

Innovations, Incentives and Institutions: Honey Bee Network

Section I. Accountability towards knowledge providers

How would we feel, if in a meeting attended by various intellectuals, some body takes notes of the discussions and then becomes the author of the summary. She does not attribute any ideas to those who shared these in the first place and claims authorship over the ideas? Similarly, a corporation or any other outside institution or individual accesses the biodiversity conserved by a community along with associated knowledge about its uses, develops a value added product such as a plant variety or drug or dye, generates wealth and does not share any part with the resource conservers and knowledge generators and providers? If every person or institution, which collects knowledge of people, neither attributes nor shares the findings with the knowledge providers in their language and in the manner that they can understand, will we consider such an exchange ethical and fair? How would knowledge providers know whether we have used their knowledge in the right context? How will they learn from each other and thus enrich each other's repertoire? How will the creativity and innovative potential of people be recognised, respected and rewarded?

It is questions like these, which brought many like-minded people more than fifteen years ago together and eventually triggered the evolution of Honey Bee network. This group found it totally unfair and unethical that the only resource in which poor people were rich, that is their knowledge, is taken away from them without any attribution, accountability or reciprocity. Honey Bee network also believed that if many of these knowledge rich people were economically poor, it was not because their knowledge was of lesser consequence or that they were incapable of generating creative and efficient solutions (though, in some cases, this well might be the reason). Their conditions could also be explained by various policy and institutional factors apart from the lack of supporting platforms for strengthening their problem solving capabilities. It is to develop a platform of this kind that Honey Bee network devoted its attention over all these years. A data base of thousands of innovations and traditional knowledge was built up, all with the name and addresses of the knowledge providers, some of it shared with knowledge providers and others through Honey Bee News letter and its local language versions.

The concept of Honey Bee was a response to above questions and a quest for building up an ethical and accountable relationship with knowledge rich and economically poor people. Honey Bee philosophy was a metaphor reflecting what we are trying to achieve. Honey Bee does what we do not. It collects pollens from the flowers and flowers do not complain. It connects flower to flower through pollination. This newsletter started with discourse on knowledge, rights of knowledge providers, ethics of conservation, heuristics of innovations etc., and it became an important voice on the issue of IPR. When nobody was debating about GATT in the developing countries(and CBD was still to be signed), the Honey Bee network was raising the question, "Will you stand by IPRs of peasants?" In some sense, it was a drive to make us more accountable towards people whose knowledge we wanted to learn from. What we realized after a while was that the contribution that we are getting from all sectors of the society was far more from individuals than from NGOs.

However, in addition to the publication of the newsletter, the Network tried to do many other things. To enumerate a few initiatives, way back in 1991, the first biodiversity contest was organized by our oldest partner, SEVA, among children as well as adults in a village in a drought prone region of Madurai. SEVA is a collaborating NGO for Tamil version of Honey Bee. Similar contests were organized in Kerala, Uttar Pradesh, Himachal Pradesh and Gujarat in India and in Vietnam and Bhutan. What was most remarkable about these contests was the fact that young children from very disadvantaged backgrounds showed an extraordinary ability to inventorize biodiversity and its local uses. Many of those who had dropped out from formal education system had not dropped out from, so to say, informal education systems. In fact, many of them had excelled in this system of survival knowledge.

When the movement started expanding more, a need for setting up SRISTI, a development voluntary organization was felt in 1993 to provide backup support to Honey Bee network. Indian Institute of Management, Ahmedabad has provided extremely valuable support to Honey Bee network right from its inception, and this support has continued even after the setting up of SRISTI, GIAN and NIF. Five functions were identified as crucial to the core activities of Honey Bee network., (a) documentation and dissemination

(through application of information technology and otherwise) of innovations and traditional knowledge, (b) validation and value addition in the knowledge, innovation and practices, (c) protection of intellectual property rights, (d) provision of monetary and non-monetary incentives for individual and collective creativity, conservation contribution, and innovations, and (e) policy advocacy for expanding institutional space for grassroots innovators and traditional knowledge holders.

It is around these functions that the activities of Honey Bee network, SRISTI and its partners were organized. It is these functions, as we would notice became the basis for evolution of National Innovation Foundation (NIF).

At the end of the day, the Honey Bee Network has in some way, proved that the modern institutions can, given a will, blend with the best of local knowledge system, traditional knowledge and contemporary creativity. We have realized how critical is the issue of traditional knowledge. But equally important is the issue of contemporary creativity. There are lot of people who have innovated in the past few years. While focus on traditional knowledge is justified given its important role in survival of millions of people, contemporary sources of creativity are also important to reinforce the experimental ethic.

The validation and value addition of documented knowledge helped in recognizing what was needed to be shared, how, when and in what form and with whom. It is obvious that not all experiences of knowledge holders might have the same validity. The on-farm research was attempted as one approach to validate. Linkages with formal institutions of science and technology was another. It was also realized that knowledge experts among themselves could debate and ascertain the potential some of the practices might have by drawing upon their own understanding and experience about the concerned knowledge systems. The meetings of 'Shodh Sankal' ie. the chain of experimenters became an important means of such a dialogue among the innovators and others interested in these knowledge systems.

Incentive Models for Rewarding Innovators

Honey Bee Network took up the enormously challenging task of experimenting with various models of recognizing and rewarding innovative individuals, groups and communities. SRISTI has conceived four different incentive models for rewarding innovators:

Material-individual: includes awards, fellowships, patent rights, license fees and other forms of remuneration and monetary incentives for individuals.

Material-collective: includes trust funds, risk funds, mutual insurance fund, venture capital support and revolving funds under the direct control of the stakeholders. The reward would flow to a group through different funds to encourage inventive communities to experiment more and more on the path of entrepreneurship.

Non-material-individual : includes honoring the innovators for their unique contributions to society by conferring titles, public felicitation, invitation to lecture at formal centres of learning, conferences, meetings etc.

Non-material-collective: includes changes in educational curriculum, favourable policy environment for conservation practices, eco-friendly products, capacity building through transfer of technology etc. The policy change influencing the livelihood options of communities and individuals without necessarily providing immediate monetary input would also constitute non-monetary or material collective incentive. The respect, recognition and reward for community actions besides creation of a consciousness which links seven Es (Ethics, Efficiency and Entrepreneurship, Excellence, Environment, Equity, Education, and Empathy) thus became a very important non-material collective incentive for creativity, conservation and caring culture in society.

The synergy among seven Es will emerge essentially in an institutional context. The technology can only change the ratio of inputs and outputs, but how are out puts shared, whether inputs are used within sustainable limits and to what extent the environmental, ethical, and equity considerations are kept in balance will depend upon the institutions. These institutions can be formal as well as informal. Traditional knowledge is often conserved by the communities and individual experts through norms and values that influence the way

resources are used, benefits shared and interest of future generations as well as non human sentient beings (birds, animals, ants etc.) are looked after.

Individual innovators may develop a technological solution but the extent to which it integrates the seven Es will again depend upon the values of the innovator and the institutional context in which innovation evolves and grows, is supported or and diffused.

Technology, we believe, is like words and institutions are like grammar. We discuss next the role formal institutions have played in building value chain around grassroots innovations and traditional knowledge systems. The core of these institutions is also value based. For instance, GIANS were never supposed to call any innovator or traditional knowledge expert to office or ask him/her to fill up any form. They are supposed to provide all the help at the door step of the innovator or community.

Evolution of GIAN (Grassroots Innovation Augmentation Network)

After a while, Network felt that recognition and documentation of people's knowledge was not enough. We should also aim at the commercialization of viable innovations, so that their benefits are shared widely among the community members. Such an entrepreneurial approach would provide motivation to innovate further. To achieve this goal, a nodal agency should be created that would not only upscale these innovations but also would act as a clearing house of ideas by facilitating interaction among the innovators, entrepreneurs, and investors.

This idea was mooted at the International Conference on Creativity and Innovations at Grassroots (ICIG) held at Indian Institute of Management, Ahmedabad in January 1997. The communication was sent in this regard to all the state governments but only Gujarat government came forward to cooperate with SRISTI, IIM-A and Honey Bee network to set up a Green Venture Promotion Fund to support the rural and urban disadvantaged grassroots innovators and traditional knowledge holders. This agency would link them to formal systems of marketing, technical and financial services. It was expected that such a fund would also prepare business plans for the innovators and would search and support entrepreneurs who would convert the innovations into enterprise.

The first model of GIAN (now GIAN west) was set up on March 1, 1997 at Ahmedabad. In its five years of existence, GIAN has been successful in converting many innovations into products and enterprises. However, the experience of convincing the investors in public and private sector to fund these innovation-based enterprises has not been an easy task. It was obvious that the transaction costs in mentoring such dispersed, small and risky ventures were very high and financial returns were not seen to be commensurate with these risks (the economic returns, however, were likely to be much higher). The financial institutions had not learnt any lesson from the experience of micro-finance in which the poor people had proved to be much better pay masters than the so-called large entrepreneurs with considerable collateral security.

The Need for Micro Venture Fund

The need was to set up grassroots innovations financing mechanism that would provide seed money or start up support to encourage such innovations based enterprise. The ever-increasing number of innovations in the portfolio of Honey Bee network was a clear indication that the mechanism should be set up earlier than later. GIAN has been negotiating with many funding institutions and has not yet received positive response from many.

Thus despite the presence of a huge database on innovations with for exploitation, GIAN has not been able to set up as many new enterprises as was necessary largely because of a very limited financial resource base and lack of much risk capital support. The role of TePP (Technopreneurial Promotion Programme of Department of Science and Technology and Department of Scientific and Industrial Research) has been most significant and pivotal in achieving the goals of GIAN Gujarat so far. Despite all the limitations, its experience has provided a significant basis for further policy and institutional innovations in the country. An Incubation and Micro Venture Fund to finance grassroots innovations could go a long way in providing a helping hand for the growth innovation based enterprises, generation of employment and alleviation of poverty.

