

Head: Tribal Knowledge Helps create a Livestock Boom in Washim

Colonial rulers labelled Phase Pardhis as a criminal tribe under the infamous Criminal Tribe Act, of 1871. But their understanding of grassland ecology led to the revival of the grassland ecosystem in Wadala; a small hamlet in Washim district of Maharashtra. Within a decade of the conservation drive initiation, the livestock population in the villages surrounding the grasslands has seen a surge. Today, the community is helping the conservation drive in over 60 hectares of forest land, with their local knowledge about livestock in the area

Wadala is a small village with 65 families and 325 voters all belonging to the Phase Pardhi tribe. The tribe is known for its traditional livelihood of hunting and nomadic lifestyle. But contrary to popular belief, they hunt based on their own social hunting rules that ensure it does not lead to overuse of natural resources, thus achieving sustainability in earning a livelihood. (Malhotra 1983).

How it Began

The conservation drive began with Bhimrao Rathod, an elder in the Phase Pardhi community, fencing off a three-acre forest land in the proximity of his home. The fence, made of thorny bushes would restrict people from cutting trees or grazing in the patch. Others in the community soon followed suit. The fact that there was no monetary input necessary made it easy for them to follow Bhimrao. Eventually the community adopted a ban on forest fires and destruction of forest flora. They also started reserving patches for livestock from the village to graze. In some pastures, they started planting varieties of fodder grass. Eventually they began to secure the fodder, foliage and firewood needs to strengthen the livelihood of livestock rearing.

Samvedana, a local NGO founded by a Kaustubh Pandharipande played an important role in this community-based conservation programme. Through their efforts, the project also received attention and funds from United Nations Development Programme (UNDP) and Ministry of Environment and Forest (MoEF), Government of India.

Presented here are the benefits from this conservation drive:

GRASSLAND CONSERVATION AND BENEFITS

Sl. No.	Year	Area under conservation	No of families	Production	Financial benefits
1	2008	4 hectors	1	16000 kgs	cost of produce 24000.00 + 5500.00 (by sale)
2	2009	4 hectors	6	16000 kgs	cost of produce 24000.00 + 3000.00 (by sale)
3	2010	6 hectors	13	24000 kgs	cost of produce 36000.00
4	2011	40 hectors	20	40000 kgs	cost of produce 60000.00 + 1000.00 (by sale)
5	2012	45 hectors	28	45000 kgs	cost of produce 60000.00 + 2500.00 (by sale)
6	2013	50 hectors	45	50000 kgs	cost of produce 66000.00 + 10000.00 (by sale)
7	2014	30 hectors	60	30000 kgs	cost of produce 34000.00
8	2015 *	60 hectors	65	65000 kgs	cost of produce 84000.00 + 20000.00
TOTAL				2,86,000.00	4,30,000.00

* 2015 estimated data

LIVESTOCK INCREASE DURING THE LAST DECADE

No	Year	No of families purchased animals	No of livestock
1	2013	2	5
2	2014	2	18
3	2015	2	21
Total Livestock			
4	2018	54	100

(This case study was sent by Sajal Kulkarni and Kaustubh Pandharipande; one of the founders of Samvedana - a Karanja based non-profit).

Story of : A High Milk Yielding Indigenous Buffalo

In 2011, Banni gained reputation of being India's 11th registered buffalo breed. The name is inspired from the vast stretch of Banni grasslands in the state of Gujarat, home to the breed. Banni is a vast stretch of dry grassland, spread across 3,847 square kilometers and home to pastoral communities - Maldharis being one of them, who also happen to be the breeders of Banni Buffaloes.

Apart from income, registration of Banni buffalo is also earning Maldharis global recognition and reputation. Down to Earth reported that Narendra Modi, the present PM and former Gujarat Chief Minister once remarked that a Banni buffalo costs twice the cost of a Nano car (which costs Rs. 1 lakh). The breed is in demand across the world for its ability to produce about 10-12 litres of milk a day, coupled with its resilience to hot and dry weather conditions; a characteristic of the Banni ecosystem. This has resulted in making the annual turnover of the pastoral system in Banni worth Rs. 55 crores.

