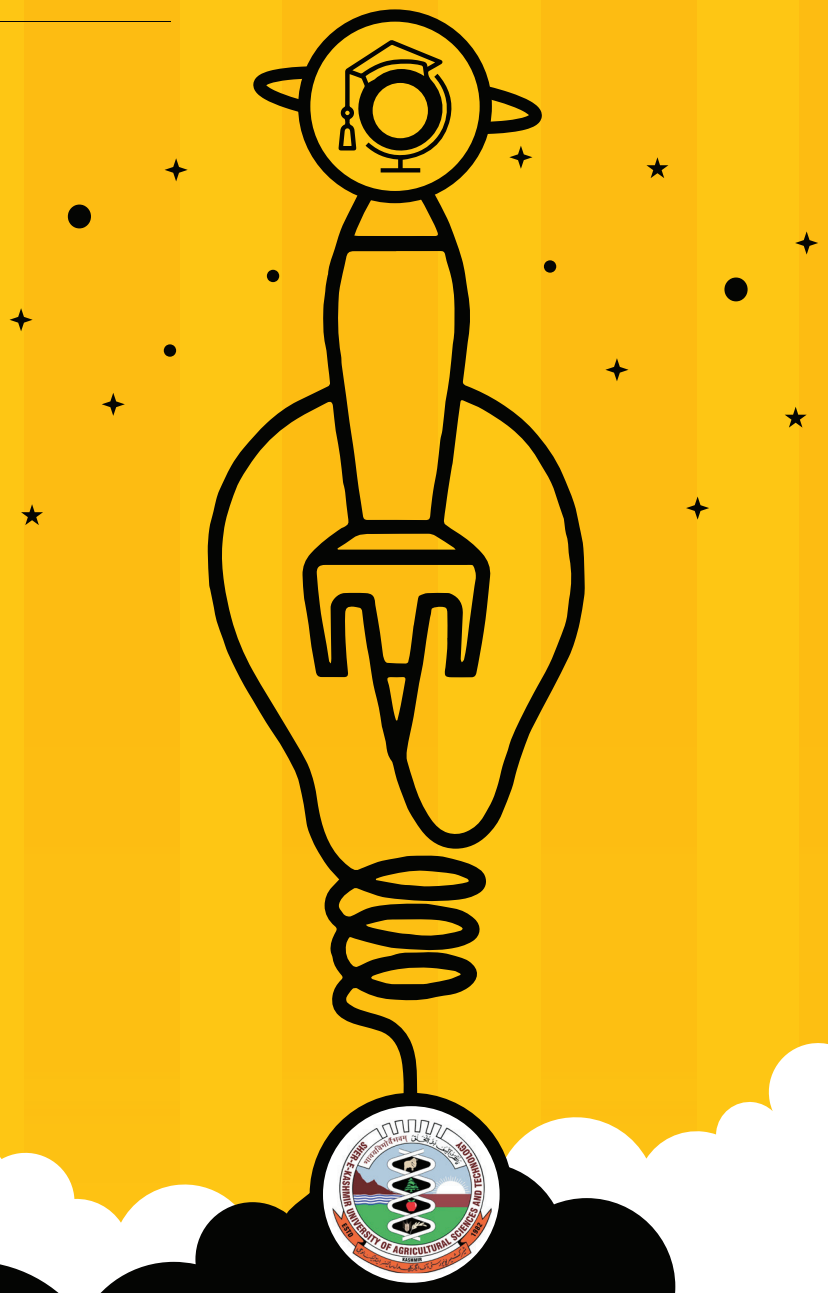
**SKUAST - KASHMIR**
Shalimar Srinagar 190025 | 0194-2461394