Section II. Institutionalizing innovative culture in India: NIF

The Union Budget of 1999 included the announcement for setting up of the National Innovation Foundation (NIF). The purpose was to build the National register of inventions, innovations and outstanding traditional knowledge, support value addition research by scientists as well as innovators at grassroots level, setting up incubators to convert innovations into products and enterprises and eventually make India a global leader in sustainable technologies.

NIF was set up by Department of Science and Technology in March 2000 at Ahmedabad to achieve its goals essentially through a non-governmental spirit and by drawing upon the Honey Bee network and its collaborating partners. The objectives of NIF are:

Objectives

- To help India become an innovative and creative society and a global leader in sustainable technologies by scouting, spawning and sustaining grassroots innovations.
- To ensure evolution and diffusion of green grassroots innovations in a selective, time-bound and mission-oriented basis so as to meet the socio-economic and environmental needs of our society.
- To provide institutional support in scouting, spawning, sustaining, and scaling up grassroots green innovations as well as outstanding traditional knowledge and helping their transition to self-supporting activities. It seeks self-reliance through competitive advantage of innovation-based enterprises and/or application of people-generated sustainable technologies at grassroots level.
- To build linkages between excellence in formal scientific systems and informal knowledge systems and create a knowledge network to link various stakeholders through application of information technology and other means.
- To promote wider social awareness, and possible applications, of the know how generated as a result of these initiatives in commercial or social spheres and encourage its incorporation in educational curriculum, developmental policies and programs.

NIF pursues each of five of the key functions described below through a National Coordinator. At present four National Coordinator (NCs) are in place for Scouting and Documentation, Value Addition and Research and Development, Intellectual Property Rights Management and Information Technology and Dissemination.

The functioning of each division mentioned above is being carried out by the NC concerned with the help of Research Associates and Fellows. The overall functioning is being supervised by Chief Innovation Officer (CIO).

A Scouting and Documentation

Scouting and Documentation of the innovations is the first step towards the fulfillment of the mission of NIF. Scouting involves extensive fieldwork; travel in rural and urban areas, search for 'odd balls'- the experimenters, local community and knowledge experts in the society. The key activities are::

- To coordinate with various governmental and non-governmental agencies to mount national campaign to scout innovations with the help of grassroots level functionaries of education, agriculture, rural development, small scale industry, Panchayati Raj institutions, etc.
- To screen, document and verify the claims about these innovations through various networks of scientific and other institutional initiatives as well as through Honey Bee collaborators, existing databases and field visits.
- To generate incentive mechanisms for innovators.
- To provide assistance in forging decentralized networks of inventors/knowledge experts and strengthen the Honey Bee Network.
- To obtain Prior Informed Consent (PIC) of the providers of knowledge.
- To share the innovations permitted in public domain with the knowledge providers through Honey Bee newsletter and other media to enrich the repertoire of the local communities and informal knowledge experts and to support shodh yatra in different parts of the country.

B. Value Addition and Research & Development

Most of the innovators and/or traditional knowledge experts need optimization in design process or product formulation through blending with modern science and technology inputs. Market prospects for many innovators will be very low without proper value addition. Efficiency gains can be made by creating technology networks. The Research and Development is a key focus of NIF. It provides a platform for the synergy between formal and informal science and technology, institutions and knowledge system. The tasks involved include:

- To coordinate with public and private sector R & D institutions, people's organizations and rural and urban innovators themselves to add value to local innovations.
- To develop product development plans and help the grassroots innovators mobilize funds from TePP and other such programs within and outside the country.
- To build product development teams on contractual basis to get the products and/or services developed through licensees ensuring appropriate benefit sharing arrangements.
- To set up and help coordinate GIANS in different regions along with other national coordinator.
- To obtain help of eminent scientists and technological experts from various fields as a part of the Research Advisory Committee, or otherwise which will guide the activities of NIF.

C. Business Development & Micro Venture

Value chain for green grassroots innovation will require financial support at different stages of product cycle. Initially support is required for improving the attributes of the innovative product/prototype through R&D linkages. This initial market assessment has to be followed by micro venture support for converting innovations into enterprises. The various activities needed for the purpose are:

- To coordinate with various entrepreneur/industry associations, management institutions and incubators to mobilize mentoring and management support for grassroots innovators and TK holder.
- To coordinate with private and public sector industrial and financial institutions and associations to link innovations with investment and enterprise wherever possible.
- To help promote various innovations and outstanding TK through market and non-market channels.
- To encourage various industry associations and other developmental bodies to set up mechanisms for licensing innovations for business development and equitable benefit sharing with the innovators and TK holder.
- To help raise resources for pursuing various activities or for innovation value chain.
- To help set up the National Micro Venture Fund through public and private participation and mobilize incubation fund and venture capital for the innovators and TK holders.

D. Intellectual Property Rights Management

The only resource in which poor people are rich is their knowledge. Protection of the intellectual property rights becomes necessary to ensure knowledge based approach to work. The activities necessary to achieve this goal are:

- To coordinate with various intellectual property institutions and attorneys to mobilize *pro bono* or paid help for grassroots innovators to file patents, trademark and other means of IP protection and also directly file applications on their behalf.
- To pursue with the government authorities, the possibility of NIF providing the certificate of inventions/unique Traditional Knowledge accompanied by medium term protection so as to reduce transaction costs of the IP offices and the innovators.
- To coordinate with WIPO and other international patent offices to secure IP protection for grassroots innovators globally wherever applicable.
- To provide assistance to innovators to enter into licensing arrangements with entrepreneurs for transferring technologies.
- To help pool part of the license fee obtained from the innovators towards an innovation fund for supporting innovators.
- To help in prior art search so that innovators can maintain their competitive edge.
- To screen ongoing patents on Indian traditional knowledge so as to oppose the improperly granted patents, particularly dealing with knowledge/innovations/practices entered in the National Register.

E. Dissemination, and Database Management through Information and Communication Technology (ICTs) applications

The entire effort of scouting and documentation leads to the development of a database of innovations and traditional knowledge aimed at building the National Register. The process involves using various Information Technology and database applications for horizontal networking among innovators and traditional knowledge experts as well as other stakeholders. In addition to this the multi-lingual approach to the database development is the main task ahead. The activities involved are:

- To develop and maintain the National Register of Innovations (contemporary innovations and traditional knowledge), database management, electronic networking, web based management of value chain for grassroots innovations, coordination with various regional language portals and managing National Grassroots Innovation and TK Management Information System.
- To develop multi language, multimedia kiosks at various public places, educational institutions and local bodies and help establish decentralised Indian language databases of innovations and Traditional Knowledge.
- To coordinate dissemination and publication activities of NIF.
- To manage the archive of all communications and maintain effective touch with latest trends in technologies which can be harnessed in support of grassroots innovators.

A: Scouting and Documentation of Grassroots Innovations

To scout grassroots green innovators and traditional knowledge holders who had solved a local problem entirely through their own effort without any outside help requires a massive campaign around the country. The knowledge so documented requires Prior Informed Consent of the innovators and Traditional Knowledge holders, besides verifications in the case of those chosen for commendation, awards and support for value addition and commercialization. National Innovation Foundation has drawn upon a variety of approaches for scouting and documentation evolved by the Honey Bee network for its national campaign for over last decade and a half.

The documentation and dissemination are to some extent simultaneous processes. Hence, the dissemination of documented innovations and traditional knowledge became integral part of the most of the methods used for documentation of grassroots innovations. Honey Bee network has been able to mobilize large number of students from rural (and some urban) colleges, rural youths, grassroots functionaries of rural development and other departments of the state government, teachers and development workers and individual volunteers or what we may call 'NGIs' (Non-Governmental Individuals) for documentation and dissemination.

Various methodologies and approaches used for documentation and dissemination are:

i) Survey of Odd Balls in the Villages through Students.

Initially about 100-120 student volunteers from various Gandhian institutions in Gujarat are selected every year by the Honey Bee Network for about two months during the summer vacation. They are given simple orientation training in small groups for scouting and documenting innovations and traditional knowledge. They are encouraged to appreciate the grassroots innovations created by their family members and neighbours in the village to begin with. The students are asked to narrate some of their own experiences, which were *interesting, intriguing or inspiring*. By underlining the ones that we find counter intuitive or less obvious, we convey what we are looking for. The process of training gets demystified and the purpose of scouting becomes clear because the examples of what we are looking for are drawn from the scout's own experience. The students then survey different villages. They also collect addresses of a few farmers who either know about the innovator concerned and/or have fields adjoining the fields of the innovative farmer. We write letters to these contacts later to have a first round of confirmation. Later, another student/field investigator revisits each site to avoid any error in the process. The best scouts are given prizes in the annual Honey Bee network meeting.

ii) Organizing Competition for Scouting Innovations

Competitions have been organized in various parts of India among students and grassroots functionaries of the state government. Survey forms have been developed to seek brief information about the innovations scouted by the participants. Application forms, procedure and other details are explained through meetings in schools/colleges. Voluntary teachers coordinate such contests in their schools and ensure that students work in the spirit of fulfilling their curiosity to learn from informal knowledge experts in our society rather than to earn a small honorarium. For launching competition among the grassroots functionaries, workshops are organized to explain the purpose of scouting campaign, as well as to expose the participants about the earlier experiences in scouting. A committee of three persons evaluates the entries sent in by the participants and the winners are awarded prizes and certificates in the network meeting. Some of the outstanding innovators identified through competition are also honoured at such meetings. Many students and functionaries can participate in this activity. Revolving trophies are given to the best district official/development agency which scouts the most interesting innovations and traditional knowledge. We have not succeeded so far to institutionalize such a process in many states but efforts are on.

