An Interactive Web Application and Data Management System for Hosting and Managing PGR and Associated Intellectual Property Records

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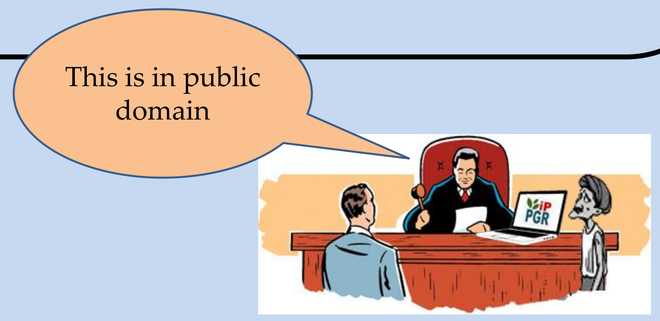
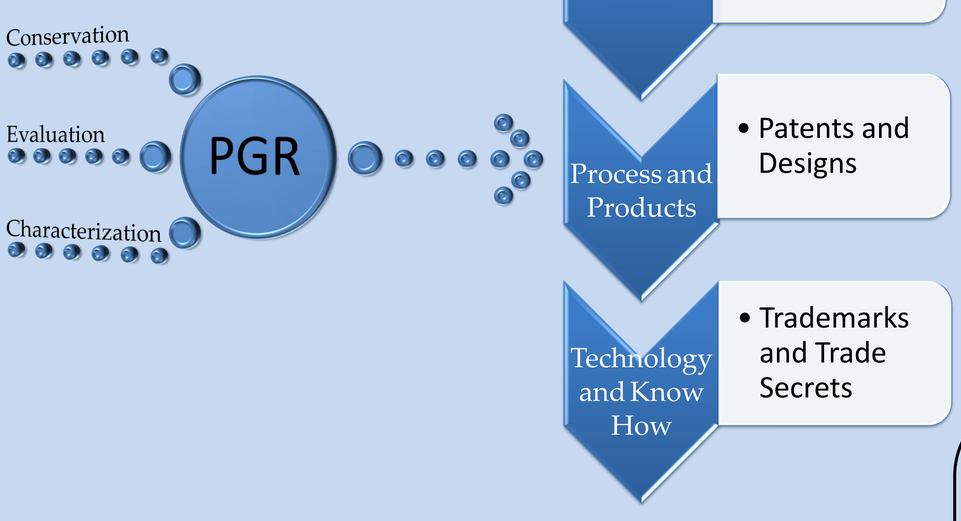
Introduction

ICAR- National Bureau of Plant Genetic Resources besides being a conservator and curator of the germplasm, is a nodal organization for registering unique germplasm and facilitating registration of plant varieties including farmers varieties with the Protection for Plant Variety and Farmers Rights Authority, India . Documentation and maintenance of the information related to Intellectual Property associated with PGR including plant varieties and germplasm registrations is a prerequisite for facilitating benefit sharing procedure. PGR-IP is meant for structured documentation and maintenance of the data being generated at ICAR-NBPGR and endeavors to bring PGR information in public domain .



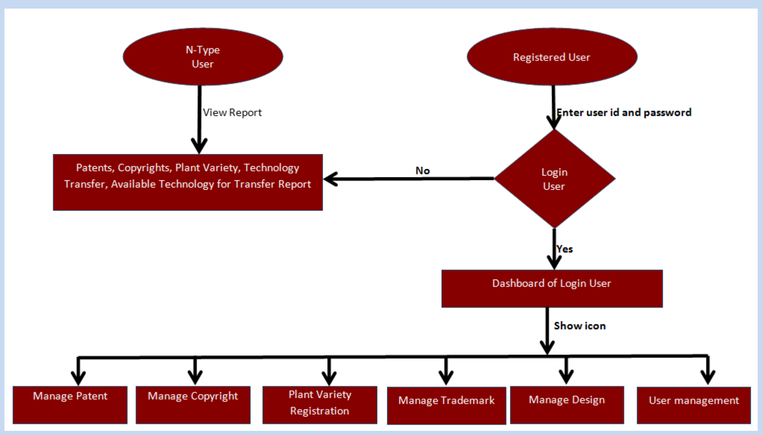
Objectives

- Managing and tracking the IPR and IP applications viz. patents, designs, copyrights of the institute
- Managing and tracking the plant variety applications being processed by the institute
- Interface for accessing the IP and PGR information being maintained by the institute
- Exhibiting the technologies developed and PGR being curated available for commercialization
- Serve as a reference portal for hosting important PGR ownership information

