Regional Priorities

Most regions have been through a number of stakeholder events, from site to regional level, in which an array of priorities have emerged. These are listed in the below tables. Those for Latin America and South East Asia still need to be discussed by the program management team and the Independent Science Panel. Further work on these tables are still needed, as it is clear that some issues listed in some regions but not others are crucial for the program to achieve in all regions (e.g. the listed M&E under Flagship project #1 in West Africa).

East Africa

Flagship 1: CSA practices	Flagship 2: Climate information services and climate-informed safety nets	Flagship 3: Low emissions development	Flagship 4: Policies and institutions for climate-resilient food systems
With national agricultural research organizations, design integrated and wide scale testing ,through participatory action research at CCAFS sites; local climate smart interventions that increase resilience, reduce GHG emission intensity, and address food insecurity of smallholder farmers	In collaboration with the National Meteorological and Hydrological Services (NMHSs) improve downscaling of seasonal forecasts and develop tools and applications to aid farmer decision making in the face of increased frequency of droughts in the arid and semi-arid lands (ASALs) of EA.	Build capacity of researchers through student training at universities in East Africa to measure GHG emissions from agriculture, support national GHG inventories and identify best-bet mitigation options for low carbon agricultural growth in coffee-banana and intensive dairy systems in the highlands of EA.	Mainstream adaptation and mitigation strategies into national policies, agricultural development plans, such as with CAADP, and key regional and global processes related to agriculture and climate change (e.g. inputs of African countries into the UNFCCC). Key actors are ministries of Agriculture, Environment and Finance
Working across CGIAR initiatives, develop tools and guidelines for promoting the use of new crop, livestock and fisheries technologies and the uptake of climate smart village models for up scaling CSA amongst thousands of women farmers and youth as well other marginalized farmer groups	With ministries of agriculture, research and other providers of rural services, assess, integrate, and communicate indigenous technical knowledge and scientific weather forecasting and early warning in Uganda and Tanzania	Contribute to knowledge and information that supports East African governments to implement sustainable land management actions under the NAMAs and develop business models that provide benefits to farmers from agroforestry carbon projects	Work with government and businesses to respond to demand for decision tools to promote innovative financing and credit provision to increase government and private sector investments to climate-proof 4 major agricultural value chains; Maize, coffee, dairy and beef

With CIMMYT, target appropriate domains for adaptation technologies and practices for drought, pests and disease management in maize based systems such as with drought tolerant maize (DTMA), insect resistant Maize (IRMA) and water efficient Maize (WEMA)	Develop and test ICT based schemes, knowledge hubs (e.g ALIN), tools, data sets and platforms for timely, reliable and user friendly delivery of agro advisories that address the needs of large numbers of men and women farmers in the grain baskets of Kenya and Tanzania		
Contribute to knowledge and information about changing local practices that support East African governments to implement priority actions developed under the NAPs and NAMAs (linked to policy work under Flagship 3 and 4)	Test social protection schemes and respond to demand for tools for risk management such as index based financial risk transfer for crops and livestock; including models for upscaling their uptake by farming communities drawing on lessons from projects in Kenya (Kilimo Salama) and Ethiopia (HARITA)		Policy analyses, including through modelling and economic analyses (such as trade-off and cost benefit analyses, agricultural commodity pricing etc.), for investments in climate smart agriculture, to help track and direct climate finance for building resilient food systems that reduce post-harvest losses of 4 major staples, Maize, Bean, Teff and Potatoes
Participate in learning partnerships for accelerated uptake of CSA tools and practices with focus on crop and breed improvement for heat and disease tolerance in EA	Participate in learning partnerships through shared learning on climate monitoring, forecasting and early warning systems for addressing drought related impacts in Kenya and Ethiopia drawing on the experiences of ICPAC/FAO/Oxfam etc.	Participate in learning partnerships to promote synergies between adaptation and mitigation in order to reduce GHG emissions intensity in agriculture and the food system	Participate in national knowledge platforms and engaging through shared learning to enhance science-policy dialogue, and promote evidence based policy outcomes under the emerging NAPs and EAC/COMESA programs.
With national agricultural research organizations, design integrated and wide scale testing ,through participatory action research at CCAFS sites; local climate smart interventions that increase resilience, reduce GHG emission	In collaboration with the National Meteorological and Hydrological Services (NMHSs) improve downscaling of seasonal forecasts and develop tools and applications to aid farmer decision making in the face of increased frequency of	Build capacity of researchers through student training at universities in East Africa to measure GHG emissions from agriculture, support national GHG inventories and identify best-bet mitigation options for low carbon	Mainstream adaptation and mitigation strategies into national policies, agricultural development plans, such as with CAADP, and key regional and global processes related to agriculture and climate change (e.g. inputs of African

