

AICRIP Experimental Database-<http://www.aicrip-intranet.in>

All India Coordinated Rice Improvement Programme (AICRIP) is the largest research network across India on a single crop. There are more than 100 coordinating centers under this programme. The main objective of the AICRIP is to evaluate technologies developed on rice crop across diverse ecosystems to increase and stabilise rice production. Every year numerous cultivars and improved elite breeding lines, crop production and protection technologies are evaluated across the country to select the best performing variety/technology. At present, there is no real time reporting, data submission but data are sent only once that too in very diverse formats thus resulting in delay in analysis and reporting. Hence there is a need for effective data collection, analysis and real time reporting.

Keeping in view of the above mentioned points, AICRIP Management Information system has been developed to receive immediate feedback regarding seed received confirmation, crop condition and important problems come across during crop growing period and also receive experimental data from all Coordinating centres in uniform formats.

Different activities under AICRIP system (starting from centers, co-operators, experiments, seed dispatch, sowing dates, crop parameters, design of experiments to analysis) were analyzed, relational tables and user interfaces were created using Visual C Sharp as Front end and MS SQL as back end. AICRIP MIS package was designed with 57 relational tables, 190 stored procedures and 60 user interfaces. User friendly interfaces were designed for data entry and analysis of Random Block, Split and Factorial designs for evaluating breeding lines, crop production and protection technologies, Screening Genotypes for assessing genotypes reaction to pests and diseases, Light trap data for pest severity, Production Oriented Survey to identify real time production constraints and Front Line Demonstrations for transfer of technology and seed distribution. This portal is accessible to only AICRIP users with user credentials. Four important user privileges were designed to access data in AICRIP Intranet.

National Coordinator: Privilege to access data from all Centers and all Disciplines

Principal Investigator(PI): Privilege to access data from all Centers for Specific discipline of PI

Center In Charge: Privilege to access data from Specific Center for all disciplines

Co-operator: Privilege to access data from Specific Center and Specific discipline

End product of this project will reduce the work and time taking for analyzing huge data from AICRIP centers. Data will be directly added to the centralized database in the prescribed format and year wise data will be maintained on the server. This will be useful for assessing the performance of genotypes to different stresses across several years. At present, trial wise consolidated reports are generating for individual

disciplines. Additional queries like performance of technologies across trails, disciplines and centers over the years can be added to the portal. This will be of great use for developing intelligence technologies to different rice growing regions.

Further this software can be easily customized and used for managing coordinating data of any other crops under Indian Council of Agricultural Research(ICAR).

This system has been successfully using by AICRIP co-operators since 7 years.