

MONITORING AND EVALUATION

SAFE HANDLING OF PESTICIDES AND FERTILISERS: DATA COLLECTION AND ANALYSIS



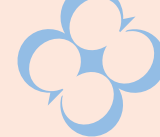


CottonConnect's commitment to promoting sustainable and responsible agricultural practices is demonstrated through its data-driven approach.

By gathering data on various aspects related to handling and managing chemical inputs, CottonConnect plays a crucial role in safeguarding the well-being of farmers and consumers. Analysing this data helps to identify the knowledge gaps and training needs, ensuring that farmers have the knowledge and resources to handle pesticides and fertilisers safely. The ability to track progress and continuously improve training and support initiatives enhances the impact of CottonConnect's efforts. The REEL and REEL Regenerative Code of Conducts (CoC) have specific compliance requirements as outlined in the table below:

REEL COC 3.1 and REEL Regenerative COC 1.1	Conduct
	<p>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 it.</p> <p>3.3.2.1 Fertiliser applications are domified as per local requirements and based upon the soil analyses.</p> <p>3.3.2.2 Organic fertilisers are not stored in proximity to surface water bodies.</p> <p>3.3.2.3 When applying fertiliser, reasonable buffers is maintained to surface water bodies specific to the type of fertiliser.</p>
	<p>4.3.1 Pesticides are safely stored, handled, and disposed of.</p> <p>4.3.1.1 Pesticides are safely stored and out of children's reach.</p> <p>4.3.1.2 For spraying, farmers use appropriate personal protective equipment.</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>
	<p>9.5.1.6 Storage areas for agrochemicals must comply with basic safety standards.</p>





DATA COLLECTION:

Our Farmer Field Book (FFB) is a valuable tool designed to capture data on the storage and handling of pesticides and fertilisers. The FFB captures the farmers' pesticide and fertiliser handling practices, providing a comprehensive dataset that includes storage, PPE usage, application details, safety precautions, and container disposal information.

- **Safe Storage:** The FFB guides farmers in proper storage techniques, emphasising storing pesticides and fertilisers in cool, dry, well-ventilated areas, away from direct sunlight. It records details about storage facilities, ensuring safe and secure containment.
- **Use of Personal Protective Equipment (PPE):** Farmers are instructed on the importance of wearing appropriate PPE during pesticide and fertiliser application. Data collected includes the type of PPE used.
- **Application Practices:** Detailed information is documented regarding applying pesticides and fertilisers. This covers aspects such as application rates, timing, and methods employed. Ensuring accuracy and precision is crucial for minimising environmental impact.
- **Disposal of Empty Containers:** Farmers are educated on disposal methods for empty pesticide and fertiliser containers. The FFB captures data on the disposal process to ensure responsible practices are followed.



DATA ANALYSIS AND REPORTING:

The various aspects related to data analysis and reporting include:

- **Data Centralisation:** All FFB data is centrally stored and organised, making it easily accessible for analysis.
- **Data Analytics:** Our team of experts utilises data analytics tools and techniques to scrutinise the FFB data. This includes:
- **Gap Identification:** Identify areas where farmers may not be following best practices or where there may be room for improvement.
- **Patterns and Trends:** Uncover patterns and trends in pesticide and fertiliser handling that may require attention or targeted training.
- **Comparative Analysis:** Data is compared across different farming groups, regions, and periods to identify variations and trends.



TRAINING NEEDS ASSESSMENT:

This includes assessing the specific training needs based on the analysis in collaboration with the farm team. This may include:

- **Tailored Training Programme:** Customised training programme are developed to address identified gaps and challenges.
- **Reinforcement of Best Practices:** Training sessions focus on reinforcing safe and sustainable handling practices.
- **Targeted Support:** Farmers requiring additional support receive personalised guidance.
- **Continuous Monitoring:** Continue to collect data through FFB to monitor the impact of training interventions and track improvements over time.

Capturing essential data points and the emphasis on responsible techniques indeed serve as vital pillars for promoting the well-being of farmers, preserving the environment, and advancing the agricultural industry. This not only ensures the health and safety of farmers but also safeguards the environment by reducing the negative impact of chemicals. These efforts also contribute to the sustainability and competitiveness of the agricultural sector, fostering a more prosperous and secure future for all stakeholders.