intensity, and address food insecurity of smallholder farmers	droughts in the arid and semi-arid lands (ASALs) of EA.	agricultural growth in coffee-banana and intensive dairy systems in the highlands of EA.	countries into the UNFCCC). Key actors are ministries of Agriculture, Environment and Finance

West Africa

Flagship 1: CSA practices	Flagship 2: Climate information services and climate-informed safety nets	Flagship 3: Low emissions development	Flagship 4: Policies and institutions for climate-resilient food systems
Assess, through participatory approaches, village vulnerability i.e. climate risks and opportunities or assets for tackling them (village resources, organisational capacity, private and public support, indigenous knowledge...)	Strengthen scientific capacity of AGRHYMET and national met services to develop improved seasonal climate forecast, downscaled to subnational levelincluding early warning systems	Although mitigation is not seen as a priority for West Africa, one priority is to capacitate institutions with up-to-date approaches, toolsand methods in order to: • quantify GHG emissions of various WA landscapes • setup relevant institutional arrangementsthat will identify trade-offs and mitigation co-benefitsfor smallholder farmers	Develop regional and national scenarios for agriculture and food security in the context of climate change (crop yields, food prices, population growth, economic growth, social capital, education and access to information…) to inform adaptation and mitigation policy plans
Develop a common vision for communities and villages for adaptation to climate variability and change – using tools like participatory planning, FoTF approach and scenario development to define adaptation domains	Develop technical groups/ schemes that provide agrometeorological assistance (agromet advisories) and develop communication mechanisms to reach end-users (e.g. through rural radio, ICT…) including women and marginalized groups		Develop priority setting tools for national level agricultural planning and investment (e.g. SROI, Systemic Integrated Adaptation...)

Develop CSA models based on the innovative packaging of best adaptation and/or mitigation technologies and practices (SWC technologies, drought tolerant crop varieties, intercropping systems (e.g. Cereal-Jatropha), crop rotation systems, integrated crop-livestock, , NATR, irrigation, ISFM (microdosing), IPM systems, AGF systems, warrantage system, Market Information System in Agriculture, etc.); this also includes developing sound approaches for the scaling-up of CSA models (e.g. promoting the use of developed CSA models by ROPPA network in WA).	Identify strategies for food systems management to respond to climate shocks and consecutive disasters, and developing approaches for precautionary management of long-term climate risks		Participate/facilitate national exchange platforms using climate-smart solutions and issues from PAR to feed science-policy dialogues. Capacitate national platforms to identify adaptation priority needs and gaps in order to do science-informed planning for the national food system. Solutions to come through research (from farmer participatory research to national to international).
Apply M&E tools/approach to iteratively monitor outcomes (assessing behavioural change and the adaptive capacity) of communities and organizations involved, from the household to the village community to the district level technical support unit.	Develop reliable weather-index crop and livestock insurance in support to climate risk management through insurance schemes that are appropriate for smallholder farmers		

