

REEL REGENERATIVE CODE OF CONDUCT



1 Integrated Management System



1.1 CONTRACTS AND AGREEMENTS

1.1.1 Written contracts, memberships and agreements shall be in place at all levels.

- 1.1.1.1 Written agreement between the producer group and CottonConnect shall be maintained.
- 1.1.1.2 Written agreement between the producer group and farmers shall be maintained.
- 1.1.1.3 There is an agreement between ginners, producer group and CottonConnect that defines among others the purchase requirements.

1.2 PRODUCER GROUP SET UP

1.2.1 A producer group structure shall be implemented, and the communication strategies with farmer members (capacity building, 1st and 2nd level facilitation) described in detail.

- 1.2.1.1 The producer group structure and communication shall be described in detail.
- 1.2.1.2 The producer group shall not exceed 50 farmers. Mode of operation, group leaders and communication places shall be mentioned.
- 1.2.1.3 A detailed documented farmer field book (FFB) shall be maintained.
- 1.2.1.4 Profile of control farmers and relevant data capturing, storage and retrieval system shall be in place for comparison of REEL REGENERATIVE cotton farmers.
- 1.2.1.5 A communication or agreement on implementation of decent work at the farm shall be in place.



1.3 DOCUMENTATION & INFORMATION MANAGEMENT

1.3.1 A system shall be in place on documentation & information management to record, collect, collate, store, extract and report the data required for the programme needs.

- 1.3.1.1 An updated REEL REGENERATIVE cotton programme plan shall be in place.
- 1.3.1.2 Evidences of implementation/progress of the programme shall be documented and maintained.
- 1.3.1.3 Results indicators are periodically reported and records shall be maintained.
- 1.3.1.4 Monthly performance reports (MPR) are submitted.
- 1.3.1.5 Quarterly progress reports are submitted.
- 1.3.1.6 Data storage or records and retrievability shall be demonstrated at primary level.
- 1.3.1.7 Producer group information shall be available to nearest Local partner or cotton unit or CDB zonal office.



1.4 QUALITY, TRACEABILITY & TERMS OF TRADE

1.4.1 Farmers adopt quality and traceability practices at pre-harvesting, harvesting, post harvesting handling and storage.

- 1.4.1.1 Farmers adopt proper crop harvest management techniques, timing and judgement.
- 1.4.1.2 Cotton is prevented from being contaminated with foreign material during and after picking.
- 1.4.1.3 Incidence of seed cotton with poor quality is physically monitored for no contamination
- 1.4.1.4 REEL REGENERATIVE cotton product flow shall be documented up to ginner level and maintained.

1.4.2. Quality and traceability system at ginner level shall be in place

- 1.4.2.1 Ginners shall maintain separate heap for REEL REGENERATIVE seed cotton to avoid contamination.
- 1.4.2.2 Ginners shall maintain separate storage spaces for lint cotton.
- 1.4.2.3 Competent traceability tools and techniques shall be accessible at the ginner level.
- 1.4.2.4 Ginner shall demonstrate the separation, physical traceability and document traceability of the REEL REGENERATIVE cotton against a particular bale ID.

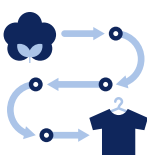


1.4.3 Ginning operation guide shall be developed.

- 1.4.3.1 Harvest guideline for producer group shall be developed and provided.

1.4.4 Clear terms of trade between trading partners (farmer, producer group and ginners)

- 1.4.4.1 There are purchase contracts/ purchase orders between producer groups and ginners that clearly indicate: agreed volumes, quality, price, payment terms and delivery condition.
- 1.4.4.2 No trading partner is paid or sales below reference price, in other words, the price agreed between parties (farmer and producer group; and producer group and ginners) shall follow at least the regional reference prices for the product being traded.



1.5 INTERNAL VERIFICATION

1.5.1 Three levels of verification system shall be in place for effective implementation of the programme.

- 1.5.1.1 1st level internal verification system shall be in place at producer group level to monitor the implementation of the programme at farmer level.
- 1.5.1.2 2nd level internal verification system shall be in place at CottonConnect level to monitor the implementation of the programme at producer group level and ginner level.
- 1.5.1.3 3rd level internal verification system shall be in place at international level to monitor the implementation of the programme at CottonConnect level.



1.6 TRAINING

1.6.1 TRAINING OF TRAINERS (TOT)

1.6.1.1 Producer group – A system shall be in place to recruit, train and monitor the performance of the trainers.

- 1.6.1.1.1 Training of trainers shall be achieved through CottonConnect in collaboration with national agriculture science centres.
- 1.6.1.1.2 The MoU with the training institutes and /or training procedure, when applicable, and the annual training plan and record of attendance shall be maintained.
- 1.6.1.1.3 Training of Trainers shall cover all modules including, Module 1 Refresher training on REEL REGENERATIVE Cotton programme, Module 2 Pre-Sowing of REEL REGENERATIVE Cotton, Module 3 Crop Management (Integrated Water Management (IWM), Integrated Pest Management (IPM), Integrated Nutrient Management (INM), Decent Work, Health, Safety, Security and Environment).

