

## Income Generation Activity Through Community Based Nursery Raising Techniques-A Case Study

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**ABSTRACT:** Income generation through community based Nursery raising technique Nursery rising and maintenance in the Natural area is a new Intervention being carried out in the villages. In selected villagers are small, marginal farmers and landless women. To improve the livelihoods of the landless poor women were identified in TUG Meeting for Nursery activity. Twenty women in Talagavara village were identified from the women SHG's for Training. During the training at Talagavara village the participants were taught the techniques of nursery rising. After training nursery unit were started in Talagavara village. Inputs such as seeds, poly bags were supported with a buy back system, from the project Jsys at 150,000 live seedlings. The cost and returns from nursery rising is presented in table.1. The women could obtain more than Rs-82000/- by utilizing free land not factored in labor. This has also enabled some of the women to obtain some capital assets and investment. This activity can be sustained for developing women entrepreneurship. The women were willing to continue this nursery activity but were uncertain of where to market their produce. The community based Tank users groups surrounded villagers are bought all the seedlings timely and planted. The land selected a Talagavara tank foreshore area for the study. There has been an Increasing demand for forestry seedlings more particularly social and agro-forestry ones in both urban and rural areas of India. The demand for good quality planting materials has gone up and hence the nursery business has developed rapidly in the recent years in our country. Nursery product is no longer restricted to large parks and gardens. It has entered in to high rise. Tank foreshores, Agro-forestry social forestry, endowment land plantation, etc. heavy demand is observed during monsoon seasons. Forestry nursery business has therefore come up in a large scale in near rural areas. Nurseries are places where seedlings are raised for planting purposes. In the nursery the young seedlings are tended from sowing to develop in such a way as to be able to endure the hard field conditions. Whether local or introduced species Nursery Seedlings are found to have better survival than seeds sown directly in the Tank foreshore or through natural regeneration. So nursery seedling becomes the planting material for plantations, whether these plantations are for production, protection (or) amenity. Nurseries are high sources of Income. Nurseries set up by TUG/ SHG's after receiving training and nursery management are good source of Income in many areas. Saplings produced in nurseries are sold to JSYS project, and farmers in the area who have been encouraged to take up forestry, after seeing the returns gained from well-managed nursery. Nursery raising and maintenance in the Talagavara village is a New Intervention being carried out in the village. Community members participated in larger number on the day of environmental day in TMI's, community members, different village peoples, planted 150,000 seedlings that were supplied by the TMI's under JSYS, projects. The purpose of the project is to identify and promote strategies for sustainable management of natural resources to improve the livelihoods of landless, small, marginal farmers and including woman. The project was executed by an inter-disciplinary partnership comprising scientists from World Bank, TMI's and SPU (state project unit) DPU (District project unit) jala samvardhane yojana sangha and NGO

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### I. INTRODUCTION:

Talagavara is a small village in Kaiwara Hobli of Chintamani taluk. Talagavara is about 12km south of Chintamani town with a population of 2034 the village has agriculture and allied activities as main source of livelihood. Though the agriculture is pre-dominantly rain fed village has big tank system for catering its water needs. The village has a thick density of Bore wells and its main backbone for water needs in the Ammani kere (tank) system. The livelihoods are severely affected by partial functioning of tank system. For renovating the tank. This serious issue was discussed with NGO (RSc) which is implementing world Bank supported project approached JSYS to Include Talagavara Ammani kere (Tank) in the proposed tank Restoration project JSYS has constituted a facilitation team to help community to study all issues and prepare a project. There has been an

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## **II. MATERIALS AND METHODS:**

**Nursery Training:** Earlier the sangha (SHG's) members did not know about Nursery maintenance. Once they were taken to Talagavara field nurseries for an exposure trip. In Talagavara village field they saw nurseries and were trained on solving of seeds in a plastic bag, growing plants and maintaining a nursery. After training sangha members were confidence that even maintain a nursery.

