

INNOVATION AND STARTUP POLICY

POLICY DOCUMENT

TAMIL NADU AGRICULTURAL UNIVERSITY



**TAMIL NADU AGRICULTURAL UNIVERSITY
COIMBATORE**

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TNAU - Innovation and Start-up Policy

TNAU has joined the campaign on implementing National Innovation and Start-up Policy (NISP) under the aegis of the Ministry of Education Innovation Cell (MIC) and adopted the policy framed by MIC.

1. Vision

To develop sustainable solutions and establish a startup ecosystem for addressing the needs of the society by promoting innovation and entrepreneurship in the key thrust areas of agriculture and allied fields

Mission

To promote innovation and start-up culture among the students, faculty and other aspiring person/ members in agriculture sector for self and community development

Objectives

- To establish an innovation hub with world class facilities and provide a good platform to bring ideas and creativity of students and faculty into life
- To inculcate innovation and strong entrepreneurship capabilities among students and faculty members to incubate successful start-ups through institution's incubation facility
- To facilitate technology transfers, technology licensing and commercialization of technologies developed by faculty members and students

Functions

- Monitoring students and aspirants in their innovative ventures
- Networking various stakeholders to promote innovation and startups
- Encouraging participation of students in various innovation and business plan competitions happening outside the campus
- Organizing ideathons and business plan competitions, boot camps and student-expert interactions periodically within the institute
- Encouraging faculty members and students to attend and organize workshops / trainings on innovations, entrepreneurship, IPR and venture development
- Refining academic curriculum to foster creativity, innovation and entrepreneurship skills among the students

2. Strategies and Governance

- Entrepreneurship promotion in agriculture and allied fields and development will be the major dimension of the TNAU start up strategy.
- Corporate social responsibility (section 135 of the Company Act 2013) will be defined and informed.
- Creation of entrepreneurial ecosystem in TNAU along with the specific objectives
- Associated performance indicators are developed for assessment of the entrepreneurial ecosystem in TNAU.
- Fund will be allocated to support innovation and startups related activities
- Faculty of TNAU will be encouraged to get funding from public institutional sources for promoting entrepreneurship
- Agribusiness incubation units (Eight) functioning at TNAU will promote entrepreneurial culture among the faculty and students of TNAU
- Conferences and workshops will be conducted at TNAU to promote awareness among the students on importance of innovation and entrepreneurial agenda of TNAU
- TNAU will promote international exchange programs, internships and engaging the international faculties in teaching and research.

3. Startups Enabling Institutional Infrastructure

Pre incubation facility

Institute Innovation Cells are formed in all colleges as per MHRD guidelines for supporting pre incubation facility for students of the University

Agri Business Incubation centers started at TNAU

1. Post-Harvest Technology Centre was established with the support of McGill University, Canada.
2. Technology Business Incubator was funded by NSTEDB, DST, GoI, New Delhi.
3. The Madurai Agribusiness Incubation Forum at AC&RI, Madurai was established with the support of NABARD.
4. The Entrepreneurship Development and Innovation Institute, Chennai has funded four incubation centres, one each at Agricultural College & Research Institute Tiruchirappalli, Agricultural College & Research Institute, Killikulam (Thoothukudi district), Horticultural College & Research Institute, Periyakulam and Forest College & Research Institute, Mettupalayam.
5. A pre-incubation centre – E - YUVA is operating at the Centre for Plant Molecular Biology and Biotechnology.

Each of these centres have separate theme areas and undertake agribusiness incubation, technology commercialization, market and financial linkages, other business services, capacity building programs and outreach activities.

4. Nurturing Innovations and Start ups

TNAU will establish processes and mechanisms for easy creation and nurturing of Start ups / enterprises by students (UG, PG, Ph.D.), research assistants and skilled workers (including temporary positions), faculty, alumni and potential start up applicants even from outside the institutions.

