SSIP:
AN IDEA THAT
BECAME A POLICY

In Gujarat, a large number of thesis and innovative ideas emerge every year. How the Student Startup and Innovation Policy (SSIP) transforms ideas into new product and services to becoming entrepreneurs, write **Hemangini Kanth Rajput** and **Dipen Pradhan** of **Elets News Network (ENN)**.

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I n 2010, the Gujarat Technological University (GTU) started an experiment to incentivise students academically. Under the experiment, the students were asked to identify a problem at any place, village, industry, or organisation, during their summer vacations.

Students, who were able to figure out the problem were awarded four credit points — equivalent to a subject. An additional point was awarded to the students who came up with solutions.

The experiment became popular among other universities in Gujarat as well. It led many students to highlight problems. It also helped some of the students to come up with fresh ideas for solving these problems. The experiment boosted the idea -- "Students could become entrepreneurs".

The experiment continued for three years. During the period, students were also encouraged to create a market for their innovations either by becoming an entrepreneur or by selling their technology. This saw a spike in patent filing with 300 patents filed during the period -- a six-fold increase in the numbers. From 2012 - 2013, around 20 to 23 students graduating from GTU were setting up their own ventures, of which some were already earning revenue of Rs 2.50 lakh.

As many new innovations and researches were being done by students in sectors like Manufacturing, Information Communication Technology (ICT), Internet of Things (IoT), Embedding System, Agritech, Edutech, etc, for the first time, student entrepreneurship was being talked about but without any financial support to their startups.

GTU then formed a Student Startup Support System (S4) to build a complete Student Startup Ecosystem: culture building, problem solving, ideation, product design, pre-incubation, etc. It provided a supply line with an access to infrastructure, initial capital and mentoring.

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Meanwhile, new theories were evolving because even if the students tried and failed at the age of 20, their innovation could achieve new heights in the market. GTU then drafted the country's first comprehensive and strategic "University Student Startup Policy" in 2014.

This policy has a provision of relaxation in attendance requirements in class for those who want to build enterprises: a provision of promoting girls entrepreneurship; a provision for the university to set up regional innovation centres; a provision for allowing colleges to facilitate startups after class hour, etc. Overall, this policy provided a legitimate definition for the student startups and entrepreneurs. It aimed to facilitate innovations among regular students and alumnus of universities and colleges of Gujarat.

The initiative witnessed 90 per cent success rate of which majority were from the institutions established within last six years and remotely located colleges of the Tier-II cities of Gujarat.

Concomitantly, the effort led to drafting the National Student Startup Policy -2016 by All India Council for Technical Education (AICTE). The draft

provided an additional boost to the legitimacy of this experiment now providing support to student startups across AICTE-approved institutions of the nation.

Student Startup and Innovation Policy (SSIP), Gujarat

Gujarat Education Minister Bhupendrasinh Chudasma held several meetings with Vice Chancellors of the universities in Gujarat on forming a state-level Student Startup & Innovation Policy (SSIP). A policy was very much needed to create resources for startups and to support the mandate for student startups in the State.

Principal Secretary of Higher and Technical Education Department of Gujarat Anju Sharma was actively working to expedite the process to frame university-based SSIP where AICTE was acting as an umbrella organisation. The idea was to provide a system to support pre-incubation phase of entrepreneurship. At that time, a policy was much needed that completed the students startup ecosystem through integration of industry, government and universities.

Earlier, the focus was only on entrepreneurs and the Government used to provide funds only to those startups that developed a prototype and were listed as companies, but the expenses accrued during the preincubation phase was not refunded. A student, for instance, in manufacturing field needed at least Rs 10,000 to develop a prototype, and more funds for a better one.

Gujarat already has two policies to support entrepreneurs. The State Industry Department awards up to Rs 21 lakh of grants to entrepreneurs,

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a type of support given at the post-prototype stage. The Science & Technology Department allocates funds for infrastructure creation, incubators, and ICT-related innovation. It also has the Centre for Innovation Incubation and Entrepreneurship (CIIE), which is the oldest incubator in the country. Gujarat Venture Finance Limited (GVFL), a Venture Capital Fund agency supported by the Government of Gujarat also provided funds . But it lacked pre-incubation link or support to the startups.