1.6.1.2 Ginners – Training of ginners shall be through CottonConnect.

- 1.6.1.2.1 Training of ginners shall be achieved through CottonConnect.
- 1.6.1.2.2 The MoU and/or training procedure, when applicable, and the annual training plan and record of attendance of ginning staff shall be maintained.
- 1.6.1.2.3 The training of ginners shall cover 4 modules: 1. Programmatic training 2. Quality and 3. Traceability management system and 4. HSSE (Health, Safety, Security and Environment)

1.6.2 TRAINING OF FARMERS (TOF)

1.6.2.1 A System shall be in place to train and monitor the training performance of the farmers.

- 1.6.2.1.1 Training of Farmers shall be achieved through producer groups.
- 1.6.2.1.2 An annual training plan and record of attendance of all farmers shall be maintained.
- 1.6.2.1.3 The training of farmers shall cover all relevant training modules including 1. Programmatic training, 2. Pre Sowing, 3. IWM, IPM and INM, 4. Contamination free picking, storage and Marketing, 5. Health, Safety, Security and Environment, 6. Decent work, 7. Documentation, 8. Drip and Micro irrigation system, 9. Importance of group-cooperative society and Farmer Producer Company (FPC), 10. Agroforestry systems, 11. Inter-relation between Regenerative farming practices, climate change mitigation & adaptation, and functional biodiversity enhancement, 12. Farming as a business (focus profitability), 13. Aspects of child labour and orientation on importance of child education, 14. Animal welfare, 15. Other need-based trainings.
- 1.6.2.1.4 Planning of training takes into consideration evaluations of previous years' trainings and insights provided by CottonConnect's monitoring and evaluation (M&E) team on the yield, quality and costs of production.
- 1.6.2.1.5 Proof of mark of each of the farmers shall be maintained.
- 1.6.2.1.6 Verification of training records have evidenced that farmers with more than 1 year in the programme have participated in all relevant training modules.
- 1.6.2.1.7 Farmers shall be aware of and committed to quality and traceability requirements.



1.7 1ST LEVEL FACILITATION (FARMER GROUP MEETINGS, INDIVIDUAL FARMER MEETINGS, INDIVIDUAL FARM VISITS, DEMONSTRATION)

1.7.1 First level facilitation is provided to the farmers in form of group meetings, demonstration plots, exposure visits and individual farm visits.

- 1.7.1.1 For each group of farmers one quarterly group meeting is conducted on all relevant topics addressed in the module training.
- 1.7.1.2 One demonstration plot for a specific training module/practice shall be established as per requirement of the local group.
- 1.7.1.3 Exposure is facilitated at least once during the lifetime of the demo.
- 1.7.1.4 Each farmer should be visited at least once in a month during the following crop stages: 1. Germination and emergence 2. Leaf area and canopy development 3. Flowering and boll development, 4. Maturation and 5. Harvesting.

1.7.2 First level facilitation is recorded and attendance is registered.

- 1.7.2.1 Farmer meetings are minuted.
- 1.7.2.2 Attendance lists are available.
- 1.7.2.3 Individual farm visits are recorded in the FFB.
- 1.7.2.4 Demonstrations and exposure visits are recorded and attendance is registered.

1.7.3 Verification of training records shows that 100% of farmers have participated in all first level methods of facilitation and proof of participation is available.

- 1.7.3.1 All farmers with more than 1 year in the programme have participated at least once in each of the first level facilitation exercises (group meetings, demo/exposure, individual field visits).



1.8 2ND LEVEL FACILITATION

1.8.1 Awareness creation among farmers on regenerative agriculture and its impact on climate adaptation and Agrobiodiversity enhancement has taken place. Mapping exercises have been conducted to identify each farmer's needs and priorities regarding the implementation of regenerative measures.

- 1.8.1.1 **Baseline assessment:**
For implementation measures that require the intervention of third parties, farm mapping exercises have been conducted to identify the needs and individual prioritisation of farmers.
- 1.8.1.2 **Ecological infrastructure:**
Ecological Infrastructure, flora and fauna, water sources and sensitive areas on farm have been mapped with participation of farmers.
- 1.8.1.3 **Training on regenerative agriculture:**
The implementation of regional knowledge hubs is fostered through involvement of experts in the field.
Use of digital training tools and IEC material to enhance knowledge transfer to farmers.
Farmers are trained on regenerative practices throughout the year (on and off cotton season).
Awareness is created on inter-relation between regenerative farming practices, climate adaptation and functional biodiversity.

1.8.1.4 **Training on farming as a business:**

Farmers are trained on basic business management practices to ensure profitability and long-term productivity:

- Maintenance of records related to costs and incomes of (cotton) operation.
- Maintenance of records related to costs and incomes of (cotton) operation.
- Maintenance of production records including year, varieties, inputs and yields.
- Implementation of strategies and measures to:
 - i. Enhance impact on profitability
 - ii. Enhance impact on profitability
 - iii. Achieve diversification
 - iv. Achieve scale of production that is economically viable



1.8.2 **Operational activities:**

Suitable consortium crops are identified in cooperation with farmers.

Established seed linkages facilitate access to consortium crops at market price.

1.8.2.1 Farmers are linked to certified or recognised laboratories offering soil analysis.

1.8.2.2 Farmers are incentivised to adopt water recharging practices.

1.8.3 **Farmers have been provided with sufficient and updated information on the types and biology of pests, diseases, weeds and natural enemies, on alternative products that can substitute internationally banned pesticides, and found in possession of means for adoption of biological and cultural control measures.**

1.8.3.1 Lists of relevant pests, diseases and weeds are available for the project area.

1.8.3.2 Basic information about pests, diseases and weeds is collected during pre-sowing and post-harvest stages.

1.8.3.3 Farmers have been demonstrated how to manufacture biological pesticides on their own.

1.8.3.4 Mapping of pesticides with retailers and inquiries with research bodies are successful in providing farmers with phytosanitary products that can substitute internationally banned pesticides with the same efficacy.

1.8.3.5 Farmers innovative/local control measures on pest and diseases shall be maintained and tested in other groups.

1.8.4 **The cotton farmer can demonstrate that he/she understands the concept of integrated nutrient management (INM) and how the soil plays into it.**

1.8.4.1 Farmers understand all aspects of INM disseminated by the REEL REGENERATIVE programme and know how to replicate INM enhancing measures in their own farms. INM should be documented and their enhancing measures properly communicated, implemented and documented.

1.8.4.2 Leaf colour chart and other simple soil/nutrient deficiency equipment's shall be available to farmer groups.

2 Plant and Field Management



2.1 PLANT

2.1.1 Producers understand the full concept of resilience and able to implement it against pests and able to judge their economic viability.

