LED policies and programs for scale-up	0	0	0	2	High	Other
FP4	<ul style="list-style-type: none"> <li>{primary} Improved access to financial and other services</li> </ul>	FP4 Outcome: 8 of million farm households with improved access to capital, with increased benefits for women (millions)	2020 - Weather-related insurance mainstreamed into at least 1 national strategy to increase participation of smallholder farmers, women and youth in financial markets and commercial agricultural value chains	Identical to proposal	National ministry policy and planning documents, websites	2	2	0	2	Medium	External environment (political, economic, legal, market)
	<ul style="list-style-type: none"> <li>{primary} CC Enhanced capacity to deal with climatic risks and extremes (Mitigation and adaptation achieved)</li> </ul>	FP4 Outcome: 40 of institutions or major initiatives that use CCAFS research outputs for services that support farm households' management of climatic risks	2020 - Services piloted in 2017 are strengthened, scaled up, evaluated	New/changed	Partner reports, websites, project reports, outcome case studies, media reports	1	1	0	2	Medium	External environment (political, economic, legal, market)

		FP4 Outcome: 40 of institutions or major initiatives that use CCAFS research outputs for services that support farm households' management of climatic risks	2020 - Additional institutions or major initiatives mainstream climate risk management services, incorporating CCAFS outputs	Reworded/ rephrased from proposal	Partner reports, websites, project reports, outcome case studies, media reports	1	1	1	1	Medium	External environment (political, economic, legal, market)
	• {primary} CC Enabled environment for climate resilience	FP4 Outcome: \$ USD new investments by state, national, regional and global agencies, informed by CCAFS science and engagement	2020 - CCAFS evaluation of climate services, additional cost-benefit analyses, methods and guidance mainstreamed into climate service investment strategy by at least one major funder	Reworded/ rephrased from proposal	Evaluation reports and policy briefs. CCAFS acknowledged in funding and implementing partner reports, publications, websites, media coverage	0	0	0	2	High	External environment (political, economic, legal, market)
	• {primary} CC Gender-equitable control of productive assets and resources	FP4 Outcome: 20 of development organizations adapting their plans and directing investment to increase women's access to, and control over, productive assets and resources through gender-sensitive climate-based advisories and safety nets	2020 - Additional development organizations, including one additional CCAFS region, adapt climate service and insurance implementation strategy and resources to increase women's participation in decision-making	Identical to proposal	Outcome case studies, development organization reports, websites	2	0	0	2	Medium	External environment (political, economic, legal, market)
	• {primary} CC Increased capacity for innovation in partner development organizations and in poor and vulnerable communities	FP4 Outcome: # of policy decisions taken (in part) based on engagement and information dissemination by CCAFS	2020 - Rwanda mainstreams climate services, and adaptive government decision processes and farmer policies into the agriculture sector	Identical to proposal	Ministry policy documents, extension materials, website, media.	1	1	0	2	Medium	External environment (political, economic, legal, market)