Though one finds that same or similar traditional knowledge and in some cases even innovations are recorded from more than one place, we do not discourage this. This helps us to learn about the capability of local communities and individuals to evolve sometimes similar solutions to same problems independently, autonomously and simultaneously. In some cases, such a knowledge or innovation may indeed have diffused from place to another. Our experience so far has been that many innovations/traditional knowledge are discovered from unexpected quarters within a very short span of time through such competitions.

iii) *Scanning of Old Literature*

There are many visionaries and experts at the regional level who did not get their due credit and recognition just because they did not publish in English. As a result many times it so happens that we end up giving credit for 'reinventing the wheel'. One of the purposes of scanning the old, vernacular literature is to bring these unaccredited knowledge systems to light. We have collected old books from civil society, old institutions and stalls, NGOs and vendors of old books. We are trying to reprint some of these books. Particular mention may be made of a book by Gangaben, who became a widow at an early age and published a compendium of 2080 formulae for self employment based on local knowledge way back in 1898 in Gujarati language.

iv) *Agricultural and Cultural Fairs*

Agricultural fairs are vibrant traditional institutions in rural India where people assemble in large numbers either for religious or cultural celebrations. Honey Bee network members participate in such fairs by putting up stalls. Many innovative volunteers sometimes set-up and run these stalls. In addition a computer for accessing Honey Bee database, posters, leaflets and other publications in local languages are kept at the stall. Many farmers, artisans, community leaders and professionals visit the stalls and get information about the innovations developed by other farmers. While accessing this knowledge base, they also share their own innovations with Honey Bee network members.

v) *Shodh Sankal* - a local network of grassroots innovators

To generate lateral learning environment among the grassroots innovators, SRISTI has initiated the concept of *Shodh Sankal* - chain of experimenting farmers. The idea is to bring together experimenting farmers and discuss the results of trials that farmers have taken up on their own to solve various local problems. This discussion also enhances the esteem for local knowledge system. It is possible to generate 'lateral learning' among farmers by sharing innovative practices found suitable in one region with the farmers in another similar region after on farm testing/trials if necessary. This could help to speed up the process of technological change in regions where formal technology generation system has not been very successful, such as dry regions, mountainous regions and other disadvantaged areas. Even in less risk prone regions it cannot be assumed that an innovative technology will diffuse on its own just because some farmers in a village have evolved it.

vi) *Shodh Yatra* (journey for exploration)

Based on the experiences of several years, the network launched the concept of *Shodh Yatra* in 1998. The journey of exploration is organised on foot from one village to another for 810 days covering maximum of

about 250 kms during extreme summer as well as winter. Innovative farmers, artisans, students and scientists join *Shodh Yatra* and walk with the objective of participatory learning and dissemination of information as well as spreading experimental and inventive ethics among communities. Local experts whether in traditional knowledge or contemporary innovations are honoured at their door step in these villages. Honey Bee database is shared with farmers in the local language through laptop computer and other publications. A mobile exhibition on medicinal plants, posters, artifacts, working models of innovations etc., are used for making the presentation more relevant to the local context. Biodiversity contests are organized among children while recipe contests are organized among women in some of the villages (particularly with focus on such food recipes in which at least one uncultivated plant has been used).

vii) *Scouting through Innovators*

Unlike the agricultural practices, the search for artisanal and farm machinery innovations is far more complex. One village may have several hundred farmers but only one or two artisans. To meet 100 artisans, one may have to survey 50-100 villages. However, over a period of time we discovered that social network of artisans is reasonably strong. Once we identified an innovative artisan or mechanic, we asked him to look for others of his kind. This process has helped in discovering many innovators.

viii) *Scouting through Media*

Many newspapers and magazines have written about the innovations and traditional knowledge recognized by Honey Bee network. Some of the innovators have approached us after reading about other innovators. This process is further strengthened through circulation of posters of competition among various institutions and stake-holders. A very small number of innovations are also scouted through internet where existing websites (www.sristi.org, www.nifindia.org, www.gian.org, www.Honey_Bee.org, www.indiainnovates.com) of the network have popularized the missions of NIF and other collaborating institutions.

Practices collected from various sources reflect a variety of knowledge systems, problem solving approaches, sectoral areas of technology, and above all a variety of ethical approach to evolution and dissemination of local solutions. The technological solutions have been recorded from various fields such as agronomy, plant varieties, plant protection, crop production, soil and water conservation, farm implements, veterinary and animal husbandry, poultry keeping, vegetative dye, forest and other natural resource management, leather tanning, energy generation, transport, general utilities, farm and small scale machineries, household utilities etc. The methods described above are complementary to each other and are some times followed together. The practices scouted or documented irrespective of the methods used, are verified by writing letters to the innovators and followed by a personal visit from the team. Innovators are encouraged to correct the practices and interpretation made of the information provided by them. Verified practices are stored in the computerized database with the names and addresses of the innovators as well as communicators. If the same practice is reported from other sources without variation, the names of the other providers are also added in the same record. However, all the scouting methods are not as effective in the same way in different regions. The success rate of a particular scouting method may not be the same at every place, it varies over time, space and of course the social group attempting to use these methods.

Scouting through the Network

The network collaborators and coordinators of GIAN play a very important role in helping to attain a record of respectable number of innovations and traditional knowledge through their active involvement with the network.

Lateral learning in the network: Experiences shared by the collaborators

In a recent meeting, various collaborators shared their experiences about different methodologies tried by them to scout innovations and traditional knowledge. It was stressed that our focus need not be only on number of entries but also on quality of entries. Similarly, mere documentation is not enough, conversion of innovations and traditional knowledge into products and enterprises was also necessary. There was a general consensus that the mobilization of entries through advertisements was much lesser whereas the results through network contact were much better. NIF's experience at national level corroborated this. Out of about 13000 innovations/traditional knowledge examples, hardly 1600 practices/innovations were mobilized through the

advertisement in the papers. It was also felt that before detailed documentation, the originality and social importance of the innovation should be ascertained. Those practices, which are well known in a given region, could be kept as open source technology available for wider use.

Mr. Vivekanandan (SEVA) Madurai organized workshops in different regions of Tamil Nadu and tried to scout other innovators and traditional knowledge holders through innovators themselves. He gave examples of several innovators who had only developed a concept or an incomplete product but after the documentation process, they felt inspired to complete the development of product. In some cases, the innovation was postponed in deference to the request from the affected people. For example, the innovator who developed coconut harvester did not develop it immediately when neighbours were affected. Later on, to meet his own needs, he completed the innovation by borrowing money at very high rate of interest. The trigger was the documentation process initiated by SEVA. The workshops of animal healers helped in uncovering even more traditional knowledge of animal husbandry and healing from those who came to learn. Many people enquire as to what would be done after their knowledge is documented. A note clarifying NIF's commitment, capacity and concern in this regard is being developed and shared in local language.

Dr. T.N. Prakash (PRITVI) mentioned the collaboration with Director of Agriculture, Karnataka through whom about 20000 pamphlets were circulated all over the state apart from thousands of posters. This approach led to generation of wide variety of ideas, innovations and traditional knowledge entries. While reviewing the campaign strategy, he mentioned that only ten per cent entries came in response to the poster based campaign, about thirty per cent came through NGO and readers of magazine like Adike Patrike, and fifteen per cent through personal visits after getting some leads from network members. An issue was raised that there should be a balance of resources spent on scouting vis-à-vis the follow up action on the scouted innovations and traditional knowledge. Several questions being raised in the media about the process of documentation were raised such as, (a) what is the sanctity of digital documentation when most people do not have access to digital technology, (b) if there are no IPR laws in the country which can safeguard TK, should documentation be done at all (c) if benefits cannot be ensured and IPRs cannot be protected, should documentation process be stopped for a while, (d) can the PIC note and its framework be really understood by the people and if not, what steps are being taken to facilitate its easy comprehension and compliance by people and NIF.

On digital documentation, it was explained that the long ranging controversy on bio piracy required patent office world wide to have access to digital information on public domain traditional knowledge so that no patents were issued on such knowledge. This has been a demand of global civil society for long time. TKDL (Traditional Knowledge Digital Library) thus ensures complete protection of Indian documented knowledge heritage in terms of biopiracy. So far as documentation processes are concerned, the purpose is not just the protection of IPR. Idea is to make India innovative and build bridges between excellences in informal and formal science. The public domain traditional knowledge can be disseminated among other communities to promote lateral learning and improve productivity and sustainability in the society. Further, till IPR system evolves, confidentiality has to be maintained in NIF. The information is shared with third parties only as per the PIC. In some cases, where scope for value addition exists, sharing is done on the basis of non-disclosure agreement (NDA). Every contractual staff or associate of NIF is expected to sign NDA. It is on the same pattern as all the collaborators and RAC members have been asked to sign the NDA. Documentation also helps in preventing the erosion of knowledge besides generating respect among the knowledge holders about this knowledge system. As mentioned earlier, some of the innovations got matured precisely because documentation process created pressure to perform. Such an ethic is extremely healthy and would help make India a more creative, productive and inter connected society. So far as the issue of PIC is concerned, the current complexity in the background has emerged because of the feedback received and the need to ensure fairness in the process. We have to share pros and cons of every option so that people can decide what they think is proper in the matter.

CCD representative mentioned that they have been planning to train the scouts so that quality of documentation can improve. He also mentioned that the traditional knowledge of healers required attention to their own system of validation and value addition.