- 2.1.1.1 Variety of cotton follows recommendations from local authorities or experts.
- 2.1.1.2 Seed material has been treated with pesticide or fungicide.
- 2.1.1.3 No prohibited chemical has been used for seed treatment.
- 2.1.1.4 Farmers maintain plant population and gap filling.
- 2.1.1.5 Farmers maintain seed rate to achieve desired plant populations and cotton plant nursery to be used for gap filling.



2.2 FIELD

2.2.1 The producer adopts measures to improve the production system's resilience against pests.

- 2.2.1.1 Cotton cultivation is not done in protected designated areas.
- 2.2.1.2 Summer tillage (soil turning) at intervals of 2-3 years helps to disinfect and improve the phytosanitary conditions of the soil.
Tillage operations are gradually reduced.
Minimum tillage or low tillage practices are promoted.
With the help of farmer field books farmers can demonstrate that tillage has a downward trend.
- 2.2.1.3 Farmers are encouraged to adopt locally adapted and viable crop rotation on part of cotton land.
- 2.2.1.4 Farmers do regular weed control to keep fields clean.
- 2.2.1.5 Farmers adopts green mulching and or dust mulching based on needs for phytosanitary purposes and/or conserving humidity.
- 2.2.1.6 Farmers adopts plastic mulching based on needs for phytosanitary purposes and/or conserving humidity.
- 2.2.1.7 Existing natural habitats for natural enemies of pests are protected.
- 2.2.1.8 Natural habitats for natural enemies are developed if absent.
- 2.2.1.9 Green cover crops are promoted.
- 2.2.1.10 Introduction & conservation of pollinators are encouraged.

3 Soil and Integrated Nutrient Management



3.1 SOIL FERTILITY

3.1.1 Cotton farmers adopt measures to increase soil fertility.

- 3.1.1.1 Burning of crop residues is not practised.
Crop residues should be used for energy purpose in the household as per requirements. Remainings should be recycled into the soil.
- 3.1.1.2 Crop residues are incorporated or recycled by own cattle (manure or biogas slurry).
Soil organic matter and carbon is maintained through the combination of local recycling techniques. Manure should first be used for energy purpose, remaining are fully recycled on-farm into compost. Besides use for energy purposes, the remaining crop residues are fed to own cattle, incorporated into the field or used for composting.
Pruned tree branches, twigs, leaves and other live barrier materials are mulched and/or left as a soil amendment or converted to biochar after anaerobic burning.
- 3.1.1.3 If available, biogas slurry is brought out onto the field.
- 3.1.1.4 Cotton is intercropped with nitrogen-fixing or other protective plants.
- 3.1.1.5 At least 25% of the productive area is covered by a layer of organic matter (dead and decaying biomass – mulch, grass leaves, branches) and/or nitrogen-fixing cover crops.
- 3.1.1.6 Improvement in soil health and soil biodiversity is measured through annual sampling and lab analysis following regenerative code requirements.
- 3.1.1.7 The formula of applied nutrients and non-synthetic soil amendments is customised in response to results of soil analysis.

3.2 SOIL EROSION

3.2.1 Appropriate measures are implemented to avoid erosion of the soil.

- 3.2.1.1 Land preparation follows contour lines in hilly or sloppy lands.
- 3.2.1.2 Soil-specific tillage methods suggested in training modules 1 (Pre-Sowing) and 2 (IWM, IPM and INM) are adopted to prevent soil compaction.
- 3.2.1.3 Irrigation methods do not disturb the structure of the soil.
- 3.2.1.4 Where applicable, living barriers support the stability of the soil.



3.3 INTEGRATED FERTILISER MANAGEMENT

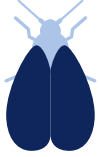
3.3.1 Fertiliser application is based on evaluation of needs by taking soil-borne nutrients, soil conditions and input from non-mineral sources into account.

- 3.3.1.1 Soil and/or leaf analysis, when feasible, are carried out on a regular basis (every three to four years).
- 3.3.1.2 Farmers adopt the practice of applying farm yard manure and/or compost. Farmer and community trainings on composting are conducted. Community centers for production of bio inputs have been established (e.g. CCP, Dashparni, Jeevamrut, Neem seed kernel extract, Soya tonic, Five-Leave-Extract).
- 3.3.1.3 Soil conditions, in particular organic matter, when available are considered before mineral fertiliser.
- 3.3.1.4 Organic fertiliser available on the farm is not exported from the farm.
- 3.3.1.5 Farmers apply micro nutrients based, when available, on the soil/leaf testing or plant symptoms (colour system).
- 3.3.1.6 The phase out of nitrogen based and other inorganic fertilisers through the use of more organic inputs is constantly promoted during individual and communal training sessions.

3.3.2 Safe use and storage of fertiliser – use methods and storage practices ensure that fertilisation does not constitute a source of water pollution and a health risk for those who apply them.

- 3.3.2.1 Fertiliser applications are dosed by following locally recommended intervals or as per the requirements of the crop.
- 3.3.2.2 Organic fertilisers are not stored in proximity to surface water bodies.
- 3.3.2.3 When applying fertiliser, reasonable buffer is maintained to surface water bodies specific to the type of fertiliser.

4 Pest Management



4.1 INTEGRATED PEST MANAGEMENT

4.1.1 Crop hygiene is safeguarded through preventive cultural means.

- 4.1.1.1 Diseased plants are removed to maintain healthy crops.
- 4.1.1.2 Management of natural enemies and other integrated pest management techniques are incentivised and known by the farmer.
- 4.1.1.3 Cage crops, molasses trap, yellow trap, pheromone trap, and light traps, when feasible are adopted to control pests.
- 4.1.1.4 Trap crops are being promoted and increasingly adopted by farmers.
- 4.1.1.5 Water used for irrigation is clean.