SKUAST-KASHMIR

# INNOVATION & STARTUP POLICY 2021

FOR STUDENTS AND FACULTY

**SHER-E-KASHMIR**
**University of Agricultural Sciences & Technology of Kashmir**
Shalimar-190025, Srinagar (J&K)

SKUAST-KASHMIR

# INNOVATION

# & STARTUP POLICY 2021

FOR STUDENTS AND FACULTY

**Directorate for Strategic Planning and Monitoring**

S.K University of Agricultural Sciences & Technology of Kashmir

Shalimar, Srinagar, Jammu and Kashmir-190025

# Committee for SKUAST-KASHMIR Innovation and Startup Policy 2021

**PROF. NAZIR AHMAD GANAI**
Director Planning and Monitoring

**PROF SARFARAZ AHMADWANI**
Director Research

**PROF. DIL MOHAMMAD MAKHDOOMI**
Director Extension

**PROF M.N.KHAN**
Director Education

**PROF. T H MASOODI**
Dean Fo Forestry

**PROF. GUL ZAFFAR**
Registrar SKUAST-K

**PROF. ROHITASH KUMAR**
Assoc Dean CoAET,

**PROF. M AFZAL ZARGAR**
Registrar, Central University

**ER. SAAD PRVAIZ**
Head IIED CENTRE, NIT Srinagar

**DR. MAJID HUSSAIN QADRI**
Chief Coordinator, NewGen IEDC UoKashmir

**MR. ARTIF MEHRAJ LONE**
Center for IIBM, EDI Srinagar

**MR. FAHEEM**
CEO Kashmir Developers Pvt. Ltd.

**MR. A RASHEED**
Aaraf Foods and Spices

**MR. ARJIMAND HUSSAIN**
Chief Editor Zirrat Times

**PROF. RAIHANA HABIB KANT**
Prof. Agronomy SKUAST-K

# CONTENT

# Preamble

**Policy Objective:**

The SKUASTK Innovation and Start-up Policy (SISP- 2021) intends to create and promote student and faculty driven innovation & start-up ecosystem in the university. The entrepreneurial ecosystem will play key role in identifying, mentoring, nurturing innovative and entrepreneurial potential of students, faculty and staff and transforming them into start-up entrepreneurs by providing avenues of funding, investment opportunities and networking support to make the innovation and venture successful. It also aims to promote a strong intra and inter-institutional partnerships with ecosystem enablers and different stakeholders at regional, national and international level. It delineates incentives for faculty and students involved in innovation and startup, and suggests mechanisms in the areas of IP ownership, revenue sharing, equity sharing between institutes and incubated start-ups.

**Policy Genesis:**

SKUASTK is part of the Flagship Program on National Agricultural Higher Education project funded by ICAR and World Bank. The Institutional Development Plan under NAHEP was granted to it for its innovative model of education- "A Spinning Wheel of Knowledge connecting education and research with innovation and entrepreneurship", and developing a flexible and inter-disciplinary learning eco-system with its slogan of "DCIDE to LEED". Promoting Skill education, innovation, incubation, entrepreneurship, industry involvement and start-up culture has been an important objective of the project. Our endeavour under the project has been to change the mind set of students from job seekers to job creators by working on enhancing their leadership and soft Skills; infusing creative & critical thinking for innovation led enterprises; skilling them with technologies that drive Agri-4 revolution; linking them with the industry and the leading international organizations. This successful pilot exercise during the last 2 years has helped us build a very strong ideation bank, out of which atleast 4 have reached TRL-8, and are now registered as student startups- which is very un-common in any farm university in the country as of now. As part of the enabling eco-system, we have established AI & ML center to skill students in new age technologies & SKIIE center (SK Innovation, incubation, entrepreneurship center) for handholding the young start-ups towards successful enterprises.

Our novel initiatives under NAHEP have later found its strong advocacy in New Education Policy-2020 (NEP) and National Innovation and Start-up Policy-2019 (NISP), where innovation, skill education, incubation, entrepreneurship and startup have been made an indispensable part of the formal education. The adoption and implementation of NEP-2020 and NISP-2019 has been made mandatory for HEIs in India. Fortunately, SKUAST-K is already treading the path of this paradigm shift in new educational setup created under IDP-NAHEP. In order to build on this momentum and break the inertia plaguing the universities, this appears to be an opportune time to have a policy framework in place to facilitate and create an enabling, congenial and academically compatible environment in the university for promoting further these prospective and future generation entrepreneurs and start-ups. The policy document needs to be compatible with the existing statutes and academic regulations in the university. The policy support is expected

- to achieve an attitudinal change among students and faculty,
- building a start-up and entrepreneurship culture in the university,
- for making industry as important stakeholders
- for building revenue earning assets and creating endowments
- taking J& K on board with 4$^{th}$ gen. industrial and agricultural revolution
- boosting our exports for exchange earnings
- creating employment opportunities

SKUAST-K, I&S policy-2021(SISP-2021) document draws its guiding principles from and is in complete consonance with the National Innovation and Start-up Policy-2019 rolled out by the Ministry of Education, GOI. The policy highlights various important and practical aspects of promoting and supporting innovation, technology commercialisation and startup in academic setup. It delineates pre-incubation and incubation support system in our campii, incentives for faculty and students involved in innovation and startup, and suggests mechanisms in the areas of IP ownership, revenue sharing, equity sharing between institutes and incubated start-ups.

# SKUAST-Kashmir, Innovation, Entrepreneurship and Startup Policy 2021 for students and faculty

## Chapter I

### Strategies andGovernance

1. Entrepreneurship promotion and development will be one of the major dimensions of the university strategy. To facilitate development of an entrepreneurial ecosystem in the organization, specific objectives and associated performance indicators should be defined for assessment.

