

# AGRICULTURE CRITERIA

## Climate Bonds Standard



### Why have Agriculture Criteria?

#### Agriculture and Climate Change:

- Agriculture can play a crucial role in achieving global decarbonisation targets.
- In 2014, the IPCC estimated that this sector accounts for approximately 11% of anthropogenic emissions.
- The implementation of sustainable agricultural practices is necessary for the industry to successfully reduce emissions, adapt to changes in weather patterns, and withstand the pressures placed on food security by population growth.
- Agriculture differs from most other sectors when considering climate change mitigation as it can act as both a source and a sink for greenhouse gas emissions. For this reason, agriculture has the potential to be a net positive sector from an emissions perspective.

### Investment need:

- Estimates suggest that between USD 7 billion and 7.6 billion are required per year for adaptation measures in the agriculture, food and forestry sectors.
- Despite the need for more finance flows directed towards addressing climate impacts in these sectors, it accounts for USD37.3bn or just over 3% of the climate-aligned bond universe.

### Eligible Use of Proceeds

Eligible use of proceeds relating to agriculture production systems might include capital and operating expenditure relating to:

- 1. Inputs**  
(e.g. land, seeds, fertilizer, energy, information),
- 2. Capital goods**  
(e.g. land, equipment, housing),
- 3. Crop-based transformation processes**  
(e.g. crop cultivation and planted trees)

### 4. Agricultural outputs

(e.g. grains, vegetables, fibre, dairy, meat)

### 5. Waste management

(composting, manure, crop residue processing, recycling)

### 6. Primary processing and storage

before point of sale.

Eligible use of proceeds relating to supporting activities generated outside of the production system that enable mitigation or climate adaptation and resilience on production systems can include a variety of capital and operating expenditure associated with the provision of the qualifying product or service.

## Scope

### In Scope

#### Perennial and non-perennial crop production

#### Livestock production

#### Mixed farming (crops and livestock)

#### On-Production Unit Activities

May include inputs, capital goods, crop-based transformation processes, agricultural outputs, waste management, primary processing or storage before point of sale, associated conservation areas.

#### Off-Production Unit Activities

Eligible activities (and related products and services) to be used on third-party production units with the goal of (1) reducing GHG emissions/increasing sequestration or (2) enhancing adaptation and resilience.

### Out of Scope

#### Controlled environment agriculture

#### Aquaculture and the farming of fish

#### Supply chain

- Production and transport of purchased farm inputs
- Secondary processing or storage
- Distribution, packaging, handling and other logistics
- Wholesale and retail markets



**Framework**

The Criteria relate to two types of agricultural production:

1. Perennial and non-perennial crop production (including agroforestry systems where crops make up more than 50% of the area under agroforestry)
2. Livestock production

For each of these types of agricultural production, the Criteria cover activities whose use of proceeds fall into three distinct groupings:

- A. Use of proceeds related to the whole agricultural production unit
- B. Use of proceeds related to a component of, or specific intervention in, the agricultural production unit

C. Use of proceeds related to supporting activities outside of the agricultural production unit

Uses of proceeds for interventions (grouping B) and supporting activities (grouping C) are further divided into those that are aimed at reducing GHG emissions/increasing sequestration and those that are aimed at enhancing adaptation and resilience.

Eligibility criteria for each combination of agricultural production type and use of proceeds group have two components:

- I. Mitigation component (where applicable) (with additional animal welfare and feed sourcing components for livestock)
- II. Adaptation and resilience component

Bond issuers should determine which of these categories their type of agricultural production and use of proceeds falls into and refer to the appropriate Criteria.

Special provisions are set out where the use of proceeds is allocated to over 50 separate producer units (with single producers not being allowed to represent more than 20% of the portfolio and with the maximum concentration of the top five producers not exceeding 35%). Such as where a large number of smallholder farmers receive finance via a co-operative, supply chain partner or bank. We call this a 'highly dispersed bond'.

**Criteria for assessing a whole agricultural production unit**

If you are issuing a bond that is financing the **whole agricultural production unit**, you must meet both the mitigation criteria and the adaptation and resilience criteria. If production involves livestock, you must also meet the animal welfare/feed sourcing criteria.

**Mitigation Criteria**

**M1:** No conversion of high carbon stock lands.

Yes

**M2:** No clearing of woody vegetation over 3 metres in height after 2020 on the production unit in question.

Yes

**M3:** Low-emission crop and animal management. Demonstrate by either achieving a climate-aligned % reduction in GHG emissions (tCO<sub>2</sub>e) over the investment period compared to the start of that period [Option M3.1] OR provide evidence of following low emissions agricultural best practices [Option M3.2].

Yes

**Animal Welfare/Feed Sourcing Criteria**

If agricultural production includes livestock in intensive production systems, standards of animal welfare must be met. Feedlot/stall-fed and in-house livestock must use feed that is sustainably sourced and from areas not recently converted from natural habitats.

**Adaptation and Resilience Criteria**

Clear boundaries and critical interdependencies between the production unit and the system it operates within are identified.

Yes

An assessment has been undertaken to identify the key physical climate hazards to which the production unit will be exposed and vulnerable over its operating life.

Yes

The measures that have been or will be taken to address those risks mitigate them to a level so that the production unit is able to manage changing climatic conditions over its operational life.

Yes

The measures that have been or will be taken do no harm to the resilience of the defined system they operate within, as indicated by the boundaries of and critical interdependencies with that system.

Yes

The issuance is required to demonstrate that there will be ongoing monitoring and evaluation of the relevance of the risks and resilience measures and related adjustments to those measures will be taken.

