IIRR Online Seed Portal (https://www.iirr-seedportal.in)

Seed is the most important basic and critical input required for Rice Production. The responses of all other inputs depend on quality seeds to a large extent. Hence the use of high quality seeds of improved varieties or hybrids is vital and indispensable.

An effective and sustainable means of increasing the production is through the cultivation of improved seed varieties. The use of high-yielding, climate-resilient, disease-resistant, nutrient-rich, adaptable and high-quality improved seeds will make it possible to produce more food profitably without expanding farm land.

Many improved varieties have been developed by Indian Institute of Rice Research for rice cultivation suiting to the need of the famers. Information on improved varieties covering the duration, traits addressing and seed availability is one of the crucial component for bridging the gap between technology development and its adoption. IIRR Seed Portal has been developed as a new digital initiative from ICAR-IIRR to facilitate seed procurement through online and provide the information on improved varieties and seed availability. This portal was successfully launched in December 2021 and hosted at https://iirr-seedportal.in.

The portal was developed using WordPress, a Content Management Software(CMS). One Time Password (OTP) verification plugin was integrated with Seed Portal registration form. WooCommerce plugin was used for integration of SBI Payment Gateway for online procurement. This portal is very user friendly with simple navigation to menu items. It is mandatory that user/farmer has to register with the portal to procure seeds online. Users/Farmers can easily select the varieties by choosing the traits and duration and place the orders for quality seed of rice crop. Menus and Interfaces IIRR Seed portal can be accessed by using the URL https://IIRR-seedportal.in. Home page of the Portal contains seven menu items i.e. ABOUT PORTAL, STORE, LOGIN, LOGOUT, MYACCOUNT AND CONTACTUS. ABOUT menu item displays brief description about portal and team members involved in the development of the portal. STORE menu item displays the seed availability of improved varieties of IIRR highlighting important features of the varieties. Once user select the variety, then it will go to the cart form and using checkout button, SBI payment gateway page will be displayed. LOGIN menu item prompts for user name and password for registered users and also facilitate user registration. MYACCOUNT menu item is used for editing the profile, verifying the orders booked etc. CONTACT US form displays contact address along with Feedback submission form (Figs. 1-7).

How this technology contributed to agricultural advancements or improved farmer practices:

- Seed is the most important basic critical input required for Rice Production. The responses of all other inputs depend on quality seeds to a large extent. Hence the use of high quality seeds of improved varieties or hybrids is vital and indispensable.
- An effective and sustainable means of increasing production is through the cultivation of improved seed varieties.
- The use of high-yielding, climate-resilient, disease-resistant, nutrient-rich, adaptable and high-quality improved seeds will make it possible to produce more food profitably without expanding farmland.

- This software facilitates choosing the seed based on the traits, which expand the reach of improved quality seeds to end users/growers efficiently.
- This software facilitates quality seed procurement online
- This portal is useful in creating awareness about improved rice varieties developed at IIRR addressing the important traits
- It also provide information on availability of seeds
- Through this portal location wise seed sales and seed demand could be easily visualised

Details of Impact on farmer's livelihood and agricultural practices:

- Online procurement of quality seed saves time, energy and labour of visiting to the institute to procure the seed.
- The seed can be procured from any remote location in India.
- Procuring quality seeds online saves the cost incurred in procuring seeds physically at the institute. It also saves labour and time. This software can be accessible to registered users only.
- This portal is very user friendly with simple navigation to menu items.
- The cart pages are designed similarly to popular e-procurement sites like Amazon, Flipkart etc.

Screenshots of IIRR Seed Portal

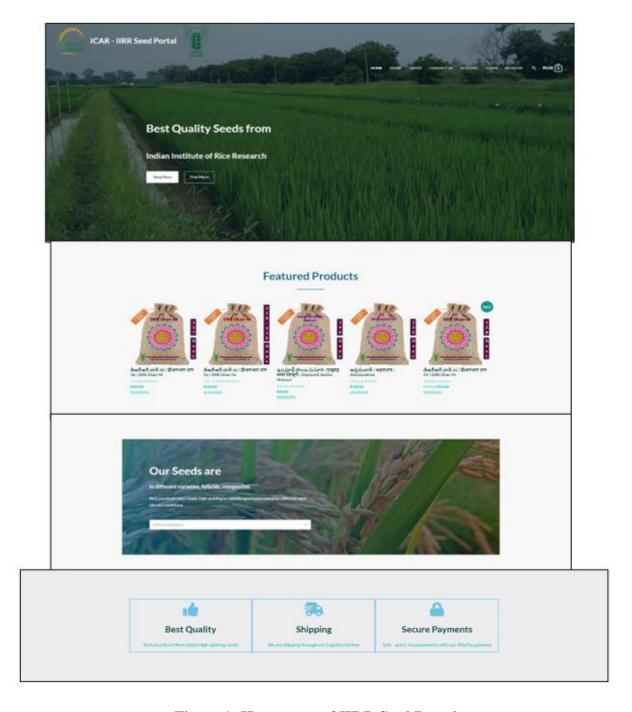


Figure 1: Home page of IIRR Seed Portal

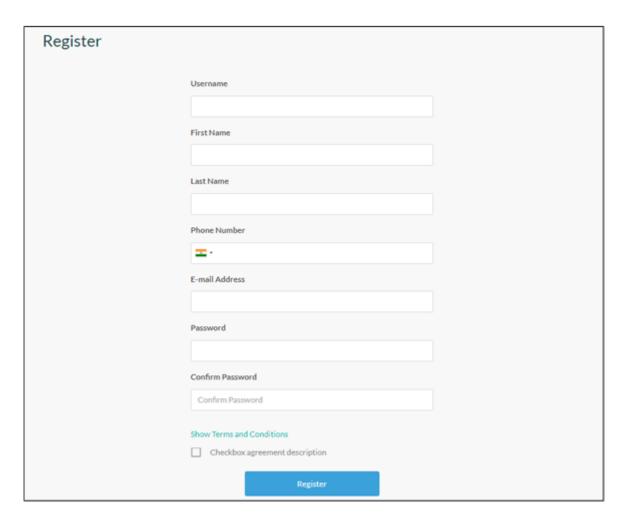


Figure 2: Registration Form - IIRR Seed Portal

During the first login with registered username and password, the screen prompts for update password and It is mandatory that user has to change the password during first login. User has to enter OTP received in the mobile and use validate OTP button for verification of OTP. After this, a home page will be displayed along with the account name in the menu bar.

