

**Agri-Business Incubation Opportunities**

**About NSRI and Agri-Business Incubation (ABI) Centre**



Soybean contributes 45% of the total oilseeds and about 25% of the total edible oil produced in the country. Its high protein content and nutraceuticals (Minerals and isoflavones) qualities make it extremely promising for eradicating widespread protein malnutrition in the nation and ensuring nutritional security. As a leguminous crop, soybean fixes atmospheric nitrogen and reduces the consumption of synthetic nitrogenous fertilizers in the subsequent crop, thus sustaining soil fertility.

ICAR-Indian Institute of Soybean Research (IISR) is a premier institute engaged in soybean research and development in the country. Established in 1987, it has been a catalyst for increasing soybean productivity and sustainability. Soybean (*Glycine max* L.) is one of the most important oilseed and protein crops, with immense potential for value addition and commercialization through technological innovations and improved production systems. At the ICAR–National Soybean Research Institute (NSRI), significant progress has been made in developing, refining, and disseminating soybean-based technologies that enhance productivity, quality, and profitability across the value chain. A diverse range of soy-based food products and by-products such as soy paneer (tofu), soy beverages, soy flour, and soy-based snacks have been developed, showcasing the vast potential of soybean for nutritional, commercial and industrial applications.

On the production front, NSRI has standardized a comprehensive package of practices and good agricultural practices (GAPs) integrating microbial technologies including biofertilizers, biocontrol agents, and efficient rhizobial inoculants to improve soil fertility, nutrient use efficiency, and crop resilience. These interventions have resulted in sustainable yield enhancement and resource optimization at the farm level.

The Agri-Business Incubation (ABI) Centre was established at ICAR-NSRI, Indore, in 2021. It aims to mentor and nurture agri-startups, incubatees, and entrepreneurs in the areas of Soy food processing, biofertilizer production, and

seed production, focusing on incubation and business development programs, including entrepreneurship skill development activities. The ABI centre is expected to facilitate incubatees in transforming their ideas into commercial ventures. ABI also acts as a platform for the speedy commercialization of the ICAR technologies through an interfacing and networking mechanism between research institutions, agri-startups, industries, and financial institutions.

## Vision

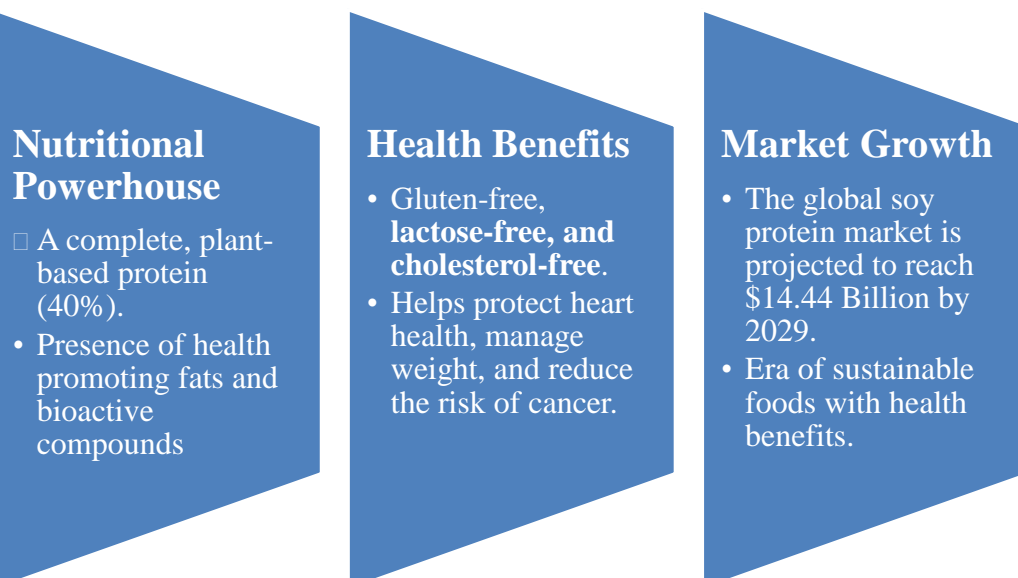
An entrepreneurial venture in production and formulation of microbial bioinoculants for soybean-based cropping systems, soybean seed production, soybean food product processing and fabrication of farm implements for farm mechanization are highly relevance to promote soybean production, utilization, value addition, skill development, and employment opportunities.

## Mission

To create entrepreneurship and startups in biofertilizer production, formulation, soybean food processing, and soybean-related business and technology ventures through capacity building and facilitating access to knowledge and resources.

