- Level II – Zonal Technology Management Centres (ZTMCs): Provide regional coordination, legal vetting, and technical assistance to institutes for IP filing and valuation.
- Level III – Institute Technology Management Units (ITMUs): Serve as the nodal points at each ICAR institute for identifying protectable innovations, facilitating filings, and maintaining IP records under NAIF Component I.

✶ Process Flow for IP (including Copyright Registration):

1. Innovation identification: Scientist or project team notifies the ITMU about a new work (manual, software, database, multimedia, etc.).
2. Ownership verification: ITMU reviews authorship, originality, and institutional ownership as per ICAR IP guidelines.
3. Documentation: The work is catalogued using the prescribed disclosure format, including version/date and funding source.
4. Routing & approval: ITMU forwards the verified case to the ZTMC/IP&TM Unit for formal clearance and filing through the Copyright Office e-portal or patent/PVP office, as applicable.
5. Filing & registration: Application submitted under the appropriate class (literary, software, artistic, etc.); diary number and certificate stored in the institutional IP database.
6. Recording & tracking: All registered works are logged in the ICAR IP database with a unique reference number for periodic review.
7. Licensing & commercialization: Registered outputs ready for transfer are channelled to Agrinnovate India Ltd. for non-exclusive or commercial licensing, consultancy, or training-based revenue generation.

★ Benefits of the Institutional Pathway:

- Ensures legal protection, transparency, and traceability of creative outputs.
- Provides an integrated route from creation registration valuation licensing.
- Strengthens institutional visibility, researcher recognition.

## V. Current Trends in Copyrights & IP in Indian Agriculture

India's intellectual property (IP) ecosystem has seen substantial growth in recent years, with total IP filings rising by ~44% from 477,533 in 2020-21 to 689,991 in 2024-25. Notably, copyright applications increased by ~83% in this period, reflecting greater awareness of creative-works protection. For the agriculture and allied sector specifically, As per ICAR Annual report 2024-25, total of 307 copyrights were filed in which 13 for Artistic works, 21 for Cinematograph Films, 92 for Computer Software, and 181 for Literary/ Dramatic works. Meanwhile, the Government's push for digital filing, fee-concessions for startups/Educational Institutions and 95% of IP filings moving online, is lowering administrative friction and encouraging IP registration overall. The broad trend signals a favourable climate for copyright registration in agriculture: growing capacity, streamlined systems and rising recognition—but also a clear gap in harnessing non-patentable knowledge products (manuals, e-modules, image-banks) as institutional assets.

## VI. Turning Copyright into Value: Licensing and Impact

Copyright transforms creative research outputs into tangible institutional assets. Once registered, works such as manuals, datasets, software, and multimedia modules acquire legal identity and credibility, enabling their controlled use and monetization. Through Agrinnovate India Ltd. and institute-level agreements, these assets can be licensed under educational, non-exclusive, or commercial terms to universities, government agencies, or private partners. This approach ensures both knowledge dissemination and revenue generation, while crediting the creators and their institutions. Under ICAR's NAIF framework, copyright-based products are now being valued for inclusion in training packages, consultancy modules, and digital repositories. Tracking indicators like users reached, licenses issued, and revenue earned helps quantify impact—linking intellectual creativity with measurable institutional growth and societal benefit.

## VII. Challenges and the Way Forward

Key Challenges:

- Low awareness and capacity gaps: Many agricultural researchers remain unfamiliar with copyright eligibility, registration procedures, and institutional IP routing.
- Underreporting of creative outputs: Manuals, datasets, and digital content often remain unregistered, leaving valuable institutional knowledge unprotected.
- Limited valuation frameworks: Non-patentable works such as software, databases, or training modules are rarely appraised for their economic or societal worth.
- Fragmented record-keeping: Institutes lack unified databases for tracking copyrights, leading to duplication and loss of institutional ownership evidence.
- Delayed licensing adoption: Few institutes actively commercialize copyrighted assets through Agrinnovate or other channels, reducing potential returns.

Way Forward:

- Capacity building and awareness: Conduct regular NAIF–ITMU workshops on copyright filing, ownership policies, and licensing models.
- Institutional IP inventory: Develop centralized digital repositories to record all creative outputs and registration details.
- Simplified valuation mechanisms: Create standardized templates to estimate knowledge-product value for training, consultancy, or digital delivery.
- Integration with Agrinnovate India: Route all copyright-eligible works through structured licensing pipelines to ensure visibility and benefit sharing.
- Policy and recognition: Include copyright registrations and licensed outputs as quantifiable indicators in annual performance appraisals and research impact assessments.