South Asia

Flagship 1: CSA practices	Flagship 2: Climate information services and climate-informed safety nets	Flagship 3: Low emissions development	Flagship 4: Policies and institutions for climate-resilient food systems
Assess, through participatory approaches,risk management interventions in an integrated manner (climate smart villages) including community management of natural resources, crops, livestock, fish and agroforestry.	Improve short-term and seasonal weather forecasts	Assess trade-offs and synergies among food production, farm income, adaptation and mitigation at different scales, from farm to national level	Develop tools and case studies for food security planning especially in periods of climatic stresses including NAPs, NAPAs and NAMAs
Develop tools and case studies for defining the adaptation domains of various technological interventions for climate risk management	Develop ICT based schemes and pilots for communicating targeted climate information and value-added agro-advisories to large numbers of farmers, especially women farmers, and other stakeholders.	Assess biophysical and economic mitigation potential of agricultural practices and challenges and opportunities for their implementation at large scale in order to contribute to low carbon development	Develop tools and case studies to inform decision making on prioritized investments in climate smart agricultural technologies and practices
Develop innovative models/guidelines for scaling up and out climate smart villages/other practices for enhanced resilience at national/sub-national/local level. Pilots that could be scaled up and out need to reach a large number of farmers	Improve or develop new insurance products for managing climatic risks. Community/private sector based partnership models for their dissemination and implementation	Assess interventions for the sustainable intensification of rice and livestock for their biophysical and economic mitigation potentials	Develop policies and institutions for scaling out the models of climate smart development (the latter arising from Flagship 1)
Develop improved/innovative practices/incentives/policies for increasing resilience and adaptive capacity at local and landscape scale.	Develop strategies for management of food systems in relation to climatic variability		Update assessment of the regionally and temporally differentiated impacts of climate change scenarios on natural resources and food production

South East Asia (Note: This is still a work in progress)

Flagship 1: CSA practices	Flagship 2: Climate information services and climate-informed safety nets	Flagship 3: Low emissions development	Flagship 4: Policies and institutions for climate-resilient food systems
Modalities that will link farm CSV to bigger landscape and administrative units through various participator approaches and a *series of* transition pathways to more sustainable land use.	Understanding farmer demand for climate services in different agroecological zones (e.g. coastal, lowland, upland) for crops, livestock, and fisheries; and the building capacity to effectively deliver them.	Approaches/strategies for up-scaling/out-scaling mitigation measures (e.g. AWD) used by small- holders farmers in local agricultural productions system in SEA.	Policy and institution action mapping methods and high-impact intervention points including methods of private sector participation
Effective strategies and policy measures at village to sub-national level that support greater resilience and sustainability to climate change among women and men farmers and ethnic minorities through better use of local knowledge and available natural and biological resources (e.g. crop diversification, watershed management).	Mobile phone based and other innovative schemes for communicating productivity enhancing agricultural knowledge and practices enriched with climate smart agriculture information. This includes linking weather based information to local knowledge and farmers' friendly terms. Special focus is needed on the highly vulnerable areas, marginalized farming sectors, women, youth, and ethnic minorities.	Improve landscape governance and effectiveness of sustainability initiatives for agricultural industries that promote deforestation and high greenhouse gas emissions (e.g. oil palm).	Policy information sharing platform on CC for SEA countries Methods for country-wide scaling-up of CSV experiences and analysis of CS roadmaps. Tools and a series of case studies for food security planning (including aquaculture) and crop yield forecasting
Innovative incentive mechanisms to support climate smart villages and rural development. Studies can look at promising options and identify factors that influence success.	Enhance food security decision-making by tailoring early warning systems to response mechanisms, including food security safety nets and policy interventions	Providing incentive systems that promotes practices mitigating greenhouse gasses and climate changes adaptations in rural communities and household in their use of agricultural products and by products (especially women).	Assessment of regionally differentiated impacts of climate change scenarios on food production
	Assessment of potential for weather-	Establishing regional support	

	related insurance in target countries, including index development and institutional partnerships	systems (e.g. clearing house) for more effective NAMA implementation among SEA countries providing technical advices, options and services.	