4.1.2 Monitoring to determine the economic threshold of pests and time of application is practiced.

- 4.1.2.1 The cotton producer scouts and monitors pest attack.
- 4.1.2.2 When feasible, farmers use pheromone traps for identification of pests with the aim to ensure targeted pesticide use.
- 4.1.2.3 Economic injury levels and action thresholds are respected.

4.1.3 Farmers have been encouraged to recur to herbicides as a last resort.

- 4.1.3.1 Weed control is done manually and/or mechanically.
- 4.1.3.2 Farmers are encouraged not to use herbicides.
- 4.1.3.3 Herbicide use is reduced over time. Herbicides are not used to control ground vegetation or cover crops and are only used in spot applications for aggressive weeds.
- 4.1.3.4 Herbicide use is fully phased out after 5 years. Exceptional use is only punctually allowed upon formal request and prove of extraordinary circumstances.

4.1.4 Cultural, physical and biological measures are applied before resorting to chemical pest control (only applicable if scouting has shown pest infestation).

- 4.1.4.1 Farmers shall plant cotton along with boarder crop and trap crop.
- 4.1.4.2 At least one cultural measure to control pests has been adopted (eg. bird perches; traps (pheromone) etc.).
- 4.1.4.3 At least one biological methods (eg. release and augmentation of natural enemies; use of microbial products; use of natural products/biological pesticides; organic pest repellents (e.g. neem extract) has been considered.



4.2 PESTICIDE USE

4.2.1 REEL REGENERATIVE farmers strive to reduce the amounts of pesticides over time, records of pesticide use are available.

- 4.2.1.1 Farmers keep records of types and amounts of pesticides used, pests and pesticide details in the FFB.
- 4.2.1.2 With help of use records and inventories farmers can demonstrate that pesticide application use has a downward trend is carried as needed or remains at least stagnant.
- 4.2.1.3 The phasing out of synthetic inputs and the respective compensation with organic inputs is constantly promoted during trainings, and fully achieved after 5 years.
- 4.2.1.4 No agrochemicals are applied within 10m of any permanent water body.

4.2.2 WHO Class Ia and Ib substances and those banned by international conventions (POP/ PIC/Montreal/Stockholm) are not used.

- 4.2.2.1 Cotton farmers do not use pesticides containing substances listed in WHO Classes 1a and 1b.
- 4.2.2.2 Cotton farmers do not use pesticides containing substances banned by international conventions.
- 4.2.2.3 List of locally available safe pesticide shall be provided to the farmer groups.

4.2.3 Substances that figure on the REEL/REGENERATIVE prohibited pesticide List must be phased out over a period of 5 years (20% p.a.).

- 4.2.3.1 Cotton farmers do not use substances contained on the REEL/ REGENERATIVE prohibited pesticide List.

4.2.4 Pesticides are officially registered in the country, and crop and pest specificity is warranted.

- 4.2.4.1 Cotton farmers only use pesticides that are officially registered in the country.
- 4.2.4.2 Crop specificity of used pesticides is guaranteed.
- 4.2.4.3 Pesticide used is specifically recommended for combating the target pest.

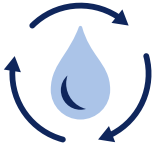


4.3 SAFE HANDLING

4.3.1 Pesticides are safely stored, handled and disposed.

- 4.3.1.1 Pesticides are safely stored and out of children's reach.
- 4.3.1.2 For spraying, farmers use appropriate personal protective equipment.
- 4.3.1.3 Pesticide containers shall not be stored, handled, emptied, disposed of, or left unattended in a manner that may present a hazard to persons, animals, food, feed, crops or property.

5 Water Management



5.1 SUSTAINABLE WATER SOURCES

5.1.1 Sources of water for irrigation of cotton fields stems are identified and preserved.

- 5.1.1.1 The owner of the land has identified all water sources for irrigation of cotton fields.
- 5.1.1.2 The cotton farmer is clear about the volumes that can be extracted used to avoid depletion of the source(s).
- 5.1.1.3 Water availability from the chosen source(s) is stable since the start of cotton production.
- 5.1.1.4 The cotton farmer can demonstrate that he/she is legally authorised to extract water.
- 5.1.1.5 Best waste-water management practices are applied.
- 5.1.1.6 There is no evidence that water extraction and waste water leads to the depletion of natural water sources on the farm or in the neighbourhood of the farm within a radius of 500m.

5.1.2 Producer groups adopt initiatives to preserve source of water

- 5.1.2.1 Producer group initiatives dialogue with other stakeholders to conserve sources of water that are in critical stage or overused.
- 5.1.2.2 Innovative techniques for on-farm water harvesting are actively promoted.

5.2 QUALITY OF IRRIGATION WATER

5.2.1 The water used for irrigation of cotton fields is safe for crop, soil and human health

- 5.2.1.1 Untreated sewage water is not used in the cotton fields.
- 5.2.1.2 The farm owner must submit analytical proof if there is reason for doubt, or at least once in three years.



5.3 SUSTAINABLE USE OF WATER

5.3.1 Measures optimise water use for irrigation of cotton fields have been adopted.

- 5.3.1.1 The cotton farmer has a good understanding of the watering needs of cotton.
- 5.3.1.2 The rainfall pattern has been taken into account when watering cotton fields.
- 5.3.1.3 The timing of irrigation follows physiological requirements of the cotton plant.
- 5.3.1.4 Farmers recall to the volume of water used for irrigation.
- 5.3.1.5 The most effective irrigation method that is available in the region and affordable to the cotton farmer is being used.
- 5.3.1.6 The irrigation equipment is properly maintained.
- 5.3.1.7 Follow appropriate method of water discharging during heavy rainfall or flood.

6 Ecosystem protection and conservation of high carbon stock areas



6.1 FOREST CONSERVATION AND PROTECTION OF SENSITIVE AREAS

6.1.1 New lands for cotton cultivation will not be developed through deforestation, on protected land or in areas of high biodiversity.