## Objectives (Complete)

- ✚ **To create, nurture, strengthen, and incubate startups and entrepreneurs in commercial production and formulation of bio-inoculants (AM fungi, bacterial strains) of NSRI microbial technologies for use in soybean and other crop/plants.**
- ✚ **To create, strengthen, and incubate startups and entrepreneurs in the area of the soybean food processing sector.**
- ✚ **To provide incubation support for access to knowledge and networking services in innovation and developing entrepreneurship and business plans in biofertilizer production, soybean food processing, seed production and fabrication of farm machineries.**
- ✚ **Why Soy?**



## Key technological advancements and areas of focus in value addition by NSRI Indore include:

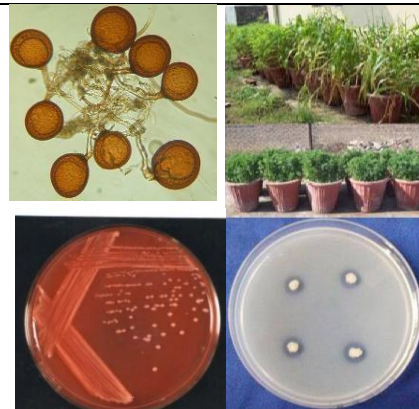
- **Development of Food-Grade Soybean Varieties:** NSRI has been at the forefront of breeding soybean varieties specifically suited for food applications. These varieties are characterized by a less beany flavor, better color, and higher protein content, making them more palatable and acceptable to the Indian consumer.
- **Small-Scale Processing Technologies:** Acknowledging the need to empower farmers and small entrepreneurs, NSRI has developed and promoted low-cost, village-level processing technologies. These innovations enable the production of a range of products like soy milk, tofu, and fortified flour, creating livelihood opportunities and making nutritious food accessible at the grassroots level.
- **Product Diversification and Fortification:** The institute has developed protocols for incorporating soy flour into traditional Indian staples like chapati, upma, halwa, sev, laddoo, cake, namakpare and cookies, thereby enhancing their protein content without significantly altering their taste or texture. This approach is crucial for improving the nutritional profile of the Indian diet.
- **Entrepreneurship Development:** NSRI actively engages in training and capacity building for farmers, women's self-help groups, and aspiring entrepreneurs. Through these programs, they disseminate knowledge on soy processing, product development, and business management, fostering a vibrant ecosystem for soy-based enterprises.
- **Innovative Products:** Research at NSRI has led to the development of novel soy products that cater to modern consumer preferences. This includes soy-based snacks, beverages, and meat analogues, which are gaining popularity in the health and wellness segment.

By focusing on the entire value chain, from crop improvement to consumer-friendly products, NSRI Indore has laid a robust foundation for the growth of the soy food industry in India. Their work has been pivotal in demonstrating that soybean is not just an oilseed but a versatile and nutritious food source that can contribute significantly to the nation's food and nutritional security.

## Agri-business opportunities for startups and companies

### Production of biofertilizers and bioinoculants based technologies viz.,

- ❖ Arbuscular mycorrhizal fungal biofertilizer
- ❖ N-fixing, zinc/phosphate solubilizing bacteria

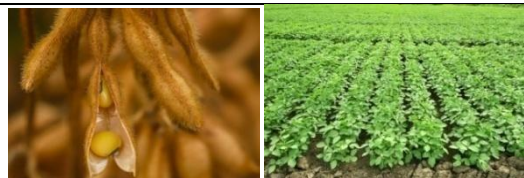


**Soybean food product based technology viz.,**

- ❖ Tofu
- ❖ Soymilk
- ❖ Soy Nuts
- ❖ Soy laddoo
- ❖ Soy sev
- ❖ Soy chakli
- ❖ Soy mathri
- ❖ Upma mix
- ❖ Halwa mix
- ❖ Soy cookies
- ❖ soy meal utilization for protein purification and functionality improvement
- ❖ Frozen soy based snacks
- ❖ Gluten free soy products






- ❖ **Specialty food grade soybean** viz NRC127, NRC109, NRC147, NRC142, NRC 150, NRC 188
- ❖ Setting up of seed production units



**How We Nurture Your Startup**

We provide end-to-end support to get your idea from concept to market.