Cross FP: Developing multi-scalar strategies to enhance the resilience of water supply and farming systems under increasing climate and development pressures in the major river basins of SEA "
Approach:
- Multi-scale analysis from CSV scale through to the basin scale;
- Comparative analysis of basins with levels of development (e.g. Red or Chao Phraya R) with those with low levels of development (Mekong River);
- Builds upon the basin scale water accounting framework (CRP5) to assess climate smart storage and land use planning options.

Topics would include:
Resource and impact assessments at village scale from uplands through to deltas
Analysis of future climate forecasts, stakeholder-driven development scenarios and prospective adaption and mitigation measures
Implementation and evaluation of most prospective adaption/mitigation scenarios in CSVs
Recommendations for upscaling building on village-level experience

Latin America (the regional program strategy has still be discussed by the management team and ISP)

Flagship 1: CSA practices	Flagship 2: Climate information services and climate-informed safety nets	Flagship 3: Low emissions development	Flagship 4: Policies and institutions for climate-resilient food systems
Provide tools for small farmers in order to increase their resilience to floods and droughts, in particular, CCAFS will promote intensification and diversification practices of cropping systems in the face of climate variability. Activities to reduce the emissions of GHG through diversification will be strategic for the region.	Contribute to the implementation of participatory early warning systems and insurance mechanisms.	Tailor decision-support tools related to low emissions development to NARES and policy makers to help inform agricultural development policy, with a focus on commodity agriculture and avoided conversion of forest lands.	Support and contribute to the formulation of National Adaptation Plans and to the inclusion of climate issues on agricultural policies.
Focus on learning activities oriented to young people and children to transfer knowledge to make climate smart agriculture decisions.	Provide access to climate information to rural communities, especially women, allowing them to participate in the decision making process related to food security, nutrition and rural entrepreneurship.	Implement the SAMPLES tool in Latin America, making special emphasis on trade-offs of sustainable intensification, avoiding deforestation while supporting local livelihoods and food security.	
Assess a hub system 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.	Implement communities of practice to build seasonal forecasting systems involving various meteorological services institutions of the region.	Support CRP6 in REDD+ initiative on carbon in setting financial mechanisms to help kick-start agricultural diversification efforts	

	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.	Provide tools to make investment choices that consider food security, adaptation and mitigation targets, both at national and local level (including models that combine macro level economic models with detailed models of biophysical processes in order to provide policy makers a portfolio of development strategies that weigh emissions reductions against possible trade-offs in terms of agricultural output or GDP).	Elaborate socioeconomic scenarios for Central American (Honduras, El Salvador, Nicaragua, Guatemala, Costa Rica, Panama, and Belize) and Andean countries (Bolivia, Colombia, Ecuador and Peru) through participatory mechanisms and using the IMPACT and GLOBIOM models, as well as support the use of the scenarios by regional and national stakeholders.
		Support the formulation of NAMAS on commodity agriculture and avoided conversion of forest lands.	CCAFS will work closely with CAC (Consejo Agropecuario Centroamericano) as a strategy to approach to decision makers in the agricultural sectors.
Work with existing rural agro-advisory services to strengthen their capacity to transfer knowledge in order to enable the implementation of CSA practices by communities of farmers considering gender equity and differentiation.	Work with national disaster agencies and NGOs in order to provide them with climate information to prevent major impacts in crops, as well as to respond with disaster early recovery practices/varieties to diminish impacts in income and food security when facing floods and droughts.		
Identify, rescue, test, validate and adopt practices and technologies that contribute to enhance adaptive capacity on agricultural systems to climate variability and change (including case studies and systematization of experiences).			Search for viable partners to influence policy formulation and decision making through research/evaluation/test of alternative paths considering context specific actors and processes.

Support the development of technologies and methodologies for the conservation of biodiversity in-situ and ex situ, as well as plant breeding to diversify crops, species and varieties, according to the challenges of climate change.			Promote and facilitate South - South cooperation of initiatives both in adaptation and mitigation exchanging knowledge and experience.