- 6.1.1.1 Primary forest and land protected by Law are not destroyed for the purpose of cotton cultivation.
- 6.1.1.2 Secondary forest > 10 years old will not be deforested with the purpose to gain new land for cotton cultivation.
- 6.1.1.3 For secondary forest < 10 years old compensation has been sought in equivalent amount (restoration measures on unproductive land).
- 6.1.1.4 Sensitive areas of high biodiversity, natural vegetation, fauna, soil and water sources in the direct neighbourhood of cotton farms are identified and conserved.
- 6.1.1.5 Farmers are provided with a list of wildlife species native to their region and can identify which of those species are classified vulnerable, endangered or critically endangered according to the IUCN red list (<http://www.redlist.org>).

6.2 BUFFER ZONES

6.2.1 Cotton production respects ecological sensitive areas by keeping buffers that are sufficiently sized. There are visible signs that these areas have been actively restored.

- 6.2.1.1 When applicable, the farmer maintains buffer zones between his explorations and ecologically sensitive areas. Such buffer zones are in line with local legislation.
- 6.2.1.2 Ecological buffers are left untouched.
- 6.2.1.3 Naked buffers are actively restored through reforestation or other protective measures that allow natural regrowth without human or animal interference.

6.2.2 Buffers to public areas like roads and human settlements are maintained.

- 6.2.2.1 The cotton farmer keeps safe distances to public roads and houses when applying chemicals.
- 6.2.2.2 In case safe distances cannot be maintained, vegetative buffers account for public safety.



6.3 ECOLOGICAL COMPENSATION

6.3.1 The cotton farmers actively contribute to restoring unproductive land.

- 6.3.1.1 Unproductive land is not converted into cotton fields.
- 6.3.1.2 The cotton farmer can demonstrate that measures have been implemented to restore the natural vegetation.
- 6.3.1.3 Cotton farmer groups contribute towards plantation of tree cotton and silk cotton in their locality.



6.4 AGROBIODIVERSITY AND CLIMATE ADAPTATION

6.4.1 Cotton farmers diversify their production system to increase environmental and economic sustainability.

- 6.4.1.2 Fallowing of land is practised, where possible, on a regular basis.
- 6.4.1.2 Crop rotation systems are designed based on the socio-economic situation of the cotton farmer (eg. availability of land, irrigation).
- 6.4.1.3 Economic resilience is increased through intercropping.
- 6.4.1.4 A concept of multifunctional agroforestry is trained and actively promoted.
- 6.4.1.5 Trees, shrubs and woody perennials are integrated into the farming system.
- 6.4.1.6 Trees, shrubs, woody perennials are planted with the aim to produce food, fodder and firewood, increase soil fertility and health, protect the land from wind and erosion, provide nesting spaces and sequester carbon above the ground.
- 6.4.1.7 Multiple plant species that contribute to biodiversity have been planted where space allows within the farm (e.g. borders, trails, fallow land). Only native species are planted.
- 6.4.1.8 Number of plant families, genera, species and varieties grow over time (temporal succession).
- 6.4.1.9 A nursery has been established or identified as a source of native tree and plant species for ecological restoration activities on the farm.
- 6.4.1.10 Climate change mitigation and adaptation measures are identified and implemented.

7 Waste Management



7.1 RECYCLABLE WASTE

7.1.1 Farmers are encouraged to reintroduce the organic waste from cotton fields into the farm.

- 7.1.1.1 Crop residues are reused or left on the field but not burnt.
 - 7.1.1.2 If crop residues are used as fodder, it is fed to own animals and the manure is reintroduced into the cotton fields.
 - 7.1.1.3 When fed to animals, the required waiting period since last pesticide application is safeguarded.
 - 7.1.1.4 Manure is in an advanced stage of decomposition when applied.
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7.2 HAZARDOUS WASTE

7.2.1 The cotton farmer shall demonstrate that the farm is free of hazardous waste and that disposal techniques are appropriate for the identified waste.

- 7.2.1.1 The cotton farmer has identified hazardous waste on the farm/house/sheds.
 - 7.2.1.2 Farm premises and fields are free of inorganic waste.
 - 7.2.1.3 Appropriate disposal techniques are employed that do not harm the environment and human health.
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8 Institutional Building

8.1 PROGRESS TOWARDS EVOLVEMENT OF FORMALIZED ORGANISATIONAL SET UP (SHGS, COOPERATIVE, PRODUCER COMPANY ETC.) SHALL BE EVIDENCED

8.1.1 Mechanisms of registering/formalising the farmer organisation are in the process of being developed.

9 Social Conditions



9.1 FREEDOM OF ASSOCIATION (ILO 87) & COLLECTIVE BARGAINING (ILO 89)

9.1.1 Management of farms with > 10 full or part-time permanent workers recognise in writing and in practice the right of all workers to establish and to join worker organisations of their own choosing and to collectively negotiate their working conditions.

9.1.1.1 Management shall respect the right of all workers to form or to join a trade union of their choice and to engage in the activities of the trade union on-site, in case available.

9.1.1.2 Workers shall have the right to choose their representative at any level.

9.1.2 If no active and representative union exists on farms with > 10 full or part-time permanent workers, all workers shall democratically elect a workers' committee, which represents them and negotiates with management to defend their rights and interests.

9.1.2.1 Worker committees shall be established to defend workers' rights and interests, if trade union are absent on-site or in the area.

9.1.2.2 Workers committee shall be democratically elected by workers to represent their interests and negotiate with management.

9.1.3 Workers are not subject to retaliation, discrimination or any other negative consequences as a result of collective bargaining.

9.1.3.1 The union representative shall have access to all workers at the workplace.

9.1.3.2 The union representative shall be aware of the appeal procedure in case that management does not obey to legal rules.