Kamaljit (SRISTI-GYAN Kendra) shared his experience of scouting by first pursuing a 'Shodh Yatra' on cycle and scooter covering about 250 kms, including four states. The first round of 'Shodh Yatra' was done to identify the places where documentation was to be attempted. Initially he and his young colleagues began with

booklets in Hindi but the response was not very good. Then they started with cassettes and the impression people got was that they had come probably to sell something. Slowly and slowly, they came to realize that they had to use mobile exhibition. They developed a new vehicle called as “*Saksham*” with NIF’s support, which provided the facilities of dissemination using multimedia technologies. This strategy worked very well because lot of people young and old came forward to see the odd balls in the exhibition and then volunteered to share their own experiences. Kamaljit and his team also made presentation to the young students who were attending national integration camp and through these young participants, got leads for new innovations. They have also set up a telephone help line through which they were answering questions of farmers using Honey Bee database. Sometimes, the process of documentation was quite frustrating. After visiting twenty villages over two weeks, they got only three innovations. The advantage of age that their group had was also sometimes disadvantage because they had to work harder to build their credibility. They also tried to show ‘*Shodh Yatra*’ films developed by EMRC, Ahmedabad in collaboration with SRISTI on cable TV. Several technology offers were received through this channel.

Mr. James (PEDES) in Kerala tried to use the NGO network to scout innovations. He mentioned that among other channels, the leads in the newspapers were very helpful for documenting innovations. Given higher literacy in Kerala and wider readership of newspapers, journalists had started giving more attention to local innovations here than perhaps elsewhere. About 50 to 60 innovations were documented through these leads. He also felt that if some of the innovations were commercialized quickly and also replicated widely, then the documentation process would become faster. He also suggested that some of the older innovations, which might have been commercialized locally, should also be documented so that through National Register, such knowledge would get disseminated in other areas. In cases where similar innovations or traditional knowledge were found in more than one place, we should document these from each place so that the diffusion of existing innovations or traditional knowledge can be understood.

Dr. Balaram Sahu has been well known science writer in Orissa and has recently started Oriya version of Honey Bee. He along with Mr .Ranjan Mahapatra are trying to coordinate the campaign in Orissa. He mentioned several ideas which could be taken up for scouting and documenting innovations; a) It would be useful to tap young minds at the school level to create awareness; in turn it would also help to bring forward their creativity amidst masses. Formation of innovative and eco clubs involving students from school and colleges could help, b) the art and posters made to popularize the innovations can also help, and c) slogans should be developed which capture the essence of NIF goals.

Ranjan Mahapatra (SHRISTI) suggested that self help groups of women should be involved. The administrative agencies can also help in the process of scouting. The connection between the scouting and livelihood support strategies of poor people was necessary.

Sunda Ram, an innovator cum scout has been pursuing the scouting process in Rajasthan. He tried several interesting innovations in scouting. He organised a contest on biodiversity-based knowledge among forest department officials, in which District forest officer, forest guards and community forest protectors participated.

Dr Vittala mentioned that GIAN NE has conducted several community meetings in Assam at Kamrup, Morigaon, Nagaon, Nalbari, Tezpur and Jorhat district, in Arunachal at Ziro, NERIST. Students from all over northeastern region have been mobilized as volunteers for scouting.

Government officials are also supporting the scouting process by their official network. Recently GIAN-NE has scouted one innovator with the help of Mr. I. K. Baruah, ADC Morigaon. Ms. Vineeta Sharma, SP Morigaon has taken keen interest and circulated our Assamese version leaflets among all the police stations of the district.

Mrs. G. B. Marak, Social Welfare Officer, Ri – Bhoi district, Meghalaya is coordinating with GIAN – NE in organizing meetings in the district. Further, GIAN-NE has conducted scouting competition at Jorhat, Tezpur, North Guwahati and Nirjuli, Itanagar. GIAN-NE has scouted about 250 innovations during the last ten months.

Several other ideas, which emerged in the meetings, were:

- a) Certain practices could be kept in open source if they were not unique depending upon the conditions imposed by the innovator concerned in the consent form.
- b) Innovations even if they are old may be accepted and included in the national register but should not be considered for award.
- c) Sometime grassroots innovators are unable to articulate the essence of their innovation. Therefore, it is necessary for the scout to try to explore and decipher the meaning of the practice through iterative discussions and perseverance. To achieve better results, scouts should be given proper orientation training for documentation
- d) For intensifying documentation process, it would be helpful to recruit local correspondents (*khabarpatri*) based in villages (as tried by SRISTI recently) who may have inclination towards documentation of innovations and TK.
- e) Innovators could also act as a scout. Whenever an innovator scouts another similar person, it becomes easier for him to identify the problem because of his familiarity with the subject matter. His assistance in the documentation process, improves the quality of documentation at times.
- f) Innovators could be broadly classified into two categories: Grassroots people; having low academic background but vast experience and Professionals/trained; having access to state-of-art knowledge network system
- g) It was agreed that PIC form and note would require considerable effort by the scouts in explaining to innovators and traditional knowledge holders. It is also necessary that regional workshops be organized for the purpose.
- h) Local language versions of Honey Bee are providing a very useful and productive way of disseminating the campaign goals and Honey Bee network philosophy. NIF should support spawning of new versions in different regions.
- i) Many of the Nodal Officers are playing a very important role in popularizing the NIF's campaign and they need to be supported to strengthen links with various institutions to forge ahead with the goals of NIF.

Prior Informed Consent

It is now accepted worldwide that knowledge of the local communities and individuals should be accessed and used only through their prior informed consent. The issue of informed consent is not easy. NIF took lead in this regard and started developing a form for Prior Informed Consent (PIC). In the first round of the contest, the PIC form that was used revealed several areas of improvement. Subsequently, after discussions with the collaborators and knowledge providers, a new form has been developed. It is obvious that for the people who have never been even acknowledged, the concept of PIC is not only new but also intriguing. A detailed note has been prepared which highlights the plus and the minus side of saying, 'yes' or 'no' to various choices given in the form. For instance, if an innovator suggests that his knowledge may be shared widely through Honey Bee newsletter and/or on website or through other public channels, we have to explain the advantages of doing so and also the disadvantages from the IPR perspective. After sharing these implications the knowledge provider is well within his rights to say yes or no to this or other options.

Till date we have received 444 consent forms from the innovators/innovators TK holders those who participated in the second competition. Apparently as is evident from the figures, majority of the innovators do not mind sharing their addresses with the interested members. About 92 per cent of them have agreed to share their addresses with others if necessary. Out of these, fifty per cent of the innovators have permitted to use their innovations free of cost if it is on individual basis. Regarding technology transfer, the option related to the choice of assigning technology where the innovators are supposed to be suggesting their proportion of sharing benefits, have not been uniformly distributed. It may therefore be inferred that either the innovators do not have proper clarity about their preferences or they are unable to understand the framework behind the suggested benefit-sharing model that NIF wants to set forth.

Further, it is considered necessary to have a mutual understanding between the innovators and NIF about that flexibility in the conditions that have been already specified in the form. If any need arises to modify any of the conditions specified in the consent form, NIF would like to have an agreement with the innovators that they would authorize NIF to change the options on their behalf with the prior consent of the innovator concerned.

Likewise, if the innovator wants to cancel his conditions specified in their consent form, they may do so with prior notification to NIF.

Since PIC is a new concept, considerable investment will have to be made in creating awareness among various stakeholders. At this moment, we have no hesitation in accepting that complexity of the form and the options in the background note are not easy to follow by most people in villages. In the absence of any major effort to create awareness about PIC, NIF's effort will remain limited in its overall impact. NIF will however, continue to make efforts to make this process as transparent and effective as possible.

B. Value Addition and R & D Linkages

NIF is trying various approaches in order to establish linkages with several premier research and technical institutions at the national level to add value to local innovations and attain a wider coverage for promotion and dissemination of the potential technologies.

The aim is to form a value chain around each innovation or traditional knowledge. The networking model for value addition mainly aims at setting up GIANS in different regions of the country and strengthening the current GIANS. Apart from routing support through GIANS, NIF is also supporting some projects directly where either the innovators are capable enough to develop the innovation into a product on their own or GIAN support is not available. Product development teams are contracted in some cases to help innovators augment their innovations. Further, NIF is trying to support the innovators through Honey Bee Collaborators and simultaneously strengthening the capacity of collaborators to take up the augmentation process further.

Projects Supported Directly by NIF

- a) NIF has supported 'Multi-cylinder Reciprocating Pump' of Sakun Das. A prototype has been developed after the analysis of the concept by IIT, Delhi. It will be tested in the field.
- b) Mr. N. V. Satyanarayana has received support from NIF directly for improvisation and testing of his innovation Micro Windmill.
- c) Mr. C. V. Pathak, an entrepreneur and innovator has received technical and financial support from NIF.
- d) With direct monitoring of NIF, Mr. Naresh Kamble is developing, disseminating and testing "Development of device that would prevent burning down the electric pump".

Projects Supported through Collaborators

In addition to the work done by the GIANS, various Honey Bee Collaborators have also undertaken value addition work with support from NIF for the grassroots innovators.

Peermade Development Society, Kerala

Peermade Development Society of Kerala has supported two projects namely the 'Low Cost Hand Pump' by Reji Joseph and Ousapachhen, and 'Cardamom Drying Chamber' by Mr. P. J. Abraham. In case of Low Cost Hand Pump, an improved prototype has been developed and the innovator has been able to sell around twenty pieces in the nearby villages with this improved product.

In case of the Cardamom Drying Chamber, the innovator had earlier tried the concept through an old model. With the support from NIF and the fieldwork of Peermade Development Society, the innovator made a prototype to validate the concept. The improved version of the prototype has now been made which is much better than the earlier one. The Spices Board has been approached for testing the product and a TePP proposal has been submitted to mobilize support for further product development.