**Table 2B: Planned evaluations/reviews, impact assessments and learning exercises**

FP	Status	Planned studies/learning exercises in the coming year	Geographic scope	Who is commissioning this study
FP1, FP3, FP2, FP4	Ongoing	Review of climate change, agriculture, and food and nutrition security policies and strategies in East Africa	Regional [Sub-Saharan Africa / Eastern Africa]	RPL CCAFS EA
FP1, FP3, FP2, FP4	Ongoing	Analysis of farmers' climate-smart agriculture (CSA) adoption in relation to their adaptation strategies and livelihood outcomes	Regional [South-Eastern Asia]	CCAFS
FP1, FP3, FP2, FP4	Ongoing	Documenting the outcomes of the 2015 Myanmar CSA Strategy	National [Myanmar (Burma)]	CCAFS SEA
FP4	Ongoing	Review of SMS-based agro-advisories in India: ingredients for success for decisions around climate risk management in farming	National [India]	CRP
FP1	Ongoing	How do country CSA profiles inform investments and policy decisions towards CSA development and promotion?	Multinational [Benin, Cote d'Ivoire, Cape Verde, Gambia, Guinea, Nigeria, Seychelles, Senegal]	ICRISAT
FP1, FP3, FP2, FP4	New	Impact study on the large scale implementation of climate-related risk maps and adaptation plans in the Mekong River Delta of Vietnam	Sub-national [Vietnam]	CCAFS SEA
FP3	Ongoing	Fertilizer industry uses Global Yield Gap Atlas (GYGA) for long-term minimum nutrient requirements estimates	Regional [Sub-Saharan Africa]	CRP
FP1, FP3, FP2, FP4	Ongoing	Climate-Smart Village (CSV) approach will lead to several agencies to develop and implement policies/schemes/investment plans to scale CSA, with potential benefits to millions of smallholder farmers	Regional [Southern Asia]	PMU/RPL
FP1, FP3, FP2, FP4	Ongoing	Adoption of improved residue management through CIMMYT/CCAFS science and business models on alternate tillage practices	Regional [Southern Asia]	PMU
FP1	Ongoing	Outcome study on the uptake of transformation science for strategy development within IFAD	Global	IFAD
FP1	Ongoing	Outcome study on livestock development policies and strategies informed by future scenarios workshops	Regional [Sub-Saharan Africa / Eastern Africa]	ILRI
FP1	Ongoing	Outcome study on Nationally Determined Contribution implementation in Costa Rica	National [Costa Rica]	CIAT
FP1	Ongoing	Outcome study on the effects of training Cambodian Members of Parliament in foresight approaches and prioritization of CSA	National [Cambodia]	CIAT

FP	Status	Planned studies/learning exercises in the coming year	Geographic scope	Who is commissioning this study
FP1	Ongoing	Outcome study on development of Bangladesh's 5-year plan using future scenarios and food systems modelling	National [Bangladesh]	CIAT
FP2	Ongoing	Systematic review of knowledge gaps/opportunities in big data analytics for gender-sensitive and equitable CSA	Global	CIMMYT
FP1, FP3, FP2, FP4	Ongoing	Precision Land Leveling technology will lead to potential benefits of large savings in irrigation water, energy with mitigation co-benefits	Regional [Southern Asia]	PMU
FP4	Ongoing	Assessing the impact of climate services across Latin America	Multinational [Colombia, Honduras]	CIAT
FP1, FP3, FP2, FP4	New	Qualitative outcomes study of CCAFS activities on the Philippines' climate change-related policies and programs	National [Philippines]	CCAFS
FP3	Ongoing	Inputs in the preparation of the Africa Fertilizer Summit (Abuja-2)	Multinational [Burkina Faso, Ethiopia, Ghana, Kenya, Mali, Niger, Nigeria, United Republic of Tanzania, Uganda, Zambia]	CRP
FP4	Ongoing	Working paper or Info Note on overview of the main challenges in climate services from CCAFS experiences	Regional [Latin America & the Caribbean, South-Eastern Asia, Southern Asia, Sub-Saharan Africa / Eastern Africa, Sub-Saharan Africa / Western Africa]	CCAFS
FP4	Ongoing	Good practices in developing agricultural climate services (working paper)	Regional [Latin America & the Caribbean, South-Eastern Asia, Southern Asia, Sub-Saharan Africa]	CCAFS, GCA
FP4	New	Outcome report on scaling out of Participatory Integrated Services for Agriculture tool (PICSA) in Honduras and Guatemala	Multinational [Guatemala, Honduras]	CIAT/CCAFS
FP1, FP3, FP2, FP4	Ongoing	Adoption of CSA in Lushoto, Tanzania	Sub-national [United Republic of Tanzania]	RPL CCAFS EA
FP1, FP3, FP2, FP4	Ongoing	Effect of CSA on soil carbon stocks under different land management systems in East Africa	Regional [Sub-Saharan Africa / Eastern Africa]	RPL CCAFS EA
FP4	Ongoing	Journal article on economy-wide benefits of agricultural climate services in Ethiopia	National [Ethiopia]	CCAFS FP4