Yes

**Certifiable**

\*not mandatory for production units which meet the exemption criteria



### Criteria for assessing specific interventions within the agricultural production unit addressing GHG emissions or carbon sequestration

If you are issuing a bond that is financing a **specific intervention within an agricultural production unit that is aimed at addressing GHG emissions or carbon sequestration**, you must meet both the mitigation and adaptation and resilience criteria. If the intervention relates to production involving livestock, you must also meet the animal welfare/feed sourcing criteria.

#### Mitigation Criteria

**M1:** No conversion of high carbon stock lands

Yes

**M2:** The intervention must enable or support the relevant low GHG best practices.

Demonstrate by either achieving a climate-aligned % reduction in GHG emissions (tCO<sub>2</sub>e) over the investment period compared to the start of that period [Option M2.1] OR provide evidence of following low emissions agricultural best practices [Option M2.2]

Yes

#### Animal Welfare/Feed Sourcing Criteria

If the intervention involves agricultural production that includes livestock in intensive production systems, standards of animal welfare must be met. Feedlot/stall-fed and in-house livestock must use feed that is sustainably sourced and from areas not recently converted from natural habitats.

#### Adaptation and Resilience Criteria

Clear boundaries and critical interdependencies between the intervention and the agricultural production unit and wider system it operates within are identified.

Yes

An assessment has been undertaken to identify the key physical climate hazards to which the production unit will be exposed and vulnerable over its operating life.

Yes

The intervention does no harm to the resilience of the production unit or the wider system it operates within.

Yes

If the intervention relates to hard infrastructure, the infrastructure is suitable to climate change conditions over its operational life.

Yes

Certifiable

### Criteria for assessing specific interventions within the agricultural production unit addressing adaptation and resilience

If you are issuing a bond that is financing a **specific intervention within an Agricultural Production Unit that is aimed at addressing adaptation and resilience**, there are no mitigation criteria, but only certain activities are eligible. You must meet the adaptation and resilience criteria, and if the intervention relates to production involving livestock, you must also meet the animal welfare/feed sourcing criteria.

#### Mitigation Criteria

None.

Yes

#### Eligibility

- Use of microorganisms to substitute for or to reduce use of mineral N fertilizer or pesticides or to promote crop growth
- Precision agriculture (PA)
- Satellite farming or site-specific crop management (SSCM)
- Use of species and breeds adapted to changes in CO<sub>2</sub> and climate, e.g., temperature, water regimes, extreme events
- Ecological buffering of climate impacts such as water or microclimate management, ecological diversification, including shifting land use from monoculture to polyculture or other diversified production; riparian buffer strips; soil and water conservation; mangrove management; habitat restoration.
- Physical relocation of vulnerable assets or activities

#### Adaptation and Resilience Criteria

Clear boundaries and critical interdependencies between the intervention, the agricultural production unit and the wider system are identified.

Yes

An assessment has been undertaken to identify key physical climate hazards to which the production unit will be exposed over its life.

Yes

The intervention forms part of a package of measures to mitigate climate risks to support the production unit in being 'fit for purpose' in the face of climate change over its life.

Yes

The intervention does no harm to the resilience of the defined system it operates within.

Yes

If the intervention relates to hard infrastructure, it is suitable to climate change over its life.

Yes

Certifiable



### Criteria for assessing supporting activities aimed at enabling GHG emission reductions or carbon sequestration on third-party agricultural production units

If you are issuing a bond that is financing a **supporting activity** (and resulting products or services) that is **aimed at enabling GHG emission reductions or carbon sequestration on third-party agricultural production units**, there are no mitigation criteria, but only certain activities are eligible. You must meet the adaptation and resilience criteria, and if the activity/product/service relates to production involving livestock, you must also meet the animal welfare/feed sourcing criteria.

#### Mitigation Criteria

None.

Yes

#### Activities are limited to:

- Activities that enable the measurement, monitoring, reporting and verification of emissions reductions
- Research and development of ruminant feed that reduces methane emissions
- Research into alternative meat and dairy products that might substitute for meat and dairy consumption
- Provision of capacity building or education services relating to low carbon agricultural practices
- Training in one of the approved best practices

#### Adaptation and Resilience Criteria

The product(s) or service(s) should not substantially increase the impacts of material physical climate risk when applied on-farm.

Yes

The product(s) or service(s) do not/will not cause significant harm to the resilience of the defined system or the wider ecosystems in which they might be deployed.

Yes

Certifiable

### Criteria for assessing supporting activities aimed at enabling climate adaptation and resilience on third-party agricultural production units

If you are issuing a bond that is financing a **supporting activity** (and resulting products or services) that is **aimed at enabling climate adaptation and resilience on third-party agricultural production units**, there are no mitigation criteria, but only certain activities are eligible. You must meet the adaptation and resilience criteria, and if the activity/product/service relates to production involving livestock, you must also meet the animal welfare/feed sourcing criteria.

#### Mitigation Criteria

None.

Yes

#### Activities are limited to:

- Development and distribution of public-release seeds for crops that are more resistant to the impacts of climate change using conventional breeding or CRISPR technology. Eligible traits include drought tolerance, flood tolerance and pest resistance.
- Information technology and information services, e.g., climate information services, monitoring and evaluation (M&E) imagery systems, soil analysis tools and weather monitoring services
- Training in climate adapted and resilient agricultural techniques

#### Adaptation and Resilience Criteria

The product(s) or service(s) substantially reduce material physical climate risk when applied on-farm.

Yes

The product(s) or service(s) do not/will not cause significant harm to the ecosystem.

Yes

Certifiable

### Further information

Check out these documents for more information:

[Agriculture Criteria](#)

[Agriculture Background Paper](#)

[Agriculture FAQs](#)

[Climate Bonds Standard](#)



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