

Towards an Impatient and Agile Ecosystem for Inclusive Innovations

Recently, among the various Gandhian Young Technological Innovation (GYTI) Awards given by the Hon'ble President of India, there were a few ideas which addressed some of the widely prevalent problems that needed extremely affordable solutions. As in the previous years, innovations *from* and *for* grassroots were showcased at the Festival of Innovations and Entrepreneurship (FINE) hosted by the office of the President of India. The National Innovation Foundation helped in organizing FINE, brought along more than 200 innovations from and for grassroots.

Vikas, Pooja, and Saurabh, students at IIT Delhi, a GYTI awardee team designed an attachment worth Rs.10,000/-. This can convert a conventional microscope of Rs. 10,000/- into a fluorescent microscope and that too in just Rs. 20,000/-. It presently costs more than seven - eight lacs. Without such a microscope, identifying TB causing organism will become difficult. If it isn't diagnosed on time, then treating it can become more difficult. India has decided to get over this problem by 2025 by having full coverage. Similarly, the majority of the primary health centers do not have

autoclave facility to sterilize various tools used by the doctors. A Rs.500/- solution by Saugandha Das and Archit Devarajan, students of ICT Mumbai will do the needful. Due to the difficulty in finding the vein while giving an intravenous injection or taking a blood sample, one has to pierce the needle several times. An extremely affordable solution by Irvikram Annamalai, IDC, IIT Bombay will make it convenient to detect the vein at a very low cost. One can go on with many such solutions.

Many of similar innovations for grassroots innovations have not diffused because of several reasons, a) industry lacks the hunger for innovations, b) an efficient supply chain could not be built by innovators cum entrepreneurs association, c) design inputs in conversion of prototype to product and utility were lacking or unaffordable, d) pilot procurement by public agencies is not being done to have larger scale testing, feedback, redesign if needed and approval for large scale procurement etc. In fact many innovation based entrepreneurs at grassroots may also need financing for pilot as well as normal production. Advance against order will reduce their borrowing requirement. While big companies

are able to manage advance payment, startups often don't get such an advance payment against the orders. The time has come to rethink the problem of building a holistic ecosystem.

During the forthcoming 25th year of celebration of SRISTI and 30 years of Honey Bee Network, June 1-3, 2018 at Grambharati, Amrapur; many of these questions will be discussed threadbare to develop a strategy for future transformation of our society. Among many actors who have remained un/under recognised are the ones who help in connecting communities, companies, creative innovators, connecting distribution chain, financing logistic partners and feedback collectors for redesigning the product, process, service and the system (PPSS). How can start-up policies and agencies become more empathetic towards innovators? Nattu Bhai is a struggling innovator who spent almost 16-17 years to crack the problem of picking cotton balls from a rain-fed cotton variety like 797. He spent lacs of rupees from his own resources besides getting support from GIAN and NIF.

I hope that we can develop a more responsive and agile ecosystem for supporting inclusive innovations all over the country so that the pace of social transformation can be accelerated.

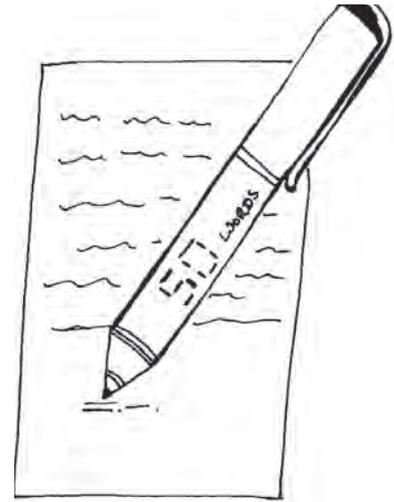
It is suggested that various science academies should come together to enrich the ecosystem for inclusive innovations. If a transport company provides a no-frill, no-loss ensured distribution system at a reasonable cost, should we not recognise the contribution of such a company. Similarly, if the state government agrees to procure say 1000 fluorescent microscopes for large-scale user trial so that it could then get it installed in all the primary health centers, then

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Khalid Hussain & Mir Zamman: Shalamishri tablets for stomach



Word counting pen: Muzafar Ahmed Khan

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should not we recognise the leaders in such a state? If another state government not only gives orders but also finances the production, and provides public procurement guarantee, and if the products perform well in the field, then such a state government deserves even more recognition. If a network of design and communication institutions/ companies develop an entire communication strategy for such innovation-based enterprises, then their role also deserves to be appreciated. If a policymaker in Ministry of External Affairs advises all Indian missions to gift some of these solutions for user trial in Africa and other countries as a part of innovation diplomacy, then there has to be a recognition of such an initiative. If public and private radio, TV channels and film producers incorporate these innovations in their stories and programmes, then writers and producers, actors and financiers deserve appreciation from the society. If a school tech board committee includes lessons based on innovations in the textbooks to enhance creativity and curiosity among children, then such educational boards naturally deserve appreciation and recognition.

What I am suggesting here is that various science academies should

come together to create an academy of Inclusive Innovations. This academy will not only map the missing link in the innovation value chain but also orchestrate the design of public policy to ensure that these gaps are filled up. In the process, those who create new standards of performance in linking products, process services and system can still recognise the efforts of creative people annually through awards, grants and opportunities to diffuse the ideas globally by linking them with innovation diplomacy efforts of India.

Empowered academy of inclusive innovation will conduct research, documentation, policy analysis, and design, fund pilot experiments, create knowledge network and ensure that gaps get filled up with an impatient, empathetic, action-oriented approach.

I hope that such an academy will remain apolitical and be run professionally by mobilising support from various public and private institutions. The transaction costs of converging the triangle of innovation, investment and enterprise were conceived while creating GIAN in 1997 will hopefully happen sooner than later. Informal interaction with several stakeholders convinces me that we need an academy

which will not only elect fellows from around the world but also make the connections and invest in pilots so that innovations don't remain on the shelf. India is called by many observers as the largest graveyard of prototypes. The small industry which provides the most jobs and help in keeping the economy polycentric deserves a new deal. Millions of students do projects but very few become products (see techpedia.sristi.org). There is nobody who has not benefited from goods or service for which he or she never paid. And yet when it comes to creating common or public goods, we always fear that if not charged, they will not be used properly. In some places, it is quite true. For e.g., water, but in other cases, such open source content for government school children, it is not true. So the whole model of economic development through social, economic, individual and collective enterprises, needs to be reimaged and redeployed. The future belongs to a sharing, caring and daring society.


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