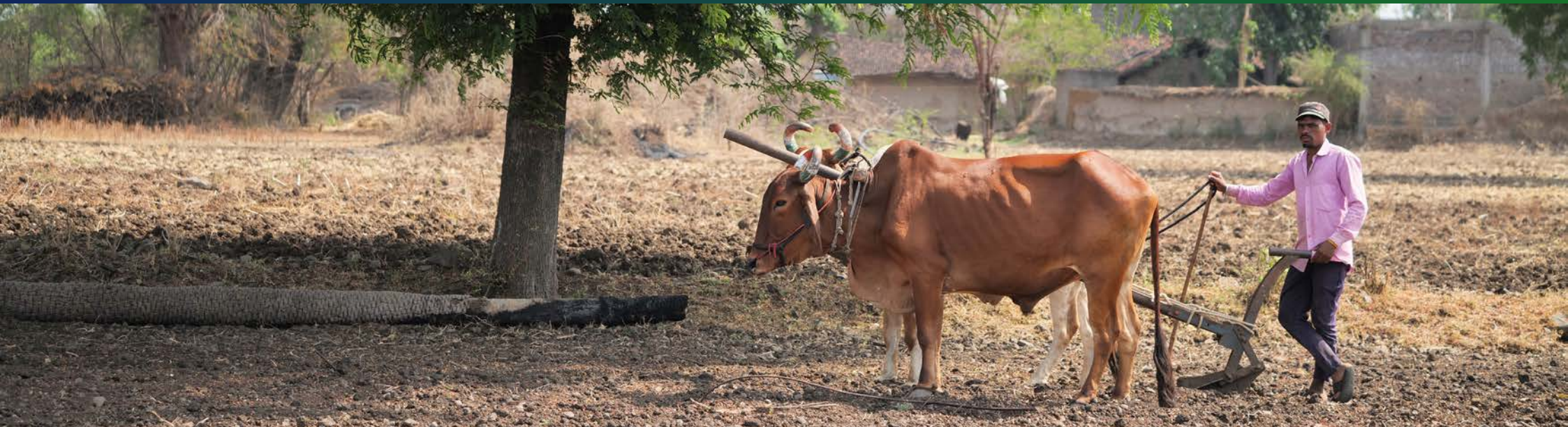




**COTTON  
CONNECT**  
REIMAGINING THE FUTURE FOR SUPPLY CHAINS

# REEL Regenerative Standard 1.0



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## ABOUT COTTONCONNECT

CottonConnect with a vision for reimagining the future for supply chains, implements agricultural training programmes aimed at enhancing the sustainability of cotton production and improving farmers' livelihoods. CottonConnect has trained farmers in India, Pakistan, Bangladesh, China, Turkey, Peru and Egypt through sustainable and regenerative agricultural practices, ensuring positive outcomes while expanding its reach. As a socially driven organisation, CottonConnect is committed to transforming cotton supply chains, enabling textile producers and farmers to achieve better livelihoods. By helping brands access more sustainable cotton and other natural fibres, CottonConnect promotes transparent, traceable, and resilient supply chains that consistently deliver high-quality raw materials.

## INTRODUCTION TO THE STANDARD

The development and implementation of the REEL Regenerative Standard has been driven by the growing demand from brands to integrate regenerative agriculture practices into raw material sourcing. The core goal is to promote agrobiodiversity, enhance soil health, improve water management, and strengthen ecosystem services. By establishing a sustainable farming system, these standards aim to build long-term resilience to climate change, support diversified income streams, and improve farmers' livelihoods, creating a lasting positive impact on their well-being.



## CORE PRINCIPLES

The implementation of the REEL Regenerative Standard is guided by 11 Core Principles, which act as the foundation for operational choices and decision-making processes.



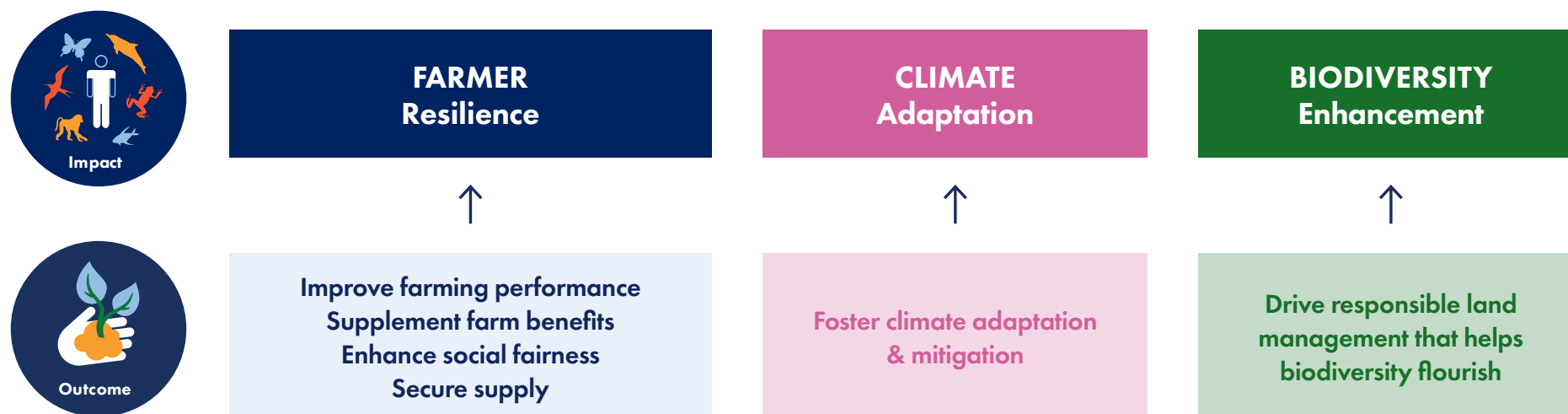
## REEL REGENERATIVE THEORY OF CHANGE

The REEL Regenerative Theory of Change (ToC) is a vital framework that guides the effective implementation of the programme while establishing both short-term and long-term impacts. By clearly defining the programme's goals, desired outcomes, and key interventions, the ToC lays a strong foundation for the Monitoring, Evaluation, and Learning (MEL) system. It also helps align potential risks and assumptions throughout the implementation process to ensure the intended change is achieved. By identifying risks early, the ToC supports the development of appropriate coping strategies, enabling informed decision-making and contributing to the overall success of the programme.

The REEL Regenerative defines a system of farming practices designed to enhance agricultural biodiversity, enrich soil health, improve water management, and strengthen ecosystem services. It promotes a long-term, sustainable farming approach that builds resilience against climate change, diversifies income streams, and improves farmers' livelihoods. The standard supports farmers transitioning to holistic farming systems by improving soil health, fostering biodiversity, reducing greenhouse gas emissions, and promoting carbon sequestration.

The impact of the REEL Regenerative Programme is categorised into three main overarching themes. This division provides a comprehensive and clear understanding of the programme's implementation and allows for a more focused and structured approach towards achieving the intended outcomes.

For more information, please refer to the CottonConnect website.  
[www.cottonconnect.org](http://www.cottonconnect.org)



## STRUCTURE OF THE STANDARD

The REEL Regenerative Standard is structured around eleven core principles, each addressing a key aspect of sustainable, regenerative and responsible cotton production. These principles are further detailed through specific indicators which are assessed based on the level of compliance:

1. full compliance,
2. partial compliance,
3. non-compliance.



The standard employs a three-tier verification system:

### **First level – Self-assessment:**

The implementation team conducts a self-assessment, analysing their progress and achievements.



### **Second level – Internal monitoring:**

The CottonConnect MEL team actively monitors the on-ground implementation of the standard.



### **Third level – External audit:**

Independent Certification Bodies (CBs) are appointed to audit the on-ground implementation of the Standard.

For more information, please refer to the [CottonConnect website](http://www.cottonconnect.org).

## SCOPE

The REEL Regenerative Standard is designed for implementation at both the farm and gin levels. Currently, the geographic scope covers India, Pakistan, Bangladesh, Turkey, and Egypt. However, with minor adaptations to regional requirements, the standard is flexible enough to be applied globally.

## IMPLEMENTATION

The implementation of the REEL Regenerative Standard can be carried out with the support and guidance of CottonConnect. To review the eligibility requirements for the REEL programme, please visit [www.cottonconnect.org](http://www.cottonconnect.org).

## STAKEHOLDER CONSULTATION

In the first round, we have extended invitations to around 28 stakeholders representing 10 diverse sectors to review the Standard and incorporated their valuable feedback during its development. These stakeholders, hailing from various regions, are actively contributing to ensure a comprehensive and practical approach that enhances the Standard's robustness and suitability for implementation.

In the second round, the REEL Standards were made available for public stakeholder consultation and have been published on the CottonConnect website and social media pages to invite stakeholders to review the standards.

## DISCLOSURE OBLIGATION

None of the requirements of this standard limit or expand disclosure obligations under any central/federal, state, tribal, or local laws regarding the reporting of hazardous substance releases or hazardous waste disposal. Each member of the supply chain is responsible for conducting their own inquiries to determine their respective disclosure obligations under these laws and ensuring full compliance with any applicable reporting requirements.

