

SUCCESS POINT, OUTCOME AND IMPACT ANALYSIS OF AZOLLA (AZOLLA PINNATA) CULTIVATION THROUGH INSTITUTIONAL INVOLVEMENT

GANESH DAS¹, VICTOR SARKAR², BAPPA PARAMANIK³, BIKASH ROY⁴,
SUSHEN KUMAR DAS⁵ & ATIT MAJI⁶

¹Subject Matter Specialist (Agricultural Extension), Cooch Behar Krishi Vigyan Kendra, Uttar Banga Krishi
Viswavidyalaya, Pundibari, Cooch Behar, India

²Research Scholar, Department of Agricultural Extension, Cooch Behar Krishi Vigyan Kendra, Uttar Banga Krishi
Viswavidyalaya, Pundibari, Cooch Behar, India

³Subject Matter Specialist (Soil Science) DakshinDinajpur Krishi Vigyan Kendra, Uttar Banga Krishi
Viswavidyalaya, Pundibari, Cooch Behar, India

⁴Senior Scientist and Head, Cooch Behar Krishi Vigyan Kendra, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch
Behar, West Bengal, India

⁵Programme Assistant, Cooch Behar Krishi Vigyan Kendra, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar,
West Bengal, India

⁶Programme Assistant, Murshidabad Krishi Vigyan Kendra, Murshidabad, West Bengal, India

ABSTRACT

Azolla (Azolla pinnata) is a very good source of feeds of households, animals and poultry. The Tribal farmers of Cooch, Behar district are involved in animal husbandry, poultry and fishery production in their locality. The total fallow land of Cooch Behar district was only 855 ha, total livestock was 18, 30,308 and the total poultry bird was 16, 55, 786, which creates huge pressure on the supply of good quality feed. The tribal people in Cooch Behar district collected household animal feeds from other village, which is creating conflict among the villagers. This conflict stimulated Cooch Behar Krishi Vigyan Kendra to make them aware and train the tribal farmers, especially women on Azolla production and its utilization.

KEYWORDS: Azolla, Tribal, Feed, Conflict, Trained

INTRODUCTION

Background Information

Azolla is a very good source of feeds of cattle's, ducks, hens and pigs [1]. Azolla contains huge amount of nutrients and vitamins, which is essential for household animals. It contains essential amino acid, Vitamin-A, Vitamin-B12, B-carotene, calcium, phosphorus, potassium, iron and magnesium [2, 3, and 4]. Azolla production, especially Azolla pinnata in Cooch Behar district is hereby increasing day to day due to rise in its demand and awareness [5]. The Tribal women farmers of Cooch Behar district not only depend on agriculture, they are also involved in animal husbandry and fishery production. The agricultural land is increasing day by day, whereas use of different type of herbicide decreasing the grass and fallow land, which are major feeding sources of household animal of tribal farmer. The total current fallow land of Cooch Behar district was only 885 ha, and the net sown area was 250611 ha and total numbers of livestock was 18,30,308 and poultry was 16,55,786 [6]. Maize was only one crop, which was cultivated as fodder crops for animal feeds.

DESCRIPTION OF TECHNOLOGY

- The above problem stimulated CoochBeharKrishiVigyan Kendra to organize non-residential training program for tribal women farmers in Azolla cultivation, which are alternative sources of feed of household animal, poultry, sucker and also fishery.
- Dhalaguri village of Cooch Behar district was selected purposively in November, 2015.
- 4 numbers of the tribal SHGs group were selected purposefully.
- Each group contains 10 numbers of members.
- Initially, 3 days off campus training cum demonstration was conducted
- Then, 40 numbers of Azolla demonstration units were formed at Dhalaguri with the help of the Tribal sub plan and SHGs members.
- Each member was taking responsibility to monitor and manage at least one demonstration unit
- KVK scientist monitors the member's activity in weekly
- After 30 days, production record was taken
- Average production of each plot was found @ 4 to 5 kg/unit (unit size 4 ft× 3ft)
- Then organized one day training on the Azolla feeding of household animal and its alternative use
- Linking a marketing channel with the help of farmers club for purchasing of Azolla

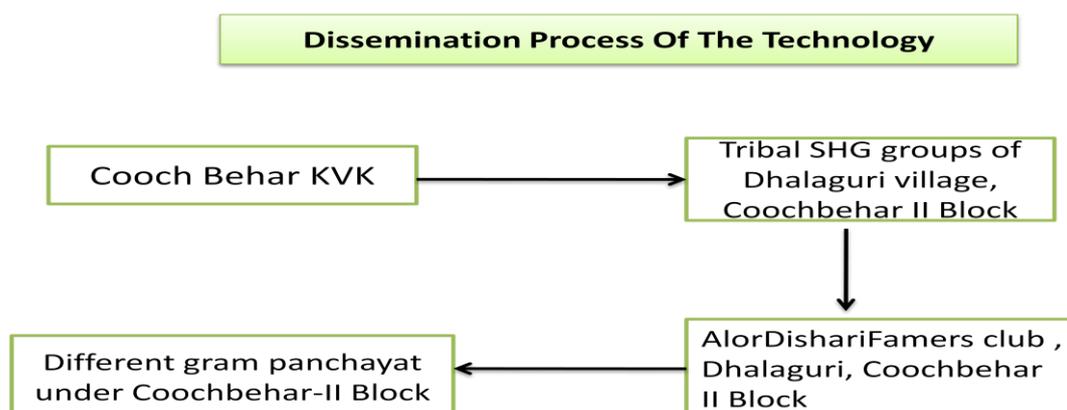


Figure 1

INSTITUTES INVOLVED

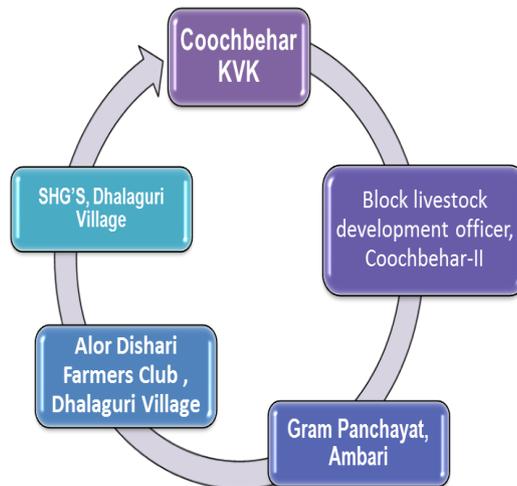


Figure 2

SUCCESS POINTS

- The tribal farm women become aware about the benefit of Azolla production
- Physiological change of the house animal after feeding of Azolla.
- Less dependents on the others field for collecting of grass.
- Building relationships with farmers club and KVK.

OUTCOME

- Increased the Knowledge level of the trainees on animal feeding from 30 % to 55%
- Increased the milk production of the cattle's up to 20% from Bench Mark (BM).
- Reduced the animal feed cost up to 15% from BM.
- Added an additional income of the members (average 150 Rs. /Unit.)
- Built relationships with farmers club and KVK.

IMPACT

- Looking to the success of four SHGs groups, another 3 SHGs and thirty five non SHGs members also came forward to cultivate Azolla for household animal, hens and ducks feed.
- Farmers of surrounding villages like Gopalpur, Khagribari, Kalakata, and Durganagarare also started to cultivate Azolla for household animal feed and as a source of nitrogen in paddy field.



Figure 3

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