



GIAN

ANNUAL REPORT

April 2018 – March 2019

GIAN as an organisation held various events and took care of various innovations in this year. The highlights include:

- Partnership with UN agencies- UNESCO, ESCAP and UNDP.
- It has worked on the G2G model covering over 500 villages.
- The building work has been approved and it is ready for the tender to float.
- Fund mobilization

Gian was an integral part of various activities:

1. Shodhyatra-Gadchiroli

Shodhyatra 2019 was held between 13 th June to 17th June, in Dhanora District, Gadchiroli, Maharashtra. Shodhyatris covered 90km on their feet by visiting 24 villages. It is one of the areas in India, mostly habituated by tribal communities. There were 33 shodhyaris. Learning about many other traditional practices for natural medicines was apart of the yatra. Various herbal practices to save the crops were explored. Various other inventions came forward like machines made to give water to the road while constructing it. The village had artisans and womean sports person like JayshriKargamani who was a state level wrestling champion youngest Sarpanch, RanjanaPustola. She was just 24 yrs old successfully running a village! Many interesting and delicious vegetable recipes were shared by the women of the villages. Tribal community life has always been around the forest. Adiwasi from Dhanora district has made remarkable journey by fighting for Forests rights and implementing PESA act by showing exceptional community level unity and understanding the importance of preserving and cultivating natural resources. By welcoming with warm hospitality, they opened their treasure of traditional practices and knowledge for us. This journey came to an end with hope to work further in collaboration with local villagers on topics as establishing various enterprises or setting up market for traditional arty-crafts and food.

2. Incubatees-Review of new technologies accepted for incubation

Gian has been successful in incubating the following innovations in this year:

a) Cumin Harvesting Machine- The Innovative thresher will help in solving the problem of harvesting process, collection and threshing.

b) Manure Spreading Machine - With the help of this innovative machine, farmers will be able to spread manure uniformly in the field. Farmers can also regulate the quantity of the manure to be distributed per unit area. This innovative machine will save labour cost, time and fertilizer.

c) Electrical Tricycle- The innovation is a battery operated multi-featured tricycle with a better ergonomics and flexibility. It has been customized to suit the requirements of the differently abled user in a very simple manner. It has a reverse brake system, which allows this tricycle to move forward only. Hence, the tricycle can run an incline path without any fear of moving backwards, down the slope.

d) Date Thinning Device - Thinning is an important operation in the date palm. The basic idea of thinning is to improve sink-source ratio, i.e. removal of some fruits from the bunch

so that higher amount of nutrition and space is available to fruits, resulting in better size and quality. Moreover, climbing a tall tree and staying there for thinning is also dangerous. Even though it is highly laborious, this method is followed by many commercial farms in Kachchh. This tool reduces the time required in the alternate thinning method.

e) FashionAble - FashionAble is a brand of ready-made adaptive clothes that bring together aesthetics and designs adapted to various special physical requirements. FashionAble aims at creating well-researched, aesthetically designed clothes that are easy to wear, as independently as possible and that gives a range of style to suit the personality and requirements of the wearer

f) Trigonik- Trigonik is a strategy board game based on trigonometry. This of the world's first dice which has trigonometry functions on it.

g) Cow Dung Collecting Machine- In this machine cow dung is collected through motor operated conveyer belt. The entire machine is manually operated on four wheels. It does not take too much space and saves water unlike the current machines available in the market.

4. Review of the on-going innovative technologies under incubation with the support from Industries Department, Government of Gujarat

Industries department, Government of Gujarat has supported three grassroots innovations from GIAN and has provided financial support under the Scheme of Startup Gujarat.