## LANGUAGE AND TRANSLATION

The REEL Regenerative Standard is currently available to the public in English, with official translations completed in Chinese, Turkish, Bengali, Urdu, Gujarati, Marathi, Hindi, Telugu, and Tamil. These translations are available upon request. If you require the Standard in another language, please contact CottonConnect at [info@cottonconnect.org](mailto:info@cottonconnect.org).

## GUIDELINES AND SOPS

The supporting documents for the implementation of the REEL programme can be accessed from the CottonConnect website:

- REEL Monitoring and Evaluation Process
- REEL Chain of Custody and Traceability Framework
- REEL Cotton Standard and Verification Process
- REEL Regenerative Theory of Change
- REEL Cotton Handbook – Accountability & Assurance

## STANDARD EFFECTIVE DATE AND NEXT REVIEW

The REEL Regenerative Standard will take effect on April 1, 2025. The Standard is reviewed at least every three years, with the next scheduled review in 2027.

## ABBREVIATION

|          |                                     |
|----------|-------------------------------------|
| BT:      | Bacillus Thuringiensis              |
| FFB:     | Farmers Field Book                  |
| FPO:     | Farmers Producer Organisation       |
| FYM:     | Farm Yard Manure                    |
| GM Seed: | Genetically Modified Seed           |
| G:       | Ginner or Gin                       |
| IMS:     | Integrated Management System        |
| INM:     | Integrated Nutrient Management      |
| IP:      | Implementing Partner                |
| IPM:     | Integrated Pest management          |
| IWM:     | Integrated Water Management         |
| LF:      | Large Farm                          |
| MEL:     | Monitoring, Evaluation and Learning |
| PG:      | Producer Group                      |
| SF:      | Small Farm                          |
| TOC:     | Theory of Change                    |
| TOF:     | Training of Farmers                 |
| TOG:     | Training of Ginners                 |
| TOT:     | Training of Trainers                |

## REVISION AND VERSION HISTORY

|  |                          |   |
|--|--------------------------|---|
| <b>REEL Regenerative Code of Conduct 1.0</b> | <b>2020 – 21</b>         | Regenerative Agriculture and Carbon Sequestration Pilot Project in Madhya Pradesh India |
|  | <b>March – July 2021</b> | REEL Regenerative Theory of Change and prototype REEL Regenerative Code of Conduct      |
|  | <b>2021 – 22</b>         | Pilot implementation of REEL Regenerative Code of Conduct                               |
|  | <b>August 2021</b>       | Stakeholder consultation on REEL Regenerative Code of Conduct                           |
| <b>REEL Regenerative Code of Conduct 1.1</b> | <b>April 2022</b>        | REEL Regenerative Code of Conduct 1.0 released  |
|  | <b>April 2023</b>        | Approved and released REEL Regenerative Code of Conduct 1.1                             |
| <b>REEL Regenerative Standard 1.0</b>        | <b>2023 – 24</b>         | Benchmarking and review of global legislation (EU, UK and US)                           |
|  | <b>July 2024</b>         | First draft of REEL Regenerative Standard 1.0   |
|  | <b>September 2024</b>    | First round Stakeholder Consultation on REEL Regenerative Standard 1.0                  |
|  | <b>January 2025</b>      | Second round Public Stakeholder Consultation on REEL Regenerative Standard 1.0          |
|  | <b>February 2025</b>     | Approval of REEL Regenerative Standard 1.0  |
|  | <b>April 2025</b>        | REEL Regenerative Standard release and available for implementation                     |

## LEGENDS

-  Large Farmers (LF)
-  Small Farmers (SF)
-  Producer Group
-  Gin

## KEY DEFINITIONS

### Farmers classification

Based on the implementation experience of the REEL Programme across various regions, farmers will be classified into two distinct categories to ensure proper support and management:

- **Large Farmers (LF)**  
Farm holdings with more than 15 hectares of cotton land in the same cropping season.
- **Small Farmers (SF)**  
Farm holdings with less than or equal to 15 hectares of cotton land in the same cropping season.

### Farmers Group

Individual small farmers will be organised into groups, comprising a minimum of 20 and a maximum of 50 farmers. For large farmers, all activities including training and meetings, will be conducted on a group/ individual farm basis depending on the local situations/proximity etc.

### Producer Group

Small farmers will be organised into Producer Groups, with each group comprising up to 4,500 farmers. For large farmers, a Producer Group will consist of 50 farmers, allowing for a deviation of up to 20%.

## DOCUMENT CONTROL

This document is issued, takes effect, and is maintained as follows:

|                   |                                   |
|-------------------|-----------------------------------|
| Document name:    | <b>REEL Regenerative Standard</b> |
| StandardVersion:  | <b>V 1.0</b>                      |
| Issue Date:       | <b>01 March 2025</b>              |
| Effective Date:   | <b>01 April 2025</b>              |
| Last updated:     | <b>4 February 2026</b>            |
| Previous Version: | <b>NA</b>                         |



# REEL Regenerative Standard 1.0



# 1. Integrated Management System (IMS)



























The REEL Regenerative Standard requirements for both Large Farmers (LF) and Small Farmers (SF) emphasise the establishment of an Integrated Management System (IMS) to ensure effective communication, documentation, and quality practices. Written contracts and clear agreements between stakeholders are essential for operational clarity. Producers must form organised groups with detailed communication strategies, supported by documentation management systems for data collection and reporting.














Quality control and traceability, key components of the REEL Regenerative Standard, are critical at all stages of cotton production, requiring proper management practices to prevent contamination. Internal verification processes must be established to monitor compliance, while comprehensive training programmes for farmers and ginners will facilitate knowledge transfer and ensure adherence to sustainable practices aligned with the REEL Regenerative Standard.

| GROUP | MAJOR | NR           | STANDARD REQUIREMENTS   | FARM SIZE |
|-------|-------|--------------|---|-----------|
|       |       | <b>1</b>     | <b>Integrated Management System (IMS)</b>   |           |
|       |       | <b>1.1</b>   | <b>CONTRACTS AND AGREEMENTS</b>   |           |
|       |       | <b>1.1.1</b> | <b>Written Contracts, memberships and agreements shall be in place at all levels.</b>   |           |
|       |       | 1.1.1.1      | A written agreement between the Implementation Partner/ Producer Group and CottonConnect shall be maintained.   | SF LF     |
|       |       | 1.1.1.2      | An agreement between Ginners, the Implementation Partner/Producer Group, and CottonConnect shall be in place, clearly defining, among other aspects, the purchase requirements. | SF LF     |

|   |   |                |   |   |
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|   |   | <b>1.2</b>     | <b>ESTABLISHMENT OF PRODUCER GROUPS</b>   |   |
|   |   | <b>1.2.1</b>   | <b>A Producer Group and Implementation Partner structure shall be established, with detailed descriptions of communication strategies with farmer members, including capacity building and first and second-level facilitation.</b>   |   |
|    |   | 1.2.1.1        | The structure and communication strategies of the producer group and implementation Partner shall be described in detail.   |       |
|    |   | 1.2.1.2        | Farmers' groups shall be established for programme implementation. The mode of operation, group leaders, and communication channels shall be clearly defined.   |    |
|    |  | <b>1.2.1.3</b> | <b>A documented farmer profile shall be maintained.</b><br>Reference: MEL Guidelines  |       |
|    |   | 1.2.1.4        | A Farmers Field Book (FFB) for control farmers, along with a relevant data capturing, storage, and retrieval system, shall be implemented for comparison with REEL Cotton farmers.<br>Reference: MEL Guidelines   |       |
|    |   | 1.2.1.5        | A guideline on the implementation of decent work practices for farms and farmers shall be in place.   |       |
|   |   | <b>1.3</b>     | <b>DOCUMENTATION AND INFORMATION MANAGEMENT</b>   |   |
|   |   | <b>1.3.1</b>   | <b>A system shall be in place for Documentation and Information Management to record, collect, collate, store, extract, and report data required for programme needs.</b><br><br>An updated REEL Programme Plan shall be in place.<br>Guidance: A program implementation plan outlines how the REEL Programme will be put into action, including programme activities, scope, timeline, tasks, communication, risk management, and monitoring/evaluation, ensuring a structured and successful execution. |   |
|  |   | 1.3.1.1        | Key elements:<br>i. Programme activities: Clearly define what the programme activities want to achieve, using SMART (Specific, Measurable, Achievable, Relevant, Time-bound) criteria.<br>ii. Timelines: Establish a realistic schedule with key dates and deadlines for each activity and milestone.<br>iii. Monitoring and Evaluation: Define how progress will be tracked and measured against the established objectives.   |   |
|  |   | 1.3.1.2        | Results indicators shall be reported annually and records shall be maintained.<br>Reference : MEL Guidelines  |   |
|  |   | 1.3.1.3        | Monthly progress reports (MPR) shall be submitted.  |   |
|  |   | 1.3.1.4        | Data storage and record retrievability shall be demonstrated at the respective stakeholder level.   |   |