**Study Area:** Field study was conducted during season at Talagavara village 12 km away from taluk head quarters of chintamani 12 km away from the chintamani taluk. Details of the experiments materials used and the procedure followed are presented in this chapter.

**Weather and Climate:** The climate of the district is seasonally dry tropical savanna climate with four seasons. The dry season with clear bright weather is from December to February. The summer season from March to May is followed by the south west monsoon from June to September October and November constitute the post monsoon or retreating monsoon. The mean dry temperature is about 35 in summer and 14 in winter. The maximum percentage of Rainfall between July to October and mean annual rain fall is around 705 mm.

**Site Selection:** Based on Requirements of water, place and for easy transportation, Talagavara Tank foreshore area was selected for nursery raising site.

**Field and soil:** The Nursery activity was taken up in tank foreshore area during Season of 2005. The soil of the experimental field was sandy loam. The Nursery was watering with good quality of water from a tank situated near by and community Bore well.

**Seeds used:** Used forestry Seeds such as pongamia, Terminalia Arjuna, Glyricidia, Jatropa, Bamboo, Acacia, Dalbergia sisoo silver oak. Etc.

**Land preparation:** The field was leveled manually. The layout was taken and final leveling was done with hand leveling.

**Seeds and sowing:** The seeds were obtained from private stores, chikkaballapura.

**Seed sowing method:** Direct seed sowing method were followed.

**Water management:** It means watering every day morning hours. The watering by using fine rose watering cane. The Nurseries were watering during early morning hours. Excess irrigation is avoided.

**Fertilization:** During active branch initiation stages 3<sup>rd</sup> week applied DAP and urea.

**Plant protection:** Locally available Neem oil was used.

**Weeding:** Weeding Manually once in a week.

**Size of the Nursery:** Sizes of the Nursery beds are around 12m in length 1.2m width, separated by 0.5m wide foot path. The width has its Importance for helps in the easy nursery operation Viz weeding watering hoeing etc. seedlings were transported based on demand of JSYS project.

**SOIL SAND AND FYM:** Seeds covered with fine earth or sand. Watering should invariably be done with rose watering cane. The soils are dry at the time of seed sowing. The Nursery would be fenced with thorns.

**SOIL USED:** 1:2:3 [FYM: Red soil: Sand] All the stones are removed, big lumps broken and earth sieved. The polythene bags are filled with the ratio of 1:2:3 (well Rotted FYM: Red soil: Sand).

**Transplanting:** The seedlings are transported after a 1 year. The transplanted seedlings about 1 m height.

**Types of containers used:** Polythene bags were used.

**Grading:** The best seedlings are taken out for field plantation the best plants were judged on the basis of height, color, diameter and growth.

**Time of planting:** Most of the planting is done during the monsoon after a good soaking Rain.

**Design of the Nursery:** Decided on the site and size of the Nursery. The site is carefully leveled, fenced and a shelter from the prevailing wind. Filling the bags: "6 x 12" polythene bags were used for raising nursery seedlings the bags were filled with 1:2:3 (FYM: soil: sand) and leaving a small spaces at the top and stocked side by side on nursery beds.