- Incubation support: TNAU will offer access to Pre-incubation & Incubation facility to start ups by students and staff.
- TNAU will allow licensing of IPR technologies and products to start ups.
- Ideally students and staff members intending to initiate a startup based on the technology developed or co-developed by them or the technology owned by the institute, will be allowed to take a license on the said technology, either in terms of equity in the venture and/ or license fees and/ or royalty.
- TNAU will allow the students / staff to work on their innovative projects and setting up startups (including Social Startups) or work as intern / part-time in startups (incubated in TNAU) while studying / working.
- Guidelines will be developed for providing attendance to the students and also about their activities to formalize this mechanism and provided.
- Student entrepreneurs may earn credits for working on innovative prototypes / business models. Undergraduate student inventors will be allowed to opt for startup in place of their project and post graduation students in place of their seminars and summer trainings.
- TNAU will facilitate the startup activities/ technology development in the following manners:
 - i. Short-term entrepreneurship trainings
 - ii. Mentorship support on regular basis.
 - iii. Facilitation will be done to the students in the field of technology development, ideation, creativity, design thinking, market and financial linkages, product development, social entrepreneurship and patent filing.
 - iv. TNAU will link the startups to other seed-fund providers / angel funds / venture funds
- TNAU staff can take off for a semester / year (or even more depending upon the

decision of review committee constituted by the institute) as sabbatical / unpaid leave / casual leave / earned leave for working on startups and come back.

- In return of the services and facilities, TNAU will take 2% to 9.5% equity/ stake in the startup/ company, based on brand used, faculty contribution, support provided and use of institute's IPR.
- For staff, TNAU will take not more than 20% of shares that staff / faculty takes while drawing full salary from the institution; however, this share will be within the 9.5% cap of company shares.
- No restriction on shares that can take, as long as they do not spend more than 20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work / duties. In case, the faculty / staff holds the executive or managerial position for more than three months in a startup, they will go on sabbatical / leave without pay / earned leave.
- TNAU will provide services based on mixture of equity, fee-based and / or zero payment model. So, a startup may choose to avail only the support, not seed funding, by the institute on rental basis.
- TNAU will allow alumni and outsiders also to use the incubation facility

5. Product Ownership Rights for Technologies Developed at Institute

- a. When TNAU facilities / funds are used substantially or when IPR is developed as a part of curriculum/ academic activity, IPR is to be jointly owned by inventors and TNAU. Inventors and TNAU will together license the product / IPR to any commercial organisation, with inventors having the primary say. License fees could be either / or a mix of
 1. Upfront fees or one-time technology transfer fees
 2. Royalty as a percentage of sale-price
 3. Shares in the company licensing the product
- b. If product / IPR is developed by innovators not using any TNAU facilities, outside office hours (for staff) or not as a part of curriculum by student, then product / IPR will be entirely owned by inventors in proportion to the contributions made by them. In this case, inventors can decide to license the technology to third parties or use the technology the way they deem fit.
- c. TNAU IPR cell will be a coordinator and facilitator for providing services to faculty, staff and students

- d. A committee consists of experts in IPR & Technology Licensing will be constituted to facilitate the filing process and address the disputes in ownership.

6. Organizational Capacity, Human Resources and Incentives

- a. External subject matter experts such as guest lecturers or alumni will be engaged for strategic advice and bringing in skills to the faculty and students of TNAU
- b. TNAU staff will be encouraged to do courses on innovation, entrepreneurship management and venture development.
- c. TNAU will develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.
- d. Performance matrix may be developed and used for evaluation of annual performance.

7. Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level

Mechanisms will be developed at TNAU to ensure exposure of maximum students to innovation and pre incubation activities at their early stage and to support the pathway from ideation to innovation to commercialization.

- I. Awareness will be created among the students and faculty about the value of the entrepreneurship and its role in career development by inviting first generation local entrepreneurs or experts in agriculture and allied sciences to address young minds.
- II. Initiatives like ideathons, hackathons, workshops, bootcamps, pitchdays, seminars, conferences, exhibitions, mentoring by academic and industry personnel, awards and recognition will be undertaken to develop entrepreneurial mindset among the students
- III. Experiential learning courses on Entrepreneurship will be offered at TNAU to ignite the young minds.
- IV. TNAU will establish Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and allocate appropriate budget for its activities. IICs will guide in conducting various activities related to innovation, startup and entrepreneurship development.
- V. Networking events will be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.
- VI. Provide business incubation facilities: premises at subsidised cost. Laboratories, research facilities, IT services, training, mentoring, etc. will be accessible to the new

student startups.

VII. TNAU will develop a ready reckoner of Innovation Tool Kit, which will be kept on the homepage on TNAU website to answer the doubts and queries of the innovators and enlisting the facilities available.

VIII. Executive Committee will be formed to implement and monitor various activities of NISP at TNAU. Each activity will be assigned to different committee.