<p><b>Handholding &amp; Mentoring:</b></p>  <ul style="list-style-type: none"> <li>● Direct access to our team of expert scientists for technical guidance on product development, processing, and quality control.</li> </ul>	<p><b>Plug-and-Play Facilities:</b></p>  <ul style="list-style-type: none"> <li>● Use our state-of-the-art pilot-scale food processing and biofertilizer production units, including soy milk plants, fermenters, ovens, and packaging machinery.</li> </ul>	<p><b>Certified Training:</b></p>  <ul style="list-style-type: none"> <li>☐ We offer 5-Day Certified Training program on "Soy Food Processing and By-product Utilization" to get you started.</li> </ul>	<p><b>Business &amp; Regulatory Support:</b></p>  <p>We guide you through FSSAI licensing, MSME schemes, R&amp;D, packaging, labeling, and creating your business plan.</p>
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## Eligibility of applicants

Any start up/ Firms/ companies/ NGOs/ GOs or prospective startup/individual and companies engaged in microbial biofertilizer, soy food processing, farm implement fabrication, analytical services and seed production can get associate with ICAR-NSRI-ABI, Indore Centre after completing admission/registration formalities.

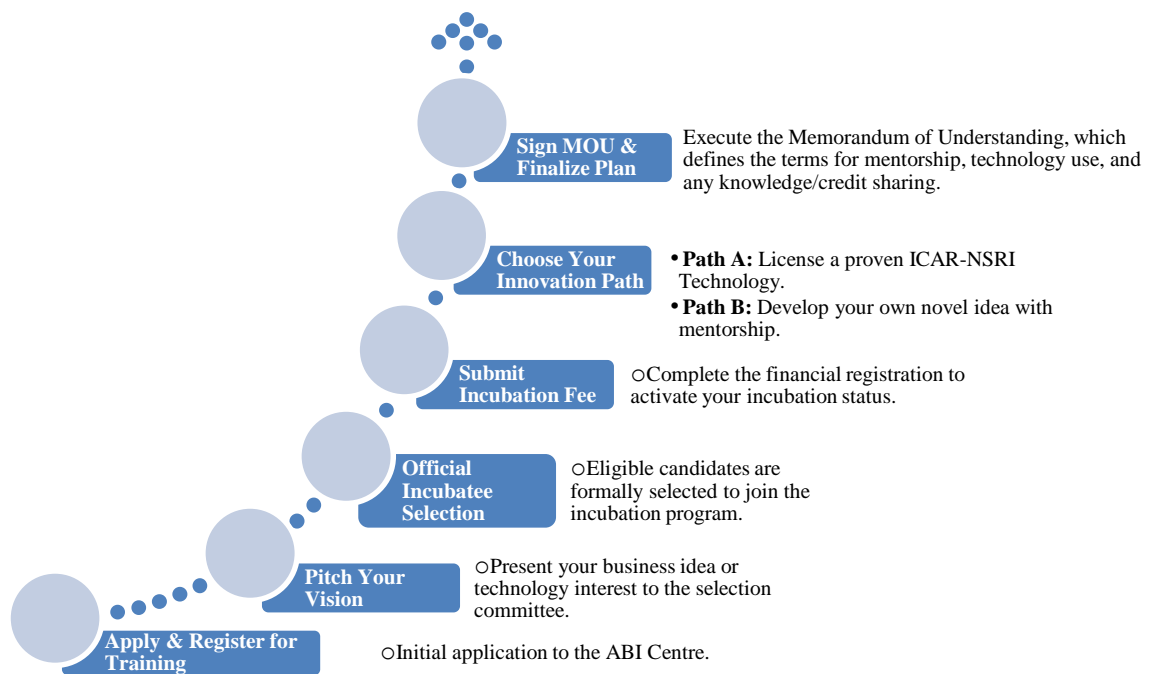
The individuals who have already registered their firm under company's registration act and are looking for facilities/infrastructure for their start-up.

Aspiring individuals who have are seeking technical mentoring to start the startup and entrepreneurship in any of the sector mentioned above.

The ABI Centre has a special focus on empowering women-led enterprises, Farmer Producer Organizations (FPOs), and Self-Help Groups (SHGs). We have specially designed a three-day hands-on training program focused on training and empowering FPOs and SHGs. We have also signed MOUs with various FPOs for discounted rates on training. Our simple, low-cost technologies are designed to create sustainable livelihoods and improve community nutrition.

## The ABI Incubation Journey: From Idea to Startup

### Process of joining as Incubate with ABI-NSRI



## Incubation Begins: Access "Plug & Play" Facilities

You now have access to our pilot plants and labs, where you can start working on selected technologies for one month without incurring facility rental costs. After 1 month of incubation, incubators will pay for the hourly rent of the machines they are using.