SEVA, Madurai

Out of the innovations from the first campaign, SEVA, Madurai, has supported two innovations with the help of NIF namely; 'the modifications to silencer' by Mr. Akasi and 'Relay Switch' by Mr. Ponnuswamy, In the first case, two models have been made and are being tested to ascertain the extent to which the sound of the engine can be reduced. In case of the Relay switch, prototypes have been developed with modifications done

by the innovator in collaboration with Small Industries Testing and Research Centre (SiTARC). The blending of the design in both the cases to make a good final product is in progress. The testing results from SiTARC and Central Power Research Institute (CPRI), Bangalore have been quite positive about the concept underline the innovation.

Another innovation supported by SEVA is Coconut Dehusker of Mr. Jayaseelan. NIF supported this innovation through the linkage with Industrial Design Center (IDC), IIT, Mumbai, which has undertaken to modify the product. The modification was done in terms of feeding, de-husking and improving the efficiency. A modified prototype based on the input from the innovator has been developed already.

For the second campaign, the efforts to add value have already started and NIF has already provided support to two innovations out of which one is an award winner and another is non-awardee. Part support has been already provided for the innovations “To Develop Prototype, Testing and Improvement of Power Tiller” by Mr. P. Thirumaran and “Air recycling mechanism in Compressor” by Mr. Ayyathurai.

Collaboration with IIT, Delhi

A cell was set up at IIT, Delhi with the voluntary help of Dr. Subir Kumar Saha, Professor in Department of Mechanical Engineering and Prof. K. Athre, Professor in Department of Mechanical Engineering. Three M. Tech research associates were assigned to work on the innovations. They had taken up the task of defining the problem arena and pursuing technological gap analysis for three innovations.

Discussions have been held with Prof. R. Sirohi, Director, IIT, Delhi to sign a MOU with NIF. This will help in taking more projects by IIT, Delhi students and setting up a centre at IIT, Delhi to add value to grassroots technological innovations.

Linkage with Industrial Design Centre, IIT, Mumbai

Two students of Industrial Design Centre, IIT Mumbai, have taken up projects on Coconut Dehusker and Groundnut Pod Separator. NIF supported this project undertaken by IDC to modify the product. The modification was done in terms of feeding, dehusking and improving the efficiency. A modified prototype based on the input from the innovator has been already developed.

An informal student linkage with TECH-GC, IIT, Mumbai

Through TECH-GC, IIT Mumbai an idea competition was conducted and many students have shown interest in NIF pursuing their ideas. The students had organized a presentation on NIF to the entire first-year batch of IIT, Mumbai in September this year. The winners of the idea competition have been declared and there are plans for having a students club to work on grassroots technological innovations.

Setting up of GIAN-TECH at IIT, Kanpur

Students from IIT, Kanpur had taken up the task of validating around twenty innovations. They had visited the innovators in the summer vacation. This gave them the insight about grassroots innovations and also enlightened them regarding their role in society. They presented their experience to a larger student body. The Director, IIT, Kanpur, Prof. Dhonde has taken personal interest in the matter. With the support of Prof. Prashant p Sanjay G. Dhande, Director, IIT, Kanpur has agreed to set up a GIAN-Technology (GIAN-Tech at IIT, Kanpur). A draft MoU is being discussed so that those GIANS which do not have their own technical back-up can get technological support from GIAN-Tech.

To provide exposure to the innovators and encourage linkages with scientists, technologists, designers, potential investors and entrepreneurs, NIF has supported the participation of innovators and traditional knowledge holders in various workshops, seminars and exhibitions, such as Indian Science Congress, Pune 2001 and at Lucknow in 2002; National Agricultural Machinery Exhibition, Bangalore 2002, CII Exhibitions in 2001 and 2002 at Ahmedabad, Kissan Exhibition 2002, Pune, etc. In all about 61 innovators (24 awardees and 37 non-awardees) were provided opportunity to show case their products in these exhibitions. Some of them got many interesting enquiries and even orders in these exhibitions.

A one-day workshop, 'Srijan' was organized at IIT, Delhi on 2nd March to provide a platform for interaction among formal and informal grassroots innovators. Six innovators participated in this workshop through the effort of GIAN-North. A design workshop was organized at Indian Institute of Science, Bangalore in collaboration with various other stake-holders under the overall guidance of Prof. Vijay Chandru of IISc.

C. Business Incubation and Venture Assistance

Given the limited resources of NIF there is no way, one can fulfill the aspirations of the thousands of the innovators and traditional knowledge holders without establishing a genuine risk capital fund. The transaction cost in dealing with large number of grassroots innovators & local communities, one has to find innovative ways of building value chain. To form the mentoring teams around each product for which business development has to be done, one has to find willing entrepreneurs or business managers who would help in market research, business planning, developing a proposal for raising micro venture finance and eventually help convert innovations or traditional knowledge into commercial venture. Several approaches have been used to accomplish this goal so far.

- a) NIF's BD cell have taken up the project of setting up Students Club for Augmenting Innovations (or SCAI) at grassroots across selected Business Schools in the country, in order to have a 'distributed network'. The awarded entries of First and Second Award Competitions have been clubbed with the nearest Business School so that the students there can do market research, mentoring and monitoring of the projects. Each Business School and Technical School will have a SCAI chapter, a Faculty coordinator and a Student Coordinator. The domain www.scai.org.in has been registered and will soon be functioning.
- b) A business plan competition is being launched in September across Business Schools all over the country to collect necessary information on the awarded innovations so as to make due diligence easier for these innovation-based projects, which in turn will help in attracting investments. Prizes worth Rs. 1 Lac will be announced to be won in this competition. This year, IIM Ahmedabad students are organizing the competition and IIM A will host the final round of the contest in its campus. However, once the SCAI chapters are formed all across India, the business plan contest will be organized by the institutes turn-wise. Gradually, we plan to expand the SCAI network by including technological institutes as well. The technical students shall help the innovator with technical refinements in his innovation, and the management students will help him develop a commercialization plan for the innovation.
- c) Hon'ble Finance Minister has held discussions with SIDBI subsequent to the announcement in the parliament in his budget speech about setting up a National Micro Venture Fund. This will be operational in September 2003 and NIF will start investing in grassroots innovations and traditional knowledge practices through this fund. About ten projects have already been identified for investments.
- d) Technology of four agricultural sprayers has been recently transferred to a first generation entrepreneur (Mr. Nilesh Satasiya in Ahmedabad), for a sum of Rs. 2.11 Lacs (to be paid upfront and 2.5 % royalty over the sales) and the money has been shared equitably amongst all the stakeholders in a most ethical manner, setting an example.
- e) A pilot scale manufacturing unit has been set up near Baroda by Mr. Nileshbhai Patel and they are developing and testing some of the formulations by SRISTI-Sansodhan Lab.
- f) Efforts are on to seek active support from private sector as well in augmenting grassroots innovations. Negotiations are on to transfer some of the technologies (two-layered multi blade fan and Unique Power Saving Coupling Device) to big Corporates like Crompton Graves and Kirloskar Industries.

D. Intellectual Property Rights Protection

NIF has set up an Intellectual Property Section. The Section consisting of a National Coordinator and fellows have started working to achieve the above objectives. The Intellectual Property Section conducts prior art searches in order to analyse the innovations to assess their viability for getting patent and other means of intellectual property protection. IP section drafts the patent specifications and other related legal documents.

Some of the premier Intellectual Property firms and IP institutions like Anand & Anand, New Delhi and Surana & Surana, Chennai of the country have been contacted for mobilising pro-bono help for filing patents for innovators. Similarly the firms like DP Ahuja & Co. (HQ at Kolkata), Subramaniam, Nataraj & Associates (Delhi) and L.S. Davar & Co., New Delhi are providing professional services at the minimum professional charges. NIF has also been able to file patent applications in United States through a law firm Testa Hurwitz (THT) based in United States. It is hoped that the coming year would see more firms taking interest in working with NIF on pro bono basis.

To facilitate the protection for grassroots innovations and to create a nation wide, the I.P section has been working with the law schools around the country. Students from NALSAR University School of Law, Hyderabad have worked with NIF for last two years. The winter internship for three students from the law school on "Grassroots Innovation and their Intellectual Property Protection" has enabled the students from the school in gaining skills on patent drafting, conducting of prior art searches and drafting of various I.P agreements. One of the leading law schools of the country, West Bengal National University of Juridical Sciences (NUJS), has already expressed their interest in working with the I.P Department of NIF. Efforts are also underway to establish Intellectual Property Law Clinics in various law schools.

The concentration of the I.P section has not been confined just to the law schools. Three students pursuing the Master of Business Administration (M.B.A) at the Indian Institute of Technology (IIT) Kanpur are working with the I.P section.

To provide training to the staff at NIF and also to create awareness on I.P protection, a workshop on "Intellectual Property Protection for Grassroots Innovations" was conducted by Mr. R. K. Gupta, Head of the Intellectual Property Management Division, Centre for Scientific and Industrial Research (CSIR), New Delhi.

IP section of NIF as well as its associates have already filed 46 patent applications and three design and trade mark applications in India as well as USA. Nine applications are ready for filing. IP section has also been providing advice on related aspects of Intellectual Property Law, drafting of legal documents like NDA, MoU, transfer of technology agreements etc. for other institutions like Centre for Innovation, Incubation and Entrepreneurship (CIIE), IIM Ahmedabad and all GIANS.