2. Implementation of entrepreneurial vision at the university will be achieved through mission statements rather than stringent control system. The entrepreneurial agenda will be the responsibility of a senior person at the level of dean/ director/ equivalent position to bring in required commitment and must be well understood by the higher authorities. However, one must understand that promoting entrepreneurship requires a different type of mindset as compared to other academic activities. Thus, this person at the university and the college levels will be very carefully chosen from someone who understands the industry and above all business.

3. To promote the culture "Product Development, Innovation, Entrepreneurship, Business Development and Start-up is flagged here-in- as the 4th statutory mandate of the university at par with teaching, research and extension as envisaged in New Educational Policy-2020.

4. There will be an Innovation, Entrepreneurship and Start-up Council (IESC) at the apex level at par with the university Research and Extension Councils having powers and functions at par with RC and EC with respect to Innovation and entrepreneurship matters. Micro action plan will also be developed by the colleges to accomplish the policy objectives. HOD, SKIIEC will be the ex-officio Member Secretary of the council or any professor till the time SKIIEC is established.

5. Resource mobilization plan will be worked out at the university/ college level for supporting pre-incubation, incubation infrastructure and facilities. A sustainable financial strategy will be defined in order to reduce the organizational constraints to work on the entrepreneurial agenda.

- Investment in the entrepreneurial activities will be a part of the institutional financial strategy, on the pattern as is allocated to the other 03 mandates of the university, viz., teaching, research and extension. Minimum 1% fund of the total annual budget of the institution need to be allocated for funding and supporting innovation and startups related activities through creation of separate 'Innovation fund'.

- The strategy will also involve raising funds from diverse sources to reduce dependency on the public funding. Bringing in external funding through government (state and central) such as DST, DBT, ICAR, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, Meit Y, MSDE, MSME, and other GOI and UT Govt Schemes. Non-government sources will be encouraged. Alumni endowment fund will contribute to the Innovation Fund.

- To support technology incubators, the university will approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.

- The university will also raise funding through sponsorships and donations. The university will actively engage alumni network for promoting Innovation & Entrepreneurship (I&E).

6. For expediting the decision making, hierarchical barriers will be minimized, and individual autonomy and ownership of initiatives will be promoted. The Dean/Associate Dean of the college in consultation with HOD, SKIIEC shall take the decision.

7. Importance of innovation and entrepreneurial agenda will be known across all the colleges and should be promoted and highlighted at the university programs such as conferences, convocations, workshops, etc. HOD, SKIIEC will

take a proactive role in sensitizing the teachers and the students on Innovation and entrepreneurship agenda of the university.

8. The policy guidelines are expected to develop and implement I & E strategy and policy for the entire the university in order to integrate the entrepreneurial activities across various centers, departments, colleges, within the university, thus breaking the silos and will be overviewed by the IES Council proposed at section d of this Chapter.

9. Product to market strategy for startups will be developed by the university on case-to-case basis.

10. Development of entrepreneurship culture will not be limited within the boundaries of the university.

- The university will endeavor to be the driving force in developing entrepreneurship culture in its area of jurisdiction (regional, social and community level) by collaborating with other I&E promotional organizations. This shall include giving opportunity for regional startups, provision to extend facilities for outsiders and active involvement of the university in defining strategic direction for local development as done under the aegis of NAHEP at SKUAST-K.

- Strategic international partnerships should be developed using bilateral and multilateral channels with international innovation clusters and other relevant organizations. Moreover, international exchange programs, internships, engaging the international faculties in teaching and research should also be promoted, as modeled under NAHEP, SKUAST-K with national and international organizations of high repute.

## Chapter II.

### Startups Enabling Institutional Infrastructure

Creation of pre-incubation and incubation facilities for nurturing innovations and startups in the university will be undertaken. Incubation and Innovation need to be organically interlinked. Without innovation, new enterprises are unlikely to succeed. The goal of the effort should be to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

1. The university has proposed to create facilities within the university for supporting pre-incubation and Incubation/ acceleration by establishing SKIIEC and CAIML mobilizing resources from internal and external sources.

2. This Pre-Incubation/Incubation facility should be accessible to students, staff and faculty of all disciplines and departments across the institution.

3. Pre-incubation facilities may or may not be a separately registered entity or Special Purpose Vehicle (SPV), but 'Incubation cum Technology Commercialization Unit' (ITCU) of the university should be a separate entity preferably registered under Section-8 of Company Act 2013 or 'Society' registered under Society Registration Act with independent governance structure. This will allow more freedom to Incubators in decision making with less administrative hassles for executing the programs related to innovation, IPR and Startups. Moreover, they will have better accountability towards investors supporting the incubation facility.

4. The university may offer mentoring and other relevant services through Pre-incubation/Incubation units in-return for fees, equity sharing and (or) zero payment basis. The modalities regarding Equity Sharing in Startups supported through these units will depend upon the nature of services offered by these units and are elaborately in the other sections of this policy frame work.