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|   |   | <b>1.4</b>     | <b>QUALITY, TRACEABILITY, AND TERMS OF TRADE</b>  |   |
|   |   | <b>1.4.1</b>   | <b>Farmers shall adopt quality and traceability practices at the pre-harvesting, harvesting, post-harvesting handling, and storage stages.</b>  |   |
|    |   | 1.4.1.1        | Farmers shall implement relevant crop harvest management techniques, including appropriate timing and judgment.   |       |
|    |    | <b>1.4.1.2</b> | <b>Cotton shall be protected from contamination with foreign materials during and after picking.</b><br><br>Guidance: Refer to requirement 1.4.3.1.<br>Cotton contamination during harvesting primarily involves foreign materials like plastic, debris, and dust mixing with the cotton, which can negatively impact the quality and processing of the final product.<br><br>Sources of contamination:<br>i. Plastic: Plastic module wraps, plastic twine used to tie down covers, and plastic debris blown into fields are major sources of contamination.<br>ii. Debris: Roadside trash, leaves, dust, stones, and other organic matter can also contaminate the cotton.<br>iii. Human Error: Contamination can also occur due to human error during the harvesting process, such as workers dropping debris into the cotton or using contaminated equipment.<br>iv. Equipment: Grease, oil, or grime on harvesting equipment can also contaminate the cotton. |       |
|    |    | <b>1.4.1.3</b> | <b>The flow of REEL Cotton products shall be documented up to the ginner level and maintained.</b>  |       |
|   |   | <b>1.4.2</b>   | <b>A quality and traceability system shall be established at the ginner level.</b>  |   |
|   |   | 1.4.2.1        | Ginners shall maintain separate heaps for REEL Seed Cotton to prevent contamination.  |       |
|  |   | 1.4.2.2        | Ginners shall maintain separate storage spaces for lint cotton.   |   |
|  |  | <b>1.4.2.3</b> | <b>Traceability tools (e.g. TraceBale) and techniques shall be accessible, and all required data shall be maintained and processed at the ginner level. Ref: TraceBale Manual</b>   |   |
|  |   | 1.4.2.4        | The ginner shall demonstrate the separation, physical traceability, and document traceability of REEL cotton for each specific Bale ID.   |   |

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|   |  | <p><b>1.4.3</b></p> <p>1.4.3.1</p>                                  | <p><b>A harvest guideline shall be developed.</b></p> <p>A harvest guideline for the producer group shall be developed and provided.<br/>Reference: The harvest guidelines should cover the following:</p> <ol style="list-style-type: none"> <li>1. Contamination and trash minimisation</li> <li>2. Storage, transportation, and quality precautions</li> <li>3. Moisture reduction</li> <li>4. Packaging and storage</li> </ol>   |   |
|   |  | <p><b>1.4.4</b></p> <p>1.4.4.1</p>                                  | <p><b>Clear terms of trade shall be established between trading partners. (Producer Group/Implementation Partner and Ginners.)</b></p> <p>No trading partner shall be paid or sell below the reference price. In other words, the price agreed upon between parties (Farmer and Producer Group, and Producer Group and Ginners) must meet or exceed the regional reference prices for the product being traded.</p>  |   |
| <br><br> |  | <p><b>1.5</b></p> <p><b>1.5.1</b></p> <p>1.5.1.1</p> <p>1.5.1.2</p> | <p><b>POLICIES, PROCEDURES, AND RESPONSIBILITIES</b></p> <p><b>1.5.1 Policies, procedures, and responsibilities for the most relevant aspects of the standard</b></p> <p>The Implementation Partner/Producer Group shall have a documented policy and defined procedures for compliance with each of the following chapters of the standard:</p> <ol style="list-style-type: none"> <li>1. Pest Management (prohibition of hazardous chemicals)</li> <li>2. Water Management (water use efficiency and stewardship)</li> <li>3. Social and working Conditions (child labour, sexual harassment, forced labour, bonded labour, working time, occupational health and safety, collective bargaining, equal and fair wages)</li> </ol> <p>The Implementation Partner/Producer Group shall designate a responsible individual to implement the policy and related procedures. This individual shall be aware of their responsibilities and have the necessary resources to effectively carry out the defined activities.</p> | <br><br> |

|   |   |  |  |   |
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| <br><br> |   | <p><b>1.6 TRAINING</b></p> <p><b>1.6.1 Training of Trainers (ToT)</b></p> <p><b>1.6.1.1 Producer group – A System shall be in place to recruit, train and monitor the performance of the Trainers.</b></p> | <p>1.6.1.1.1 Training of trainers shall be achieved through CottonConnect in collaboration with cotton experts'/universities/ reputed resource institutions (academics, research etc).</p> <p>1.6.1.1.2 The training procedure, including the annual training plan and attendance records, shall be maintained where applicable as per the REEL Standard.</p> <p>1.6.1.1.3 Training of Trainers shall encompass all modules, including pre-sowing activities, the REEL Cotton Programme (Decent Work, Health, Safety, Security, and Environment), Crop Management (IPM, INM, IWM, Weed Management), Crop Harvest Management, Techniques, Crop Residue Management, Cover Crops, Grievance Mechanism, Labor Training, Farming as a Business, and Animal Welfare.</p> | <br><br> |
| <br>  |   | <p><b>1.6.1.2 Training of Ginners shall be conducted through CottonConnect.</b></p>  | <p>1.6.1.2.1 Training of Ginners shall be conducted through CottonConnect (REEL Cotton).</p> <p>1.6.1.2.2 The annual training plan and attendance records of ginning staff shall be maintained.</p>  | <br>  |
|    |  | <p><b>1.6.1.2.3</b></p>  | <p><b>The training of Ginners shall cover programmatic training, quality, traceability management systems, and HSSE (Health, Safety, Security, and Environment).</b></p>   |    |

|  |  |   |   |
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|  |  | <p><b>1.6.2 Training of Farmers (ToF)</b></p> <p><b>1.6.2.1 A system shall be in place to train and monitor the Farmers training performance.</b></p> <p>1.6.2.1.1 Training of farmers shall be conducted through Implementation Partners.</p> <p>1.6.2.1.2 An annual training plan and records of attendance for all farmers shall be maintained.</p> <p>The training of farmers shall cover all relevant modules, including:</p> <ol style="list-style-type: none"> <li>1. Pre-sowing activities</li> <li>2. REEL Cotton Programme (Decent Work, Health, Safety, Security, and Environment)</li> <li>3. Crop Management (IPM, INM, IWM, Weed Management)</li> <li>4. Crop Harvest Management</li> <li>5. Techniques</li> <li>6. Crop Residue Management</li> <li>7. Cover Crops</li> <li>8. Institution Building &amp; Grievance Mechanism</li> <li>9. Social Condition</li> <li>10. Farming as a Business</li> <li>11. Animal Welfare</li> </ol> <p>1.6.2.1.3</p> <p>1.6.2.1.4 Verification of training records shall confirm that farmers with more than one year in the programme have participated in all relevant training modules.</p> <p>1.6.2.1.5 Farmers shall be informed about and committed to quality and traceability requirements.<br/><b>Guidance:</b> Refer to harvest guidelines and REEL Supply Chain SOP.</p> | <p>SF LF</p> <p>SF LF</p> <p>SF LF</p> <p>SF</p> <p>SF LF</p> |
|  |  | <p><b>1.7 FIRST-LEVEL FACILITATION (FARMER GROUP MEETINGS, INDIVIDUAL FARMER MEETINGS, INDIVIDUAL FARM VISITS, DEMONSTRATIONS)</b></p> <p><b>1.7.1 First-level facilitation is provided to farmers through group meetings, demonstration plots, exposure visits, and individual farm visits.</b></p> <p>1.7.1.1 First-level facilitation is provided to farmers through group meetings, demonstration plots, exposure visits, and individual farm visits.</p> <p>1.7.1.2 Demonstration plot for a relevant practices shall be established according to the requirements of the local group.</p>   | <p>SF</p> <p>SF</p>   |

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| <br><br>  |  | <p><b>1.7.2</b></p> <p>1.7.2.1</p> <p>1.7.2.2</p> <p>1.7.2.3</p>   | <p><b>First-level facilitation activities shall be recorded, and attendance shall be registered.</b></p> <p>Farmer meetings shall be documented with minutes.</p> <p>Attendance lists shall be maintained and available for verification.</p> <p>Demonstrations and exposure visits shall be recorded, and attendance shall be tracked.</p>  | <br><br>   |
| <br><br><br><br><br><br> |  | <p><b>1.8</b></p> <p><b>1.8.1</b></p> <p>1.8.1.1</p> <p>1.8.1.2</p> <p>1.8.1.3</p> <p>1.8.1.4</p> <p>1.8.1.5</p> <p>1.8.1.6</p> <p>1.8.1.7</p> | <p><b>SECOND LEVEL FACILITATION</b></p> <p><b>Awareness and Mapping for Regenerative Agriculture Implementation</b></p> <p>All participating farmers are provided with a comprehensive awareness on regenerative agriculture practices. This includes education on the impact of these practices on climate adaptation and the enhancement of agro-biodiversity.</p> <p>A comprehensive needs assessment of farmers within the programme’s scope has been conducted.</p> <p>The results of the needs assessment and subsequent training activities shall be systematically presented at the producer group level.</p> <p>The ecological infrastructure, encompassing flora and fauna, water sources, and sensitive areas on the farm, shall be mapped with the active participation of farmers. The village mapping report will be created for small farmers, while farm-level reports will be prepared for large farmers.</p> <p>Based on the assessment, tailored training programmes shall be developed and delivered to address the identified needs in each area, ensuring compliance with the standard and promoting sustainable agricultural practices.</p> <p>Farmers shall be trained on regenerative practices throughout the year, both during and outside the cotton season.</p> <p>Awareness shall be created regarding the interrelation between regenerative farming practices, climate adaptation, and functional biodiversity.</p> <p>Farmers shall receive training in fundamental business management practices to promote profitability and ensure long-term productivity.</p> |  <br> <br> <br> <br> <br> <br> |
| <br>   |  | <p><b>1.8.2</b></p> <p>1.8.2.1</p> <p>1.8.2.2</p>  | <p><b>Based on the mapping exercises, linkages shall be established.</b></p> <p>Farmers shall be linked to certified or recognised laboratories that offer soil testing and analysis.</p> <p>Appropriate consortium crops shall be identified in collaboration with farmers, and established seed linkages shall ensure access to these consortium crops at market prices.</p>   | <br>   |