9.1.3.2 The workers committee shall be capable of operating on-site, free from farm management interference.

9.1.3.3 There shall be no sign of worker retaliation or discrimination due to collective bargaining.

9.2 PROHIBITION OF FORCED LABOUR (ILO 29 & 105)

9.2.1 Forced labour, including bonded or involuntary prison labour, does not occur.

9.2.1.1 There is no evidence of forced labour.

9.2.1.2 Any deposits of valuables or identity papers shall not be retained by member farmers.

9.2.1.3 Salaries shall not be retained by the member farmers for the purpose of forcing workers to stay.

9.2.1.4 Workers shall be free to leave their workplace if appropriately notified.

9.2.1.5 Spouses work voluntarily and on a separate contract basis.



9.3 PROHIBITION OF CHILD LABOUR (ILO 138)

9.3.1 Children are not employed (contracted) below the age of 15.

- 9.3.1.1 The minimum age of children employed by member farmers shall not be less than the age of completion of compulsory schooling, and in any case, shall not be less than 15.
- 9.3.1.2 Policies and procedures to prevent that children below the age of 15 are employed by member farmers, are in place, and under custody of the implementing body.

9.3.2 All children of farmers attend compulsory schooling. Working does not jeopardise schooling or the social, moral or physical development of the young person.

- 9.3.2.1 Member farmers ensure that working does not jeopardise schooling, health, safety and the social, moral or physical development of workers under the age of 18.
- 9.3.2.2 Children under the age of 15 engaged in joint family labour or neighbourhood services shall only perform work duties which are commensurate to their age and under custody and guidance of their parents or relatives.
- 9.3.2.3 Children under the age of 15 engaged in joint family labour or neighbourhood services shall do so only after school or during holidays.
- 9.3.2.4 All children of farmers attend compulsory schooling.

9.4 PROHIBITION OF WORST FORMS OF CHILD LABOUR (ILO 182)

9.4.1 Worst forms of child labour do not occur.

- 9.4.1.1 There shall be no evidence of trafficked, bonded, forced or abused labour.

9.4.2 Monitoring, evaluation and response mechanisms exist.

- 9.4.2.1 Incidences of worst and regular forms of child labour shall be documented.
- 9.4.2.2 An action plan to prevent, monitor and remediate child labour is implemented, documented and followed up.



9.5 WARRANTY OF OCCUPATIONAL SAFETY

9.5.1 The farm must provide workers in all work areas with the basic services, resources and working conditions necessary to comply with the occupational health and safety programme objectives.

- 9.5.1.1 A safe and hygienic working environment shall be provided, bearing in mind the prevailing knowledge of seed cotton production and ginning and of any specific hazards. Adequate steps shall be taken to prevent accidents and injury to health arising out of, associated with, or occurring in the course of work, by minimising, so far as is reasonably practicable, the causes of hazards inherent in the working environment.
- 9.5.1.1 Workers shall receive regular and recorded health and safety training, and such training shall be repeated for new or reassigned workers.
- 9.5.1.2 Gin factories shall provide first aid services and emergency health care free of charge for work-related injuries to workers and supervisors.
- 9.5.1.3 First aid boxes shall be accessible at any time at the farm / workplace. The boxes shall be fully equipped and in good shape.

- 9.5.1.4 In all farms, potable drinking water is accessible to all workers during their working period, and clearly labelled.
- 9.5.1.5 Personnel that apply or handle agrochemicals or perform any other hazardous work shall be provided with the necessary protective equipment and trained on the proper use of the same.
- 9.5.1.6 Storage areas for agrochemicals must comply with basic safety standards.



9.6 EMPLOYMENT CONDITIONS

9.6.1 Workers are aware of their rights and duties, responsibilities, salaries, and work schedules.

- 9.6.1.1 All workers employed > 3 months shall have legally binding labour contracts defining rights and duties, responsibilities, work schedules and wages/salaries.
- 9.6.1.2 Workers employed > 3 months shall receive copies of, or have access to the contracts signed by both parties.
- 9.6.1.3 Payment shall be made in legal tender.
- 9.6.1.4 Payments shall be made on time, according to an appropriate payment schedule that has been communicated to workers employed by the farmer.
- 9.6.1.5 In farms with > 10 full or part-time permanent employees, an up-to-date written payroll and job description for each employee shall be available providing a clear account of wages earned, as well as, if applicable, of allowances, bonuses, overtime payment, and all deductions in detail.
- 9.6.1.6 The legal provisions for social insurance, leave practices and overtime are followed.

9.6.2 Work – including subcontracted work – is equally remunerated according to the type of work provided and for both genders alike.

- 9.6.2.1 Payment of workers contracted by the farmer shall either be in line with or exceeding sector collective bargaining agreements, or correspond to the regional average and/or official minimum wages for similar occupations.
- 9.6.2.2 Payment shall be in minimum equal to the country or region-specific stipulated benchmark for living wages.
- 9.6.2.3 Women pay shall be equal to their male counterpart for the same type of work provided.
- 9.6.2.4 The pay rate shall allow subcontracted workers who are remunerated based on production quotas, or piecework, to earn the proportionate minimum wage or relevant industry average (whichever is higher) during normal working hours.
- 9.6.2.5 Working hours are not excessive and are in line with national or local legislation, in terms of overtime and remuneration.

9.6.3 Deductions in salaries are only made as agreed by national laws, as fixed by a collective bargaining agreement or if the employee has given his/her written consent.

- 9.6.3.1 Deductions of salaries are in line with national laws and / or the collective bargaining agreement (if applicable).
- 9.6.3.2 Deductions are not employed as disciplinary measures.
- 9.6.3.3 When deductions are made for services provided by the farmer, they shall be in line with the actual costs incurred by the employer.