# Chapter III

## Nurturing Innovations and Startups

1. The university shall establish processes and mechanisms for easy creation and nurturing of Startups/enterprises by students (UG, PG, Ph.D.), staff (including temporary or project staff), faculty, alumni and potential startup applicants even from outside the university.

2. While defining their processes, the university will ensure to achieve following:

- Incubation support: Offer access to pre-incubation & Incubation facility to startups by students, staff, faculty and others for mutually acceptable timeframe.
- Till the time the university have dedicated facility/ infrastructure of its own, it may reach out to nearest incubation facilities in other institutions in order to facilitate access to their students, staff and faculty.
- Will allow licensing of IPR from university to startup: Ideally students and faculty members intending to initiate a startup based on the technology developed or co-developed by them or the technology owned by the university, should be allowed to take a license on the said technology on easy term, either in terms of equity in the venture and/ or license fees and/ or royalty to obviate the early-stage financial burden on the startup.
- Will allow setting up a startup (including social startups) and working part-time for the startups while studying / working: the university will allow their 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 any recognized Incubators) while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models.
- The university will count these credits earned by the students by working full or part time as an entrepreneur, startup or innovator or on developing a prototype or a product as a part of their curriculum for a course related to entrepreneurship/agribusiness or as a part of student READY programme, internship or even as additional credit courses as the case may be.

3. Student inventors may also be allowed to opt for startup in place of their mini project/ major project, seminars, summer trainings, Student Ready or Experiential learning, internship etc. The area in which student wants to initiate a startup may be interdisciplinary or multi- disciplinary. However, the student must describe how they will separate and clearly distinguish their ongoing research activities as a student from the work being conducted at the startup.

4. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying should be allowed to use their address in the university to register their company with due permission from the university.

5. Students entrepreneurs will be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the college/ university.

6. The university will allow their students to take a semester/year break (or even more depending upon the decision of review committee constituted by the university) to work on their startups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise. The university will set up a review committee for review of startup by students, and based on the progress made, it may consider giving appropriate credits for academics.

7. The university will explore provision of accommodation to the entrepreneurs within the campus for some period of time during incubation and development period.

8. Allow faculty and staff to take off for a semester / year (or even more depending upon the decision of review committee constituted by the university) as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and come back. The university will consider allowing use of its resource to faculty/students/staff wishing to establish startup as a fulltime effort. The seniority and other academic benefits during such period may be preserved for such staff or faculty.

9. The university will start a part-time/full time MS/ MBA/ PGDM (Innovation, entrepreneurship and venture development) program or as a specialization for MBA(HBM) where one can get degree while incubating and nurturing a startup company.

10. The university will facilitate the startup activities/ technology development by allowing students/ faculty/ staff to use the university infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners:

- i Short-term/ six-month/ one-year part-time entrepreneurship training. ii Mentorship support on regular basis.
- Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product- costing, marketing, brand-development, human resource management as well as law and regulations impacting a business.
- The university will endeavor to link the startups to other seed-fund providers/ angel funds/ venture funds or itself may set up seed-fund once the incubation activities mature.
- License the IPR as discussed in other chapters of this policy.

11. In return of the services and facilities, the university may take 2% to 9.5% equity/ stake in the startup/ company, based on brand used, faculty contribution, support provided and use of university's IPR (a limit of 9.5% is suggested so that university has no legal liability arising out of startup. The university should normally take much lower equity share unless its full-time faculty/ staff have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed- funds, support for accounts, legal, patents etc.

- For staff and faculty, the university can take no-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, listed above.
- No restriction on shares that faculty / staff can take, if 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, then they will go on sabbatical/ leave without pay/ earned leave.
- In case of compulsory equity model, Startup may be given a cooling period of 3 months to use incubation services on rental basis to take a final decision based on satisfaction of
- services offered by the university/incubator. In that case, during the cooling period, the university cannot force startup to issue equity on the first day of granting incubation support.
- This will also warrant to create equity in the consultancy fee earned by a faculty for providing consultancy services to a company or his engagement in some national or international corporate industrial engagements for the university permit the teacher.

12. The university will also 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 university on rental basis.

13. University could extend this startup facility to alumni of the university as well as outsiders.

14. Participation in startup related activities needs to be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancy and management duties and must be considered while evaluating the annual performance of the faculty. Every faculty may be encouraged to mentor at least one startup.

15. Product development and commercialization as well as participating and nurturing of startups would now be added to a bucket of faculty-duties and each faculty would choose a mix and match of these activities (in addition to minimum required teaching and guidance) and then respective faculty are evaluated accordingly for their performance and promotion.

16. The self-assessment proforma for promotions and career advancements will accordingly be revised to chip in the score and points for various activities related to IE&S performed by the faculty. An expert committee having knowledge and experience of IE&S will frame the score card for IE&S. Members could be from the other university having expertise in the domain area.