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| <br><br><br> |  | <p><b>1.8.3</b> <b>Farmers shall be provided with sufficient and updated information on the types and biology of pests, diseases, weeds, and natural enemies, as well as on alternative products that can substitute internationally banned pesticides and shall possess the means to adopt biological and cultural control measures.</b></p> <p>1.8.3.1 Lists of relevant pests, natural enemies, diseases, and weeds shall be maintained and available for the project area.</p> <p>1.8.3.2 Farmers shall be provided with demonstrations on how to manufacture biological pesticides independently.</p> <p>1.8.3.3 Mapping of pesticides available in the local market shall be verified by agricultural research bodies, ensuring that the same phytosanitary products can substitute internationally banned pesticides with equal efficacy. The list of mapped and substitutive pesticides shall be made accessible to farmers.</p> <p>1.8.3.4 Farmers’ innovative or local control measures for pests and diseases shall be maintained, tested within groups, and documented.</p> | <br><br><br> |
| <br><br>  |  | <p><b>1.8.4</b> <b>The cotton farmer shall be able to demonstrate an understanding of the concept of Integrated Nutrient Management (INM) and its relationship with soil.</b></p> <p>Farmers shall understand all aspects of Integrated Nutrient Management (INM) disseminated by the REEL Programme and know how to replicate INM-enhancing measures on their own farms. INM practices and their enhancing measures shall be properly documented, communicated, and implemented.</p> <p>1.8.4.1 Guidance: Integrated Nutrient Management (INM) is a farming technique that uses a combination of organic, inorganic, and biological fertilisers to improve soil health and crop yields.<br/>Reference: <a href="#">FAO on Integrated Plant Nutrient Management</a></p> <p>1.8.4.2 Leaf colour charts and other IEC materials related to soil and nutrient deficiency shall be made available to farmer groups.</p> <p>1.8.4.3 The introduction and conservation of pollinators shall be encouraged.</p>  | <br><br>  |

























## 2. Plant and Field Management



The REEL Regenerative Standard requirements for Plant and Field Management focus on enhancing the resilience of cotton farming against pests while ensuring economic viability. Farmers are expected to understand and implement resilience concepts by selecting appropriate cotton varieties based on local expert recommendations. Proper treatment of seed materials with approved pesticides is mandatory, while the use of prohibited chemicals is strictly forbidden.

Field management practices aim to improve soil health and reduce pest pressure. Farmers should engage in practices such as minimum tillage, crop rotation, and effective weed management. The REEL Regenerative Standard encourages the protection and development of natural habitats for beneficial insects and pollinators, as well as the adoption of green and plastic mulching strategies to enhance soil moisture retention and phytosanitary conditions. These practices collectively contribute to sustainable cotton production and environmental stewardship.

| GROUP | MAJOR | NR         | STANDARD REQUIREMENTS   | FARM SIZE |
|-------|-------|------------|---|-----------|
|       |       | <b>2</b>   | <b>Plant and Field Management</b>   |           |
|       |       | <b>2.1</b> | <b>PLANT</b>  |           |
|       |       | 2.1.1      | <b>The cotton farmers shall understand the full concept of resilience, be able to implement it effectively against pests and assess its economic viability.</b> |           |
| 🌱     |       | 2.1.1.1    | The selection of cotton crop varieties or characteristics, as well as any demonstrations, shall follow the recommendations of local experts.                    | SF        |
| 🌱     |       | 2.1.1.2    | Seed material shall be treated with pesticide or fungicide either by the seed supplier or the farmer.   | SF LF     |
| 🌱     |       | 2.1.1.3    | No prohibited chemicals shall be used for seed treatment at the farm level.   | SF LF     |
| 🌱     |       | 2.1.1.4    | Farmers shall maintain proper plant populations with appropriate seed rates and gap filling as needed.  | SF        |

















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| <br><br><br><br><br><br><br><br> |  | <p><b>2.2 FIELD</b></p> <p><b>2.2.1 The cotton farmers shall adopt measures to improve the production system’s resilience against pests.</b></p> <p>2.2.1.1 Cotton cultivation shall not be carried out in protected designated areas.</p> <p>2.2.1.2 Minimum tillage or low tillage practices shall be actively promoted.</p> <p>2.2.1.3 Farmers shall be encouraged to adopt locally adapted and viable crop rotation practices on a portion of their cotton land.</p> <p>2.2.1.4 Farmers shall carry out regular weed management and control to keep fields clean.</p> <p>2.2.1.5 Farmers shall adopt green mulching and/or dust mulching based on the needs for phytosanitary purposes and/or conserving humidity.</p> <p>2.2.1.6 Existing natural habitats for natural enemies of pests shall be protected.</p> <p>2.2.1.7 Natural habitats for natural enemies shall be developed if they are absent.</p> <p>2.2.1.8 Green cover crops shall be promoted.</p> <p>2.2.1.9 The introduction and conservation of pollinators shall be encouraged.</p> | <br> <br> <br> <br><br> <br> <br><br>  |
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### 3. Soil and Integrated Nutrient Management







The REEL Regenerative Standard for Soil and Integrated Nutrient Management emphasises practices that enhance soil fertility while minimising environmental impact. Cotton farmers are encouraged to adopt sustainable methods such as converting crop residues into biochar, recycling organic matter, and utilising biogas slurry to maintain soil health. Intercropping with nitrogen-fixing plants is also recommended to improve soil fertility. A minimum of 25% of the cropping area should be covered with organic matter or cover crops, and soil health should be monitored through regular analyses as per the REEL Regenerative Soil Test Manual.

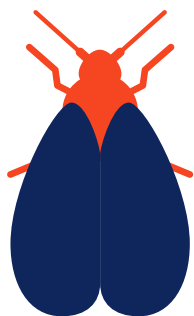
To combat soil erosion, farmers must follow contour lines during land preparation in sloping areas and employ specific tillage methods that prevent soil compaction and erosion. Maintaining soil structure during irrigation is crucial, and living barriers can further stabilise the soil.

| GROUP   | MAJOR | NR           | STANDARD REQUIREMENTS  | FARM SIZE   |
|---|-------|--------------|--|---|
|   |       | <b>3</b>     | <b>Soil and Integrated Nutrient Management</b>   |   |
|   |       | <b>3.1</b>   | <b>SOIL FERTILITY</b>  |   |
|   |       | <b>3.1.1</b> | <b>Cotton farmers shall adopt measures to increase soil fertility.</b>   |   |
|    |       | 3.1.1.1      | Burning of crop residues shall not be practiced. Instead, Crop residues shall be incorporated or recycled by on-farm cattle through manure or biogas slurry to maintain soil organic matter and carbon levels or incorporate to soil through converting to biochar. Emphasis shall be placed on prioritising recycling and composting, with any excess used for fuel or energy purposes. |       |
|  |       | 3.1.1.2      | Pruned tree branches, twigs, leaves, and other live barrier materials shall be either mulched and used as a soil amendment or converted into biochar through anaerobic burning.  |    |
|  |       | 3.1.1.3      | Cotton shall be intercropped or rotated with nitrogen-fixing or other protective plants.   |    |
|  |       | 3.1.1.4      | At least 25% of the cropping productive area shall be covered by a layer of organic matter, such as dead and decaying biomass (mulch, grass, leaves, branches), and/or nitrogen-fixing cover crops.  |   |
|  |       | 3.1.1.5      | Improvement in soil health (through sample soil tests) and soil biodiversity shall be measured as outlined in the REEL Regenerative Soil Test Manual   |   |
|  |       | 3.1.1.6      | The formula for applied nutrients and non-synthetic soil amendments shall be customised based on the results of soil analyses.   |   |

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| <br><br><br>   |  | <p><b>3.2 SOIL EROSION</b></p> <p><b>3.2.1 Appropriate measures shall be implemented to avoid soil erosion.</b></p> <p>3.2.1.1 Land preparation shall follow contour lines in hilly or sloping areas.</p> <p>3.2.1.2 Soil-specific tillage methods shall be suggested in Training Modules. Pre-sowing, IWM, IPM, and INM shall be adopted to prevent soil compaction and erosion of topsoil.</p> <p>3.2.1.3 Irrigation methods shall not disturb the structure of the soil.</p> <p>3.2.1.4 Where applicable, living barriers shall support the stability of the soil.</p>   |  <br> <br> <br>    |
| <br><br><br><br><br><br> |  | <p><b>3.3 INTEGRATED FERTILISER MANAGEMENT</b></p> <p>Reference: Standard Requirement 1.8.4.1</p> <p><b>3.3.1 Fertiliser application shall be based on the evaluation of needs, taking into account soil-borne nutrients, soil conditions, and input from non-mineral sources.</b></p> <p>3.3.1.1 Soil and/or leaf analysis shall be carried out on a regular basis, preferably every three years, when feasible.</p> <p>3.3.1.2 Farmers shall adopt the practice of applying Farmyard Manure (FYM) and/or compost. When feasible, bio-fertilisers shall also be applied.</p> <p>3.3.1.3 Soil conditions, particularly organic matter when available, shall be considered before applying mineral fertilisers.</p> <p>3.3.1.4 Organic manure available on the farm shall not be exported from the farm.</p> <p>3.3.1.5 Manure shall be in an advanced stage of decomposition when applied.</p> <p>3.3.1.6 Farmers shall apply micronutrients based on soil/leaf testing or plant symptoms (colour system), when available.</p> <p>3.3.1.7 The phase-out of nitrogen-based and other inorganic fertilisers through the use of more organic inputs shall be constantly promoted during individual and group farmer training sessions.</p> |  <br><br> <br><br><br> <br>  |