FP	Status	Planned studies/learning exercises in the coming year	Geographic scope	Who is commissioning this study
FP4	Ongoing	Journal article on analysis of impact of climate services on agricultural productivity in Ethiopia	National [Ethiopia]	CCAFS FP4
FP4	Ongoing	Working paper on willingness to pay for climate services in Rwanda	National [Rwanda]	CCAFS FP4
FP1	Ongoing	Outcome study on the use of evidence and policy advocacy in Uganda and Ethiopia on climate change and nutrition outcomes	Multi-national [Ethiopia, Uganda]	IITA in Uganda and CIAT in Ethiopia
FP3	Ongoing	Sustainable Intensification of Dairy Production Indonesia (SIDPI) project evaluation	National [Indonesia]	WUR
FP4	Ongoing	Outcome Impact Case Report on CCAFS crowd-sourcing tools unlocking insurance scaling in Ethiopia	National [Ethiopia]	CCAFS
FP3	Ongoing	Adoption study of precision nutrient management in South Asia	Regional [Southern Asia]	CIMMYT, CCAFS FP3
FP4	Ongoing	Journal article on community-based risk spectrum analysis in Uganda: Male and female livelihood risks and barriers to uptake of hybrid maize seed	National [Uganda]	CCAFS, NWO
FP4	Ongoing	Journal article on gender equality outcomes from Rwanda Climate Services for Agriculture (RCSA) project	National [Rwanda]	CCAFS
FP4	Ongoing	Journal article on exploring pathways for gender-responsive climate services in Rwanda: A focus on access and use of climate information	National [Rwanda]	CCAFS
FP1	Ongoing	Outcome study on the use of scientific evidence to influence global dialogue about sustainable diets, environment, and health	Global	CRP, and several research partners and donors among which: Oxford University, WUR, USDA, BMGF, USAID
FP3	Ongoing	Science-based input to International Fertilizer Association (IFA) Nutrient Expert panel on scaling nutrient advice in Sub-Saharan Africa	Regional [Sub-Saharan Africa]	Private partner IFA
FP1	Ongoing	Assessment on how CSA research has enabled the integration of climate change in local policy in Honduras	National [Honduras]	CIAT
FP1	Ongoing	Policy engagement strategy and outcomes assessment to foster gender inclusion and CSA integration in Central America	Regional [Latin America & Caribbean / Central America]	CIAT
FP4	Ongoing	Outcome report on increased regional capacities to manage agro-climatic risks throughout Central America	Regional [Latin America & Caribbean / Central America]	CIAT, CCAFS
FP4	Ongoing	Synthesis (journal article) on value agricultural research-for-development and CGIAR for developing cost-effective agricultural insurance	Global	CCAFS

FP	Status	Planned studies/learning exercises in the coming year	Geographic scope	Who is commissioning this study
FP4	Ongoing	Adoption study (working paper) on digital crop insurance solutions that build on insights from agricultural research-for-development	Multi-national [Ethiopia, India, Kenya]	PIM, CCAFS, Big Data Platform, bilateral donors (3ie, IDRC, WFP/R4)
FP1	Ongoing	Outcome study on informing decision makers, including the Global Commission on Adaptation (GCA), on the global and regional costs of adaptation to climate change	Global	BMGF, in support of the GCA
FP4	Ongoing	Synthesis research paper on national-level assessment of farmers' demand for climate services in Southeast Asia	Regional [South-Eastern Asia]	CIAT
FP4	Ongoing	Outcome study on the systematized experiences on strengthening climate service networks in Southeast Asia	Regional [South-Eastern Asia]	CIAT, ICRAF, CARE, Columbia University - International Research Institute for Climate and Society
FP2	Ongoing	Project process and progress study: Towards data capture, analysis, and institutional use of big data to drive CSA advisories	Regional [Southern Asia]	This study is anticipated to be independent based on CCAFS management advice. No specific institute or firm has yet been selected.
FP2	Ongoing	Outcome: Number of men and women farmers implementing the Smart-Valleys approach and the evaluation of the Alternate Wetting and Drying technology in Burkina Faso	National [Burkina Faso]	CSA-Burkina
FP2	Ongoing	Climate-smart cocoa adoption study	National [Ghana]	IITA



