

NIFTEM Experiment for Harnessing Educated Youth's Energy for Nation Building

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NIFTEM'S Village Adoption Programme: Integrating Rural Entrepreneurship in Food Processing with Mainstream Economy

Village adoption is a unique program conceptualized by NIFTEM for its students, with a view to sensitize and educate them of the problems and practices of the farmers at the grass root level. The aim is to help the Indian Food Processing sector accomplish its objective of all-inclusive growth and facilitate the process of integrating the underprivileged sections of our population with the main stream economy. Village Adoption Programme is a compulsory part of B. Tech and M. Tech course curriculum with four credits in one year.

Objectives

- Work for enhancement of Farmers' Income/Rural Household Income by creating awareness in farmers/rural population regarding value addition, preservation, reduction of wastage.
- To train progressive farmers and the rural youth to become entrepreneurs and establish micro-enterprise in food processing in rural areas.
- To connect farmers and the rural population to Food Processing Industry so as to provide a viable economic model to agriculture.
- To connect students to the grass root level (villages) and the country with a view to make them aware of the rural India and work for its all round development and contribute to Nation's Development.
- To understand the inefficiencies in the supply chain for all commodities from the farmers' fields to the consumers plate so that they become more informed food technologists in future and are able to address the issues effectively.
- Have a two way exchange of knowledge between students and the rural population whereby students transfer their scientific and technical knowledge

and thinking process to the rural population and they also get educated about the traditional way of thinking and doing things and are exposed to the strong common sense (depending upon which the villagers survive.)

- Work for all round development of the village on social issues (health, sanitation, girl child education etc). Infrastructure Development (road connectivity, access to drinking water, use of renewable energy, solar energy and bio-mass energy etc.)

The Framework of Village Adoption Programme

- Under this programme, B. Tech (Food Technology & Management) and M. Tech students are divided into groups of 10 to 12 students at the time of joining NIFTEM.
- Each group is lead by a Faculty member (Mentor) and adopts a village anywhere in India and nurses it during the entire programme of study.
- The Groups go and stay in the village twice a year: 10 to 12 days each time in a semester. It is a symbiotic process leading to exchange of Knowledge
- While villagers gain scientific and technical knowledge through students who promote future possibilities of food processing among them, students obtain firsthand experience of Indian rural scenario and understand traditional processing technologies adopted by the villagers;
- Students gain general awareness of the village life and facilitate the process of integrating the underprivileged sections of our population with the main stream.

Steps in the Village Adoption Process

- The students shall have to identify a village and establish a work plan at the beginning of the first semester and work during the semester for 10-12 days at the village site
- The students will work in a group under the guidance of a mentor faculty and will develop realistic village development plan for four years including identification of local resources and

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avenues for promoting entrepreneurship in food processing sector.

- Sensitize and train the farmers and local youth about Food Processing and its advantages- Encourage farmers & local youth to become Entrepreneurs, establish micro and small Food Processing Enterprises form Producers' Company and establish Food Processing Units.
- Provide access and training programs to farmers Prepare a catalogue of traditional food production practices/ food preservation/ traditional recipes of food, etc.
- Imparting trainings on basic processing and value addition techniques for enhancement of shelf life, etc.
- Promote Good Agricultural Practices (GAP).
- Conduct an extensive survey of the village & record demographics and prepare a data base.
- Organize resources - By providing vital linkages, micro credits, Govt. Policies.
- Prepare and present a report at the end of each semester.
- In addition, Professors and Senior Officers of NIFTEM visit the groups when they are in the village to guide them and closely evaluate their progress.

NIFTEM undertook its first session of village adoption programme during October-November, 2012 in 13 states by sending its faculty and a mix batch of students from B. Tech and M. Tech Programme. Each group was lead by a NIFTEM Faculty member and all the groups stayed in the selected villages. The gamut of activities undertaken during the stay included:

- Understanding the farming practices,
- Extent of food processing interventions required,
- Sensitizing farmers to take up food processing and value addition initiatives leading to microenterprise creation,
- Socio-economic and lifestyle surveys,
- Study of traditions and customs of the village,
- Extent of farm mechanization,
- Basic problems which the people of that village are facing,
- Kind of crops/farm products produced,
- Education structure at primary and junior school level, mid day meal survey, and
- Level of Hygiene at village level etc.

Work Done Till Now

Owing to the success of first session of Village Adoption Programme (29.10.2012-03.11.2012), NIFTEM undertook the regular subsequent visits under its innovative programme till date. So far seven visits has been accomplished viz., second (11-16th March 2013), third (30th June-09th July, 2013), fourth, (19-27th October, 2013), fifth (23-29th December, 2013) and sixth (02-11th March, 2014). In recently completed seventh visit of Team NIFTEM (17-26 September 2014) under Village Adoption Programme, 37 teams of NIFTEM visited 39 villages in 19 states of the Country.