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|  |  | <p><b>3.3.2 Use methods and storage practices for fertilisers shall ensure that their application does not pose a risk of water pollution or health hazards to those who apply them.</b></p> <p>3.3.2.1 The dose of fertiliser applications shall be according to local requirements and based on soil analyses.</p> <p>3.3.2.2 Organic and synthetic fertilisers shall not be stored in proximity to surface water bodies.</p> <p>3.3.2.3 When applying fertiliser, reasonable buffer zones shall be maintained around surface water bodies, specific to the type of fertiliser used.</p> | <br><br> |
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## 4. Pest Management











































The REEL Regenerative Standard for Pest Management prioritises Integrated Pest Management (IPM) strategies that minimise chemical use while maintaining crop health. Cotton farmers are required to maintain crop hygiene by removing and properly disposing of diseased plants. They should also adopt pest monitoring techniques, such as pheromone traps, to determine pest thresholds and inform targeted pesticide applications. Preventive measures, including the use of trap crops and manual weed control, are encouraged to reduce reliance on herbicides, with a phased-out approach over five years.

Farmers are urged to record pesticide usage to demonstrate a reduction over time, favouring low-toxicity options and adhering to strict guidelines prohibiting harmful substances. The use of pesticides must comply with local regulations, ensuring that only registered products with crop and pest specificity are utilised. Safe handling, storage, and disposal of pesticides are crucial, with farmers required to use personal protective equipment (PPE) during applications and to ensure that pesticide containers are managed safely to protect health and the environment.

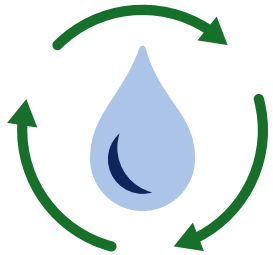
| GROUP | MAJOR | NR           | STANDARD REQUIREMENTS  | FARM SIZE |
|-------|-------|--------------|--|-----------|
|       |       | <b>4</b>     | <b>Pest Management</b>   |           |
|       |       | <b>4.1</b>   | <b>INTEGRATED PEST MANAGEMENT</b>  |           |
|       |       |              | Guidance: Integrated Pest Management (IPM) is a holistic, environmentally-friendly approach to pest control that prioritises prevention and minimises the use of pesticides by combining various methods like biological control, cultural practices, and targeted chemical interventions. Reference: <a href="#">FAO on IPM</a> |           |
|       |       | <b>4.1.1</b> | <b>Crop hygiene shall be safeguarded through preventive cultural means.</b>  |           |
|       |       | 4.1.1.1      | Diseased plants shall be removed and destroyed, burned, or buried to maintain healthy crops.   | SF LF     |
|       |       | 4.1.1.2      | Management of natural enemies and other integrated pest management techniques shall be incentivised, promoted, disseminated, and made known to farmers.  | SF LF     |
|       |       | 4.1.1.3      | Cage crops, molasses traps, yellow traps, pheromone traps, and light traps shall be adopted, when feasible, to control and monitor pests.  | SF LF     |
|       |       | 4.1.1.4      | Water used for irrigation shall be clean.  | SF LF     |
|       |       | 4.1.1.5      | Trap crops shall be promoted and increasingly adopted by farmers.  | SF LF     |

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| <br><br>  |  | <p><b>4.1.2 Monitoring to determine the economic threshold of pests and the optimal time for the application of pesticides shall be practiced.</b></p> <p>4.1.2.1 The cotton farmer shall scout and monitor for pest attacks.</p> <p>4.1.2.2 When feasible, farmers shall use pheromone traps for the identification of pests to ensure targeted pesticide use.</p> <p>4.1.2.3 Economic injury levels and action thresholds shall be respected.</p>   |  <br> <br>   |
| <br><br><br> |  | <p><b>4.1.3 Farmers shall be encouraged to use recurrent herbicides only as a last resort.</b></p> <p>4.1.3.1 Preventive weed control and management shall be performed manually or mechanically.</p> <p>4.1.3.2 Farmers shall be encouraged to avoid using herbicides.</p> <p>4.1.3.3 The application of herbicides shall be reduced over time.</p> <p>4.1.3.4 Activities for full phase-out after five years for herbicide shall be implemented. A reduced dose of herbicide application shall be documented through Farmer Field Book (FFB) data. Exceptional use shall only be allowed punctually upon formal request and proof of extraordinary circumstances.</p> |  <br> <br> <br>  |
| <br><br>   |  | <p><b>4.1.4 Cultural, physical, and biological measures shall be applied before resorting to chemical pest control, and only if scouting has shown pest infestation.</b></p> <p>4.1.4.1 Farmers shall plant cotton alongside border crops and trap crops.</p> <p>4.1.4.2 At least one cultural measure to control pests, such as bird perches or traps (e.g., pheromone traps), shall be adopted.</p> <p>4.1.4.3 At least one biological method, such as the release and augmentation of natural enemies, the use of microbial products, natural products/biological pesticides, or organic pest repellents (e.g., neem extract), shall be considered.</p>              |  <br> <br>   |













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|   |   | <b>4.2 PESTICIDE USE</b>   |   |
|   |   | <b>4.2.1 REEL farmers shall strive to reduce the amounts of pesticides used over time, with records of pesticide use being maintained and available.</b>   |   |
|    |   | 4.2.1.1 Farmers shall keep records of the types and amounts of pesticides used, along with pest and pesticide details, in the Farmer Field Book (FFB).   |       |
|    |   | 4.2.1.2 With the help of usage records and inventories, farmers shall demonstrate that pesticide application follows a downward trend and is applied only as needed.   |       |
|    |   | 4.2.1.3 Farmers shall prefer the selection of pesticides with the lowest toxicity levels.  |       |
|    |   | 4.2.1.4 The activities of phasing out synthetic pesticides and their replacement with organic inputs shall be constantly promoted during training.   |       |
|    |   | 4.2.1.5 No synthetic pesticides shall be applied within 10 meters of any permanent water body.   |       |
|   |   | <b>4.2.2 Substances classified as WHO Class Ia and Ib, as well as those banned by international conventions (such as POP, PIC, Montreal, and Stockholm), shall not be used.</b>  |   |
|    |  | 4.2.2.1 Cotton farmers shall not use pesticides containing substances listed in WHO Classes Ia and Ib.   |       |
|    |  | 4.2.2.2 Cotton farmers shall not use any substances listed as prohibited synthetic agrochemicals & pesticides by the international protocols or governance bodies followed by CottonConnect, including WHO, POP, PIC, and Montreal (refer to the annex of the standards for links to these lists). |       |
|   |   | 4.2.2.3 A list of locally available safe pesticides shall be provided to the farmer groups.  |   |
|   |   | <b>4.2.3 Substances listed on the REEL Prohibited Pesticide List shall be phased out.</b>  |   |
|  |   | 4.2.3.1 Cotton farmers shall not use substances listed on the REEL Prohibited Pesticide List.  |   |

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| <br><br> |  | <p><b>4.2.4 Pesticides used shall be officially registered in the country, with crop and pest specificity warranted.</b></p> <p>4.2.4.1 Cotton farmers shall only use pesticides that are officially registered in the country.</p> <p>4.2.4.2 The crop specificity of used pesticides shall be guaranteed.</p> <p>4.2.4.3 Pesticides used shall be specifically permitted for combating the target pest.</p>  | <br><br> |
| <br><br> |  | <p><b>4.3 SAFE HANDLING</b></p> <p><b>4.3.1 Pesticides shall be safely stored, handled, and disposed of.</b></p> <p>4.3.1.1 Pesticides shall be safely stored and kept out of children’s reach.</p> <p>4.3.1.2 Farmers shall use appropriate personal protective equipment (PPE) for spraying.</p> <p>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.</p> | <br><br> |




















## 5. Water Management



The REEL Regenerative Standard for Water Management mandates cotton farmers to identify and preserve irrigation sources, ensuring legal extraction and preventing depletion. Farmers must avoid untreated sewage, monitor water quality, and adapt irrigation based on rainfall and crop needs. Proper maintenance of irrigation equipment and effective drainage during heavy rainfall are also essential.