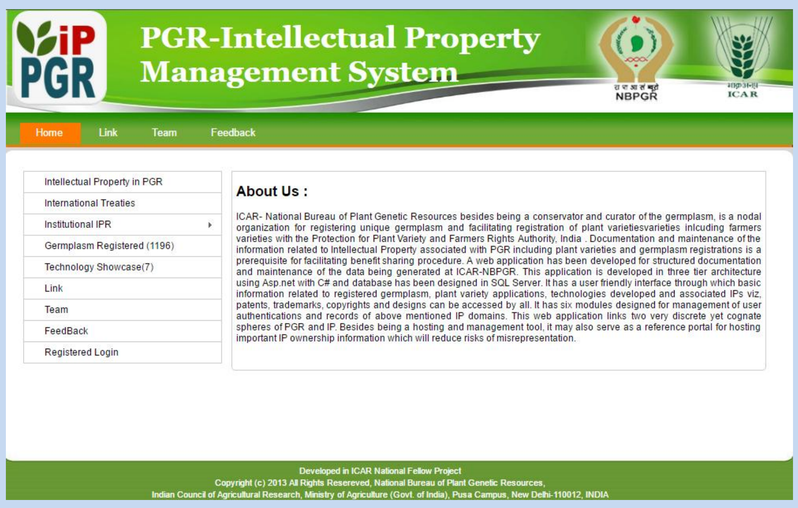


Architecture

This application is developed in three tier architecture using Asp.net with C# and database has been designed in SQL Server. It has a user friendly interface through which basic information related to registered germplasm, plant variety applications, technologies developed and associated IPs viz, patents, trademarks, copyrights and designs can be accessed by all. It has six modules designed for management of user authentications and records of above mentioned IP domains.

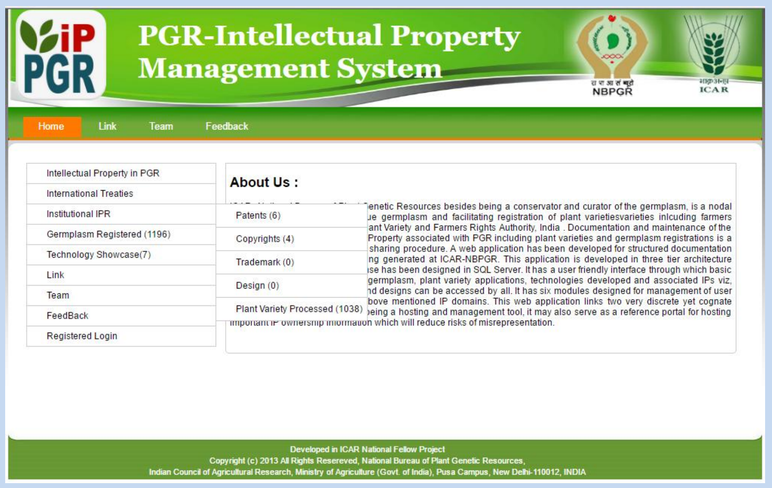


RESULTS



A web application has been developed which showcases institutional IP and also is a management tool for tracking and managing institutional IP records.
Besides institutional IP's. information on plant variety applications facilitated by NBPGR as a nodal organization, can be accessed .
This application also hosts pertinent PGR related information in public domain and facilitates its easy access and enhanced use.

Information on Institutional IPRs can be accessed by clicking on the relevant tabs on the home page.



A framework for inventorization and documentation of plant germplasm is available at the Bureau in the form of Germplasm registrations.
The main purpose of plant germplasm registration is to bring the trait-specific germplasm in public domain and to disseminate the information thereof for using the same effectively in developing new varieties.
This information can be accessed by clicking relevant tab on the home page of PGR-IP.

Details of plant variety applications facilitated by NBPGR are available under the institutional IPR tab.

Bibliographic details are available with a preliminary search option.

Detailed reports can be generated on Advanced Report option wherein search reports based on various parameters can be generated on single click.

Status of IP applications or registered IPR's highlighting any actions pending along with due dates are displayed on dashboard for ready reference of the registered user.

Registered users can access the management dashboard by logging into the system.

There are six modules: five for managing each form of IP and a sixth one for managing user authentications. Registered users can be given selective access according to their role.

New records can be created, old records can be edited and reports based on multiple choices can be generated by registered users from this dashboard.

Conclusion

This web application links two very discrete yet cognate spheres of PGR and IP. Besides being a hosting and management tool, it may also serve as a reference portal for hosting important IP ownership information which will reduce risks of misrepresentation.