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On the hill-hamlet of Bambadaguda, one will find the quaint household of Ms. Mangamma Savara and her Husband Mr Rajaya who live in their household with their two sons. Their night shelter and forage area is an excellent example of innovation and creativity in design of their space for maximum efficiency. Their daughter is currently pursuing her degree in Pharmacology in Visakhapatnam. The couple had experience in raising chickens in the backyard in addition to other birds like parrots, pigeons, doves, and budgerigars but had not constructed a dedicated night shelter for Desi Backyard Poultry (BYP) in the past, however, with the intervention of **HDFC Parivartan**, they were able build a robust support structure for their poultry business in just a year.

The couple belong to the Savara Tribe (PVTG) and are supported by the HDFC Parivartan project in 2023, under which they were allotted support for the construction of a night shelter on their 5 cents land. A sound foundation for their entrepreneurial skills was that Mr Rajaya is a skilled carpenter whose services were vital in the construction and modification of the basic foundation and Ms Mangamma Savara is enthusiastic about growing a diversity of plants, vegetables, fruits and herbs in the forage land of the chickens. In addition to the support of ₹6000 for a shade net, asbestos sheets, mesh and cement bags for the night

shelter, and ₹4000 towards bricks, sand, wood and labour costs was borne by Mangamma herself.

The family started systematically raising poultry with a night shelter in January 2023 with 5 Hens, 10 Cocks and 20 Chicks. The birds are sold locally. Prior to the Night Shelter the birds sold for Rs 600-700 for an adult cock. Presently with the introduction of the practices of marketing, ₹ 1000-1200 are fetched for a full-grown cock and Rs 300-400 are fetched for a hen locally. The increase in market rate for Mangamma's birds is due to the incorporation of organic Package of Practices (Annexure I).

Best Practices

- In their forage area,
 Mangamma and Rajana grow several medicinal and nutritious plants
- They naturally utilize the area for producing termites in dried logs / wood



- The couple supplements foraging with additional feed grains such as rice, ragi, makkai jonna (maize) Seasonal practices are followed - The roof of the shelter is covered with palm leaves to insulate against direct sunlight and heat.
- Feed is supplemented by chopped aloe vera and onions during the summers. This
 helps the birds build resilience during extremely hot weather.
- Vegetable patch is separated from the forage area by building a boundary with bamboo and cloth.
- Mostly locally available materials are sourced and used which reduces the infrastructure costs significantly.
- Frequent reuse of old and waste materials on their land- tubs, roosting areas, feeding vessels etc. are made from old tubs, tires, wood and plastic. Nothing goes to waste.

Innovations and Experiments

The birds are 80-90% dependent on the forage area for their nutrition, additionally varied supplementary feed is provided twice a day (maize, broken rice, husk and millets). The couple are very open to experimenting, learning and incorporating new ideas and designs into their current model of practice. Additionally they are active participants in the local Common Interest Group trainings which they routinely incorporate on their forage area. One method that is used is striking a bell to call the chickens to feed in a similar fashion to a school. Secondly, walls are washed with local red soil mixed with lime. It provides a hygienic and antibacterial and cool environment for the shelter of chickens. As a replacement of cow-dung, soil from a snake's mound (*Pammu Putta*) is used to layer the floor of the night shelter.





Challenges and areas of improvement

Due to partial communication and understanding of quarantine practices when introducing new poultry into one's flock from a different location, in April 2024 Mangamma introduced a new cock which she sourced from a nearby village. It was found that within 3 days of introducing the bird, 10 growers died due to different diseases. This could be prevented in the future by increasing and upskilling farmers from time to time on proper quarantine and hygiene practices. Chick loss

due to disease totaled to 12 birds @₹ 500/ bird and 10 chicks @ ₹ 50/chick, and 4 chicks were lost due to predation @₹ 50/ chick.

Impact

The intervention has supplemented the family income by an additional Rs 10,000 annually. This increase goes towards improvement in the farm practices and towards expenses for the final year's college fees for their daughter who is pursuing her B. Pharma in a government aided college at Visakhapatnam.

Inputs and Income

Inputs and Costs	Amount (₹)	Income and Benefit	Amount (₹)
ONE - TIME COST		CONSUMPTION	
Night Shelter		• Eggs - 36 eggs (@ 15 / egg)	540
Labour costs for building	4,000	• Chicken - 4 birds (@ 350 / bird)	1,400
Material costs for night shelter (sponsored by HDFC Parivartan)	6,000	<u>SALES</u>	
OPERATING COSTS		• Cocks - ₹ 1000 - 1200 / bird (1100 x 6 birds)	6,600
New Parent stock feed			
• Rice (5 Kg) @₹ 2/Kg x 12	120	• Hens - ₹ 300 - 400 / bird (350 x 10 birds)	3,500
Maize (5kg)@₹16/Kg x12	960		
• Ragi (3Kg) @₹25/Kg x 12	900	• Growers (₹ 300 x 5 birds)	1,500
Rice Husk (3 Kg) @₹12/Kg x 12	432		
Total	3412	Total	13,540



Annexure - 1: Package of Practices

Ethno Veterinary Medicines Used







Bird's eye chilly

Chirayta

Wild ginger

Aloe vera





Mate Paspu (Turmeric)

Potassium Permanganate in water









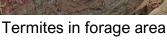
Ragi and Bajra

Corn Meal

Desi Papaya: Separating Seeds for deworming

Best Practices







Insulation of shed with palm leaves



Red clay mixed with lime for lining walls



Ringing a bell to call chickens



Tires hung in roosting area