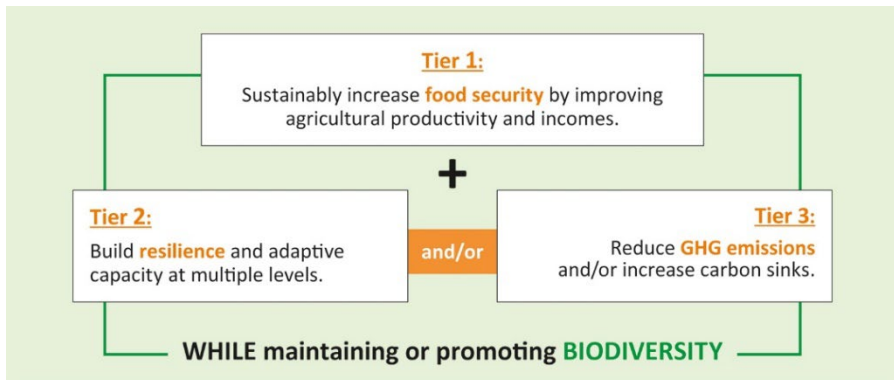




Leveraging linkages to Climate Smart Agriculture (CSA) in agriculture insurance projects

Insurance cover can directly reduce expected financial losses of farmers due to climate related disasters by partially compensating these losses with insurance payouts. However, insurance is not a standalone solution. It must be accompanied by other adaptation measures that will increase resilience of farmers. These measures lead to behavioral changes in farmers, which in turn either decrease or increase their exposure to climate risks. In designing these insurance solutions, it is therefore critical to consider possible economic and ecological tradeoffs that farmers may face, in the absence of knowledge or incentives to undertake improved farming practices.

Progress in sustainable agriculture and preservation of biodiversity are amongst the priorities of the [German G7](#) presidency. In support of these policies and moving from ambition to implementation, we invite applicants to submit agricultural insurance solutions which **identify and leverage linkages to climate smart agriculture (CSA)** by focusing directly or indirectly (or have a component) on end-beneficiaries (farmers). These solutions will ideally minimize the likelihood of agricultural practices (such as monoculture and excess usage of chemical fertilizers and water) themselves contributing to climate change and loss of biodiversity. All ISF projects targeting agricultural insurance are required to consider CSA measures to complement the insurance solution, **fulfilling at least two of the three CSA criteria** (as defined by the [Food & Agriculture Organization](#) (FAO)), **while ensuring positive biodiversity outcomes**:



In addition to local partners working on the topic of CSA on the ground (to be identified by the applicant), this may be done in alliance or consultation with specialized organizations such as [CGIAR](#), [FAO](#), [IFAD](#), [CIMMYT](#), [IFPRI](#), [ILRI](#), or even other development partners.

This brochure presents a selection of CSA measures that could be implemented or supported, including, but not limited to:

Soil Management

CSA Practices	Tier 1	Tier 2	Tier 3	BIODIVERSITY++
Conservation agriculture (minimum/no tillage)	☑	☑ ☑	☑	
Cover cropping (permanent soil organic cover)	☑	☑ ☑	☑	
Nutrient management (integrated soil fertility management)	☑	☑ ☑	☑	
Contour stone bunds	☑	☑ ☑	☑	

+ Soil health may be improved or maintained by ensuring comprehensive soil cover of vegetation, keep soil carbon levels high, minimizing loss of soil nutrients through leaching, minimizing runoff and erosion rates, reducing accumulation of contaminants in soil, and minimizing use of inorganic fertilizers.

Crop Production

CSA Practices	Tier 1	Tier 2	Tier 3	BIODIVERSITY++
Diversification and intercropping via crop variety mixtures or crop rotations	☑ ☑	☑	☑	
High yielding/ improved crop varieties	☑	☑		
Use of traditional drought/ pest resistant crop varieties	☑ ☑	☑ ☑		
Crop and nutrient management	☑	☑	☑ ☑	

+ The use of traditional or improved crop varieties (and short-duration varieties) can minimize chances of crop failure due to tolerance against heat, drought, pest, salinity. Crop and nutrient management in quality and quantity and cereal-legume intercropping can also reduce GHG.

Integrated Pest Management

CSA Practices	Tier 1	Tier 2	Tier 3	BIODIVERSITY++
Physical control (traps, weeding, pruning)	☑	☑	☑	
Biological control (use of natural predators, parasites)	☑	☑ ☑	☑ ☑	
Chemical control (use of insecticides, fungicides, herbicides)	☑	☑ ☑		

+ IPM is a systematic strategy for managing pests which considers prevention, avoidance, monitoring, and suppression. Chemical pesticides should be a last resort, and even then, preference should be given to methods which minimize environmental risk.

