

## Usability Evaluation of Rice Doctor as a Diagnostic Tool for Agricultural Extension Workers in Selected Areas in the Philippines

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**Abstract :** The effective agricultural extension is essential in facilitating improvements in various agricultural areas. One way of doing this is through Information and communication technologies (ICTs) like Rice Doctor (RD), an app-based diagnostic tool that provides accurate and timely diagnosis and management recommendations for more than 80 crop problems. This study aims to evaluate the RD usability by determining the effectiveness, efficiency, and user satisfaction of RD in making an accurate and timely diagnosis. It also aims to identify other factors that affect RD usability. This will be done by comparing RD with two other diagnostic methods: visual identification-based diagnosis and reference-guided diagnosis. The study was implemented in three rice-producing areas and has involved 96 extension workers. Respondents accomplished a self-administered survey and participated in group discussions. Data collected was then subjected to qualitative and quantitative analysis. Most of the respondents were satisfied with RD and believed that references are needed in assuring the accuracy of diagnosis. The majority found it efficient and easy to use. Some found it confusing and complicated, but this is because of their unfamiliarity with RD. Most users were also able to achieve accurate diagnosis proving effectiveness. Lastly, although users have reservations, they are satisfied and open to using RD. The study also found out the importance of visual identification skills in using RD and the need for capacity development and improvement of access to RD devices. From these results, the following are recommended to improve RD usability: review and upgrade diagnostic keys, expand further RD content, initiate capacity development for AEWs, and prepare and implement an RD communication plan.

**Keywords :** agricultural extension, crop protection, information and communication technologies, rice doctor

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