9.7 NO DISCRIMINATION IN THE WORKPLACE (ILO 111)

9.7.1 Any form of discrimination or abuse is absent.

- 9.7.1.1 There is no discrimination made on the basis of race, caste, national origin, religion, disability, gender, sexual orientation, union, membership, political affiliation or age in recruitment, remuneration, access to training, promotion, disciplinary measures, termination or retirement.
- 9.7.1.2 The organisation and the members do not engage in or support the use of corporal punishment, mental or physical coercion and verbal abuse.

9.7.2 Grievance mechanisms.

- 9.7.2.1 A grievance mechanism shall be implemented and made accessible to farmers, workers, and other individuals potentially affected by the organisation work. The design and functionality of the mechanism is effective.

9.8 COMMUNAL DEVELOPMENT PROJECTS

9.8.1 The organisation fosters the social and economic development of farmers, female farmers and farmers' wives through the creation of farmer business groups, 'women in cotton' projects and other entrepreneurial initiatives at communal level.

- 9.8.1.1 Farmer business groups shall be established at communal level to improve the economic resilience of member farmers.
- 9.8.1.2 Entrepreneurial initiatives shall be developed at communal level to diversify sources of income for farmers.

9.8.2 Programmes related to disadvantaged/minority groups among the farmers' force, in particular women, are in place to improve their position.

- 9.8.2.1 Women in cotton projects shall be enhanced at community level to improve the position of female farmers and farmer wives.
- 9.8.2.2 Growing of tree seedlings in local tree nurseries feeds the extended REEL agroforestry chapter and creates additional incomes for female farmers.
- 9.8.2.3 Incentivising goat and poultry husbandry as holistic farming practices generates food for self-consumption and provides additional marketable products e.g. beef and eggs.

10 Animal Welfare



10.1 LIVESTOCK RAISED ON COTTON FARM IS TREATED WITH RESPECT.

- 10.1.1 Regular health checkups and vaccinations of animals are conducted.
 - 10.1.2 Adequate shelter for farm animals is provided.
 - 10.1.3 The development of silvopasture areas is promoted under the Agroforestry systems to meet the need of on-farm livestock (for farms above 10ha).
 - 10.1.4 Animals should not suffer from prolonged hunger and/or thirst, they should have an appropriate and sufficient diet and accessible clean water supply.
-

11 Resilient Livelihoods

11.1 REGENERATIVE AGRICULTURE COMBINED WITH SOCIAL FAIRNESS SHOULD LEAD TO TANGIBLE INCREASE OF INCOMES, IMPROVED CLIMATE ADAPTATION AND ENHANCED AGRO-BIODIVERSITY ON COTTON FARMS.

- 11.1.1 Economic welfare is steadily improved through diversified incomes – simultaneous production of cotton, food, fodder, firewood, tree seedlings and animal husbandry.
- 11.1.2 Cost of farming is steadily decreasing as farming inputs are reduced.
- 11.1.3 Carbon sequestration below and above the ground shows measurable increase.
- 11.1.4 Water consumption on farm is consequently reduced.
- 11.1.5 Existing natural habitats on farm are retained, new habitats are created.
- 11.1.6 Agrobiodiversity on farm is continuously increasing.

Glossary

AGROBIODIVERSITY

Agrobiodiversity is the variety of animals, plants and microorganisms that are used directly or indirectly for agriculture, including crops, livestock, and forestry. It comprises the diversity of genetic resources used for food, fodder and fibre production. It also includes the diversity of non-harvested species that support the production e.g., soil microorganisms, predators and pollinators as well as the diversity of agro-ecosystems.

AGROECOLOGY

Agroecology is an ecological approach to agriculture that views agricultural areas as ecosystems and is concerned about with the ecological impact of agricultural practices.

AGROFORESTRY

Agroforestry is a collective name for land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land-management units as agricultural crops and/or animals, in some form of spatial arrangement or temporal sequence.

BIODIVERSITY

Biodiversity is a term used to describe the enormous variety of life on Earth. It can be used more specifically to refer to all of the species in one region or ecosystem.

Biodiversity refers to every living thing, including plants, animals, humans, and microorganisms in the soil.

BIO MAGNIFICATION

Condition where the chemical concentration in an organism exceeds the concentration of its food when the major exposure route occurs from the organism's diet.

BT COTTON

BT (*Bacillus thuringiensis*) cotton is a genetically modified organism (GMO) or genetically modified pest resistant plant cotton variety, which produces an insecticide to combat bollworm.

CARBON SEQUESTRATION

Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide. It is one method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing global climate change.

CHEMICAL FERTILISERS

Synthetic fertilisers like urea, di-ammonium phosphate, murate of potash etc.

CHEMICAL PESTICIDES

Synthetic pesticides like acephate, ethion etc.

CLIMATE CHANGE ADAPTATION & MITIGATION

Climate change adaptation refers to actions that reduce the negative impact of climate change, while taking advantage of potential new opportunities.

Adaptation (responding to climate impacts) and mitigation (reducing GHG emissions) are necessary complements in addressing climate change.

COC

Code of conduct.

CONTROL FARMERS

Control farmers are the Non-REEL REGENERATIVE project farmers who are all being used as reference to benchmark Project farmers.

COVER CROP

Cover crop is a crop grown for the protection and enrichment of the soil and increased retention capacity of water in the soil.

CROP ROTATION

Crop rotation is the practice of planting different crops sequentially on the same plot of land to improve soil health, optimise nutrients in the soil, and combat pest and weed pressure.

DEMONSTRATION PLOT

A demonstration plot is a field that can be used to teach, experiment, and share ideas about agricultural practices.

ECOLOGICAL INFRASTRUCTURE

Ecological infrastructure refers to naturally functioning ecosystems that deliver valuable services to people, such as water and climate regulation, soil formation and disaster risk reduction.

ECOLOGY

Branch of biology that deals with the relations of organisms to one another and to their physical surroundings.

ECOSYSTEM

A community or group of living organisms that live in and interact with each other in a specific environment.

FFB

Farmers field book.