1. Startup: PramukhmaanAgri Thresher Private Limited

Innovation: Mobile Groundnut Thresher,
Innovator: Mr. NileshbhaiDobariya

Updates

Technical inputs-

- Updated the design by using standard parts
- There was a problem of slippage of tyres in the machine due to uneven load distribution and
- Innovator updated the design to solve the problem of slippage,

Fabrication work-

- Fabrication work of thresher and storage cabin is completed
- Presently, he is working on conveyor belt and fitting it to the thresher and tractor

Prototype-

- Prototype will be ready in approximately in next two months

Field testing-

- Testing of the machine could be possible the next groundnut harvesting season
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2. Startup: Vadher Agro Industries Private Limited

Innovation: Cotton Ball Picker
Innovator: Mr. NatubhaiVadher

Updates

Technical inputs-

- Updated the design by using standard parts.
- Improved the design by making changes in conveyor belt
- In the previous design, blower was operated by PTO and took time to reach to a predefined RPM for efficient collection of cotton ball. Innovator is working on solving the problem of blower by using an alternate mechanism
- In the previous design, few cotton balls would fall off on ground at the end section of plucking unit therefore innovator is working on design of platform
- Also he provided an arrangement in design for detaching the cotton plucking unit with the tractor so that a separate tractor can be used after harvesting season gets completed

Fabrication work-

- Fabrication work of cotton plucking unit was done,
- Presently, he is working on the blower and platform

Prototype-

- Prototype will be ready in approximately in next three months

Field testing-

- Testing of the machine could be possible in next cotton harvesting season

3. Startup: Freedom Wheels Enterprise

Innovation: Modified two wheeler for handicap person

Innovator: Mr. Jigneshbhai Shah

Updates-

Technical inputs-

- An intern from IIT Jabalpur, Mr. Saumil Singh Panwar (BDes) is helping the innovator
- The design has been improved by developing a standard chassis with variable Driving mechanism suitable to most users
- Provided a battery operated ramp for easy entrance and exit of wheel chair from the vehicle
- Locking mechanism is provided in which front wheels of the wheelchair constraints in mounts and back wheel is constrained by ramp

Fabrication work-

- Innovator started fabrication work

Prototype-

Prototype will be ready in approximately in next two to three months

5. Dissemination

Dissemination of plant varieties in Gujarat, supported by NIF

GIAN is working on dissemination of plant varieties bred by the farmers in rural, tribal and adjoining areas of Gujarat and Maharashtra state. GIAN conducted baseline surveys in Banaskantha, Sabarkantha, Panchmahal, Valsad, Dang, Tapi, Narmada, Chhota-Udepuretc districts and has successfully covered 37 villages during April 2019.

Various meetings and exhibitions were also conducted wherein seeds of farmers bred plant varieties were displayed, literature of information about farmers bred plant varieties along with herbal formulation of plant protection was shared and methods of seed storage were also discussed with farmers. Information about farming pattern, major crops, method of farming, irrigation, use of fertilizer, pest and loss due to pest, plant protection methods, yield etc. were collected and compiled for the further analysis.

GIAN disseminated farmers bred plant varieties to farmers with the objective of improving productivity, reducing farm input cost, verifying plant varieties, checking adaptability in different regions and capacity building and income generation in local youth. During the project of dissemination of plant varieties in Gujarat and Maharashtra, activities were completed during Kharif 2018, Rabi 2018-2019 and Kharif 2019. During this project, seeds were distributed to 319 farmers for field experiments and 1114 farmers for kitchen garden.

Dissemination of Herbal Veterinary Products at Tribal and Adjoining Areas of Gujarat & Maharashtra.

The GIAN conducted a baseline survey in the proposed geographical area like Panchmahal, Sabarkantha, Banaskantha, Dang, Palghar etc. Also, we identified farmers for dissemination of selected Herbal Veterinary products namely Galactagogue powder and Herbal control of Ecto-Parasite for cattle. Till date both the product was disseminated to more than 80 identified farmers in four different districts of Gujarat. The feedback was collected during the field visit and regular collection of data on call. The average increase in milk production (L) and milk fat (%) of farm animals fed Galactagogue powder all four districts is 0.9 (L) and 0.8 (%) respectively. Whereas in Herbal control of Ecto-Parasite for cattle the number of ticks and other Ecto-Parasite reduced in the range of 30 to 50 % in each application and complete relieve from Ecto-Parasite had observed in most of the animals after third application. Furthermore, other Herbal Veterinary Medicine practices from the Honeybee Network database, about Galactagogue and control of Ecto-Parasite in cattle and other reported problems like Fever, Bloat etc. were disseminated among the farmers. Apart from Herbal Veterinary Medicine, feeding and management practices in farm animals for increasing milk production and control of Ecto-Parasite