17. The university need to update/change/revise performance evaluation policies for faculty and staff as stated above and envisaged in other chapters.

18. University should ensure that at no stage any liability accrue to it because of any activity of any startup.

19. The policy formed and adopted herein is in the best spirit of,"National Policy on Innovation and Startup", which may be mandatory to adopt by all the UGC recognized universities in future.

# Chapter IV

## Product Ownership Rights for Technologies Developed at SKUAST-K

1. When the university 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 the university .

An IPR policy has recently been framed by the university where the equities between the university, faculty and the inventors are well defined. The two policies may complement to each other.

i) Inventors and the universities could together license the product / IPR to any commercial organisation, with inventors having the primary say. License fees could be either / or a mix of

- Upfront fees or one-time technology transfer fees
- Royalty as a percentage of sale-price
- Shares in the company licensing the product.

ii) The university may not be able to hold the equity as per the current statute, so SPV may hold equity on their behalf if the need be.

iii) If one or more of the inventors wish to incubate a company and license the product to this company, the royalties would be no more than 4% of sale price, preferably 1 to 2%, unless it is pure software product. If it is shares in the company, shares will again be 1% to 4%. For a pure software product licensing, there may be a revenue sharing to be mutually decided between the university and the incubated company.

2. On the other hand, if product/ IPR is developed by innovators not using any university facilities, outside office hours (for staff and faculty) 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 provided it is not an outcome or output of the research done by the

3. If there is a dispute in ownership, a minimum five membered committee consisting of two faculty members (having developed sufficient IPR and translated to commercialization), two of the university's alumni/ industry experts (having experience in technology commercialization) and one legal advisor with experience in IPR, will examine the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction. The university can use alumni/ faculty of other university as members, if they cannot find sufficiently experienced alumni / faculty of their own.

4. university IPR and technology management cell or incubation center will only be a coordinator and facilitator for providing services to faculty, staff and students. They will have no say on how the invention is carried out, how it is patented or how it is to be licensed. If university is to pay for patent filing, they can have a committee which can examine whether the IPR is worth patenting. The committee should consist of faculty who have experience and excelled in technology translation. If inventors are using their own funds or non- university funds, then they alone should have a say in patenting.

5. The university's decision-making body with respect to incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department / university will have no say, including heads of department, heads of schools, deans or registrar.

6. Interdisciplinary research and publication on startup and entrepreneurship be promoted by the university by considering it as good as a research/extension publication.

# Chapter V

## Organizational Capacity, Human Resources and Incentives

1. The university will recruit staff that have a strong innovation and entrepreneurial/ industrial experience, behaviour and attitude. This will help in fostering the I&E culture. Approval for such a proposal submitted by the university is awaited from the Hon'ble Chancellor and L.G of the UT.

- Some of the relevant faculty members with prior exposure and interest have been deputed for training to promote I&E.

- Innovation Ambassadors have been appointed across all the colleges.

- To achieve better engagement of staff in entrepreneurial activities, institutional policy on career development of staff should be developed with constant up skilling of staff on I&E.

2. Faculty and departments of the university have to work in coherence and cross-departmental linkages will be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge.

3. Periodically some external subject matter experts such as guest lecturers or alumni can be engaged for strategic advice and bringing in skills which are not available internally.

4. Faculty and staff will be deputed to do courses on innovation, entrepreneurship management and venture development.

5. Each college of the university will nominate at least 03 innovator and entrepreneurship mentors/ ambassadors to coordinate the I&E activities within the college. These I&E mentors will promote and facilitate the entrepreneurs and startups at the departmental and intercollege level. All the I&E mentors will meet and interact once in two months to discuss the issues.

6. In order to attract and retain right people, the university will create academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.

7. The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.

8. The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associate ships, etc.

9. A performance matrix existing in the and used for evaluation of annual performance and career advancement will be modified to include points on I&E activities of the teacher.

# Chapter VI

## Creating Innovation Pipeline and Pathways for Entrepreneurs

1. 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 market, mechanisms should be devised at the university level.

- Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development or employability will be a part of the university entrepreneurial agenda, right from the first year with special courses, programmes and training on I&E.
- Students/ staff should be taught that innovation (technology, process or business innovation) is a mechanism to solve the problems of the society and consumers. Entrepreneurs should innovate with focus on the market niche.
- Students will be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, bootcamps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition should be routinely organized.
- To prepare the students for creating the startup through the education, integration of education activities with enterprise-related activities to be done.

2. The university will attempt to link their startups and companies with wider entrepreneurial ecosystem and by providing support to students who show potential, in pre-startup phase. Connecting student entrepreneurs with real life entrepreneurs will help the students in understanding real challenges which may be faced by them while going through the innovation funnel and will increase the probability of success.