LIST OF PATENT, TRADEMARK AND DESIGN APPLICATIONS FILED UPTO August, 2003

Serial No.& Competition	Innovation & Innovator	Country	Law Firm	Status
1, 2 nd	Single wheel weed remover. Gopal Malhari Bhise	India	Anand & Anand, New Delhi	Filed (With provisional specification)
2, 1 st	Improved Multicrop thresher. Madanlal Kumawat	India	Anand & Anand, New Delhi	Filed (With provisional specification)
3, 2 nd	Portable Power Generating Device. N.V.Satyanaryana	India	Anand & Anand, New Delhi	Filed
4, 1 st	Sprinkling Apparatus with multiple nozzles.	India	Anand & Anand, New Delhi	Filed (With provisional specification)

5, 3 rd	Annasaheb Udgavi Double Acting liquid discharger. Manubha Jadeja	India	Anand &Anand, New Delhi	Filed (With provisional specification)
6, 2 nd	Pathfinding Android. Prem Singh Saini	India	Anand &Anand, New Delhi	Filed (With provisional specification)
7, 1 st	Multicylinder Reciprocating Pump. Shakun Das	India	Anand &Anand, New Delhi	Filed
8, 1 st	Coconut Harvesting Device. P. Karuppiah	India	Anand &Anand, New Delhi	Filed
9, 3 rd	Dishwashing Apparatus. Anil K. Makkanwar	India	Anand &Anand, New Delhi	Filed (With provisional specification)
10, 2 nd	Self propelled weeder Ramkumar Patel	India	Anand &Anand, New Delhi	Filed
11, 2 nd	Leaf Mat-making apparatus P. Marthandan	India	Anand &Anand, New Delhi	Filed
12, 1 st	Cardamom Drier. P.J. Abraham	India	Anand &Anand, New Delhi	Filed
13, 1 st	Water level Indicator. Eldose Markose	India	Anand &Anand, New Delhi	Filed
14, 3 rd	Mobile charger. Manoharan	India	Anand &Anand, New Delhi	Filed
15, 1 st	Moped LPG kit . Ram Kumar	India	Anand &Anand, New Delhi	Filed
16, 3 rd	Manual Washing machine. Ramya Jose	India	Anand &Anand, New Delhi	Filed
17, 2 nd	Improved bicycle Kanak Das	India		Filed through (GIAN- NE)
18, 2 nd	Process .. Mooga silk, Dulal Chaudhary	India		Filed through (GIAN- NE)
19, 3 rd	Power Disc Deb Gupta	India		Filed through (GIAN- NE)
20, 3 rd	Anti-locking Device G.C. Gogoi	India		Filed through (GIAN- NE)
21, 3 rd	Process... for treating bone fractures , Pushpalata Saikia	India		Filed through (GIAN- NE)
22, 3 rd	Beauty Care umbrella Dulal Chaudhary	India		Filed through (GIAN- NE)

23, 3 rd	Process.... Mosquito repellent Leena Talukadar at.el	India		Filed through (GIAN- NE)
24, 3 rd	Combating termites with Ipomea Carnea Jacq Upasana Talukdar	India		Filed through (GIAN- NE)
25, 1 st	Power saving Pump Ram Naresh Yadav	India	Subramani am, Natrajan & Associates , New delhi	Filed through GIAN-N
26, 2 nd	Process... medicine for Kidney-stone	India	Surana & Surana, Chennai	Filed through GIAN-N
27, 2 nd	Tooth extraction machine	India	Surana & Surana, Chennai	Filed through GIAN-N
28, 1 st	Oil expeller Kalpesh Gajjar	USA	THT, Boston, USA	Filed through GIAN West
29, 2 nd	Cotton Stripper Mansukhbhai Patel	USA (Granted) Pat. No (6543091) Dt. April 8,2003.	THT, Boston, USA	Filed through GIAN West
30, 1 st	Adaptive Agricultural Machine Mansukhbhai Jagani	USA	THT, Boston, USA	Filed through GIAN West
31, 2 nd	Convertible 3 wheel tractor Bhanjibhai Mathukia	USA	THT, Boston, USA	Filed through GIAN West
32, 1 st	Fibre optic Cable Anand Gogte	USA	THT, Boston, USA	Filed through GIAN West
33, 2 nd	Auto Air-kick Pump Aravindbhai Patel	USA	THT, Boston, USA	Filed through GIAN West
34, 1 st	Aruni tilting bullockcart Amritbhai Agravat	India	D. P. Ahuja & Co. Kolkata	*Filed through GIAN West
35, 1 st	Natural Water-cooler Arvindbhai Patel	India	D.P. Ahuja, Kolkata	*Filed through GIAN West
36, 2 nd	Cotton Stripper Mansukhbhai Patel	India	D.P. Ahuja & Co., Kolakarta	Filed through GIAN West
37, 1 st	Fibre optic Cable Anand Gogte	India	D.P. Ahuja & Co., Kolakarta	Filed through GIAN West

38, 2 nd	Auto Air-kick Pump Aravindbhai Patel	India	D.P. Ahuja & Co., Kolakata	Filed through GIAN West
39. 3 rd	Bicycle Sprayer, Mansukhbhai Jagani	India	D.P. Ahuja & Co., Kolakata	Filed through GIAN West
40. 1 st	Swastik Oil Expeller, Kalpesh Gajjar	India	NRDC, New Delhi (L.S. Davar & Co.)	Filed through GIAN West
41. 1 st	Adapted agricultural Machine, Mansukhbhai Jagani	India	NRDC, New Delhi (L.S. Davar & Co.)	Filed through GIAN West
42, 2 nd	Convertible 3 wheel tractor Bhanjibhai Mathukia	India	NRDC, New Delhi (L.S. Davar & Co.)	Filed through GIAN West
43. 2 nd	Aaron Fly wheel, Jayantibhai Bakaria	India	NRDC, New Delhi	Filed through GIAN West
44. 2 nd	Manual Sprayer, Khimjibhai Kanadia	India	Anand & Anand, New Delhi	Filed
45. 3 rd	Automatic Sprayer, Arvindbhai R. Patel	India	Anand & Anand, New Delhi	Filed
46.	Manual Sprayer, Gopalbhai Suratia	India	Anand & Anand, New Delhi	Filed

* The Patent Applications filed by GIAN West before the existence of NIF.

Besides the above patent applications Design & Trademark applications have also been filed as given below;

S.no	Design / Trademark	Country	Law firm	Status
1	GIAN	INDIA	D.P.Ahuja & Co., Kolkata	Filed
2	SHASHWAT	INDIA	D.P.Ahuja & Co., Kolkata	Filed
3	Design (Bullet Shanti)	INDIA	Anand & Anand,	Filed

E. Dissemination and Database Management through Information and Communication Technology (ICTs) applications

NIF has taken up several steps to augment the IT portfolio though we are still to have a full time National Coordinator for the purpose.

- a) A Multi language Multi media Honey Bee data base has been contributed by SRISTI to NIF. This has been widely distributed by NIF along with information on the awardees of the first national Competition, to various stakeholders around the country and outside.
- b) NIF has co-sponsored a portal on innovation viz., Indiainnovates.com being developed by students at IIMA as a part of their course requirements. This portal has already generated very encouraging response from IIMA alumni around the world who were requested to volunteer to help in building value chain around green grassroots innovations. This portal may eventually become one point stop for any individual innovator in India. Dr Mashelkar, Chairperson, NIF had suggested this idea two years ago when the stall on innovations at the Indian Science Congress, Pune, 2000 also entitled 'India innovates'.
- c) A village kiosk has been set up by Honey Bee network in a village in North Gujarat and NIF has decided to replicate this experience in several villages where our collaborators are working. The key difference in the approach used by Honey Bee network and the rest of the efforts in the country as well as outside is that we do not think bridging *digital divide* should be our first priority. The first priority ought to be to bridge *knowledge divide* with in the local community. Once that has been bridged, the nature of approach and process used to bridge digital divide will be quite different than would have been the case without it. In this village, six data bases have been developed or are being developed each with identity of knowledge source being acknowledged: (i) biodiversity based knowledge of children and older people; (ii) design heritage in the village, such as the arrangement of utensils in the kitchen, design of old architecture, furniture, cradle for children, motifs on old clothes etc., all aimed at showing the creativity of women in their domain of control; (iii) agricultural and other resource management practices, (iv) riddles, sayings, folk songs and sayings about nature and other cultural matters collected through competition among children, (v) distinguished recipes particularly the ones which draw upon some uncultivated plants, and (vi) local innovations and traditional knowledge register.
- d) NIF web site is being made more interactive so that users can get lot of information quickly and easily.
- e) The software for National register has been developed and various collaborators have also been provided the database entry modules in local language with the help from Honey Bee network and SRISTI.
- f) Demo Software for Technology Exchange (for online bidding for technologies) has been put up at the web site for testing. SRISTI is helping in maintaining this as well as innovation database on the web site with more than 1300 innovations and traditional knowledge examples.
- g) A web based three-language innovation/Traditional Knowledge entry module has been put on the web site. However, so far only 141 entries have been received through web, all in English. About the same number of entries have also been received through email.
- h) Two state government web sites viz., Punjab and Maharashtra have linked NIF site and information to diffuse our work widely. However, effort will be made to pursue such linkage with all the state governments.

Section III. GIAN (Grassroots Innovation Augmentation Network)

Grassroots Innovations Augmentation Networks (GIANs) have been established with the primary objective to link up innovations, investment and enterprise. The transition of an innovation into product and later into enterprise requires input of formal science & technology, design, handholding support for project planning and management, finance and marketing intelligence. Three GIANs namely the GIAN-West, GIAN-North and GIAN-NE provide support for grassroots innovations/traditional knowledge of the respective regions.

