

PROGRESS REPORT

of

WOMEN TECHNOLOGY PARK FOR CAPACITY BUILDING OF TRIBAL WOMEN OF ZUNHEBOTO DISTRICT NAGALAND

Cumulative for the period 1st April 2014 – 31st March 2015



Catalyzed and Supported by

**SCIENCE FOR EQUITY EMPOWERMENT & DEVELOPMENT DIVISION
DEPARTMENT OF SCIENCE & TECHNOLOGY
TECHNOLOGY BHAVAN
NEW DELHI - 110 016**

A. SUMMARY SHEET

1. TITLE OF THE PROJECT: Women Technology Park for capacity building of Tribal Women of Zunheboto district Nagaland.

2. REFERENCE NO. OF SANCTION LETTER WITH DATE: SSD/WS/063/2010/G; dated 10th December 2012

3. PI NAME & ORGANISATION: **Prof.** Dr. Dipak Sinha
Department of Chemistry
Nagaland University
Lumami-798627; NAGALAND
Phone No: 9402988873
Email:dipaksinha@gmail.com

4. DATE OF START: 26th December, 2012

5. DATE OF COMPLETION: Scheduled date of completion: 25th December, 2015
SCHEDULED AND LIKELY Likely date of completion: December 2016 (extended)

6. TOTAL COST OF THE PROJECT: Total sanctioned cost of the project: Rs.51,86,337/-
SANCTIONED AND NOW ESTIMATED

7. STAFF SANCTIONED & IN POSITION: Staff sanctioned: Three:
One project coordinator and two project Assistant.

Staff in position: One: One Project coordinator

8. TOTAL EXPENDITURE: Rs. 3,05,619/- for General Component
(1st April, 2004 to 31st march, 2005) Rs. Nil for the Capital component

9. ASSETS DEVELOPED OR EQUIPTMENTS ACQUIRED, IF ANY: (i) Bakery Training center
(ii) Fruit/ Vegetable processing Training center.
(Developed in last financial year)

10. SUMMARY OF PROGRESS AGAINST APPROVED WORK-PLAN/TIME SCHEDULE OF ACTIVITIES IN THE PROJECT:

PERIOD	ACTIVITY
April – June 2014	Training programme in making different bakery Products.
July – August 2014	Training programme on fruit and vegetable Preserves.
September – October 2014	Training programme on various bakery items organized especially for the Students and scholars of Nagaland University.
November to March 2015	Training programme on bakery items and Fruit and vegetable Preserves organized especially for the employees of Nagaland University.

11. ISSUES NEEDING ATTENTION OF GOVERNMENT/LOCAL BODIES

WTP aims at developing the skills of women in agro processing; hence it is important that women of different villages are made aware about how to develop these skills. It is therefore necessary for the local bodies like the village councils to take up the responsibility to make the villagers aware of Women Technology Park and how it can help them develop their skills in Agro processing. Local bodies of some villages have therefore started helping in creating a linkage between WTP and different villages.

DETAILED REPORT

1. INTRODUCTION (Need Assessment for S&T Intervention in Project Area):

Nagaland is a place where fresh agro products are easily available, but it mostly suffices domestic consumption. The women, though they process the products, it is processed only for local consumption without long shelf life, hence it cannot be preserved for a long period of time nor can it be sent outside Nagaland for sale. This is mainly due to lack of training. With proper training, the women can be given the boost to get the self-confidence needed to start their own business with which they can become self-sufficient. Thus, 'Capacity building of women' in agro processing is important.

2. APPROVED OBJECTIVES OF THE PROJECT:

- (i) Empowerment of local women through capacity building programme.
- (ii) Formation and management of women self-help groups;
- (iii) Enhancement of income generation capacities of women through training programme aimed towards development of individual/ group entrepreneurship;
- (iv) Creation of linkages between women entrepreneurs and the market for sustainability of the programme.
- (v) Creation of networks among different Women Self Help Groups (WSHGs) so as to extend income-generating facilities to maximum number of women;
- (vi) Creation of employment avenues in the region

3. PROJECT AREA: (Block, Village, Total Area Covered)

Total project area:

Zunheboto District covers a total area of 1255 square kilometers and is one of the centrally located districts of Nagaland. The district is divided into six blocks, viz, Zunheboto, Tokiye, Akuluto, Satakha, Suruhuto and Ghathashi.