3. The university will establish university's Innovation, Entrepreneurship and Council (UIESC) as per the guidelines of MHRD's Innovation Cell and allocate appropriate budget for its activities. UIESC should guide the colleges in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts will be undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.

4. For strengthening the innovation funnel of the university, access to financing must be opened for the potential entrepreneurs.

- Networking events must be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas.
- Provide business incubation facilities: premises at subsidised cost. Laboratories, research facilities, IT services, training, mentoring, etc. need to be made accessible to the new startups.
- A culture needs to be promoted to understand that money is not FREE and is risk capital. The entrepreneur must utilize these funds and return. While funding is taking risk on the entrepreneur, it is an obligation of the entrepreneur to make every effort possible to prove that the funding agency did right in funding him/ her.

5. The university will develop a ready reckoner of Innovation Tool Kit, which will be kept on the homepage on university's website to answer the doubts and queries of the innovators and enlisting the facilities available at the university. SKIIEC, SKUAST-K to take this initiative.

# Chapter VII

## Norms for Faculty Startups

1. For better coordination of the entrepreneurial activities, norms for faculty to do startups need to adopted as proposed in this policy and also to be created by the university in near future. Only those technologies should be taken for faculty startups which originate from within the university.

- Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup. The roles of the faculty and stakes will be accordingly mutually agreed upon by the faculty and startup within the prescribed sealing.
- As the experience on I&E goes the university will keep on working on developing a policy on 'conflict of interests' to ensure that the regular duties of the faculty don't suffer owing to his/her involvement in the startup activities.
- Faculty startup may consist of faculty members alone or with students or with faculty of other university or with alumni or with other entrepreneurs.

2. 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/ utilize existing leave.

3. Faculty must clearly separate and distinguish on-going research at the university from the work conducted at the startup/ company.

4. In case of selection of a faculty startup 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 university) may be permitted to the faculty.

5. Faculty must not accept gifts from the startup.

6. Faculty must not involve research staff or other staff of the university in activities at the startup and vice-versa.

7. Human subject related research in startup should get clearance from ethics committee or UIEC of the university.

# Chapter VIII

## Pedagogy and Learning Interventions for Entrepreneurship Development

1. Diversified approach should be adopted to produce desirable learning outcomes, which should include cross disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture-based delivery.

Student clubs/ bodies/ departments must be created for organizing competitions, bootcamps, workshops, awards, etc. These bodies should be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability.

- University should start annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within university. SKIIEC to initiate the process in consultation with the colleges.
- For creating awareness among the students, the teaching methods should include case studies on business failure and real-life experience reports by startups.
- Tolerating and encouraging failures: Our systems are not designed for tolerating and encouraging failure. Failures need to be elaborately discussed and debated to imbibe that failure is a part of life, thus helping in reducing the social stigma associated with it. Very importantly, this should be a part of university's philosophy and culture.
- Innovation champions should be nominated from within the students/ faculty/ staff for each department/ stream of study.

2. Entrepreneurship education should 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. Validated learning outcomes should be made available to the students.

- Integration of expertise of the external stakeholders should be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment.
- In the beginning of every academic session, university should conduct an induction program about the importance of I&E so that freshly inducted students are made aware about the entrepreneurial agenda of the university and available support systems. Curriculum for the entrepreneurship education should be continuously updated based on entrepreneurship research outcomes. This should also include case studies on failures.
- Industry linkages should be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.
- Sensitization of students should be done for their understanding on expected learning outcomes.
- Student innovators, startups, experts must be engaged in the dialogue process while developing the strategy so that it becomes need based.
- Customized teaching and training materials should be developed for startups.
- It must be noted that not everyone can become an entrepreneur. The entrepreneur is a leader,
- who would convert an innovation successfully into a product, others may join the leader and work for the startup. It is important to understand that entrepreneurship is about risk taking. One must carefully evaluate whether a student is capable and willing to take risk.

3. Pedagogical changes need to be done to ensure that maximum number of student projects and innovations are based around real life challenges. Learning interventions developed by the university for inculcating entrepreneurial culture should be constantly reviewed and updated.

# Chapter IX

## Collaboration, Co-creation, Business Relationships and Knowledge Exchange

1. Stakeholder engagement should be given prime importance in the entrepreneurial agenda of the university. University will endeavour to find potential partners, resource organizations, micro, small and medium- sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programs.

- To encourage co-creation, bi-directional flow/ exchange of knowledge and people should be ensured between the organizations such as incubators, science parks, etc.
- University need to organize networking events for better engagement of collaborators and should open up the opportunities for staff, faculty and students to allow constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.
- Mechanism should be developed by university to capitalize on the knowledge gained through these collaborations.
- Care must be taken to ensure that events DON'T BECOME an end goal. First focus of the incubator should be to create successful ventures.