Conflict With The Forest Department

A conflict began brewing in 1955 when the government introduced *Prosopis juliflora*, known as Ganda Bawal in Gujarati, a plant species which turned out to be invasive in nature. With the introduction of this species, the rich plant biodiversity in the Banni ecosystem started deteriorating. This led to strained relations between the Maldharis' and the Forest department.

Maldharis claim that the Maharaja of Kutch granted them the area under the grasslands, on the condition that they would not convert it into agriculture lands. The Wire, an online news platform reported that they have documents to support the claim. Banni buffaloes, unlike other exotic species like Jersey, depend on feeding in open pastures. The Maldharis

believe enclosing the animals leads to their deterioration. In 2009 the forest department (under a working plan), decided to fence the grassland restricting the entry of Maldharis' Banni buffaloes into the area. This resulted in souring the already strained relations between the Maldharis' and the forest department.

The move led to scarcity of feed for the animals. With the help of Sahjeevan – a local NGO, the breeders organized themselves into a breeders' association in 2008. In 2013, the breeders' association supported 47 gram sabhas of Maldharis to file claims for individual and community forest rights under the Forest Rights Act, 2006. The allocation of the title is still awaited.

Amidst this legal battle however, the Breeders' Association was successful in registering the Buffalo with the National Bureau of Animal Genetic Resources (NBAGR); the government agency given the task to document the genetic diversity in animals, especially livestock, in India.

Banni's Economics

The report 'Let Banni Be' published in 2012 by Centre for Economic and Social Studies, Hyderabad gives details of Maldharis' livelihoods in Banni. The study estimates that annual turnover of Banni's pastoral community is Rs. 55 Crore. Milk sales contribute over 60 percent of their earnings, followed by sale of buffaloes and bulls. Among sale of pastoral products, milk and milk products bring in 95 percent of their gross earnings. But net earning from milk is less than rearing animals because of high cost involved in maintaining lactating and pregnant buffaloes. Manure sales contribute only 3% to their total earnings. The table below gives details.

CURRENT PASTORAL ECONOMY: ANNUAL TURNOVER

Product	Sales	Unit Price	Annual Turnover (Rs in Lakhs)	Percent Share
Animal Sales				
Bullock Sales (Nos)	13000	7500	975.0	17.6
Buffalo Sales (Nos)	2500	35000	875.0	15.8
Sheep – Goat (Nos)	2000	1500	30.0	0.5

Pastoral Products				
Ghee	3000	350	10.5	0.2
Milk Sales ('000 Litres)	13854.6	25	3463.7	62.7
Manure Sales (Trucks)	11500	1500	172.5	3.1
		Total	5526.7	100.0

(Ghee production: Calculated at average 250 kg per month for whole Banni. Quantity of manure worked out from total cattle and buffaloes on the basis of 24 trucks / annum for every 100 animals).

Source: The report 'Let Banni Be' published in 2012 by Centre for Economic and Social Studies

(This case study was sent by Sajal Kulkarni, current RRA Network fellow working on the issue of extensive livestock systems).

CASE STUDY - 3

'PashuSakhis'

A Hope for Poultry Farmers in Madhya Pradesh

Dittu Bai Parmer, of Patelia tribe is sought after in Sad village of Jabhua district in Madhya Pradesh, for her healing touch. She works as *PashuSakhi* or Friend of Animal. She provides on-the-call health care services for animals of livestock keepers in her village. Parmar earns about Rs. 2000 from this work. 'It is not too much, but at least I don't have to borrow money anymore to pay for my children's fees and uniforms', she says.

Shruti Bai of Sad village got so popular because of her work as *MurgiSakhi* or fowl friend that she eventually decided to run for local polls and got elected as Sarpanch, head of the village council. Prior to this, owing to her knowledge of poultry she and her husband bought chicks of Kadaknath, a pitch-black indigenous fowl variety. By selling the flock for Rs. 500 apiece they earned about Rs. 2 lakh.

A Confidence Booster

Both the women earned their place in society through the South Asia Pro Poor Livestock Policy Programme (SA PPLPP) which was a joint initiative co-funded by the Food and Agriculture Organisation

(FAO) of the United Nations and the National Dairy Development Board (NDDB), India.