Blocks and villages covered so far:

Names of block covered: Akuluto and Satakha

Names of villages: (i) Akuluto; (ii) Lumithsami; (iii) Sichimi; (iv) Lotisami; (v) Zaphumi; (vi) Sumi Settsu; (vii) Lumami; (viii) Sutemi; (ix) Alaphumi; (x) Shena; (xi) Vishepu; (xiii) Lukhai; (xvi) Aghuyito and (xv) Sataka

4. COMMUNITY BACKGROUND AND KNOWLEDGE LEVEL (Caste, occupation, including Traditional Knowledge & Practices followed)

Caste: Zunheboto is the home of the Sema tribe of Nagaland. The people are simple but hard working and friendly. The main religion of the Sema tribe is Christianity where 99% of the people follow Christianity.

Occupation: The people of Zunheboto mostly depend upon agriculture for their livelihood. The main type of agriculture practiced is shifting cultivation. However, 70% of the people living on the bank of Tizu river practice terrace cultivation. The economic condition of the people is poor as the agricultural productions are low in this region.

Traditional knowledge & practices followed: The people of the Sema tribe are well aware of the uses of plants and animals for medicinal purposes. They also possess the knowledge of agriculture and animal husbandry which is mostly old, handed down information from their ancestors. The area has a lot of potential for horticultural development but the people are not aware of the ways and means to develop it.

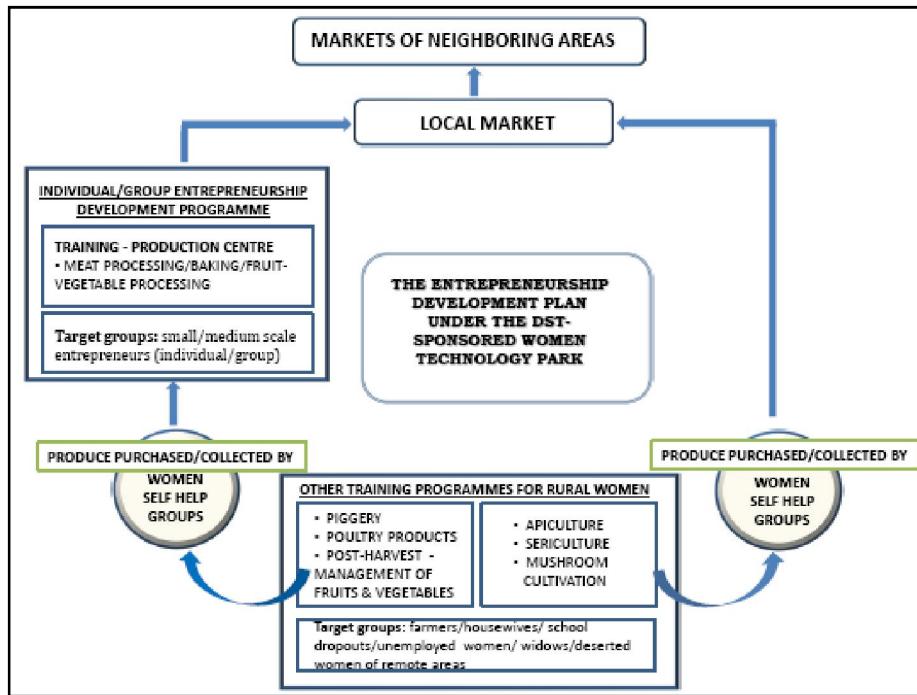
5. METHODOLOGY & SYSTEMS APPROACH (survey/ PRA exercise; community mobilization & social engineering; technology identification, modulation & diffusion & training component, etc)

Survey: A survey on the people's diet, socio –economic status, occupation of the people, climatic condition, and topography and farming system in Zunheboto district of Nagaland was done in order to understand the needs of the people. Problem faced by women and the socio-economic status was given prior importance during each survey.

