

# ICAR Research Complex for Eastern Region, Patna

## Field Survey Report: Crop Damage Assessment due to Recent Rainfall in Patna district of Bihar

Date of Survey: 21.03.2024

Location: Naubatpur and Phulwari Sharif blocks of Patna

Survey Team: Dr Ajay Kumar (Principal Scientist), Dr Ved Prakash (Scientist) and Dr Govind Makarana (Scientist)

### Crop Damage:

Following recent light rainfall (8-15mm) in the region of Patna, a field survey was conducted to assess the extent of crop damage in different villages (Abu lodhipur, Akabarpur, saristabad, Jeetuchak, Abupur, Lodhipur, Dariapur, Gopalpur) of Naubatpur and Phulwari Sharif blocks. The primary focus was on wheat, pea, lentil, mustard, and chickpea, prominent crops in the area. Most of the agricultural area was cultivated with wheat crop. Contrary to initial concerns, the wheat crop showed negligible damage due to the rainfall. However, some farmers told that this light rainfall could benefit in terms of maintenance of proper moisture in wheat fields. The chickpea crop appeared to be relatively unaffected by the recent rainfall and minimal damage was observed, indicating resilience to adverse weather conditions. Pea and lentil fields have experienced some damage due to the rainfall, with approximately 10% of crops affected by lodging. Flowers and small fruits of mango dropped due to strong winds along with intermittent rain.



### Recommendations:

- Farmers should assess the extent of lodging in peas and lentil fields and take necessary actions such as propping up plants or harvesting techniques to salvage the remaining yield.
- Additionally, implementing preventive measures such as improved drainage systems or selecting lodging-resistant varieties for future cultivation could mitigate similar risks.
- Continuous monitoring of weather forecasts and crop conditions is essential to promptly address any emerging issues.
- Encouraging crop diversification strategies can enhance resilience to adverse weather events. Farmers may consider rotating crops or integrating multiple crops within their fields to diversify risks.
- As per the weather forecast by IMD (Patna) for the next week (23rd March to 28th March 2024), the weather will remain dry, and it is advised to the farmers to keep turning the harvested crop to check the rotting.

**Conclusion:**

Despite the recent rainfall in Patna, the overall impact on crops varied significantly. While the wheat crop remained largely unaffected, peas and lentils experienced little damage due to lodging. However, the chickpea crop displayed resilience to adverse weather conditions. Moving forward, proactive measures such as improved management practices and diversification strategies can help mitigate risks and build resilience in agricultural systems. Farmers should be aware of getting knowledge of weather forecasts so that they can prevent or minimize crop damage due to untimely rainfall.

This report serves to provide insights into the current situation and offers recommendations for mitigating crop damage and enhancing agricultural resilience in the face of unpredictable weather patterns.