FPO

A farmer producer organisation (FPO), formed by a group of farm producers, is a registered body with producers as shareholders of the organisation. It deals with business activities related to farm produce and works for the benefit of member producers.

FYM

Farm yard manure.

GM SEED

Genetically modified seed.

HABITAT

A habitat is the place where an organism lives.

IMS

Integrated management system.

INM

Integrated nutrition management.

INTERCROP

Intercropping is the practice of growing two or more crops in proximity. Like pigeon pea or green gram with cotton crop.

IP

Implementing partner.

IPM

Integrated pest management.

IWM

Integrated water management.

MEL

Monitoring, evaluation and learning.

MIX CROPPING

A system of sowing two or three crops together on the same land, one being the main crop and the others the subsidiaries.

NATURAL HABITAT

A natural habitat is an ecological area (on or beyond the farm) where specific species live.

NICHE

Niche is that organism's role within that environment.

NITROGEN IMMOBILIZATION

Nitrogen immobilisation refers to the process in which nitrate and ammonium are taken up by soil organisms and therefore become unavailable to crops. When the microorganisms die, the organic N contained in their cells is converted by mineralisation and nitrification to plant available nitrate.

PASTURE LAND

Pastures are those lands that are primarily used for the production of adapted, domesticated forage plants for livestock.

PEST SCOUTING

The term 'pest scouting' as it applies to the area of agriculture can be defined as 'inspecting a field for pests, including insects, weeds, and pathogens.' Pest scouting is a basic component of integrated pest management programmes.

PHEROMONE TRAP

Pheromones are chemicals used by insects and other animals to communicate with each other. Insects send these chemical signals to help attract mates, warn others of predators, or find food. Using specific pheromones, traps can be used to monitor target pests in agriculture or in residential areas.

POLLINATORS

A pollinator is anything (insects, birds & animals) that helps carry pollen from the male part of the flower (stamen) to the female part of the same or another flower (stigma). The movement of pollen must occur for the plant to become fertilised and produce fruits, seeds, and young plants.

PRODUCER GROUP

Group of farmers producing REEL REGENERATIVE Cotton.

PROJECT FARMERS

Project farmers are the REEL REGENERATIVE Project farmers

REGENERATIVE AGRICULTURE

Regenerative agriculture is a system of farming practices that intends to increase agrobiodiversity, enrich soils, improve water management and enhance ecosystems services. It offers a long-term sustainable farming system that provides resilience against climate instability, diversified incomes and better livelihoods for farmers.

REDUCED TILLAGE

Reduced tillage or conservation tillage is a practice of minimising soil disturbance and allowing crop residue or stubble to remain on the ground instead of being thrown away or incorporated into the soil. With less tilling, farmers save on machinery use, fuel, labour, and their own time.

REEL

Responsible Environment Enhanced Livelihood.

REEL COTTON

Cotton produced out of the REEL programme farmers.

RIPARIAN BUFFER

Riparian buffer is a vegetated area located near a stream, which helps shade and partially protect the stream from the impact of adjacent land uses. Benefits include the filtering of leached nutrients, reduced flooding and providing of habitat and reduced erosion.

RESILIENCE

The ability of a community or society exposed to hazards to resist, absorb, accommodate, and recover from the effects of a hazard in a timely and efficient manner.

SALINISATION

The process of increasing the salt content is known as salinisation.

SOIL HEALTH

Soil health is the soil's ability to function and sustain plants, animals and humans as part of the ecosystem. The diversity of microorganisms plays a crucial role in soil functioning.

SOIL ORGANIC MATTER

Soil organic matter (SOM) is the organic matter component of soil, consisting of plant and animal detritus at various stages of decomposition, cells and tissues of soil microbes, and substances that soil microbes synthesise. SOM also acts as a major sink and source of soil carbon.

SOIL SALINITY

Soil salinity is the salt content in the soil.

SPECIES/SPECIES RICHNESS

Species richness (S) is the number of species within a defined region.

ToC

Theory of change.

ToF

Training of farmers.

ToG

Training of ginners.

ToT

Training of trainers.

TRAP CROP

Trap crop planted to attract insect pests from another crop, especially one in which the pests fail to survive or reproduce. Like China rose in cotton farm.

WILDLIFE CORRIDOR

The term 'wildlife corridor' is used to refer to any linear feature in the landscape that can be used for migration or dispersal of wildlife. Wildlife or biological corridors offer the possibility of linking habitats and reducing the isolation of populations.

YELLOW STICKY TRAP

Yellow sticky traps are a commonly used method for population monitoring of many pests.

Annex – REEL REGENERATIVE Code – list of prohibited chemicals

REEL REGENERATIVE Code disallows the use of any materials defined by the following protocols or governance bodies. Please consult the links below for an updated list of the prohibited substances.



WHO

The WHO Recommended Classification of Pesticides by Hazard, of which:

1. Extremely hazardous (Class Ia); and
2. Highly hazardous (Class Ib)

<https://www.who.int/publications> or
<https://www.who.int/publications/i/item/9789240005662>



POP

Stockholm Convention on persistent organic pollutants (POPs), of which:
Annex I and Annex II

<https://echa.europa.eu/list-of-substances-subject-to-pops-regulation> or
<https://chm.pops.int/Convention/ConventionText/tabid/2232/Default.aspx>

PIC

Prior Informed Consent (PIC) Procedure for certain hazardous Chemicals and pesticides. In international trade under the Rotterdam Convention, of which: Annex III

<https://echa.europa.eu/information-on-chemicals/pic/chemicals> or
<http://www.pic.int/TheConvention/Overview/TextoftheConvention/tabid/1048/language/en-US/Default.aspx>



MONTREAL

Montreal Protocol on Substances that Deplete the Ozone Layer

<https://ozone.unep.org/treaties/montreal-protocol>



CottonConnect is a company with a social purpose to re-imagine the cotton supply chains and help textile producers and farmers enjoy better livelihoods.

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