Results and Achievements

During the last seven visits in the respective 39 villages, the VAP groups have successfully documented and executed following interventions at farmer/villager level:

- Based upon the surplus of crops/agricultural commodities produced in the village, extent of food processing interventions being done in these areas:
 - Postharvest management
 - Primary processing, storage, value addition to undertake medium and small scale projects
- Entrepreneurial interest of the farming community and willingness to start a venture through individual investment Producer Company/ cooperative society/ self help group, etc.
 - Arranged training on Entrepreneurship in food processing sector (food grains/fruits/ vegetables/ Ready to Eat (RTE) Food Items.
 - Encouraged farmers to form Self help group
 - Arranged interactive session with Producer Company/ cooperative society/banks etc.
 - Vocational trainings for uplifting livelihood resources
- Cataloguing of traditional food production practices/ food preservation/ traditional recipes of food
- Awareness and educational programmes for village people, hygiene and sanitation camps, health camps, interactive sessions, video shows, etc
- Utilization and promotion of renewable energy (solar energy projects, etc)
- Trainings on Post-harvest management of fruits and vegetables, primary and secondary process of agricultural produce, scope and avenues in food processing sector, rainwater harvesting and organic farming, etc.

Evaluation and Course Correction

Based on such activities undertaken by a group, impact on the village and presentations made to the Evaluation committee, the best five groups are given certificates of appreciation and an award every year on 15th August and 26th January. First VAP prize ceremony was organized on 26th January, 2014 where best 3 teams for 1st, 2nd and 3rd position was awarded for year 2012-13. Another VAP prize distribution was held on 15th August, 2014, during which the prize distribution for VAP- V & VI was done.

In recently completed VAP-7 i.e., 17th-26th September 2014, there was adoption of 39 villages in 19 states by 37 teams of NIFTEM. About 550 students

of B. Tech as well as M. Tech along with faculty members went in different villages assigned to them and worked there in close co-ordination with villagers and local administration as well as other development agencies

Table 1 shows the groups participated in seventh village (17-26th September 2014) adoption programme in 39 villages in 19 States across the country.

Salient Achievements in VAP

Food Processing Promotional Initiatives

About 450 programmes including Trainings and Expert Lectures, Awareness Camps organized on

Table 1: Groups Participated in Village Adoption Programme

S.No.	Name of the Village	Block and Sub District/ District/	State
1.	Kalavacharla	Rajahmundry/East Godavari	Andhra Pradesh
2.	Karakambadi	Renigunta/ Chittoor	Andhra Pradesh
3.	Harihapur	Hajipur, Vaishali	Bihar
4.	Chhoti Ladha	Keoti/ Darbhanga	Bihar
5.	Koyli	Vadodara	Gujarat
6.	Gangwa	Hisar	Haryana
7.	Rawalwaas Kala	Hisar	Haryana
8.	Nauni	Shimla	Himachal Pradesh
9.	Tunna	Mandi	Himachal Pradesh
10.	Hocher	Kanke / Ranchi	Jharkhand
11.	Rakhbaroi	Vijaypur/ Sambha	Jammu
12.	Mangur and Yalgud	Belgaum and Kolhapur	Karnataka and Maharashtra
13.	Pulincunnu	Veliyanad/ Alappuzha	Kerala
14.	Bagroda	Phanda/ Bhopal	Madhya Pradesh
15.	Simariya	Seoni	Madhya Pradesh
16.	Kure	Bhusaval/Jalgaon	Maharashtra
17.	Pimpri Gawli	Ahamednagar	Maharashtra
18.	Lathor	Kaprakhole/ Balangir	Odisha
19.	Simula	Balasore	Odisha
20.	Vairowal	Tarn Taran	Punjab
21.	Daroli Bhai	Moga	Punjab
22.	Aloda	Sikar	Rajasthan
23.	Junakheda	Jhalarapatan/ Jhalawar	Rajasthan
24.	Sahanawali	Billothi/Sevar/ Bharatpur	Rajasthan
25.	Samlik Marchak (Nandok)	East Sikkim	Sikkim
26.	Alanganallur	Alanganallur/Madurai	Tamilnadu
27.	Kallupattai	Rajakapattai/Dindigul	Tamilnadu
28.	Dhanpau and Lakhwad	Dehradun	Uttarakhand
29.	Naglamohan	Mathura	Uttar Pradesh
30.	Husainpur	Ballia	Uttar Pradesh
31.	Arjunpur	Bakshi Ka Talab/ Lucknow	Uttar Pradesh
32.	Karkatpur	Wazirganj/ Badaun	Uttar Pradesh
33.	Bichpuri	Bichpuri/ Agra	Uttar Pradesh
34.	Lahara	Hathras	Uttar Pradesh
35.	Dakshin Kalrayat Kuthi	Cooch Behar/ Cooch Behar-2	West Bengal
36.	Kamlapur (Nimpith)	South 24 Parganas District	West Bengal
37.	Uttar Shibatara	Alipurduar/ Jalpaiguri	West Bengal

