Research outputs

Smart irrigation systems deployed. Drone technology for real-time crop surveillance. *Implementatio* n of automation in farming. Sustainable pest control methods. Data analysis for decision support. **Collaborative** platforms and knowledge exchange.

Indicators

Number of smart irrigation systems deployed. Number of drones implemented for real-time crop surveillance. **Percentage** reduction in manual labor requirements through automation. Reduction in chemical pesticide usage as a percentage. Adoption rate of data-driven decision-making practices. **Participation** metrics in workshops and seminars.

Research outcomes

Percentage

change in water use efficiency (Outcome: Improved water efficiency). Reduction in crop losses due to pest infestations (Outcome: Improved pest management). Percentage improvement in labor efficiency through automation (Outcome: **Enhanced labor** efficiency). Decrease in chemical pesticide usage as a percentage (Outcome: Sustainable pest control). Adoption of data-driven decision-making (Outcome: **Enhanced** decision support). Increase in interdisciplinary collaboration among stakeholders (Outcome: **Enhanced** knowledge sharing).

Indicators

Improved water efficiency: Percentage change in water use efficiency, indicating more effective use of water resources for agriculture. Improved pest management: Reduction in crop losses due to pest infestations, reflecting better control of agricultural pests. Enhanced labor efficiency: Percentage improvement in labor efficiency through automation, indicating reduced manual labor requirements. Sustainable pest control: Decrease in chemical pesticide usage as a percentage, showcasing the adoption of more sustainable and environmentally friendly pest control practices. **Enhanced decision** support: Adoption of data-driven decisionmaking, showing that farmers and stakeholders are using real-time data for informed decisionmaking. Enhanced knowledge sharing: Increase in interdisciplinary collaboration among stakeholders, indicating a greater exchange of expertise and knowledge among different fields involved in agriculture.