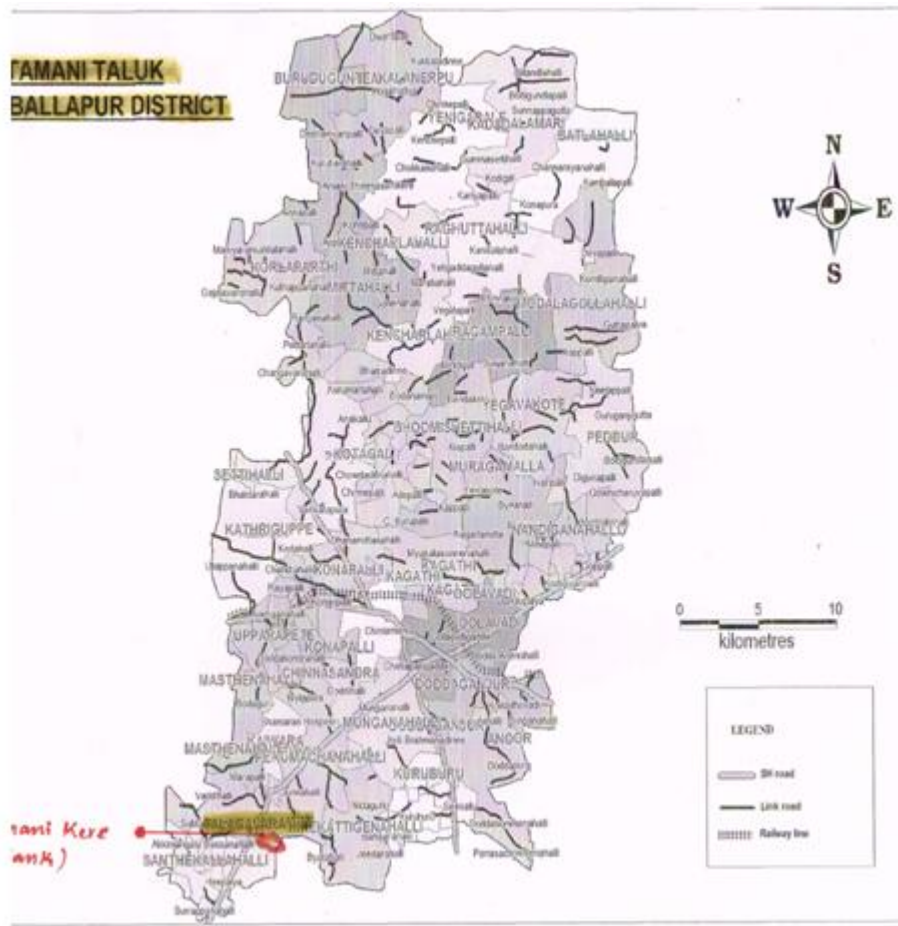
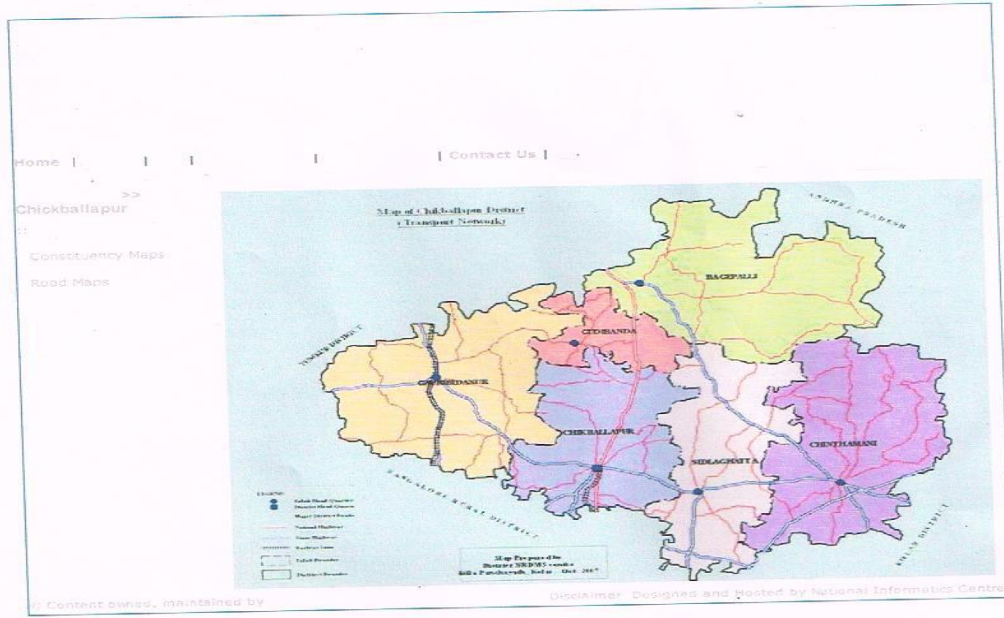
**Soaking in hot/ boiling water:** The seeds of Terminalia Arjuna have extremely tough outer coats which can delay germination hence immersed in hot or boiling water.