MISSION of GIAN

GIAN aims at sustaining the spirit of innovation, encouraging experimentation and nurturing creativity at grassroots level of knowledge rich economically poor people through transition of innovation into enterprises and facilitating diffusion of grassroots green innovations through commercial as well as non-commercial public, private and voluntary channels.

OBJECTIVES of GIAN

- To identify grassroots innovations from Honey Bee database amenable for scaling up.
- To establish links with research and design institutions to add value so that efficiency can be enhanced and socio-economic and environmental efficiency can be enhanced.
- Protect the Intellectual Property Rights of Innovators and operationalize their prior informed consent obtained in advance.
- To mobilize resources to strengthen the capacity of grassroots innovators in undertaking large-scale expansion of their innovations.
- To undertake technology, design and managerial research activities for scaling up the innovation to product stage.
- Link Innovations with enterprise and Investment.
- Provide project development and entrepreneurial support to innovators or innovations based entrepreneurs.
- To disseminate information about innovations and innovative products through various means such as exhibitions, media and workshops.
- To organize entrepreneurial development and capacity building workshops in collaboration with expert institutions for innovators and first generation entrepreneurs.
- To influence policy at micro and macro level to make it more responsive to the needs and expectations of green innovators.

Grassroots Innovation Augmentation Network , West - Ahmedabad

The scope of the GIAN-Gujarat was expanded to GIAN-West so as to cater to the states of Gujarat, Maharashtra and Goa. It has selected about ten new innovations from the awarded entries of first annual competition of NIF and from the Honey Bee database.

Milestones of GIAN-West

- Networked with premier technical & design institutes such as IIM, IITs, NID, and MIT etc. for technical and managerial assistance
- Established a design studio GRIDS (GRASSROOTS INNOVATIONS DESIGN STUDIO) at National Institute of Design, Ahmedabad to provide world class design inputs to the grassroots innovations supported by Gujarat Government .
- GIAN recognized as a R & D institution by Department of Scientific and Industrial Research , Government of India.
- Achieved six technology transfer for four innovations on, district, state, national and global level.
- Linked various schemes of DST and DSIR such as Technopreneur Promotion Programme (Tepp), TIFAC, and leading nationalized banks to help innovators in the form of product prototype, workshop establishment, conference & seminar etc.
- Facilitated filing of nine patents and two design registration in India & five patents in USA
- Facilitated filing of five trademarks protection applications.

- Facilitated outside recognition and reward to the grassroots innovator. Dr. Vikram Sarabhai Young Scientist Award has been awarded to young innovator Shri Kalpesh Gajjar who invented oil expeller machine. Eight innovators supported by GIAN-west have been awarded by National Innovation Foundation.
- Established patent facilitation cell with the help of Industries Commissionerate, Govt. of Gujarat for small & medium innovators.
- Incubation support extended for seventeen innovations
- Supported thirty innovative projects including five project of social relevance.
- Venture finance arranged for seven innovations. Five patents filed in USA with pro-bono support from THT, a Boston based law firm.

Structure

The board of Directors of GIAN Gujarat (registered as a charitable society and a Trust) included Addl. Chief Secretaries industry, agriculture and industry, three managing directors of state corporations (GMDC, GNFC and GIIC), three professors from IIM-A, representative of SRISTI, SEWA, and GOPAL Dham, three NGOs, and CEO of Gujarat Venture Finance Ltd. The Chairperson was an eminent Gandhian and Addl Chief Secretary Industry was vice President and SRISTI president was appointed as Managing Trustee. Director IIMA and NID and state Chief Secretary were permanent invitees. State government encouraged state corporations to contribute corpus contribution to the extent of Rs 45 lacs as against original target of Rs one crore.

Incubation and prototype financing

Incubation assistance continued for 10 hp tractor, oil expeller, 5.5 hp tractor, motorcycle ploughing machine and also for double acting pump with balancing mechanism, solar cooker, innovative wind mill application, auto air kick pump, auto weigh sprayer and Eriiculture. Incubation and prototype finance arranged for all of the above from TePP, GEDA and Science and Society program of DST.

The innovation of ‘Groundnut Pod Separator’ of Mr. Marutrao Sarode has been studied and a student of IDC, IIT Mumbai has developed two prototypes for groundnut pod separator.

Through NIF, 12 projects have been supported by GIAN West (8 awardees, 4 non-awardees). Out of these, three awardees have been provided support through NIF. Among the remaining nine, five innovators have been provided support through TePP (3 awardees & 2 non-awardees), two innovators through GEDA (1 awardee & 1 non-awardee), one innovator through DST (non-awardee) and one through SRISTI (awardee). From among the second competition award winners, the “Check Dam” of Mr. Bhanjibhai has been supported technically and financially. Student from IIT-Kanpur are working on this. Another innovation of the same innovator “10 HP Tractor” has also been supported for testing and certification.

Incubation Activities At Grassroots Innovation Design Studio (Grids)

Under an agreement, signed on April 17, 2001, with National Institute of Design, GIAN established a Grassroots Innovation Design Studio (GRIDS) for facilitating formal design inputs to the grassroots innovations. As per the agreement, NID will take up at least four projects from GIAN each year to integrate formal design inputs with grassroots innovations.

In the first phase, two crucial products i.e. Motorcycle Ploughing Machine and small tractor were taken for design integration. Also, a mobile exhibition of innovations is being designed by NID students. Students selected both the products from a range of choice given to work on aesthetics, space re-orientation, form and feature standardization, ergonomics etc. Both the products have received design inputs from students. However, a great deal of work remains to be done before moving on to the next stage in the product cycle.

The outcome thus generated is protected in the name of the innovator with due recognition to the contribution by the faculty & students.

Both the products were displayed in the Auto-Expo at New Delhi, where they were greatly appreciated by visitors. The second phase of projects is on for selection. This studio has mobilized interest of design students in Grassroots innovations and a large number of students are coming forward to work on these challenging innovative products. A project of automatic weight sprayer has already been taken up in this session.

The real challenge before the students is to blend mechanical interventions with design integration so as to optimise the functional efficiency of the equipment. Hence, sometimes-external technical help may have to be mobilised so that designs become functional and alternative to end-user. It is obvious that grassroots innovations have to compete with other projects from industry, offering sometime new attractions. But so far, GRIDS is getting a good response.

IPR Initiatives And Accomplishments

- Gian west has filed patents for cotton stripper, oil expeller and, Auto Air Kick Pump, motorcycle ploughing machine, small convertible tractor and Fibre optic Conduit Coupler which is an awarded entry of NIF competition, through NRDC and with M/s D.P.Ahuja & Co.
- In case of international patents through the pro-bono help of THT, Boston we have filed US patent for fiber optic conduit coupler, motorcycle ploughing machine and cotton stripper, Small Convertible tractor while applications for oil expeller is at advanced stage.

Patent Facilitation Centre

Resource Mobilized: GIAN received a grant of Rs. 4.72 lakh from Industries Commissionerate of Gujarat State, towards IPR Assistance cell for small and medium innovators. Government of Gujarat will reimburse 50% of the total cost of patenting upon grant of the patents, which will be filed through this cell.

Work accomplished: GIAN filed two national patents and five US patent through this centre. Four trademarks have also been filed. We have four more national patents, Two Design registration applications and two US patents in process.

Concern: A recurring expense has been more in terms of the usage of the infrastructure and manpower resources. Even if we charge at cost price it would be taxing to the small and medium innovators.

The present stipulation of reimbursement of 50% of expenses only after grant of patent does not encourage small and individual innovators as the grant of patent may be delayed up to five years in India. Industries Commissionerate has been requested that subsidy should be allowed on filing of application as filing itself consumes much of the resource.

Venture Assistance

- Venture finance for motorcycle ploughing machine arranged from NIF, oil expeller got venture assistance from SRISTI, 10 hp tractor got similar support from State Bank of Bikaner and Jaipur, Cotton stripper is being considered under PATSER scheme of DSIR.
- National Innovation Foundation provided 1.5 lakh for the motorcycle driven ploughing machine, which was utilized for upgrading the workshop of the innovator for more experimentation.
- Oil expeller machine got venture promotion assistance of 2.5 lakh from SRISTI.
- 10 hp tractor got cash-credit support from SBBJ, Satellite branch of 1.25 lakh.
- Cotton stripper that earlier got incubated through TePP scheme is short listed for PATSER scheme of rapid prototyping.

Technology Transfer & Innovation Fund Contribution and Business Incubation

- Technology transfer for foot-operated pump effected by MCAM for toy making & the entire fee so generated was handed over to the innovator.
- Auto air pump kit pump licensed to a local entrepreneur.
- Tilting bullock cart was licensed to three entrepreneurs for five districts in Gujarat and entire licensing fee was paid to the innovator.

GIAN-North East (Grassroots Innovation Augmentation Network North East - Guwahati)

Milestones of GIAN-NE:

- Started working from 26th January, 2002
- Handholding support to three innovators to improve model and pursue market analysis
- Three patents have been filed on behalf of innovators
- Organized Exhibition of Grassroots innovations at IITG
- Opened Two Chapters of GIAN-NE in North East, One at NERIST, Arunachal Pradesh and One at Tezpur University, Assam.
- Their association has brought changes in life of three innovators. Assam Government has reduced the prison term of one of the innovators who while in prison made a bamboo cycle.

Structure

Indian Institute of Guwahati (IIT-G) has kindly agreed to host the activities of GIAN-NE. NIF took the steps for setting up GIAN –NE with out waiting for any formal communication from any of the state governments in the region.