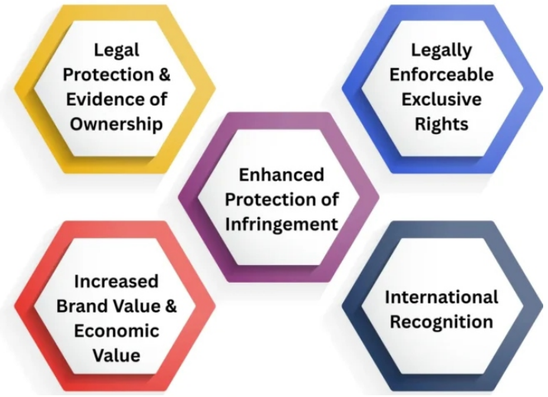
Prepared by:
**Dr. R. Solomon Rajkumar**, Senior Scientist
(Livestock Products Technology, & Nodal Officer (ITMU))
**Dr. Sreekanth G.B.**, Senior Scientist, Fisheries Resource Management
**Dr. Gopal R. Mahajan**, Senior Scientist, Soil Science
**Shri. Vinod Ubarhande**, Assistant Chief Technical Officer
**Dr. Subhradip Bhattacharjee**, Research Associate, ITMU

Technical Assistance:
**Mrs. Pranjali Ninad Wadekar**, Assistant Chief Technical Officer (Computers)
**Shri Sidharth Marathe**, Assistant Chief Technical Officer (PME Cell)

Published by:
**Dr. Parveen Kumar**
Director
ICAR-Central Coastal Agricultural Research Institute
Old Goa-403402, North Goa, Goa
Phone: 0832 2993097(O) Email: director.ccari@gmail.com
Website: https://ccari.res.in/

Extension Folder No. 126/2025

# Leveraging Copyright Registration for Value Capture in Agricultural Research and Innovation




**ICAR – Central Coastal Agricultural Research Institute**
(Indian Council of Agricultural Research)
Old Goa - 403 402, Goa
(An ISO 9001:2015 Certified Institute)

## I. Copyright in Agricultural Innovation

Agricultural innovation today extends beyond physical technologies to encompass creative, data-driven outputs such as software tools, GIS databases, training manuals, and multimedia content. Under India's Copyright Act (1957), these works gain automatic protection for the life of the author plus 60 years, offering legal recognition and control over use. Yet, less than 5 % of total IP filings from public agricultural research institutions involve such non-patentable creative works, indicating an under-utilized protection route. With India's agritech market projected to exceed ₹ 6,000 crore by 2030, systematic copyright registration can convert institutional creativity into measurable value—through recognition, licensing, and controlled dissemination of research knowledge.

## II. What Agricultural Works Can Be Copyrighted

The scope of copyright in agricultural research is far wider than commonly perceived, covering not just text and images but also digital and analytical outputs that embody originality. Under the Copyright Act, 1957, any literary, artistic, dramatic, musical, cinematographic, or computer program work qualifies once expressed in tangible form. In agriculture and natural resource management, this includes research manuals, field guides, software scripts, databases, geospatial maps, mobile apps, audiovisual training materials, and illustrated extension folders. Such works are automatically protected upon creation, though formal registration provides stronger legal standing and institutional visibility. Recognizing these diverse creative outputs as intellectual assets allows agricultural institutions to safeguard innovation, prevent unauthorized replication, and build a repository of copyrighted knowledge products ready for licensing and wider dissemination.

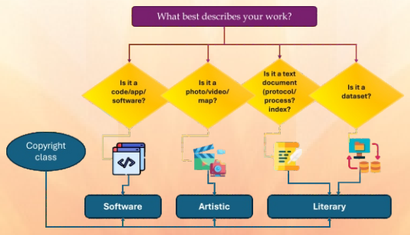



**Table 1. Classification of Copyrightable Works in Agricultural Research and Innovation wherin the owner is the Institute and filing authority is either Institute or Scientist or Project PI**

| Category of Work (as per Copyright Act, 1957) | Examples in Agriculture & NRM | Typical Duration of Protection |
|---|---|---|
| **Literary / Dramatic Works** | Research manuals, field guides, e-learning scripts, training booklets | Life of author + 60 years |
| **Artistic Works** | Infographics, GIS map layouts, illustrated posters, photographs | Life of creator + 60 years |
| **Computer Programs** | R/Python packages, DSS software, mobile apps, simulation codes | 60 years from publication |
| **Cinematograph Films / Multimedia** | Training videos, animation modules, e-learning lectures | 60 years from publication |
| **Databases / Compilations** | Soil–climate–crop datasets, pest–disease image banks, gene inventories | 60 years from publication |