**Table 2C: Planned major new collaborations (CGIAR internal, or with non-CGIAR collaborators)**

Name of Platform/CRP or non-CGIAR collaborator	Brief description of collaboration (give and take among CRPs/Platforms/non-CGIAR collaborator) and value added (e.g. scientific or efficiency benefits)
CCARDESA - Centre for Coordination of Agricultural Research and Development for Southern Africa	Collaboration on climate risk analysis for the Southern African Development Community (SADC) region and identifying climate resilient development pathways.
Global Commission on Adaptation (GCA)	A key focus in 2020 for P266 will be on the partnership with the GCA, which is hosted by the World Resources Institute. The Flagship will be working with the GCA and other partners, including World Food Programme, to play a lead role in framing of climate services in the global adaptation agenda and creation of an Alliance for Services to Empower Climate-Smart Agriculture and Food Security. Through this partnership, CCAFS will be able to shape the international agenda on climate services, and gain a platform for CCAFS learning on this and related topics.
Odisha Livelihood Mission	There is a new three-year Odisha project funded by the Odisha Livelihoods Missions, a state government body. Child and Family Focus South Asia (P1606) will feed into this project to inform the planning of CSA considering climate risk.
Oxfam	A new partnership with Oxfam in P1607 in Bangladesh to promote a flood insurance product to meet the needs of climate-vulnerable communities.
Southern African Development Community (SADC)	Collaboration on climate risk analysis for the SADC region and identifying climate resilient development pathways
World Food Programme (WFP)	The World Food Programme R4 Rural Resilience Initiative (R4) is planning to deepen its partnership with CCAFS by starting to work closer with the IFPRI insurance team (P1609). In Ethiopia, the IFPRI team is already analyzing options to better manage basis risk in the index product offered by R4 at scale, and funding opportunities are being explored to partner also in Burkina Faso and Senegal around improved targeting and integration of macro- and micro-insurance. The R4 program is an important initiative through which CCAFS research has the potential to support farm households' management of climate risks.

**Table 3: Planned budget**

Component	Planned budget				Comments on major changes
	W1/W2	W3/Bilateral	Center own fund	Total	
<b>FP1</b>	\$3,987,540	\$6,039,062	\$0	\$10,026,602	No major changes against 2019
<b>FP2</b>	\$6,036,902	\$22,166,040	\$0	\$28,202,942	Includes a W2 1.6 million project funded by NORAD
<b>FP3</b>	\$3,641,850	\$4,710,465	\$0	\$8,352,315	No major changes against 2019
<b>FP4</b>	\$3,544,600	\$8,850,740	\$0	\$12,395,340	No major changes against 2019
<b>Strategic Competitive Research grant</b>	\$0	\$0	\$0	\$0	Funds for Impact Assessment Studies allocated within each FP
<b>CRP Management &amp; Support Cost</b>	\$3,742,000	\$102,000	\$0	\$3,844,000	No major changes against 2019
<b>CRP Total</b>	<b>\$20,952,892</b>	<b>\$41,868,307</b>	<b>\$0</b>	<b>\$62,821,199</b>	

**Note:** Planned W1/W2 funds total USD 20.953 million, comprising 19.306 million as per the 2019–2021 Financial Plan (19.7 million for year 2020 Gross of 2% CSP) and extraordinary additional W2 funding from NORAD for USD 1.647 million allocated to IITA directly.