NIF had deputed initially one person to co-ordinate the activities of GIAN-NE. The governing board now appoints the Coordinator and other staff. A governing body with Director, IIT, Guwahati as chairman has been constituted to guide the activities of GIAN NE. GIAN-NE will be catering to the needs of all the seven states of the Northeastern region. The plan is to have nodal centers in each state. Already they have received some enquires for opening chapters at Tripura, Nagaland, Manipur, Mizoram and Meghalaya. A nodal center has been set up at NERIST, Arunachal Pradesh.

Incubation Support

GIAN North East has extended product development support to eleven innovators.

- **Bamboo Bicycle:** The award winning innovation of Bamboo Bicycle of Mr. Dodhi Pathak has been taken up further for value addition. Discussion with District commissioner Nalbari and subsequent meeting with Director, District Industries Centre has resulted in providing financial support to Mr. Dodhi Pathak for setting up his enterprise. Students from IIT Delhi, NERIST, SFRI, Itanagar, Bamboo and Cane Technology Center, Guwahati are working for developing commercially viable Cycle made out of Bamboo and connected parts. Two models have already been made with the help of innovators.
- **Rider induced and terrain induced forces for transmission of Bicycle:** Local innovator Mr. Kanak Das has developed a mechanism for reducing effect of bump on rider and also use the force generated on a bumpy road for transmission purposes. Faculty of Mech. Dept. IIT Guwahati has approved the work and they have taken it up for further analysis. GIAN - NE has initiated market survey of the product and four different models have been developed. The mechanism will be tested for its utility with different models of bicycle available in the market.
- **Development of pre medicated bandages for Bone fracture and Back Ache:** Traditional knowledge of curing bone fracture and back ache, using herbal medicine has been taken up for making a viable product. Consent from Biotechnology Department, Guwahati University has been obtained to investigate the side effects and developing various efficient methods. NIF has supported this work as in other cases through GIAN. Assam Science Technology and Environment Council has also provided help to local innovator Mrs. Puspalata Saikia to improve the efficiency of treatments and to upgrade her infrastructure.
- **Floating water wheel for harnessing the energy from river:** Local innovator, Mr. Mahendranath Dutta has developed floating water wheel for harnessing energy from the current of the river. A token support has been offered to tide over current repair problem for the existing model. IIT, Guwahati has taken this for further value addition.

- **High Efficient Ceiling Fan:** This innovation of Nipul Bezborra is all set to introduce a new concept in ceiling fan designs providing high volume of air with separation features. GIAN-NE has taken it up for value addition. IIT-Guwahati and Tezpur University have started work on different parameters of the technology involved in developing it to make it a commercially viable product.
- **Biodegradable Torch:** Shri Jawaharlal Rai has made a Torch with Biodegradable materials like Bamboo. The innovator is being helped to develop different models based on the concept.
- **Beauty Care Umbrella:** Based on the innovation of Soft Muga Silk, GIAN-NE has guided the innovator Mr. Dulal Choudhury towards making a commercially viable product; Beauty Care Umbrella. This umbrella unlike the available umbrellas helps to protect from UV radiation (up to 85 per cent). Also it provides a glow to the skin of the user. Patent has already been filed for the innovation as well as for the product on behalf of Mr. Dulal Choudhury. GIAN-NE is mediating in the technology transfer agreement.
- **Water Lifting Device by using Hydrostatic Pressure:** A grassroots innovator Mr. S.A. Ohid from Orissa has designed a water lifting device by using hydrostatic pressure to solve the present energy crisis in a simple way. GIAN-NE is incubating this project with the help of IIT Guwahati and NERIST, Itanagar. Feasibility report from the experts shows that this will be quite an efficient water-lifting device because it can work through the creation and utilization of reaction forces in a novel way to solve the present energy crisis in a simple way.
- **Innovative Zero Head Water turbine:** A grassroots innovator Mr. Nripen Kalita has made a zero head water turbine having innovative arrangements of blades to harness energy from river with considerable efficiency and economy. GIAN-NE is incubating this product also GIAN- NE.
- **GIAN-NE has helped Mr. Bhabesh Sarma in his innovation about Planetary Compass with the financial assistance of ASTEC.** After the development of the model, the innovator is demonstrating it in various fairs by organizing show and earning considerable amounts. He is also receiving orders from educational institutions to manufacture this model as a teaching aid. Dept. of Electronics, IITG have shown their keen interest for further value addition.
- **Countable Calculator:** This innovation relates to converting a hand calculator to a mechanical counter for factories at a low cost developed by two young brothers Champak and Trilokya Bora. GIAN-NE is incubating this product with the help of Department of electronics IITG and a Technical Assistant of Tezpur University.

Finance and Venture Support

NIF is also interacting with the project finding authorities/development finance organizations for financial support in incubation projects. North Eastern Council has shown interest in providing infrastructure/capital support to GIAN-NE and incubation support to the innovations. GIAN-NE is in the process of arranging finance to start enterprise for two innovators, who have developed the product successfully. SIDBI has given the consent in this regard.

Patent Protection: GIAN-NE has already filed Indian patent application for three innovations. Filing of six patents is under progress on behalf of the innovators. Prior Art Search and Literature Review with expert comments have been done for all the priority technological innovations from this region.

Coordination with other GIANS : Apart from the projects of North eastern region GIAN-NE is supporting the projects of other GIANS also. Three projects of GIAN-North and two projects of GIAN-West have been taken for further value addition. GIAN-NE is helping GIAN-West in marketing of Kushal Sprayer.

Design Team in Support of Grassroots Innovations

Recently GIAN-NE has formed a design team to support the grassroots innovations. This team comprises experts, users, fabricators / manufactures, entrepreneurs, students and innovators.

GIAN - Grassroots Innovation Augmentation Network , North - Jaipur

Structure

Rajasthan Government, in partnership with NIF, has set up the GIAN (North) at Jaipur. GIAN North) has been registered as a society at Jaipur, Rajasthan and its present governing board consists of policy makers, administrators, academicians, innovator, industrialist and eminent social workers. The board is chaired by The Chief Secretary of the state in his individual capacity.

Incubation support

Following innovations are at various stages of incubation:

- i) Power Saving Technical Pump (innovator from UP): Development and testing is being undertaken at IIT-Kanpur. One critical part (piston) has already been developed by Rapid Prototyping techniques at IIT-K, Design Laboratory.
- ii) LPG kit for Moped (innovator from Haryana): Innovator is developing a standard product suitable for all two-wheelers. First prototype is almost complete.
- iii) Improved Thresher (innovator from Rajasthan): A new and smaller model has been developed with groundnut threshing facility (which is totally unique). Project proposal has been submitted to TePP, Min. of Science & Technology.
- iv) Improved Forage Cutter (innovator from Uttaranchal): A product prototype is being developed on the basis of the innovator's idea.
- v) Village Fridge (woman innovator from UP): Product development has been taken up at IIT-Guwahati
- vi) Steam operated stove ((innovator from UP): Product testing and development has been taken up at IIT-Guwahati
- vii) Heat Snatcher (innovator of Delhi): Basic prototypes developed. Optimisation of design and material being undertaken by innovator with the support from ex-HOD, IIT-Delhi. IIP, Dehradun to test the product.
- viii) Tooth extraction machine (innovator from UP): Detailed documentation of the concept has been made. Product development is yet to be undertaken by IIT-Kanpur.
- ix) Improved stick for the Blind (student innovators from Utranchal): Students of GB Pant University, UT, have developed a prototype. Further modification are being done after getting feedback from experts from institutes dealing with blind people.
- x) New variety of cotton Seed (farmer innovator from Haryana): Seed variety stabilised after three generations of harvesting. It's tests will be taken up soon in collaboration with either private sector or public sector R and D ins titutions.
- xi) New varieties of wheat (farmer innovator from UP): Seed variety stabilised. Samples to be tested on-farm by JK Agri-Genetics.
- xii) Electronic Robot (innovator from Haryana): technical documentation and product development plan complete. Project proposal sent to TePP. Further development may be taken up by IIT-Delhi/ IIT-Kanpur or Ambani Instt of Information & Communication Technology.

- xiii) Herbal medicine for kidney stone removal (innovator from Rajasthan): The medicine is presently given in paste form. Reports on successful application are available. It is to be tested at CDRI or ICMR and further standardisation/ value addition to be taken up.
- xiv) Idea of hydraulic system in marble cutting machine (innovator from Rajasthan): Documentation completed and sent to IIT-G for evaluation. On preliminary observation, the idea was found feasible. After formal confirmation, development work may start.

IPR protection

Three renowned patent attorneys agreed to extend pro bono help in patenting the grassroots innovation. The attorneys are: Surana & Surana (HQ at Chennai), and Subramaniam, Nataraj & Associates (Delhi). Two applications submitted through them deal with, Power saving pump (innovator from Kanpur, UP) and Tooth Extraction Machine (innovator from UP)

Three applications are at final stage: Improved Thresher (innovator from Rajasthan), LPG Kit for Moped (innovator from Haryana) and Robot (innovator from Haryana)

Summing Up

Among various functions of NIF, so far most distinctive impact has been made in our first and major goal that is, Scouting and Documentation. The receipt of 6228 entries having 13533 innovations and traditional knowledge examples in second year, as against 948 entries and 1600 innovations and traditional knowledge examples in first year is a testimony to the countrywide impact NIF has made. But this is precisely also the index of how little we have achieved in terms of adding value, or commercialization or protection of IPRs, or diffusion of public domain innovations etc. Unless a low transaction costs system of IPR protection emerges in the country and likewise a user friendly incubation and micro-venture fund gets set up, NIF will remain handicapped in fulfilling the aspirations of thousands of local knowledge experts, grassroots innovators, and traditional knowledge holding communities and individuals will remain a distant dream.

Making India innovative is a mission which NIF is determined to pursue. Together we can make it, if policy and Honey Bee network's support continues to be as buoyant as has been the case so far.