



Call for Papers Special Issue of the Indian Ecological Society, Ludhiana, Punjab

Theme: Natural Farming for Sustainable Agriculture: Principles, Practices and Adoption challenges/opportunities

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Introduction

Natural farming is emerging as a sustainable agriculture system which involves cultivation of crops using local bio-resources/methodologies that minimize external inputs and rely on ecological interactions to maintain soil fertility and control pests/diseases. This approach emphasizes the importance of maintaining a harmonious balance within the ecosystem through agro-ecology and chemical free farming. Natural farming aims to reduce reliance on synthetic chemicals and enhance the overall health of the agricultural system. Ministry of Agriculture and Farmers Welfare, Government of India has launched National Mission on Natural Farming (NMNF) for promoting this approach in Indian agriculture. In various SAUs and ICAR Institutions of the country, a lot of research work on natural farming, agro-ecology and chemical free farming is being carried out. Scattered information is available which is not meeting the objectives of the adopters on one hand and scientific fraternity on the other.

Keeping in view the importance of the topic, there is an urgent need to address the various aspects of natural farming including the SWOT analysis in terms of ecology, economics and societal behaviour. The Indian Ecological Society (IES) Ludhiana in collaboration with leading agricultural and ecological researchers, invites original research articles, review articles and case studies for a Special Issue on “*Natural Farming for Sustainable Agriculture: Principles, Practices and Adoption challenges/opportunities*”.

This special issue on natural farming aims to synthesize recent research and promote multidisciplinary dialogue on mitigation, adaption, scientific validation, and sustainable use of natural farming and agro- ecology to avoid deleterious effects of chemical agriculture in future.

Key themes

Authors are invited to submit contributions under (but not limited to) the following sub-themes:

1. Soil Health and Fertility:

- Impact of mulching and cover crops on soil organic matter, nutrient cycling, and microbial diversity
- Evaluation/ efficacy of cow-based formulations (Jeevamrit, Beejamrit, Ghanjeevamri, astars, etc.) in enhancing microbial activity, nutrient availability and plant health
- Impact on soil microorganism diversity, influence of natural farming practices on the diversity and abundance of beneficial soil microorganisms
- Long-term effects of natural farming on soil health parameters, including organic carbon, nutrient content, and physical properties

2. Crop Production and Yield:

- Yield comparison under natural farming and conventional farming methods, considering different crop types and environmental conditions.
- Evaluation of the impact of intercropping and crop rotations on crop yields, pest resistance, and nutrient cycling
- Assessment on the nutritional content and quality of crops produced under natural farming systems compared to conventional farming
- Efficacy of natural pesticides like Neemaster, Dashparni ark, Sounthaster, Sour buttermilk etc. in controlling pests and diseases.

3. Economic and Social Impacts:

- Comparison of different practices i.e., conventional farming, organic farming, natural Farming etc. w.r.t.cost of cultivation and market prices
- Assessment on the impact of natural farming on farmer incomes, employment opportunities, and overall livelihoods
- Exploration of the challenges and opportunities for marketing natural farming produce and establishing sustainable value chains
- Investigations on the factors influencing farmer adoption of natural farming practices, including perceptions, knowledge, and access to information

4. Environmental/ Ecological Benefits:

- Evaluation of the impact of natural farming on water use efficiency and water conservation
- Quantification of Ecosystem services of Natural Framing including carbon sequestration and mitigation of greenhouse gas emissions
- Investigation on the effects of natural farming on biodiversity, including crop diversity, livestock diversity, and wild plant and animal populations
- Certification for transparency and traceability

5. Specific Practices, Techniques and Adoption:

- Efficacy of cow-based preparations: Jeevamrit, Beejamrit,Ghanjeevamrit and other formulations in enhancing plant growth and resilience
- Evaluation on the long-term effects of minimal tillage and no-till systems on soil health, crop yields, and weed management
- Impact of intercropping with legumes on nitrogen fixation, soil fertility, and weed suppression
- Investigation on the benefits of using local varieties and seeds, including resilience to climate change, pest resistance, and genetic diversity

Submission Guidelines

Manuscripts must be submitted **in accordance with the author guidelines of the *Indian Journal of Ecology*** [visit: <https://indianecologicalsociety.com/guidelines-for-authors/>]

Articles must be original, unpublished, and not under consideration elsewhere. The word limit for full-length papers is 5000 words (excluding references).

All submissions should include:

- Title, abstract (250 words approximately), keywords (5-6 in alphabetical order)
- Full author details with institutional affiliation and ORCID (if available)
- References must follow journal style. **The related papers published in *Indian J Ecology* must be cited.**
- Manuscripts must be submitted online on the IES website (<https://indianecologicalsociety.com/submit-manuscript/>) under the special issue on "Reimagining Forest Futures: Ecology-Driven Innovations for Sustainable Ecosystems, Biodiversity Conservation, and Community Resilience". A copy of the full manuscript may also be emailed to Dr Pramod K Sharma at pk09sharma@rediffmail.com and Dr Subhash Sharma at dsubhashsharma@gmail.com
- For detailed guidelines, consult the author guidelines of the Indian Journal of Ecology [visit: <https://indianecologicalsociety.com/guidelines-for-authors/>]. For any query, contact at email pk09sharma@rediffmail.com

Important Dates

- Manuscript Submission Deadline: **31.07.2025**
- Peer Review Completion: **10.09.2025**
- Expected Publication: **31.10.2025**

Research papers/Review article submitted will be reviewed by the concerned experts and only the recommended papers will be considered for publication. Authors must be member (life/annual) of the society.

Contact Details

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