in cattle, were suggested. The exhibition of Herbal Veterinary Medicine Poster and literatures of Herbal Veterinary Medicine was distributed among the farmers. A positive response received from the farmers for our Herbal Veterinary products.

Mobile exhibition, supported by NIF

A mobile exhibition goes from door to door with innovations which is decided basis relevance to the region, market readiness and inspirational value. As a result of the base line survey, GIAN is going with mobile exhibition in different tribal as well adjoining areas of Gujarat and Maharashtra. Till date, GIAN mobile exhibition has covered 60 villages of Gujarat and 36 villages of Maharashtra.

Diffusion of Selected Technology in Gujarat & Maharashtra

For finding unmet needs in farm implements, for the collection of forest minor produce, income generation, day to day life & many more

Baseline surveys were conducted by GIAN in different tribal and rural areas of Gujarat and Maharashtra. The main objective of the survey was to understand & identify the unmet needs of tribal and rural areas. The baseline survey included various factors like availability of farm implements, facilities for processing of farm produces, horticulture and forest products, income generation through agriculture-horticulture-forestry, other sources of employment etc.

Energy conservation awareness workshops in Narmada & Panchmahal district sponsored by Gujarat Energy Development Agency (GEDA)

Gujarat Energy Development Agency (GEDA), Gandhinagar conducted Energy conservation workshops for Rural Population of Narmada and Panchmahal district in collaboration with GIAN. GIAN made use of their networks to execute these workshops for the local farmers. They were educated for water conservation, environment conservation and energy conservation techniques. Also, information regarding various farm implements were shared with them. Innovations to cater energy conservation developed by various Grassroots innovators were also demonstrated. The main objective of the workshop was to disseminate knowledge regarding solar energy and other energy conservation techniques.

6. GIAN's participation in Sattvik

GIAN organised a community food laboratory to encourage on-hand experimentation with some unique and innovative recipes using unconventional ingredients. A unique feature this time was the usage of brass and mud potteries for cooking. GIAN made an innovation maze which was popular amongst children and grown-ups alike. It also ran several workshops for children. Robot Fun Lab team conducted a session on learning through Lego. Children were encouraged to gain hands-on experience of learning electronics and constructing low cost solar cooker made from cardboard. Children participated in various activities like craft, card making, carpentry, origami, etc, organised by other groups.

7. GIAN Food and Nutrition Lab

An intern from University of Gastronomic Sciences, Italy, Juliana Gomes Chagas, did her Master's Thesis with GIAN on Grassroots initiatives towards Food Sovereignty: The Food Lab is devoted to the integration of traditional knowledge and innovative ways of fighting malnutrition, especially involving gender issues and child nutrition. The conceptual framework of the present study case was constructed upon extensive literature review covering the topics of food sovereignty, sustainable food systems, grassroots initiatives, and transitions towards sustainability. Six weeks of field work based in Ahmedabad, India, with field trips to rural areas in Gujarat provided the empirical data for the development of the study case. This study case reassures the importance of grassroots movements as an effective strategy to create awareness, build solidarity throughout the food chain and enforce pressure to policy makers.

8. Progress of building & GIAN Skills - The Grassroots Enterprise Development and Training Centre project at Grambharti, Gandhinagar

The Building design is changed in view of the comments received in last board meeting. It is now ready for its tender to float.

9. Gharda Corpus

A corpus contribution from Gharda chemicals was received on March 11, 2019 with a proposal and a cheque.