| GROUP   | MAJOR | NR           | STANDARD REQUIREMENTS  | FARM SIZE   |
|---|-------|--------------|--|---|
|   |       | <b>5</b>     | <b>Water Management</b>  |   |
|   |       | <b>5.1</b>   | <b>SUSTAINABLE WATER SOURCES</b>   |   |
|   |       | <b>5.1.1</b> | <b>Sources of water for the irrigation of cotton fields shall be identified and preserved.</b>                 |   |
|    |       | 5.1.1.1      | The farm owner shall identify all water sources for the irrigation of cotton fields.                           |       |
|    |       | 5.1.1.2      | The cotton farmer shall be clear about the volumes of water that can be used to avoid depleting the source(s). |       |
|   |       | 5.1.1.3      | Water availability from the chosen source(s) shall be sufficient from the start of cotton production.          |     |
|  |       | 5.1.1.4      | The cotton farmer shall be able to demonstrate legal authorisation to extract water.                           |   |



























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| <br><br><br><br><br><br> |  | <p><b>5.3 SUSTAINABLE USE OF WATER</b></p> <p><b>5.3.1 Measures to optimise water use for the irrigation of cotton fields shall be adopted.</b></p> <p>5.3.1.1 The cotton farmer shall have a good understanding of the watering needs of cotton.</p> <p>5.3.1.2 The rainfall pattern shall be taken into account when watering cotton fields.</p> <p>5.3.1.3 The timing of irrigation shall follow the physiological requirements of the cotton plant.</p> <p>5.3.1.4 Farmers shall accurately record and recall the volume of water used for irrigation to support efficient water management and sustainable practices.</p> <p>5.3.1.5 The most effective and affordable irrigation method available in the region shall be used by cotton farmers.</p> <p>5.3.1.6 The irrigation equipment shall be properly maintained.</p> <p>5.3.1.7 The appropriate method of water discharge or drainage shall be followed during heavy rainfall or flood.</p> |  <br> <br> <br><br> <br><br>  |
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## 6. Ecosystem protection and conservation of high carbon stock areas



The REEL Regenerative Standard emphasises ecosystem protection and the conservation of high-carbon stock areas in cotton farming. It prohibits new cultivation on deforested lands or protected areas, ensuring biodiversity conservation. Farmers must maintain ecological buffer zones and actively restore unproductive lands. Practices like intercropping, agroforestry, and planting native species enhance sustainability while promoting climate adaptation measures. Through these efforts, cotton farmers can improve both environmental and economic resilience.

| GROUP | MAJOR | NR         | STANDARD REQUIREMENTS  | FARM SIZE |
|-------|-------|------------|--|-----------|
|       |       | <b>6</b>   | <b>Ecosystem protection and conservation of high carbon stock areas</b>  |           |
|       |       | <b>6.1</b> | <b>FOREST CONSERVATION AND PROTECTION OF SENSITIVE AREAS</b>   |           |
|       |       | 6.1.1      | New lands for cotton cultivation shall not be developed through deforestation, on protected land, or in areas of high biodiversity.  |           |
|       | ✓     | 6.1.1.1    | Primary forests and land protected by law shall not be destroyed for the purpose of cotton cultivation.  |           |
|       |       | 6.1.1.2    | Secondary forests over 10 years old shall not be deforested for the purpose of gaining new land for cotton cultivation.  |           |
|       |       | 6.1.1.3    | For secondary forests less than 10 years old and trees around the farm, compensation shall be sought in the form of 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 shall be identified and conserved.  |           |
|       |       | 6.1.1.5    | Farmers shall be provided with a list of wildlife species native to their region and be able to identify which of those species are classified as vulnerable, endangered, or critically endangered according to the IUCN Red List ( <a href="http://www.redlist.org">http://www.redlist.org</a> ). |           |

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| <br><br>     |  | <p><b>6.2 BUFFER ZONES</b></p> <p>Guidance: A buffer zone is a designated area, often vegetated, separating agricultural land from sensitive areas like water bodies or other land uses, to protect water quality and prevent the spread of pollutants.</p> <p><b>6.2.1 Cotton production shall respect ecologically sensitive areas by maintaining adequately sized buffers, and there shall be visible signs that these areas have been actively restored.</b></p> <p>6.2.1.1 When applicable, the farmer shall maintain buffer zones between their operations and ecologically sensitive areas, in accordance with local legislation.</p> <p>6.2.1.2 Ecological buffers shall be left untouched.</p> <p>6.2.1.3 Naked buffers shall be actively restored through reforestation or other protective measures that allow natural regrowth without human or animal interference.</p> |  <br> <br>          |
| <br>  |  | <p><b>6.2.2 Buffers to public areas such as roads and human settlements shall be maintained.</b></p> <p>6.2.2.1 The cotton farmer shall maintain safe distances from public roads and houses when applying chemicals.</p> <p>6.2.2.2 In cases where safe distances cannot be maintained, vegetative buffers shall be implemented to ensure public safety.</p>  |  <br>   |
| <br><br> |  | <p><b>6.3 ECOLOGICAL COMPENSATION</b></p> <p><b>6.3.1 The cotton farmer shall actively contribute to restoring unproductive land.</b></p> <p>6.3.1.1 Unproductive land shall not be converted into cotton fields.</p> <p>6.3.1.2 The cotton farmer shall be able to demonstrate that measures have been implemented to restore natural vegetation.</p> <p>6.3.1.3 Cotton farmer groups shall contribute to the plantation of trees, including cotton trees, in their locality.</p>   |  <br> <br>  |

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|   |         | <p><b>6.4 AGROBIODIVERSITY AND CLIMATE ADAPTATION</b></p> <p><b>6.4.1 Cotton farmers shall diversify their production systems to enhance environmental and economic sustainability.</b></p>   |   |
|  | 6.4.1.1 | <p>Fallowing of land shall be practiced on a regular basis where possible.<br/>           Guidance: Farmers following fallowing of Cotton Land for at least 2 months in a year</p>  |   |
|  | 6.4.1.2 | <p>Intercrop practice shall be designed based on the socio-economic situation of the cotton farmer (e.g., availability of land, and irrigation).</p>  |   |
|  | 6.4.1.3 | <p>Economic resilience shall be increased through intercropping.</p>  |   |
|  | 6.4.1.4 | <p>The concept of Multifunctional Agroforestry shall be trained and actively promoted among farmers.<br/>           Guidance: Multifunctional agroforestry is a land-use system that integrates trees with crops and/or livestock, aiming to provide a wide range of economic, social, and environmental benefits, going beyond just food production.</p> |   |
|  | 6.4.1.5 | <p>A nursery shall be established or identified as a source of native tree and plant species for ecological restoration activities on the farm.</p>   |   |
|  | 6.4.1.6 | <p>Climate change mitigation and adaptation measures shall be identified and implemented.</p>   |   |

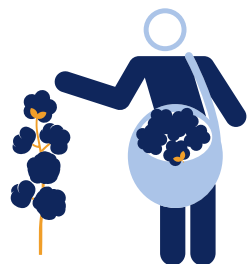
## 7. Waste Management



Farmers should recycle organic waste according to the REEL Regenerative Standard, using crop residues for composting or animal feed. They must keep farms free of hazardous waste and ensure proper disposal methods that protect human health and the environment, adhering to sustainable practices for waste management and resource recovery.

| GROUP   | MAJOR | NR           | STANDARD REQUIREMENTS   | FARM SIZE   |
|---|-------|--------------|---|---|
|   |       | <b>7</b>     | <b>Waste Management</b>   |   |
|   |       | <b>7.1</b>   | <b>HAZARDOUS WASTE</b><br>Guidance: Types of Hazardous Waste in Agriculture:<br>i. Chemicals: This is a broad category encompassing pesticides (herbicides, insecticides, fungicides), biocides, and other chemicals used for various agricultural purposes.<br>ii. Unused and Expired Chemicals: Even unused or expired chemicals can pose a hazard and need to be handled and disposed of properly.<br>iii. Packaging Materials: Contaminated packaging from pesticides, fertilisers, and other chemicals can also be considered hazardous waste.<br>iv. Other Hazardous Materials: This includes things like used oil, batteries, and other materials used on farms that can become hazardous waste.<br>v. Biomedical Waste: Animal waste and dead animals can also be considered hazardous waste if not managed properly. |   |
|   |       | <b>7.1.1</b> | <b>The cotton farmer shall demonstrate that the farm is free of hazardous waste and that disposal techniques are appropriate for the identified waste.</b>  |   |
|  |       | 7.1.1.1      | The cotton farmer shall have identified hazardous waste on the farm, house, or sheds.   |   |
|  |       | 7.1.1.2      | Farm premises and fields shall be free of inorganic waste.  |   |
|  |       | 7.1.1.3      | Appropriate disposal techniques shall be employed that do not harm the environment or human health.   |   |

## 8. Institutional Building



Progress towards establishing a formalised organisational setup, such as SHGs, Cooperatives, and Producer Companies, should align with the REEL Regenerative standard. Evidence of mechanisms for registering or formalising these farmer organisations must be developed to ensure sustainable practices, collective action, and increased bargaining power for the farmers involved.




















| GROUP | MAJOR | NR         | STANDARD REQUIREMENTS  | FARM SIZE |
|-------|-------|------------|--|-----------|
|       |       | <b>8</b>   | <b>Institutional Building</b>  |           |
|       |       | <b>8.1</b> | <b>STRENGTHENING PRODUCER GROUPS</b>   |           |
|       |       | 8.1.1      | Organisation of producer group (or sub-group structures) should be encouraged to undertake collective bargaining for their produce and purchase of agri-input. | SF        |
|       |       | 8.1.2      | Joint activities by Farmer Groups are actively promoted.   | SF        |



