To reach the stage to receive Rs 21 lakhs fund, the startups need to have at least Rs 50,000 or one lakh rupee to convert the protocol into a prototype or a product. This was the missing link Gujarat wanted to advent.

Thus, in January 2017, the Gujarat Government passed the Student Startup & Innovation Policy (SSIP). It has allocated a budget of Rs 200 crore per year, of which Rs 100 crore is allocated from the State fund and Rs 100 crore from other resources. The mandate of the SSIP is to put resources in the university for creating student startup ecosystem to nurture a startup from preincubation stage to a renowned company.

It further envisions to create a value chain of culture building, innovation building, and to set up a full-fledged organic incubation mechanism in the next five years. It can be said that the policy is at implementation phase. It is receiving applications from universities and would provide the assistance on merit basis.

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Gujarat SSIP after being implemented in all the 60 plus universities across the state touching around 1.4 million students, aims to produce 1,000 academic startups ready to obtain Proof of Concept (PoC) and Intellectual Property Rights (IPR) every year.

Academic startup has received a significant push in Gujarat. More than 8 out of 10 Technical Business Incubators (TBI), supported by the Department of Science & Technology (DST), GoI, are in universities and nearly 18 out of 20 Nodal Institutes, Gujarat, are in academic environment. Gujarat Startup ecosystem has taken a leadership towards setting up a systematic preincubation layer since past three years.

The S4 introduced by Gujarat Technological University brought some concrete cultural impact

in the mindset of students to aspire to startup. Later, Gujarat University also intervened similar efforts in non-technology sectors through its initiatives. It's claimed by universities including GTU, GU and others that at any stand-point during an academic year these universities receive nearly 30-40 student start-ups each for hand holding at their early stage.

Gujarat Startup incubators and the ecosystem at large is believed to fetch quality pool of potential start-ups from university research and handhold them to become success stories of tomorrow.

Gujarat is the first state where an end to end innovation ecosystem development approach has been adopted and three different support schemes by the Department of Education, the Department of Science & Technology and the Department of Industry, have been put in place and positioned them in such a manner that it complements each other's offering and through synchronisation create optimum impact.

SSIP: A university-based policy

Universities in Gujarat submit a roadmap on what it wants to do, are doing and what are the competencies, among few other points while obtaining SSIP support. The state-level committee then examines the proposal. Once approved, the university gets Rs one crore grant per year depending upon its size, of which a Government college is liable to get up to Rs 40 lakh grant per year and a private institution/college would get a grant of Rs 20 lakh. The funds can be utilised on helping students producing a proof of concept, designing, filing patents and, assist them on activities such as conducting workshops, programmes, etc. The policy was first implemented in Gujarat Technological University.

After the implementation of SSIP in Gujarat Technological University, it has helped disburse funds for two needs - For students who needed fund for prototype building during their pre-incubation phase and for filing patent. In Gujarat, a sum of Rs 15,000 approximately is required for filing a patent.

Student startup in every State

Informal startup networks like of E-Chai and others have helped creating critical mass at grassroots to support startup activities which complements the institutional support systems. While start-up ecosystem has evolved quite

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fast in past years, platforms like EDI has given broad dimension to entrepreneurship efforts in terms of academic research, capacity building and bringing inclusion in terms of taking start-up/ entrepreneurship process beyond technology domain and geographic limits.

Student Startup policy of GTU later on was adopted across universities in Kerala & Andhra Pradesh. Recently AICTE took some insights of such efforts from the Gujarat Ecosystem and developed a university start-up roadmap for more than 10,000 colleges affiliated to it.

Few states and like Odisha, Jharkhand and others have taken insights from Funding mechanism from Gujarat Ecosystem like GVFL and scaling them up in their context. Pre incubation/ University start-up ideas across Kerala, AP and nationally through AICTE has taken huge inspiration from Gujarat driven initiatives across academia.