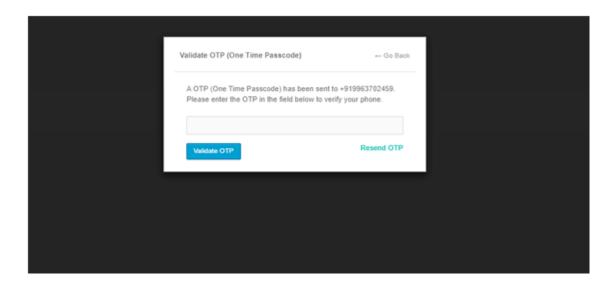


Figure 3: OTP validation form -IIRR Seed Portal

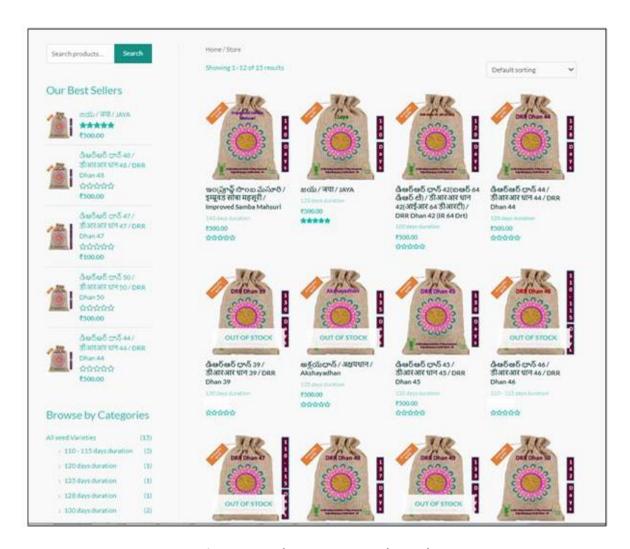


Figure 4: Stock page -IIRR Seed Portal



Figure 5: Variety Page – IIRR Seed Portal

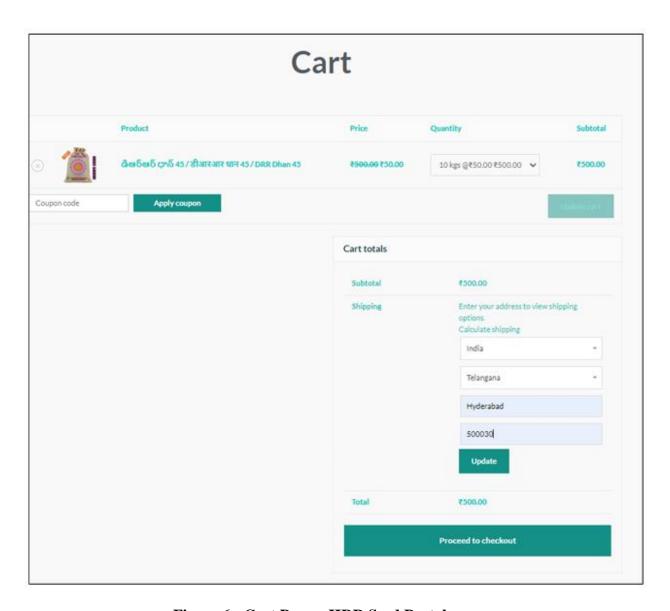


Figure 6: Cart Page – IIRR Seed Portal

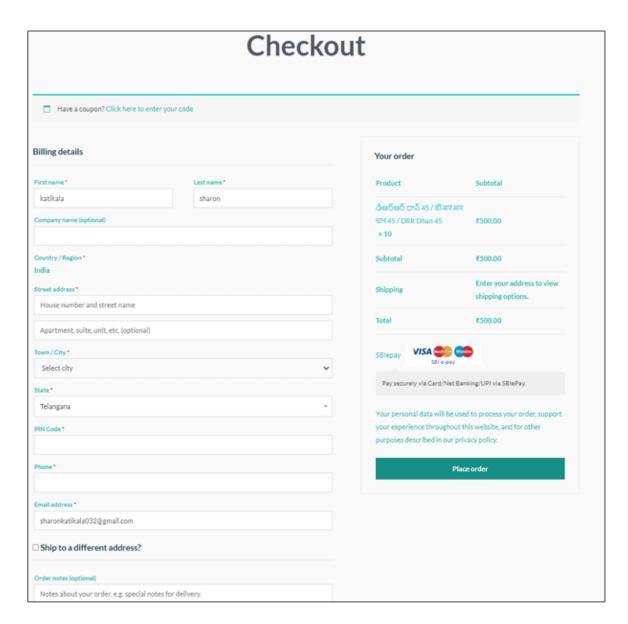


Figure 7: Checkout Page – IIRR Seed Portal

This portal successfully launched and effectively using for seed procurement during Kharif and Rabi seasons (2025). Approximately 20 lakh costs seed were procured effectively through IIRR Seed Portal.