## SHIFTING PARADIGMS IN INNOVATIONS AND ENTREPRENEURSHIP-THE ROLE OF VARIOUS INSTITUTIONS TO FOSTER & NURTURE THEM.

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Traditionally, we tend to think of business as the principal source of innovative new products or services in a market economy. Sources of innovation are changing in the contemporary economy. India, like many other economies has initiated a new strategy for its economic growth sustenance, with an emphasis on regional development. A nation wide campaign has and been launched by the government of India to implement this policy of fostering innovations and Start-ups. As a part of this strategy the government has come up with motivating slogans like Start up India, Stand up India, Wake up India, Make in India, a paradigm etc. leading to shift from its earlier policies. These articulated slogans, followed by nation wide drives undertaken by different agencies and organizations, are flagship initiatives intended to create a healthy ecosystem for nurturing innovations and Start-ups. As a consequence, excellent results are being witnessed and mind boggling innovations have come up in different sectors like social reform, health care, communications, transportation, waste management, ergonomics and so forth. Many single user innovators such as Flipkart, Bigbasket, Zomato, Paytm, Quikr, Just Dial, Helpchat, have emerged who have made an impact on the current economic and social scenario.

institutions like NIF, IITs, IIMs, MSME and NITs are at the forefront, providing Various technical support and mentorship to these budding innovators and idea generators. For example, IIT Bombay has set up an incubation centre called SINE (Society for Innovation and Entrepreneur development) and a Research park to facilitate innovations. An important concern is the impact of this paradigm shift on the situation in the state of Jammu and Kashmir. Have these and initiatives actually translated into policies, procedures and programmes in slogans our state? What efforts are being made by the government and non-government bodies to encourage and support this new model? Due to the current state of unemployment the educated and skilled youth of the state do not find many opportunities in the government or private sectors. This results in the migration of these talented youth to other states for better employment

opportunities. With boom in Start-up activities around the world as well as lack of right employment opportunities in the state, most of the educated youth are looking towards innovations and entrepreneurship as a possible means of self-employment and also as a means of employment generation. In Kashmir, there is an immense scope for improvement and in traditional areas. For example, there is a huge scope and margin for innovation in innovation conventional heating devices and mechanisms during winters, construction industry, minerals and stone industry, tourism industry, local manufacturing and service industries, traffic management systems, recycling of chinar and popular leaves to produce paper and other disposable items and so forth. No innovations have been carried out in optimising the dimensions of Hamam stones and efficiency of Hamam system. Similarly innovations are possible in redesigning a increasing the safe Kangari for household use. Our *kandur*'s tandoor has an excellent scope of improvement in design and efficiency as cost and availability of wood are deterrent factors for its economical future use. Alternative materials for construction of houseboats and shikaraas have to be developed as *Devdaar* wood is scarce and prohibitively expensive as well as the craft of houseboat making is slowly dying out. Glass fibre as an alternative material could be a future replacement for these water transportation vehicles thus boosting local industry and employment. Design and development of alternative techniques and methods for making bricks is another area of innovation since the conventional brick kilns involve the utilization of a large area of large which becomes unavailable Hence there is a tremendous scope for for agriculture sector. innovations in various areas in Kashmir, both in formal as well as informal sectors. In formal sector there are opportunities to set up industries in leather, perfumery, recycling plants etc which shall boost employment and create further innovation opportunities. Many new innovators may come forth if right and encouraging innovation culture is provided in the state. Traditional 'inside-out' approach to innovation assume that prospective innovators invent and design new products to meet the needs one may not even realized.

The youth of today have a lot of creativity and innovativeness in them and they just need someone to hold their hand and show them the right direction so that their innovative ideas are logical conclusion. This implies that there is an urgent taken towards need to establish incubation centres, research parks, start-up and innovation forums, entrepreneur development clubs etc. at various places of the state. The incubation centres are the centres where budding innovators would get a right eco system for prototype development, technical advice and financial assistance. The government needs to adopt a proactive approach to formulate and implement effective innovation and start-up strategy by involving an all the players, in

order to enhance and inculcate the culture of innovation. A state wide campaign needs to be launched so that the right and relevant information with regard to various government schemes, programmes, policies, benefits and financial assistance is disseminated across the masses. Productive and planned events and seminars need to be organised in various institutions such as schools, colleges, universities and technical institutions of higher learning.

The institutions of higher learning have a major role to play in order to create the right ecosystem in their campuses to encourage idea generation and innovation activities among the students. Activities of research, innovation, patent application, collaborative undertakings with industry, especially in MSME sector and societal development, etc need to be undertaken and carried out with zeal and zest. Moreover, the paramount aim of institutes of higher learning must be to attract the brightest engineering talent in the state and shape them into excellent researchers, innovators, and entrepreneurs in addition to carrying our skill development activities. These institutes of higher learning must identify niche areas for strategising and implementing their action plan where need based projects are taken to solve problems at various social levels through innovation.

The National Institute of Technology (NIT) Srinagar, which has been playing a pivotal role in technology and engineering domains of the state in particular and the nation in general, has create a full scale incubation centre continuing its pursuit of contributing to the undertaken to society. The premise of incubation centre is based on the philosophy of creating value for present and the future requirements. In this spirit, while the innovation is to be driven out, the centre is looking forward to provide solutions to the problems of the society or suggest ways of efficiently doing things. The centre also envisages attention towards the disruptions in the making that we are seeing globally trending. Keeping this philosophy in mind, the orientation for the incubation centre addresses issues that are met by the local industry, initiate innovation to with the national and global trends. The centre intends to take up various keep up challenges of the state including grass root technologies and develop innovative ideas of the engineering students, technocrats, innovators who intend to obtain an engineering solution for a problem. Some of the major objectives of the centre are:

- Creation of Technology Based incubation on continuous basis.
- Economic development, employment generation (targeting disadvantaged groups) and technology commercialisation.
- Fostering the entrepreneurial spirit.

- Create awareness about Technology Incubation and Commercialisation of R & D products and processes.
- Promote micro, small & medium industries.
- Assistance to existing incubatees by way of specialized services of the institute
- Develop innovative ideas of the students, Grass root innovators, entrepreneurs and other stakeholders by application of scientific and engineering principles and help to commercialise the ides by involving industrialists and entrepreneurs

Like many western countries, a culture of idea generation and collection has to be initiated and the concept of an Idea Bank needs to be publicized and propagated. Forums, institutes, schools, colleges, universities and other organizations need to establish idea collection centres for collecting ideas and bring them to incubation centres for processing them scientifically to obtain innovations. The problems of Kashmir are unique and it logically and is unlikely that a technological solution will come from outside. The onus is on the people of Kashmir to think and innovate in order to problems requiring a technological solve intervention.