PRA Exercise: Interactions were made with the village chiefs to make the objectives of the project known, as it is mandatory in Nagaland to initiate with the village council headed by the village headman for any programme regarding social cause. University has also created a five-member WTP coordination committee to facilitate the project so that the project becomes successful.

Community mobilization: Azala, the women's organization has become well known through their active works and in order to make women more aware and encourage them to be motivated to become self reliant, Azala organizes different programme and participates in catering refreshment in different occasions that are held in nearby villages.

Technology identification: The work plan which was approved by DST is being followed and the **modulation and diffusion methods** are also according to the approved plan given below.



Demonstration and training component:

Regular training programme on food-processing held at WTP center:

The main objective of food processing is to provide a safe and nutritious diet and to help in the generation of wealth for the producer and seller. The women possess the knowledge of preserving food only in the traditional manner, which comprises mostly of drying or fermentation. But this knowledge alone becomes too monotonous for the preservation of the amount of fruit and vegetables produced in these areas. Hence the industrial food processing method is being introduced to the women by teaching them how to make jams, pickles, juices ,chips and the

modern drying method in microwave ovens using locally available fruits and vegetables as given below.

Training Programme on making jams Fruits like pear, plum, oranges and bananas are produced in plenty in this area, thus the women are taught to preserve them by making jams using the available raw material.

Training Programme on pickle making The women are taught the art of making pickles using locally available chilies, bamboo shoots, tomatoes, ginger and lemons and bottling them or packing them in a more hygienic and nutritious way for longer shelf life.

Training Programme on making juices Fruits like pineapples, oranges, gooseberries and strawberries are available in plenty which mostly goes wasted. So the women are taught to make juice using these fruits and berries.

Training Programme on modern drying method The drying method used in this region is mostly the method of drying in the sun or smoking it, which usually causes the food to lose its color and reduce the nutritional value. So, the women are taught the modern method of drying, using the microwave oven, which takes less time and preserves the natural color and preserves most of the nutritious value.

Training Programme on making chips Vegetables like tapioca and fruits like jackfruits which are available in plenty are mostly consumed as it is or after cooking in the traditional method. So, it is not preserved and the excess are mostly wasted. The women are therefore taught to make chips with these fruits and vegetables.

Regular training programme on baking held at WTP center:

With the advent of modernity in the lives of the people of this region, people are becoming aware of different bakery products available and they are becoming more interested in the art of baking. People of every age have developed a taste for the western style of baked goods. Hence, the women are taught to bake varieties of bakery items with a touch of traditional taste in order to meet the demands of the people.

- Training programme on baking cakes
- Training programme on baking breads
- Training programme on making biscuits

- Training programme on baking cookies
- Training programme on baking muffins

Entrepreneurship development Programme: In order to help drive the economy of the people of this area, WTP aims at developing the entrepreneurial skills of the women. Hence regular training programme of developing the needed skills is given to the women. The trainings given are as follows:

- 1) Management awareness programme.
- 2) Seminars on entrepreneurial skills

Exposure trip to bakeries in nearby towns: in order to give the women an idea about the functioning of bakeries and the uses of different equipment for making various bakery products, interested women are taken to visit different bakeries in nearby towns.

PICTURES OF DIFFERENT ACTIVITES OF WTP



**Training on bakery items given to interested students of Nagaland University
on the 10th of September 2014**



Students participating in the training programme held on the 30th of Oct 2014



**University Employees participating in the cake making training held
on the 12th of Nov 2014**



**A participant trying her hand on making chocolate syrup in training held
on the 12th of March 2015**

TRAINING PROGRAMME

Summary of the training programme:

Training Programme 1: *Bakery training*

Total no. of bakery trainings held: 16, Avg. no of Participants: 10

Training dates and the name of items taught during bakery training Programme are given below:

Sl. No	Name of items	Date of training
1	Butter cake	04-04-14
2	Sponge cake	18-04-14
3	Fruit cake	15-05-14
4	Fruit dessert	29-05-14
5	Black forest cake	11-06-14
6	Chocolate cake	25-06-14
7	Banana cake	10-09-14
8	Cinnamon rolls	24-09-14
9	Swiss rolls	16-10-14
10	Jam filled cookies	30-10-14
11	Pineapple pastry	12-11-14
12	Finger cookies	26-11-14
13	Puff biscuit	02-12-14
14	Chocolate brownies	23-01-15
15	Salted biscuit	26-02-15
16	Milky treats	12-03-15