8. Norms for Faculty Startups

- a. The technologies originate from TNAU will be taken for faculty startups
 - i. Role of TNAU faculty member may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.
 - ii. TNAU will develop a policy on 'conflict of interests' to ensure that the regular duties of the faculty member do not suffer owing to his / her involvement in the startup activities.
 - iii. Faculty members startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- b. In case the faculty holds the executive or managerial position for more than three months in a startup, they will go on sabbatical/ leave without pay/ utilize existing leave.
- c. Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the startup/ company.
- d. In case of selection of a faculty start up by an outside national or international accelerator, a maximum leave (as sabbatical / existing leave / unpaid leave / casual leave / earned leave) of one semester / year (or even more depending upon the decision of review committee constituted by the institute) may be permitted to the faculty.
- e. Faculty must not involve research staff or other staff of institute in activities at the startup and vice-versa.
- f. Human subject related research in startup should get clearance from ethics committee of TNAU.

9. Pedagogy and Learning Interventions for Entrepreneurship Development

- a. Diversified approach will be adopted
 - i. Student clubs will be created for organizing competitions, bootcamps and workshops.

- ii. 'INNOVATION & ENTREPRENEURSHIP AWARD' will be conferred to recognize outstanding ideas, successful enterprises and contributors
 - iii. Teaching methods including case studies on innovative business ventures and real-life experience reports by startups in the field of agriculture and allied sciences will be included in the curricula. Case studies on failure of new business and the ways and means to overcome the failures will be appraised to the students.
 - iv. Evaluation strategy will be developed to assess / evaluate whether the student is capable and willing to take risk.
 - v. Innovation champions will be nominated from within the students / faculty / staff for each stream of TNAU.
 - vi. Separate hour in the time table will be allocated for innovation and entrepreneurship promotion activities.
- b. Entrepreneurship education will be imparted to students at curricular / co-curricular / extra - curricular level through elective / short term or long-term courses on innovation, entrepreneurship and venture development.
- i. Customized teaching and training materials will be developed for startups.
 - ii. Induction program will be conducted at the student orientation program
 - iii. Industry linkages will be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.
 - iv. Integration of expertise of the external stakeholders will be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment.

10. Collaboration, Co-creation, Business Relationships and Knowledge Exchange

- c. Stakeholder engagement by networking events will be given importance in the entrepreneurial agenda of TNAU. Potential partners, resource organizations, micro, small and medium- sized enterprises (MSMEs), social enterprises and entrepreneurs will be identified to support entrepreneurship and co-design the programs in TNAU.
- d. Guidelines will be developed for making collaborations with the private industries
- e. Knowledge exchange will be ensured through formal and informal mechanisms such as internships, teaching and research exchange programmes, clubs, social gatherings, etc.

- f. Single Point of Contact (SPOC) mechanism will be created in TNAU for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.

11. Entrepreneurial Impact Assessment

- a. Impact assessment of TNAU entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education will be performed regularly using well defined evaluation parameters.
 - i. Monitoring and evaluation of knowledge exchange initiatives will be done periodically. Engagement of all departments and faculty in the entrepreneurial teaching and learning will be assessed.
 - ii. Number of start ups created, support system provided at the institutional level and satisfaction of participants, new business relationships created by TNAU will be recorded and used for impact assessment.
 - iii. Impact will also be measured for the support system provided by TNAU to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.
- b. Impact assessment will be done in terms of sustainable social, financial and technological impact in the society

12. Review

This policy is as per the MHRD's National Innovation and Startup policy 2019 for students and faculty members. Review Committee will be constituted. This policy is subject to the review once in 3 years. Well defined impact evaluation parameters will be developed. However, minor amendments can be done as and when necessary and whenever policy changes are introduced in the central and state government start up policies. The University is empowered to make suitable changes in policies and introduce new policies as and when found necessary.

ANNEXURE

TNAU NISP EXPERT COMMITTEE MEMBERS

S.No	Faculty	Member
1.	Dr.N.Venkatesa Palanichamy, Dean(Agri) & Senior faculty member, NISP	Chairman
2.	Dr.M.Raveendran, Director of Research	Member
3.	Dr.E.Somasundaram, Director (Agribusiness Development)	Member
4.	Dr.P.Jeyakumar, Director Planning and Monitoring	Member
5.	Dr.N. Senthil, Dean, School of Post Graduate Studies (SPGS)	Member
6.	Dr.D.Suresh Kumar, Director, Centre for Agricultural and Rural Development Studies (CARDS)	Member
7.	Dr.N. Senthil, Director, Centre for Plant Molecular Biology and Biotechnology (CPMB)	Member
8.	Dr.P.Balasubramaniam, Director, Natural Resource Management (NRM)	Member