India Post reported that during the tenure of the programme, the *PashuSakhis* earned a stipend of Rs. 1000 a month. But their earnings did not decrease after the end of the programme, as they continue to earn from vaccination charges – Rs. 2 per bird and Rs. 10 per animal. It not only created a source of livelihood for women, it changed the perception about poultry and livestock rearing prevalent in the village. "The rate of mortality in birds was as high as 75%. Because of *PashuSakhis* it came down to about 40%" said Prem Thakur, a resource person working with Sampark; a local NGO given the charge of implementing the programme.

Hindustan Times reported that state government authorities eventually took notice of the programme and provided free vaccines for one year, and subsidized vaccines from the subsequent year.

(This case study was sent by Sajal Kulkarni, current RRA Network fellow working on the issue of extensive livestock systems).

CASE STUDY - 4

Desi Poultry

A Feather in Tribal Women's Caps

Chandrakala Palasi, a tribal woman from Kudapalli village of Paderu division in Visakhapatnam district, was a home-maker in search for supplementary income to support her family till 2016. Within a year of becoming a backyard poultry entrepreneur, Palasi earned Rs. 15,000, thus succeeding in pulling her family out of the pangs of poverty.

For Koda Chandrakala, resident of PedaKodapalli of Pedabayalumandal of Visakhapatnam district, struggles were similar. Apart from two acres of family land, which too was used to cultivate food for their household, Koda Abbaidora (her husband), saw no other ways to generate income. He moved to Hyderabad and worked at a restaurant for better earning opportunities. The aggregate income from cultivating paddy and wage labour earned him just Rs. 10,000 annually. Distraught, in 2010 he returned home. In 2016, the couple learnt of the poultry programme. Within a year of being enrolled as an entrepreneur, they earned Rs. 15,000 from their unit. This surge in income has made the couple happy. The backyard poultry programme, through which these families earned additional income, was started by Watershed Support Services and Activities Network (WASSAN), a Hyderabad based non-profit in 2016 with the help of NGOs working in the tribal belt of Andhra Pradesh. Soon ITDA took cognizance of the programme and offered support. ITDA now provides funds for the promotion of backyard poultry (BYP) programme to the State Animal Husbandry Department (AHD), which then channels the funds to local community-based organizations (CBOs) through Tribal Sub Plan (TSP). The total investment in BYP breeding farm is around INR 1,35,500. AHD disburses INR 96,500 to the selected BYP breeding farm entrepreneur and the BYP breeding farm entrepreneur invests INR 30000 from own pocket. The outlay is for construction of an enclosure, fencing it, purchase of water and feed dispensers, purchase of birds, capacity building of the entrepreneur and purchase of feed for a year.

Common Interest Group - A Boon

The structure of a programme is to create a Common Interest Group (CIG) – sort of a cooperative – which shares resources from an entrepreneur’s farm. About 100 households pool in money to avail the services of the vaccinator. The contributing households are given priority as consumers for the birds sold by the breed farm entrepreneur and in availing vaccination services. This ensures that birds stay healthy. Presence of this service has encouraged many to take to backyard poultry and become members of the CIG. The breed farm entrepreneur can sell the surplus birds to consumers beyond this CIG, once their demand is met.

Since bird sacrifice is an important part of tribal culture, it has been observed that sale of birds see an upward trend during local festivals. Although this was a common practice earlier too, the high mortality rate of birds discouraged many. People in the area see the benefit of taking up poultry as a means of a profitable livelihood, after the initiation of the programme.

The programme presently reaches out to 13500 tribal households across 27 divisions in the 6 Integrated Tribal Development Agencies (ITDAs) of Andhra Pradesh.

(This case study was originally compiled by Kanna Siripurapu and Uday K. Kalyanapu; members of RRA Network).

DETAILS OF THE SUPPLY OF CHICKEN TO LOCAL CIG AND OUTSIDE MARKET SINCE 2016

Item / Product type	No. of Units Sold	Buyer	No. of Buyers	Price Per Unit (INR)	Gross Earned Amount (INR)
Chicks	400	CIG & Outside	80	80	32000
Chicken	15	Outside Market	-	600 – 3000	15000
Chicken Droppings	72	Outside Market	1	100	7200
Eggs	-	-	-	10 – 20	-
					54200

Source: Annual earnings of Common Interest Group in Kudapalli village of Paderu division of Visakhapatnam district.