

## **Construction of a test to measure farmer's knowledge on drone technology**

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### **ABSTRACT**

In the absence of a standardized instrument to assess farmers' knowledge on drone technology, a knowledge test was systematically developed. Test items were initially compiled from credible and authoritative sources, including crop-specific Standard Operating Procedures (SOPs) for drone-based pesticide application issued by the Ministry of Agriculture and Farmers Welfare, Government of India & Professor Jayashankar Telangana Agricultural University (PJTU) and the Vyavasaya Panchangam published by Acharya N.G. Ranga Agricultural University (ANGRAU). The preliminary pool consisted of 92 items, which were subjected to expert validation and statistical methods including difficulty index, discrimination index and point-biserial correlation were employed to evaluate item quality. Based on these criteria, 26 items demonstrating acceptable levels of validity and reliability were retained for the final test. During administration, respondents received one point for each correct response, with no penalty for incorrect answers.

**Keywords:** *Drone technology, Knowledge test and Standard operating procedures*