**Seed sowing :** The women self help groups nearly 20 women Involved in seed sowing, the seeds are sown at a depth of 1-3 times their diameter after sowing, seed beds would be watered using a time nozzle spray, Rose

## TABLES AND FIGURES

FIG. 1. INDIA MAP







**Table. (1) Cost and Returns of Nursery Raising**

Total No of plants : 1,50,000	Rs
<b>A. Costs :</b>	
1) Labor for filling the polythene Bags with soil 20 women labor @ Rs- 50/day x 38 days	38,000
2) Cost of material (FYM, soil and sand)	48,000
3) Cost of polythene bags (150,000) @ 30 paisa/Bag	45,000Rs
4) Cost of seed	15,000Rs
Others expenditure	<u>10,000Rs</u>
Total expenditure	<u>1,56,000Rs</u>
<b>B. Gross Returns 1,50,000 plants @ Rs 12/plant</b>	18,00,000
<b>C. Returns = Gross return-Total expenditure</b>	
= 18,00,000 – 1,56,000	
= 16,44,000/-	
Net Returns = 82,200 / Labor/women(SHG)	

**Blocks:****Table. (2). Different Types Of Seedlings Rised In Different Blocks**

1 <sup>st</sup> Block	Terminalia Arjuna	10,000 numbers
2 <sup>nd</sup> Block	Bamboo	10,000 numbers
3 <sup>rd</sup> Block	Pongamia glabra	50,000 numbers
4 <sup>th</sup> Block	Glyricidia	25,000 numbers
5 <sup>th</sup> Block	Jatropa	10,000 numbers
6 <sup>th</sup> Block	Dalbergia sisoo	25,000 numbers
7 <sup>th</sup> Block	Silver oak	20,000 numbers
	<b>Total</b>	<b>1,50,000 numbers</b>

The Blocks are normally labeled by letters A, B, C, D, E, F, G, H, Etc.

**Table. (3).The methods of pre-treatment vary with the different types of seeds.**

SEEDS	PRE-TREATMENT
(1) Terminalia Arjuna	Wet with hot water for 1 hour
(2) pongamia glabra	- NA-
(3) Jatropa	Wet with cold water for 12 hours
(4) Bamboo	Wet with cold water for about 12 hours
(5) Dalbergia sisoo	Wet with cold water for 12 hours
(6) Glyricidia	-N A -
(7) Silver oak	Wet with cold water for 12 hours

(Soaked with cold water for from one to 2 days in sufficient to ensure germination)

**IV. DISCUSSION AND CONCLUSION**

Nursery raising and maintenance in the Community based villages in a new Intervention being carried out in the villagers. In Talagavara most of the people, (women) are small marginal farmers and landless people. To improve the livelihoods of the men were identified poor women including men were identified for nursery training. The women were willing to continue this nursery activity but were uncertain of where to market their produce. Facilitating linkages with state Governments like forestry and also local big nurseries in the near by district head quarters could be a solution. During water scarcity with the Intervention of TUG member's water at the site was arranged from near by tank with water source. Nursery raising is an Income generation activity for sure landless poor people. Nursery raising and maintenance in the Talagavara village is a New Intervention being carried out in the village. Community members participated in larger number on the day of environmental

day in TMI's, community members, different village peoples, planted 150,000 seedlings that were supplied by the TMI's under JSYS, projects. Obtain total net returns of about 16, 44,000/-Rs and obtained net Returns of about Rs 82,200 / Labor/women

#### **ACKNOWLEDGEMENT**

My sincere thanks to Dr. P. Boregowda Executive director, JSYS-SPU-Bangalore and also Thanks to TMI Chairman Rajagopal and S H G Group. And also Thanks to CFT, DPU, SPU and World Bank Team. And also directly or indirectly cooperate Project activities and Benefesires.

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