2. University need to develop policy and guidelines for forming and managing the relationships with external stakeholders including private industries.

3. Knowledge exchange through collaboration and partnership be made a part of university policy and university must provide support mechanisms and guidance for creating, managing and coordinating these relationships.

- Through formal and informal mechanisms such as internships, teaching and research exchange programmes, clubs, social gatherings, etc., faculty, staff and students of the university should be given the opportunities to connect with their external environment.
- Connect of university with the external environment must be leveraged in form of absorbing information and experience from the external ecosystem into university's environment.
- Single Point of Contact (SPOC) mechanism will be created in university for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.
- Mechanisms will be devised by university to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.
- Knowledge management may be done by university through development of innovation knowledge platform using inhouse Information & Communication Technology (ICT) capabilities.

## Chapter X

### Entrepreneurial Impact Assessment

1. Impact assessment of university's entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education should be performed regularly using well defined evaluation parameters.

- Monitoring and evaluation of knowledge exchange initiatives, engagement of all departments and faculty in the entrepreneurial teaching and learning should be assessed.
- Number of startups created, support system provided at university level and satisfaction of participants, new business relationships created by the university will be recorded and used for impact assessment.
- Impact should also be measured for the support system provided by the university to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.

2. Formulation of strategy and impact assessment should go hand in hand. The information on impact of the activities should be actively used while developing and reviewing the entrepreneurial strategy.

3. Impact assessment for measuring the success should be in terms of sustainable social, financial and technological impact in the market. For innovations at pre-commercial stage, development of sustainable enterprise model is critical. COMMERCIAL success is the ONLY measure in long run.

## Way Forward

The provisions of the policy shall need periodical review by the UIESC at least once in two years for updating and making it relevant for entrepreneurs and startups and amend for removing bottlenecks which may arise during the implementation of innovation and entrepreneurship agenda of the university.

For successful implementation of the "SKUAST-K" Innovation, Entrepreneurship and startup policy-2021for Students and Faculty" of university and to remove operational hurdles , the Chapters and sections of this policy, for the present, will prevail Suo motto notwithstanding the sections/provisions of university Statutes and provisions under Regulation on Resident Instructions, those may be in contravention with the provisions of this Policy and till such time the sections and provisions of the statutes and RRI are amended in conformity with the provisions of this policy . This is invoked in order to navigate smoothly the journey of innovation, entrepreneurship and startup culture in the university, which is at its infancy, without any cumbrances and administrative difficulties.

## Glossary Useful for Entrepreneurship

| | |
|---|---|
| **Accelerators** | Startup Accelerators design programs in batches and transform promising business ideas into reality under the guidance of mentors and several other available resources. |
| **Angel Fund** | An angel investor is a wealthy individual who invests his or her personal capital and shares experiences, contacts, and mentors (as possible and required by the startup in exchange for equity in that startup). Angels are usually accredited investors. Since their funds are involved, they are equally desirous in making the startup successful. |
| **Cash flow management** | Cash flow management is the process of tracking how much money is coming into and going out of your business. |
| **Co-Creation** | Co-creation is the act of creating together. When applied in business, it can be used as is an economic strategy to develop new business models, products and services with customers, clients, trading partner or other parts of the same enterprise or venture. |
| **Compulsory Equity** | An equity share, commonly referred to as ordinary share also, represents the form of fractional or part ownership in which a shareholder, as a fractional owner, undertakes the maximum entrepreneurial risk associated with a business venture. The holders of such shares are members of the company and have voting rights. |
| **CorporateSocial Responsibility** | Corporate social responsibility (CSR) is a self-regulating business model that helps acompanybe socially accountable to itself, its stakeholders, and the public. |
| **Cross-disciplinary** | Cross-disciplinary practices refer to teaching, learning, and scholarship activities that cut across disciplinary boundaries. |
| **Entrepreneurial culture** | A culture/ society that enhance the exhibition of the attributes, values, beliefs and behaviors that are related to entrepreneurs. |
| **Entrepreneurial Individuals** | An Individual who has an entrepreneurial mindset and wants to make his/her idea successful |
| **Entrepreneurship education** | Entrepreneurship education seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. |
| **Experiential learning** | Experiential learning is the process of learning through experience, and is more specifically defined as learning through reflection on doing |
| **Financial management** | Financial Management is the application of general principles of management to the financial possessions of an enterprise. |
| **Hackathon** | A hackathon is a design sprint-like event in which computer programmers and others involved in software development, including graphic designers, interface designers, project managers, and others, often including domain experts, collaborate intensively on software projects. |
| **Host Institution** | Host institutions refer to well-known technology, management and R&D institutions working for developing startups and contributing towards developing a favorable entrepreneurial ecosystem. |
| **Incubation** | Incubation is a unique and highly flexible combination of business development processes, infrastructure and people, designed to nurture and grow new and small businesses by supporting them through the early stages of development. |
| **Intellectual Property Rights Licensing** | A licensing is a partnership between an intellectual property rights owner (licensor) and another who is authorized to use such rights (licensee) in exchange for an agreed payment (fee or royalty). |
| **Knowledge Exchange** | Knowledge exchange is a process which brings together academic staff, users of research and wider groups and communities to exchange ideas, evidence and expertise |
| **Pedagogy and Experiential Learning** | It refers to specific methods and teaching practices (as an academic subject or The oretical concept)which would be applied fo rstudents working on startups. The experiential learning method will be used for teaching' startup related concepts and contents' to introduce a positive influence on the thought processes of students. Courses like 'business idea generation' and 'soft skills for startups' would demand experiential learning rather than traditional class room lecturing. Business cases and teachingcases will be used to discuss practical business situations that can help students to arrive at a decision while facing business dilemma(s). Field based interactions with prospective customers; support institutions will also form apart of the pedagogy which will orient the students as they acquire field knowledge. |
| **Pre-incubation** | It typically represents the process which works with entrepreneurs who are in the very early stages of setting up their company. Usually, entrepreneurs come into such programs with just and idea of early proto type of their productor service. Such companies can the graduate into full-fledged incubation programs |