### Services provided by ABI, ICAR-NSRI, Indore

These programs, in collaboration with state governments, train farmers and women entrepreneurs from regions like Maharashtra and Madhya Pradesh. We focus on simple, low-cost technologies for products like soy flour, tofu, and snacks, helping them create sustainable livelihoods and improve local nutrition .

• ***Engagement of incubates, startups for mentoring/incubation and funding facilitation in soy food processing and byproduct utilization and production of microbial bioinoculants\****

- Rs.30,000/-for six months towards rent, infrastructure facilities and mentoring fee for soy food processing/biofertilizer production/seed business (sitting space for two persons/startup)

• ***Certified sensitization training in soy food processing and by product utilization Programme (TSFP) for Startups, individuals, entrepreneurs, industry representatives, FPOs and SHGs.***

**Course fee**

- Rs.3000/-for self-sponsored for 3 days (minimum batch of 10 trainees)
- Rs. 5500/- for self-sponsored for 5 days Entrepreneurs Development Programme (minimum batch of 10 trainees)\*
- Rs1500/-for farmers/FPOs minimum of 10 farmers for 3days
- Rs.5000/-for individuals sponsored by companies/industries/Govt. Organizations for two days.

• ***Five days certified training on practicing basic techniques of arbuscular mycorrhizal fungal biofertilizer Programme (TAMP) and bacterial bio-fertilizers***

- CourseFee:Rs.15000/- (for self-sponsored)\*
- CourseFee:Rs.30000/- (for candidates sponsored by companies/industries/Govt. Organization)\*

• ***Other skill-based training***

- **One-day sensitization workshop cum training on quality seed production of soybean varieties (including specialty food grade soybeans): Course Fee-**Rs. 1000/- (for self-sponsored) and Rs 2000/- for candidates sponsored by companies/industries/Govt. Organization
- **Five days customized training on soil nutrient analysis in soil: Course fee-**Rs. 5000/- for self-sponsored) and Rs 10,000/- for candidates sponsored by companies/industries/Govt. Organization
- **One day hands on training on soy food uses for capacity building and empowerment of rural Men/women: Course Fee-**Free of cost

\*Incubates entering in to agreement/signing MoA / MoU with ABI will not be required to pay training fee

**Payment Mode: Deposit through Net banking to the given account number**

**Name: ICAR-Indian Institute of Soybean Research**

**Account number: 1476201051710**

**IFSC Code: CNRB0001476**

**Branch name: Naulakha Branch, Indore (M.P)**

#### **Management & Advisory Committee of ABI Centre\***

<b>S. No.</b>	<b>Name</b>	<b>Designation/Affiliation</b>	<b>Role</b>
1.	Dr Kuwar Harendra Singh	Director, ICAR-NSRI, Indore	Chair
2.	Dr J. B. Singh	Head, IARI Regional Station, Indore	External Member, ITMC
3.	Dr Anita Rani	Principal Scientist, & Head Crop Improvement ICAR-IISR Indore	Member, ITMC
4.	Dr Alok Dwivedi	Ex DGM, NAFED Biofertilizers, Indore	Member (Biofertilizer Expert), ABI
5.	Dr Deepak Kumar	Executive Director, Nexnode Bioscience Pvt Ltd, Kardi, Ahmadabad	Member (Biofertilizer Expert), ABI
6.	Dr Savita Kolhe	Principal Scientist (Seed technology), ICAR-NSRI Indore	Member, ITMC
7.	Dr Punam Kuchlan	Sr. Scientist (Seed Technology), ICAR-NSRI Indore	Co-PI ABI & Member, ITMC/PME-Incharge
8.	Dr. Giriraj Kumawat	Senior Scientist (Co-PI, ITMU)	Member ITMC
9.	Mrs. Neha Pandey	Scientist (Food technology), ICAR-NSRI Indore	Co-PI ABI
10.	Finance and Accounts Officer, ICAR-NSRI, Indore		Member-ABI
11.	Dr M P Sharma	Principal Scientist (Agri. Microbiology), ICAR-NSRI Indore	Principal Investigator & Member Secretary, ITMC

\*ABI will function in tandem with ITMC

**Your Success Story Starts Here. Join the ABI Program Today!**

**Ready to launch your venture in 2025?**

*Contact us to join the next wave of soy innovation.*

**In-charge**

**Agri Business Incubation Centre**

**ICAR-National Soybean Research Institute (NSRI),**

**Khandwa Road, Indore-452001, (M.P.), India**

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