food processing and value addition, postharvest management, product development, entrepreneurship development etc.

various VAP teams during VAP programme.

-- Sample booklet is attached

Identification of Entrepreneurs

- Phase I
 - More than 125 entrepreneurs are potential ones who are associated with different teams and in processes of finalizing or has already initiated ventures in agro food processing
- Phase II
 - Each VAP team also identified about 50 prospective entrepreneurs in their village and adjoining areas who will be further given training to establish ventures in agro-food processing (Total about 1546).

Preparation of Project Reports

- Nearly, 100 projects have been identified where Team NIFTEM are working closely with potential entrepreneurs and shared with them customized project reports for initiating and supporting their ventures.
- Some project reports are attached

Product Development Processes

- Students along with their mentor have taken about 150 Product Development Training Programmes at village level in different villages
- and practically demonstrated preparations of jams, jellies, pickles, fruit based beverages like mango panna, products like banana chips, dried banana flakes, bakery products like biscuits, cakes, fried snacks, etc
- Teams also shared one to two page leaflets indicating the process flow charts and estimated expenses for each venture

Developing Market Linkages

- Team VAP in Different locations worked with various self help groups and supported to form backward and forward linkages with markets.
- This organized effort lead to revival of above 100 exiting self help groups and creation of about 25 New Self help groups.

Cataloguing of Traditional Knowledge

- Preparation of booklets on traditional food recipes
 - There are about 490 traditional recipes which are unique and have been documented by

- Preparation of booklets on traditional food preservation practices

-- Various groups have compiled about 200 traditional methods of traditional form

-- Sample booklet is attached

Infrastructure Development

- VAP teams has networked with district administration and worked diligently for creation of tangible infrastructure like development of roads linking to main roads, access to potable water, repair of drains, creation of sanitation facilities, (toilets) etc.
- The efforts yielded construction of more than 220 pukka toilets in the associated villages, creation of about 27 vermi-composting units and about 38 initiatives were taken up for construction or renovation of roads, drains, school building, anganwadi infrastructure, installation of clean drinking water sources.

Social Issues Addressed

- About 450 dedicated programmes addressing social issues on Girl child education, Female Foeticide, Child labour, Health care, Sanitation and Hygiene programme have been organized in adopted villages areas.

Initiatives on Promotion of Renewable Energy Utilization

- VAP teams laid due emphasis in promotion of renewable sources of energy like Solar lightening, solar cells and contacted energy department of each state to send representative in the village and educate farmers about using the solar lights.
- The effort yielded about 100 dedicated lectures on promotion on renewable energy about 99 awareness campaigns installation of about 110 solar street lights/ solar lamps in different locations under VAP. About 25 biogas units were also established in different locations.

Future Endeavours

- The selected potential entrepreneurs will be provided one week training on food processing and allied areas in the month of March 2015 in the village

itself. Few selected among the whole lot will be given four weeks skill training, expert talks and hands on training in the related industry. A six months handholding support will also be given to those who want to establish microenterprise.

- Our efforts also aim to establishing Primary Processing cum Pre-Cooling centre in the village, powered by Hybrid Energy System (Solar+ Biomass+ Grid Electricity)
- The idea of tagging one good NGO to each village is also being examined as they could take forward the work done by the VAP group after they (VAP group) have left the village and revisit only after six months.
- Taken up research projects to standardize the recipes of the traditional Indian food (identified by groups) and develop equipments for the mass production (with safety and quality) so as to capture domestic as well as foreign markets. This will result in huge avenues of employment creation and enhancement of the income of the rural, semi urban, small and micro food enterprise.
- For villagers and entrepreneurs, there is target to provide low cost technological interventions to enhance productivity and improve quality. This will provide better food to rural and semi urban consumers and higher income to rural entrepreneurs/ farmers turned entrepreneurs/ rural youth who establishes new enterprise. □

(contd. from pg.82)

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