10. UN Escap

The Honey Bee Network through GIAN participated in the 'Workshop on Science, Technology and Innovation for the SDGs' organized by the UN Department of Economic and Social Affairs (DESA), the UN Conference on Trade and Development (UNCTAD) and the UN Economic and Social Commission for Asia and the Pacific (ESCAP), Feb 27-March 1, 2019 at UNESCAP office in Bangkok, Thailand. Forty-one experts from across the globe participated in the event. Dr. Anamika Dey, CEO, GIAN presented the experience of Honey Bee Network in two sessions: Promoting synergies with indigenous knowledge for the achievement of the SDGs and parallel session on Collaborations for innovative technology solutions: a capacity building seminar for technologists and decision makers.

11. Policy Workshop held on 27th January 2019

A one-day Regional Policy Workshop on Promoting Grassroots Innovations inaugurated by Dr. Mia Mikic (UNESCAP), Professor Anil Gupta (Founder SRISTI and GIAN) and Professor Vijaya Sherry Chand was held prior to the three day long International Conference of Creativity and Innovation at/ for/ from/ with grassroots [ICCIG 4] on the 27th of January at the Indian Institute of Management, Ahmedabad.

The workshop was addressed to government officials and decision makers from the Asia-Pacific region. The workshop saw participation from nearly fifteen countries

12. GIAN-UNESCO collaboration

As part of UNESCO's mission to reinforce national capacity on innovation, and within the framework of the project "Supporting the development of an innovation acceleration platform – science park and technology business incubator", several activities including a National Conference on Innovation, a training for trainers on entrepreneurship development, and to provide on technical assistance on technology business incubator development and on value addition of grassroots innovation took place from 3 to 8 February 2019 at Windhoek, Namibia. A workshop on grassroots innovations was conducted wherein the participants were trained in the basic functions of scouting and spawning innovations. A workbook was later prepared for UNESCO on 'National Strategies for developing the value chain of grassroots innovations in Namibia. The most notable pay off from the workshop was emergence of a HBN volunteer namely Paulina N Alfeus who has set up a HBN node in Namibia. GIAN is supporting her from the funds set aside for promoting hbn in india and abroad saved from consultancies by GIAN.

13. Unesco Colaboration

GIAN has submitted proposal to UNESCO for becoming a long-term partner. It is currently under consideration.

14. GIAN Nidhi

GIAN NIDHI, an initiative at GIAN aims at putting the problems of micro, small and medium enterprises, informal sector, grassroots innovators and other social sectors on the agenda of the young ITI & polytechnic students across the country. GIAN has collected about 1500 polytechnic projects majorly from Gujarat and Maharashtra. Recently, a short survey of Industry cluster at Rajkot was done by the volunteers of GIAN.

15. HBN CRIIA Awards for schools

HBN CRIIA Awards 2019 are for school, ITI & Polytechnic students, entrepreneurs and grassroots innovators etc.

16. ICCIG-4

International Conference On Creativity And Innovation at/for/from/with Grassroots

The key topics discussed in the intensive conference spread over three days were technology innovations, innovation, enterprise and investment, institutional transformation, educational innovation, cultural creativity, innovation in urban spaces for more accessible, accountable and available social infrastructure, integrating women's knowledge creativity and innovation in the innovation ecosystem, public policy for inclusive innovation and coping creativity with climate change etc. Various panellists from different fields of innovation and social strata of the society shared their thoughts and experience in the field of grassroots innovation. They drove the discussion towards a progressive and cooperating ecosystem for budding innovators at the grassroots level.

17. Policy on sharing of income from consultancy or professional services by employees.

GIAN has entered into a new phase wherein although still constrained in resources and manpower, it aspires to expand and make its presence felt all across the country and the globe. GIAN also wishes to encourage the growth of its employees in their professional domains. Keeping the aspirations of the employees and GIAN as an organization, it is proposed that employees having spent at least one year with GIAN should be allowed to take up consultancy/short term professional assignment with prior approval and share 50 percent of the income next of expenses with GIAN. This fund, in turn, will be used for expansion of the Honey Bee Network in geographies where it has not reached or is weakly present.