## 9. Social Conditions























In alignment with the REEL Regenerative Standard, farms employing over ten permanent workers must formally recognise workers' rights to establish organisations and engage in collective bargaining. In the absence of trade unions, a democratically elected workers' committee shall be formed, ensuring protection against any form of retaliation. Strict prohibitions against forced and child labour must be enforced, with policies in place to safeguard children's education. Occupational safety standards must be upheld, and workers should receive clear, legally binding contracts and equitable compensation. Discrimination in any form is strictly prohibited, and effective grievance mechanisms must be established, alongside initiatives aimed at empowering women and marginalised groups within the farming community.

| GROUP | MAJOR | NR           | STANDARD REQUIREMENTS   | FARM SIZE |
|-------|-------|--------------|---|-----------|
|       |       | <b>9</b>     | <b>Social Conditions</b>  |           |
|       |       | <b>9.1</b>   | <b>FREEDOM OF ASSOCIATION (ILO 87) &amp; COLLECTIVE BARGAINING (ILO 89)</b>   |           |
|       |       | <b>9.1.1</b> | <b>Management of farms/gin with more than 10 full or part-time permanent workers shall recognise, in writing and in practice, the right of all workers to establish and join worker organisations of their own choosing and to collectively negotiate their working conditions.</b> |           |
|       |       | 9.1.1.1      | Management shall respect the right of all workers to form or join a trade union or informal labour group of their choice and to engage in trade union activities on-site, if available.   |           |
|       |       | 9.1.1.2      | Workers shall have the right to choose their representative at any level.   |           |
|       |       | <b>9.1.2</b> | <b>If no active and representative union exists on farms with more than 10 full or part-time permanent workers, all workers shall democratically elect a workers' committee to represent them and negotiate with management to defend their rights and interests.</b>               |           |
|       |       | 9.1.2.1      | Worker committees shall be established to defend workers' rights and interests if trade unions are absent on-site or in the area.   |           |
|       |       | 9.1.2.2      | The workers' committee shall be democratically elected by workers to represent their interests and negotiate with management.   |           |

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|--|---|---|--|--|
| <br><br><br> |   | <p><b>9.1.3</b></p> <p>9.1.3.1</p> <p>9.1.3.2</p> <p>9.1.3.3</p> <p>9.1.3.4</p> | <p><b>Workers shall not be subject to retaliation, discrimination, or any other negative consequences as a result of collective bargaining.</b></p> <p>The union representative/workers' committee representative shall have access to all workers at the workplace.</p> <p>The union representative/workers' committee representative shall be aware of the appeal procedure in case management does not comply with legal rules.</p> <p>The workers' committee shall be capable of operating on-site, free from farm management interference.</p> <p>There shall be no signs of worker retaliation or discrimination due to collective bargaining.</p> | <br><br><br> |
|  |   | <p><b>9.2</b></p> <p><b>9.2.1</b></p>   | <p><b>PROHIBITION OF FORCED LABOUR (ILO 29 &amp; 105)</b></p> <p><b>Forced labour, including bonded or involuntary prison labour, does not occur.</b></p>  |  |
|   |  | <p><b>9.2.1.1</b></p>   | <p><b>There shall be no evidence of forced labour.</b></p>   |   |
|   |   | <p>9.2.1.2</p>  | <p>No recruitment fee, charges, or retention of valuables or identity papers shall be imposed on members.</p>  |   |
|   |   | <p>9.2.1.3</p>  | <p>Salaries or wages shall not be retained by the member farmers or ginnerers to force workers to stay.</p>  |   |
|   |   | <p>9.2.1.4</p>  | <p>Workers shall be free to leave their workplace with appropriate notice.</p>   |   |
|    |   | <p>9.2.1.5</p>  | <p>Spouses shall work voluntarily and on a separate contract basis.</p>  |    |

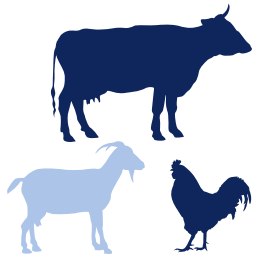
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|   |   | <b>9.3</b>     | <b>PROHIBITION OF CHILD LABOUR (ILO 138)</b>  |   |
|   |   | <b>9.3.1</b>   | <b>Children shall not be employed or contracted below the age of 14.</b>  |   |
|    | ✓ | <b>9.3.1.1</b> | <b>The minimum age of children employed shall not be less than the age of completion of compulsory schooling and, in any case, shall not be less than 14.</b>   |    |
|    |   | 9.3.1.2        | Policies and procedures to prevent the employment of children below the age of 14 shall be in place and under the custody of the implementing body.   |    |
|   |   | <b>9.3.2</b>   | <b>All children of farmers, farm labour and gin labour shall attend compulsory schooling. Work shall not jeopardise their schooling or social, moral, or physical development.</b>  |   |
|    |   | 9.3.2.1        | Member farmers and ginners shall ensure that work does not jeopardise the schooling, health, safety, or social, moral, or physical development of workers under the age of 18.  |    |
|    |   | 9.3.2.2        | Children under the age of 14 engaged in joint family labour or neighbourhood services shall only perform work duties that are commensurate with their age and under the custody and guidance of their parents or relatives. |    |
|    |   | 9.3.2.3        | Children under the age of 14 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, farm labour and gin labour shall attend compulsory schooling.  |    |
|   |   | <b>9.4</b>     | <b>PROHIBITION OF WORST FORMS OF CHILD LABOUR (ILO 182)</b>   |   |
|   |   | <b>9.4.1</b>   | <b>Worst forms of child labour do not occur.</b>  |   |
|   | ✓ | <b>9.4.1.1</b> | <b>There shall be no evidence of trafficked, bonded, forced, or abused labour.</b>  |  |
|   |   | <b>9.4.2</b>   | <b>Monitoring, evaluation and response mechanisms exist.</b>  |   |
|  |   | 9.4.2.1        | Incidences of the worst and regular forms of child labour shall be documented.  |  |
|  |   | 9.4.2.2        | An action plan to prevent, monitor, and remediate child labour shall be implemented, documented, and followed up.   |  |

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| <br><br><br><br><br><br> | <p><b>9.5</b></p> <p><b>9.5.1</b></p> <p>9.5.1.1</p> <p>9.5.1.2</p> <p>9.5.1.3</p> <p>9.5.1.4</p> <p>9.5.1.5</p> <p>9.5.1.6</p> <p>9.5.1.7</p> | <p><b>WARRANTY OF OCCUPATIONAL SAFETY</b></p> <p><b>The farm shall provide workers in all work areas with the basic services, resources, and working conditions necessary to comply with occupational health and safety programme objectives.</b></p> <p>A safe and hygienic working environment shall be provided, considering the prevailing knowledge of seed cotton production and ginning and any specific hazards. Adequate steps shall be taken to prevent accidents and injury to health arising from, associated with, or occurring in the course of work by minimising, as far as reasonably practicable, the causes of hazards inherent in the working environment.</p> <p>Workers shall receive regular and recorded health and safety training, and such training shall be repeated for new or reassigned workers.</p> <p>Gin factories shall provide first aid services and emergency health care free of charge for work-related injuries to workers and supervisors.</p> <p>First aid boxes shall be accessible at all times at the farm or workplace. The boxes shall be fully equipped and in good condition.</p> <p>In all farms &amp; gins, potable drinking water shall be accessible to all workers during their working period.</p> <p>Personnel who apply or handle agrochemicals or perform any other hazardous work shall be provided with the necessary protective equipment.</p> <p>Storage areas for agrochemicals shall comply with basic safety standards.</p> | <p>SF LF</p> <p>SF LF</p> <p>SF LF</p> <p>SF LF</p> <p>SF LF</p> <p>SF LF</p> <p>SF LF</p> |
| <br><br><br><br><br>  | <p><b>9.6</b></p> <p>9.6.1</p> <p>9.6.1.1</p> <p>9.6.1.2</p> <p>9.6.1.3</p> <p>9.6.1.4</p> <p>9.6.1.5</p> <p>9.6.1.6</p>                       | <p><b>EMPLOYMENT CONDITIONS</b></p> <p><b>Workers shall be aware of their rights and duties, responsibilities, salaries, and work schedules.</b></p> <p>All workers employed for more than 3 months shall have legally binding labour contracts defining their rights and duties, responsibilities, work schedules, and wages/salaries.</p> <p>Workers employed for more than 3 months shall receive copies of, or have access to, the contracts signed by both parties.</p> <p>Payment shall be made in legal tender.</p> <p>Payments shall be made on time, according to an appropriate payment schedule that has been communicated to workers employed by the farmer &amp; gins.</p> <p>In farms with more than 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, allowances, bonuses, overtime payment, and all deductions in detail.</p> <p>The legal provisions for social insurance, leave practices, and overtime shall be followed.</p>  | <p>SF LF</p> <p>SF LF</p> <p>SF LF</p> <p>SF LF</p> <p>SF LF</p> <p>SF LF</p>              |