Training Programme 2: *Fruit and vegetable Processing Training*

Total no of trainings held: 6 Avg.no of participants: 8

Name of the items and the training dates are given below:

Sl. No	Name of items	Date of training
1	Tomato pickle	17-07-14
2	Grape jam	31-07-14
3	Mixed vegetable preserves	14-08-14
4	Apple juice	28-08-14
5	Papaya preservation	19-11-14
6	Tapioca and potato chips	26-13-15

6. TECHNICAL BACK - UP SUPPORT (Names of Scientists involved and support received & linkages established with S&T institutions):

1. KrishiVigyan Kendra, Zuhneboto district, Lumami, Nagaland

7. SCIENCE & TECHNOLOGY COMPONENT

WTP focuses on capacity building through agro processing. The, commercial value of the local products are assessed and accordingly, needed improvements are made to increase its market value. Since, the local flavors are not well known by people coming from outside the local community and in other outside places; efforts are made to popularize its flavors by adding local herbs and seasonings to the products.

8. PEOPLE'S PARTICIPATION FROM PLANNING TO IMPLEMENTATION STAGE

A Self Help Group called, Azala has been formed with ten members, and all of them are local mothers residing in and around Lumami. These ten members are actively and enthusiastically participating in the different units of the SHG, they are involved in the process of technology adoption like making different kind of edible item on the principle of “seeing is believing” and “learning by doing” because once if they see they will believe but once if they do by themselves it will retain with them for longer time, the product which they are adopting, can be easily marketed in the locality and if there is surplus production that can also be marketed to the far located market if demand exists .

9. INDICATORS APPLIED FOR MONITORING

The initial effort has been to create a women's organization which understands and appreciates the objectives of WTP and works towards fulfillment of those objectives. All the needed efforts such as personnel training and skill up gradation and efforts to increase their income/ productivity is going on.

10. OBJECTIVES ACHIEVED SO FAR:

Objective	Achievements so far
Empowerment of women through capacity building training center.	Regular training programme on bakery , fruit and vegetable processing are offered at WTP

Formation and management of women self-help groups	Women SHG group has been formed which is beneficial for the other existing groups as well
Enhancement of income generation capacities of women through training programme aimed towards development of individual/ group entrepreneurship.	Some women are selling their products in nearby shops and in their neighborhood
Creation of linkages between women entrepreneurs and the market for sustainability of the programme.	To be pursued
Creation of networks among different Women Self- Help Groups (WHSGs) so as to extend income- generating facilities to maximum number of women	To be pursued
Creation of employment avenues in the region	To be achieved in due course of time.

12. WORK REMAINING TO BE DONE UNDER THE PROJECT:

- Creation of networks among more Women Self Help Groups (WSHGs) of the district so as to extend income- generated facilities to maximum number of women.
- Improvement of linkages between women entrepreneurs and the market
- Procurement of meat processing equipment.

13. AGENCIES/ INSTITUTIONS/ DEPT.'S LIKELY TO BE INTERESTED IN THE PROBLEM, METHODOLOGY, RESULTS, ETC.

1. KrishiVigyan Kendra, Zuhneboto district, Lumami, Nagaland

13. CONSTRAINTS, IF ANY:

Release of money in time is the main constrain. Further organizing training for villagers is a huge challenge as participants' expects honorarium for the training which is not possible as per the project present format

14. INTERVENTION OF DST REQUESTED FOR

DST may execute this type of project more realistically understanding the practical difficulties faced by PI's. Further, DST may assure that money is released in time for effective implementation of the project.

15. DATE WHEN THIS REPORT WAS DISCUSSED WITH PROJECT TEAM/TARGET GROUP – AND BRIEF OUTCOME

In order to incorporate all the relevant points pertinent to WTP, the progress of the project was discussed with stakeholders regularly and report submitted here are the outcomes of various discussions.

A handwritten signature in blue ink, appearing to read "Dipak Singh".

DATE:

SIGNATURE OF PI