

Emerging Frontiers of Honey Bee Network: grassroots to Global (g2G)

When an unmet need in one part of the world has been met by a local innovation, what should it take to make it accessible to other similar needy communities in another part of the world? Various barriers like lack of awareness, trade barriers, Intellectual property restrictions, high transaction costs and lack of purchasing power or limited local or self-fabrication facilities may come in the way. But with a platform like Honey Bee Network we may overcome these through various initiatives of the volunteers and other stakeholders.

There are several developments which I will share with the readers to show how new frontiers are being assailed by the Network. There is a major interest among many global institutions to spread the Network in Africa. USAID worked with SRISTI to not only diffuse three grassroots innovations in Kenya but also build capacity to fabricate these solutions locally. A multipurpose food processing machinery by Dharambir, Yamunanagar, Haryana; motorcycle based multi-purpose plough, later transformed into a small tractor and a seed dibbler have been transferred to Kenya and a lot of progress has been made to institutionalise the lateral learning across the continents. It was very gratifying recently when Kenya Bureau of Standards (KEBS) decided to set up an inter-institutional committee with the Chair from JKUAT, agricultural university, local partner of SRISTI in this mission. A fast track is being developed for unveiling this new innovation as a viable alternative for small farmers. This small tractor is easy to operate and userfriendly, women can also operate it easily. Similarly, in situ value addition is one of the mantras of self-reliant farming economy which has been neglected in most countries. By keeping farmers engaged with only commodities trade, we cannot increase their income a great deal. Multipurpose agricultural and food processing machine is a viable and extremely affordable alternative for this purpose. It not only process the fruits and vegetables but also keeps seeds separate. These seeds can be further processed for extracting essential oils or aromas.

Dibbler helps in seeding the crops very fast as against making a hole manually and then putting the seed.

There are a hundred of other innovations which can likewise generate jobs within India and other countries by adapting these to local conditions. The local mechanics i.e. Jua Kalis were invited from Kenya to India twice to learn the assembly of these machines at the workshop of the innovators. Likewise the innovators visited Kenya from India to adapt their knowledge to local conditions.

Capacity building programs were organised by SRISTI in collaboration with APCTT in Malaysia, Indonesia, Vietnam, Sri Lanka, Philippines, China and a few other countries. Colleagues from NIF, GIAN and other institutions were also involved in these programs. Three International conferences on Creativity and Innovation at Grassroots have also provided opportunity of global exchange on the subject.

International Centre for Development Research, university of Bonn has also partnered with SRISTI to create a manual of Honey Bee Network practices so that African colleagues can adapt the Network philosophy to their needs. A great impetus will be given to the goal of triggering sustainable learning system around the world using open reciprocal and responsible innovation network.

How do we wish to pursue the next goals of the Network:

- a) A large database of grassroots sustainable agricultural, veterinary and human use practices has been shared openly to encourage widespread experimentation by small farmers. Not all practices are to be applied directly or in artefactual manner, but can also be used as analogies or heuristics or even gestalt by users worldwide. The challenge is to make this database available in different media and languages.
- b) Despite huge international aid across the developing world, there is still no major program for on-farm trial of extremely affordable solutions to help small farmers, artisans, animal rearers, mechanics to test ideas from one context in another. How to mobilise the global will to ensure such support for local communities to try new ideas for self-reliant,

decentralised development as per Gandhian vision?

- c) Educational system in India and elsewhere has not yet incorporated lessons based on creative individuals and communities. The educational planners and policy makers fear unleashing of much creative energy through widespread exposure of students to these impulses.

It might become difficult to breed a class of conformists then!

- d) Mobilising the power of young students during summer or winter vacation for scouting and spreading the innovations and sensing unmet social needs is another idea that has not spread much. SRISTI has found this to be one of the most effective and frugal ways of tapping mass wisdom.
- e) The women's knowledge, institutional networks and coping strategies for not only climatic stresses but also socio-economic fluctuations have not been adequately tapped. Without large scale documentation and dissemination of more viable practices, women's groups will remain vulnerable as they often are.
- f) The children's ability to do research on unmet social needs and identify creative and innovative solutions has been a great source of inspiration in the Network. There is nothing more redeeming about the future than this discovery. Children thus need not be treated as sink of sermons but should be seen as an important source of ideas. Majority of development planners may not see validity of this finding just now but eventually in future, they may have to fall in line. Sustaining this research till then will be a challenge.
- g) Generating jobs is a major challenge in our economy and also in other developing countries. It is agreed globally that future economic growth through large corporations will be jobless, because of Artificial Intelligence applications, automation and other compulsions. Small distributed, decentralised and diversified enterprises are an answer. But for that we need to have an agile investment, mentoring and partnership eco-system in place. This is a challenge to incubators set up by GIAN, SIF and BIONEST (SRISTI) and NIF and others to coordinate their strategies for seamless transition over space, time, sector and skills.

- h) Virtual economy is playing a deeper and deeper role in the spend-spectrum of consumers. A lot of connections remain to be forged among consumers, producers, workers and other stakeholders. Farm workers have seldom received any attention in skill building programs as yet and that too none from sustainability perspectives. There is a need for a major change in the national and institutional priorities of all those who believe in reskilling India.

- i) The declining margins of farmers and productivity of chemical and other inputs in agriculture have caused a crisis in agriculture. The Network has been drawing attention to this impending crisis for decades but somehow focus has remained on doing more of the same, with higher subsidies disregarding declining water table, soil fertility and organic matter content. The challenge is to reverse this bias in favour of quickfix solutions. The Farmers associations demand higher margins without changing their input use practices and this is a non-viable path. There is a need for hard restructuring in the way we use soil, water, various inputs and don't use organic inputs.

There are many other challenges that the Network faces and I hope together we will find a way forward. I look forward to hear from you if you wish to join this social, ecological and institutional reform movement. The sustainability of our current path is suspect. The Climatic fluctuations are taking a heavy toll of the fragile resilience of communities and the ecosystems. The Network needs a lot many more volunteers to expand this agenda. We need to experiment with new approaches for scaling up a distributed model of innovation led social and economic entrepreneurial movement. Early stage funding gaps have to be bridged. The summer and winter schools organised by SRISTI to build long term vision of technology and other students have to be scaled up many times more to embed the Network philosophy in their dreams of inclusive and innovative new India.



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