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| <br><br><br><br> |  | <p><b>9.6.2</b></p> <p>9.6.2.1</p> <p>9.6.2.2</p> <p>9.6.2.3</p> <p>9.6.2.4</p> <p>9.6.2.5</p> | <p><b>Work, including subcontracted work, shall be equally remunerated according to the type of work provided and for both genders alike.</b></p> <p>Payment of workers contracted by the farmer &amp; gins shall either be in line with or exceed sector Collective Bargaining Agreements or correspond to the regional average and/or official minimum wages for similar occupations.</p> <p>Payment shall be at least equal to the country or region-specific stipulated benchmark for living wages.</p> <p>Women’s pay shall be equal to their male counterparts for the same type of work provided.</p> <p>The pay rate shall allow subcontracted workers who are remunerated based on production quotas or piecework to earn at least the proportionate minimum wage or the relevant industry average (whichever is higher) during normal working hours.</p> <p>Working hours shall not be excessive and shall be in line with national or local legislation regarding overtime and remuneration.</p> | <br><br><br><br> |
| <br><br>   |  | <p><b>9.6.3</b></p> <p>9.6.3.1</p> <p>9.6.3.2</p> <p>9.6.3.3</p>                               | <p><b>Deductions from salaries shall only be made as agreed by national laws, as fixed by a Collective Bargaining Agreement, or if the employee has given their written consent.</b></p> <p>Deductions from salaries shall be in line with national laws and/or the Collective Bargaining Agreement (if applicable).</p> <p>Deductions shall not be used as disciplinary measures.</p> <p>When deductions are made for services provided by the farmer, they shall be in line with the actual costs incurred by the employer.</p>   | <br><br>   |

|   |   |              |   |   |
|---|---|--------------|---|---|
|   |   | <b>9.7</b>   | <b>NO DISCRIMINATION IN THE WORKPLACE (ILO 111) AND WORKPLACE HARASSMENT</b>  |   |
|   |   | 9.7.1        | <b>Any form of discrimination or abuse shall be absent.</b>   |   |
|    | ✓ | 9.7.1.1      | There shall be no discrimination based on 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 its members shall not engage in or support the use of corporal punishment, mental or physical coercion, or verbal abuse.   |       |
|    |   | 9.7.1.3      | The work shall be free from abuse, violence and harassment, including child or any form of abuse, gender-based violence, sexual and physical harassment. Ref: ILO on Violence and Harassment Convention, 2019 (No. 190).  |       |
|    |   | <b>9.7.2</b> | <b>Grievance mechanisms.</b>  |   |
|   |   | 9.7.2.1      | A grievance mechanism shall be implemented and made accessible to farmers, workers, and other individuals potentially affected by the organisation's work. The design and functionality of the mechanism shall be effective.  |       |
|   |   | <b>9.8</b>   | <b>WOMEN'S SOCIAL INCLUSION AND ECONOMIC EMPOWERMENT</b>  |   |
|   |   | <b>9.8.1</b> | <b>The organisation shall foster the social and economic development of farmers and their spouses through the creation of Farmer Groups, Women in Cotton projects, and other entrepreneurial initiatives at the community level.</b>  |   |
|   |   | 9.8.1.1      | Farmer Groups shall be enabled to improve the economic resilience of member farmers.  |       |
|  |   | 9.8.1.2      | Entrepreneurial initiatives shall be developed at the communal level to diversify sources of income for farmers.  |   |
|  |   | <b>9.8.2</b> | <b>Programmes related to disadvantaged or minority groups among the farmers' force, particularly women, shall be in place to improve their position.</b>  |   |
|   |   | 9.8.2.1      | Women farmers or spouses of male farmers who are members of disadvantaged or minority groups shall be prioritised for participation in entrepreneurial ventures aimed at promoting regenerative farming practices, including but not limited to nursery development, animal husbandry, biochar production, and agricultural input production. |   |

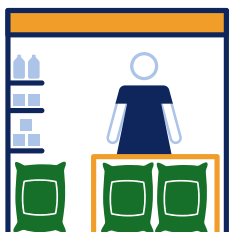
## 10. Animal Welfare



In accordance with the REEL Regenerative Standard, livestock on cotton farms must be treated humanely, ensuring their health through regular check-ups and vaccinations. Adequate shelter and access to sufficient fodder must be provided year-round. Additionally, clean drinking water must be available at all times, especially during summer and stressful periods, while promoting collective silvopasture areas within agroforestry systems to support on-farm livestock needs.

| GROUP | MAJOR | NR            | STANDARD REQUIREMENTS  | FARM SIZE |
|-------|-------|---------------|--|-----------|
|       |       | <b>10</b>     | <b>Animal Welfare</b>  |           |
|       |       | <b>10.1</b>   | <b>LIVESTOCK RAISED ON COTTON FARMS SHALL BE TREATED WITH RESPECT</b>  |           |
|       |       | 10.1.1        | Regular health check-ups and vaccinations of animals are conducted.  |           |
|       |       | 10.1.2        | Adequate shelter shall be provided for farm animals.   |           |
|       |       | 10.1.3        | The development of collective silvopasture areas shall be promoted under Agroforestry systems to meet the needs of on-farm livestock.                              |           |
|       |       | <b>10.1.4</b> | <b>Animals must not endure prolonged hunger and shall have access to an adequate source of fodder throughout the year.</b>   |           |
|       |       | 10.1.5        | Clean and hygienic water shall be accessible to livestock throughout the year, with guaranteed availability of drinking water during summer and periods of stress. |           |

## 11. Resilient Livelihoods



Aligned with the REEL Regenerative Standard, regenerative agriculture, coupled with social fairness, seeks to enhance incomes, bolster climate resilience, and enrich agro biodiversity on cotton farms. By diversifying income sources—such as food, fodder, firewood, tree seedlings, and animal husbandry—farmers can improve economic welfare while simultaneously reducing farming costs through decreased inputs. Farmers are expected to demonstrate a business-oriented approach to cotton cultivation for sustained profitability and productivity. Additionally, promoting cotton residue biochar offers an alternative income source, while preserving and creating natural habitats will enhance agro biodiversity, ensuring sustainable income avenues for farmers.

| GROUP | MAJOR | NR          | STANDARD REQUIREMENTS   | FARM SIZE |
|-------|-------|-------------|---|-----------|
|       |       | <b>11</b>   | <b>Resilient Livelihoods</b>  |           |
|       |       | <b>11.1</b> | <b>REGENERATIVE AGRICULTURE, INTEGRATED WITH SOCIAL FAIRNESS, SHALL AIM TO TANGIBLY INCREASE INCOMES, ENHANCE CLIMATE ADAPTATION, AND IMPROVE AGRO BIODIVERSITY ON COTTON FARMS</b>     |           |
|       |       | 11.1.1      | Economic welfare shall be steadily improved through diversified incomes, including the simultaneous production of cotton, food, fodder, firewood, tree seedlings, and animal husbandry. |           |
|       |       | 11.1.2      | The cost of farming shall be steadily decreased as farming inputs are reduced.  |           |
|       |       | 11.1.3      | Farmers shall provide evidence demonstrating that they treat cotton cultivation as a business to ensure profitability and long-term productivity.                                       |           |
|       |       | 11.1.4      | The promotion and development of cotton residue biochar shall serve as an alternative income source when produced in surplus.   |           |
|       |       | 11.1.5      | Existing natural habitats on the farm shall be retained, and new habitats shall be created.   |           |
|       |       | 11.1.6      | Agro biodiversity on farms shall be continuously increased to ensure a sustainable source of alternate income for farmers.  |           |



# Annexure



## Glossary of Terms

### **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.

### **CONTROL FARMERS**

Control farmers are the non-REEL 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.

## **FARMERS GROUP**

Individual farmers shall be organised into groups for the implementation and monitoring of the REEL programme and its activities. Each group will elect a group leader who will serve as the primary contact for group members. The number of farmers in each group may vary by region, with a maximum of 50 and a minimum of 20 farmers per group.

## **FARM SIZE**

For the effective implementation of the REEL programme, farmers have been categorised into two groups: Small Farm Holdings and Large Farm Holdings. Small Farm Holdings refer to farmers with less than or equal to 15 hectares of cotton land, while Large Farm Holdings consist of farmers with more than 15 hectares of cotton land.

## **FARMERS PRODUCER ORGANISATION**

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.

## **HABITAT**

A habitat is the place where an organism lives.

## **IMPLEMENTATION PARTNER**

An organisation or entity that actively carries out the programme's objectives on the ground. They are responsible for executing the programme's strategies, reaching target beneficiaries, and achieving the desired outcomes.

## **INTERCROP**

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

## **LARGE FARM HOLDING**

Large Farm Holdings refers to farmers with more than 15 hectares of cotton land.

## **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 IMMOBILISATION**

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.

## **PASTURELAND**

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**

Farmer Groups will be consolidated into Producer Groups. Each Producer Group will be led by a Project Coordinator. To ensure efficient operation and implementation, a Producer Group shall consist of a maximum of 4,500 farmers. For large farmers, Producer Group will consist of 50 farmers, allowing for a deviation of up to +20%.

## **PRODUCER GROUP INFORMATION**

Producer group information may include, but is not limited to, farmers' lists, farmers' group lists, land data, cotton cultivation areas, projected production of REEL Cotton, organisational structure, and implementation team details.

## **PROJECT FARMERS**

Project farmers are the REEL Cotton 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 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.

## **SMALL FARM**

Small Farm Holding refer to farmers with less than or equal to 15 hectares of cotton land.

## **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.

## **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.

## List of Prohibited Chemicals

REEL Regenerative Standard 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

<http://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>