Water Management

CSA Practices	Tier 1	Tier 2	Tier 3	BIODIVERSITY++
Improved capture/retention of rainwater	☑	☑	☑	
Improved scheduling and application of irrigation water	☑ ☑	☑ ☑		
Improved crop irrigation	☑	☑ ☑	☑	

+ Water management is strongly tied to other CSA entry points, e.g. soil management, crop production, (agro)forestry, etc. Best practices will depend on whether the farm system is rainfed or irrigated.

Energy Management

CSA Practices	Tier 1	Tier 2	Tier 3	BIODIVERSITY++
Renewable energies (for crop harvesting/ processing)	☑	☑	☑ ☑	
Biomass/biofuel production	☑	☑		
Improved water management using renewable energies	☑	☑	☑ ☑	

+ Adoption of alternative/more sustainable biomass (e.g., solid fuels such as wood and briquettes, or liquid biofuels), can result in increased availability of time and income, and reduced emissions.

Livestock Management

CSA Practices	Tier 1	Tier 2	Tier 3	BIODIVERSITY++
Feed management (improved feed quality, feed-water productivity, selection)	☑ ☑	☑	☑	
Improved grazing (rotational, sowing improved pasture)	☑ ☑	☑	☑ ☑	
Manure management	☑	☑	☑ ☑	

+ Depending on whether it is a grazing or non-grazing system, supporting measures may be needed. In the latter system, interventions to increase livestock heat tolerance are essential, while in the former, insurance and early warning systems are key.

Forestry and Agroforestry

CSA Practices	Tier 1	Tier 2	Tier 3	BIODIVERSITY++
Agroforestry (fruit trees)	☑	☑	☑ ☑	
Agroforestry (integrate perennial woody spp. for fiber, shade, windbreak, fuel)	☑	☑	☑ ☑	
Forest/tree plantation (on berms), reforestation, landscape restoration	☑	☑	☑ ☑	

+ Take care to plant the right species in the right places. Forest planting will only enhance biodiversity if it constitutes mainly local and not exotic species, and if savannah/grassland areas are avoided.

TABLE

LEGEND:

Colours – BIODIVERSITY++:

☐ = negative to neutral impact ☐ = positive impact ☐ = strong positive impact

Check marks: ☑ = criteria is fulfilled ☑ ☑ = criteria strongly fulfilled

Value Addition to farmers

In addition, applicants are encouraged to consider additional measures that could be offered to farmers in a 'bundling' approach, which brings value addition in terms of knowledge or capacity to undertake CSA. This could include:

Tools

- Climate/ weather apps
- Price apps
- Smartphones
- Improved agricultural technologies



Capacities

- Extension services
- Courses/ trainings
- Financial literacy
- Strengthen farmer organizations



Financing CSA components in agriculture insurance projects

SCENARIO 1	SCENARIO 2	SCENARIO 3
<ul style="list-style-type: none">Project offers tools/ services* through consortium partnersCo-funding secured through ISF <p><i>*Forecasts, databases, small scale CSA measures, etc.</i></p>	<ul style="list-style-type: none">Project partners up with organizations interested in or practicing CSA on the groundFinancing secured through partners	<ul style="list-style-type: none">Projects operates in areas where target group is already practicing CSAFinancing secured through external sources

ISF's CSA criteria may be satisfied through any of the project set up examples listed above. This figure is only indicative; project partners may identify or develop other financing channels based on interest and opportunity.

Safeguard against unintended consequences

CSA, when not planned and implemented correctly, can inadvertently result in on- or off-farm degradation. A basic standard should be to ensure a **do-no-harm approach** and build safeguards into the overall project/product design, in order to anticipate and manage these risks.

- Do not focus solely on the CSA measure – also consider its externalities and 'downstream effects' by taking a landscape/ecosystems approach.
- Promote diversified and integrated farming systems featuring a combination of measures to ensure biodiversity benefits.
- Develop a clear monitoring plan based on key indicators (particularly on biodiversity) and undertake stringent monitoring, working together with CSA or agriculture specialized agencies (local or international).
- Develop locally specific and targeted solutions (not all CSA measures are suitable in all agro-ecological conditions!)

Key resources

- CGIAR** Climate Smart Agriculture [Guide](#)
- FAO** Climate Smart Agriculture [Series](#)
- Carbon accounting** tools ([EX-ACT](#), [CCAFS-MOT](#), [Cool Farm Tool](#))
- CGIAR** [decision support tool](#) to guide CSA investments

Please note

General ISF funding criteria remain valid also for projects developed along CSA guidelines (see: [Items eligible for grant-based co-funding under Pillar III](#)). Therefore, only costs directly or indirectly linked to the development of the specific climate risk insurance product may be co-funded by ISF.