Hirenmay Mahanta, Executive Director, AICTE, said, "AICTE is serious to mandate every State to adopt a policy like SSIP, Gujarat."

"With Gujarat drafting the SSIP, three to four States have already approached for assistance in designing a similar policy in their respective State universities. Although the ecosystem of SSIP would differ from State to State due to geography, culture, resources, demography differences but the policy can act to provide the path for implementing the SSIP," he added.

GTU student startup ecosystem

At GTU, applications inviting fresh ideas are being invited monthly through the website of its Innovation Council. At least 30 to 35 applications

are being received on a monthly basis, from both university affiliated and non-affiliated colleges/institutions.

When a student comes with an idea, the GTU Innovation Council asks them to pitch in 'Design Clinics'. In Design Clinic, experts on the relevant field are summoned who evaluates the idea to check whether the idea is feasible in the market or not. Even if the idea fails to find its feasibility, through 'Idea Generation Methods', the council provides them the basics to form an idea which is again validated in the Design Clinic.

After idea validation, the council helps the innovator in prototype building or designing the proof of Concept (PoC). Then the innovator is invited in the 'Startup Clinic' where mentoring is provided. Furthermore, the innovator is invited in the 'Patent Cell' to skill them on making Patent Search and Analysis Report (PSAR), and Patent Drafting Exercise (PDE). The Council has a 'Patent Clinic' to check if the prototype needs Patent Filing or to register just the design for copyright, trademark, design registration, etc.

Then the Council provides them assistance to do 'Market Research' in which it helps them get 100 user traction or customer validation. 100 user traction is a thing the council asks them for their prototype. Once they achieve their user traction target, the council helps them obtain Limited Liability Partnership (LLP) or Private Limited done before proceeding it further to Nodal Institution. The GTU is currently trying to involve Venture Capitalists to invest, for which the aforementioned needs to be checked properly.

The GTU has assisted more than 150 startups on their pre-incubation phase of prototype building. These startups were affiliated to various institutions and nodal agencies. For GTU affiliated college/institution, it has so far incubated 47 startups, of which 14 received fund, seven commercialised their product and 26 are at early stage of getting validation in the market. Out of 480 colleges affiliated to GTU, 30 have recognised incubation centres to help the Student Startups.

Salient features of SSIP

- Setting up Innovation and Pre incubation facilities across 200 academic campuses.
- At present Gujarat files about 650 patents from which around 40 % are by academia. Through SSIP we will support 1000 student innovators/researchers to get IPR support

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and wish to be among top 3 states in IPR protection for innovation and leveraging it.

- Grassroots innovators who are even school dropout and other inclusive innovators have been made adjunct faculty (14 in GTU) in our universities for creating cross learning opportunity (Knowledge reach economical people also to be part of academic system).
- Universities in Gujarat are encouraged to give academic credit to our students for scouting community, SME, rural, urban challenges and also convert some of them as the subject of their projects/research/innovation so that impact reaches to end users. In GTU around 2000 students does real life project based on challenges by Small industries and try to work around their pain points.
- Through SSIP, a solid innovation funnel, involves youth in every academic cycle: 100,000 student projects/thesis by all universities – Virtual mentoring to 10,000 best ones from them- Support 1000 best ones at POC level / IPR support- 200 Innovation driven student start-up creation every year.
- During Smart India Hackathon program by MHRD, participants from colleges from Gujarat won highest number of awards. Total 135 awards were given across 29 ministries in 26 host venue nationally out of which student teams from Gujarat won 8 national awards.
- Gujarat on September 26, launched its own Hackathon in which challenges will be sourced from different ministries and departments and students across universities will be incentivised to participate and develop digital solutions for them.
- Recently, one Gujarat student Start-up "Straut" developed technology in solar thermal engineering got 1st prize/gold medal at MIT Climate change Innovation Award among 700 plus university participation globally. **DL**