| | |
|---|---|
| **Prototype** | A prototype is an early sample, model, or release of a product built to test a concept or process. |
| **Science parks** | A science park, also known as a research park, technology park or innovation centre, is a purpose-built cluster of office spaces, labs, workrooms and meeting areas designed to support research and development in science and technology. |
| **Seed fund** | Seed fund is a form of securities offering in which an investor invests capital in a startup company in exchange for an equity stake in the company. |
| **Special Purpose Vehicle** | Special purpose vehicle, also called a special purpose entity, is a subsidiary created by a parent company to isolate financial risk. Its legal status as a separate company makes its obligations secure even if the parent company goes bankrupt. |
| **Startup** | An entity that develops a business model based on either product innovation or service innovation and makes it scalable, replicable and self-reliant and as defined in Gazette Notification No. G.S.R. 127(E) dated February 19, 2019. |
| **Technology Business** Incubator | Technology Business incubator (TBI) is an entity, which helps technology-based startup businesses with all the necessary resources/support that the startup needs to evolve and grow into a mature business |
| **Technology** Commercialization | Technology commercialization is the process of transitioning technologies from the research lab to the marketplace. |
| **Technology licensing Agreement** | whereby an owner of a technological intellectual property (the licensor) allows another party (the licensee) to use, modify, and/or resell that property in exchange for a compensation. |
| **Technology management** | Technology management is the integrated planning, design, optimization, operation and control of technological products, processes and services. |
| **Universityb** | Sher-e- Kashmir University of Agricultural Sciences and Technology of Kashmir |
| **Venture Capital** | It is the most well-known form of startup funding. Venture Capitalists (VCs) typically reserve additional capital for follow-up investment rounds. Another huge value that VCs provide is access to their networks for employees or clients for products or services of the startup |


## Acknowledgements

I want to thank all the members of committee on 'SKUAST-K Innovation, Entrepreneurship and Startup Policy 2021' for students and faculty of SKUAST-K, especially Professor Nazir Ahmad Ganai, Chairman for his initiative for developing this policy and his valuable insights and recommendations to enable formulation of these guidelines for the university. I express my sincere thanks to all the members of the committee for going through the document critically and their valuable suggestions in improving the script and usefulness of this policy .



**Prof. Farooq Ahmad Zaki**
Consultant Human Resource Management,
NAHEP,SKUAST-K

**SHER-E-KASHMIR**
**University of Agricultural Sciences & Technology of Kashmir**
Shalimar-190025, Srinagar (J&K)

# COMPONENTS OF GUIDING FRAMEWORK

**A** HEIs Strategies & Governance for Promoting Innovation & Entrepreneurship

**A1** Creating Innovation Pipeline and Pathways for Entrepreneurs

**A2** Building Organizational Capacity, Human Resources and Incentives to support & promote innovative and entrepreneurial activities

**A3** Collaboration, Co-creation, Business Relationship and Knowledge Exchange within campus and among the ecosystem enablers co-exist at regional and national level

**B** Norms for Faculty & Students Driven Innovations and Startups

**B1** Incentivizing Students for Entrepreneurship and Startup pursuits

**B3** Incentivizing faculty and Staff for Entrepreneurship and Startup pursuits

**C** Incubation & Pre-incubation support and facility creation in HEIs

**D** IP ownership rights for technologies Development and transfer in HEIs

**E** Pedagogy and Learning Interventions for Innovation and Entrepreneurship Development

**F** Entrepreneurial Performance Impact Assessment

MIC | MHRD | UGC | AICTE