## III. Self-Registration Workflow for Copyright in India

Copyright registration in India is a simple, technology-enabled process managed by the Copyright Office under the Department for Promotion of Industry and Internal Trade (DPIIT), Government of India. While copyright protection exists automatically upon creation of a work, formal registration provides legal proof of ownership, simplifies enforcement, and strengthens institutional claims for valuation and licensing. The registration process is fully online through the official website: https://copyright.gov.in/ . the steps of registration as follows:

### 1. Decide the "class of work" and prepare files

Identify whether your output is literary (manuals, reports), artistic (figures, map layouts), computer program (code/app), or database (tables, GIS layers with documentation). Export a fixed version (PDF) and keep author/owner details ready.

### 2. Create an account and log in to the official portal

Go to the Government of India Copyright Office e-filing site and sign in / register as a new user. From the dashboard, choose new registration. In the new registration sign-up page fill in the required personal details. After verification by OTP, the account will be created.

### 3. Fill the online application (Form XIV) + uploads

In the left side menu, choose the option of Registration of copyright (Form-XIV). Follow the on-screen instructions to furnish the details for form XIV. Complete Form XIV with the Statement of Particulars and, where applicable, the Statement of Further Particulars (used for literary/artistic/software/database classes). Upload the work sample(s) and required declarations, then proceed to payment.

### 4. Pay the fee and note your Diary Number

Submit the prescribed fee (varies by class of work), after which a Diary Number is generated—this is your tracking ID for status and correspondence. Save the diary number for future correspondence.

### 5. Mandatory 30-day waiting/objection period

Your application enters a minimum 30-day window during which objections, if any, may be filed. If no objection is received, the file moves to examination/scrutiny.

### 6. Objection handling (if raised)

If an objection is filed, the Registrar schedules a hearing for both parties; a decision is recorded before the application proceeds or is refused.

### 7. Scrutiny & discrepancy removal

The office examines your submission; if discrepancies are found, you'll be asked to rectify them within a stipulated time and re-submit.

### 8. Registration & certificate download

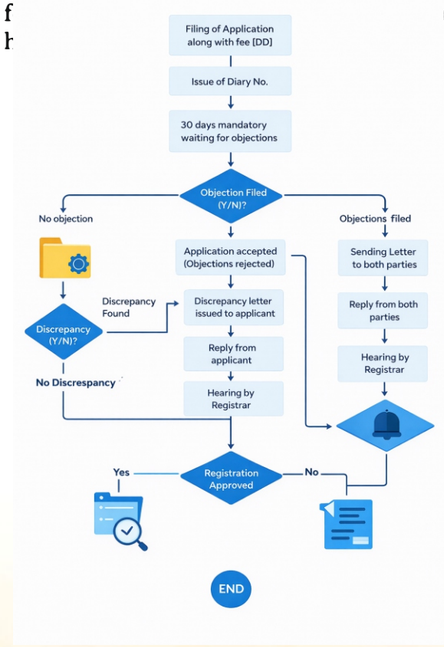
On approval, the work is entered in the Register of Copyrights and a Registration Certificate is issued (downloadable from the portal).

### 9. Track progress anytime

Use the Diary Status tool on the portal to check real-time updates (e.g., "Payment Accepted," "Mandatory Waiting Period," "Scrutiny," "Certificate Generated").

### 10. Practical tips for agri/NRM works:

- For composite submissions (e.g., a GIS atlas + methods manual + symbology), clarify authorship and institutional ownership in the Statements and attach a contents note.
- For software, web applications, packages of R and python etc needs to be saved in a single PDF file, which needs to be uploaded.
- Export code and datasets with version/date and a readme; include screenshots or compiled binaries where direct source upload is constrained.
- Maintain your diary number and keep proof of f es and h




## IV. Institutional IP Pathways for Agri R&D Orgaizations

- Three-Tier IP Management Framework (ICAR–NAIF System)
  - Level I – ICAR Headquarters (IP&TM Unit): Formulates national IP policy, maintains the central IP repository, and ensures compliance with legal and international IP standards.