

Women's Collective Venture towards Revival of Animal Husbandry for Livelihood Security - A Case Study from a Village of Kutch District

Meghadeepa Chakraborty

How a women's collective in drought-stricken Dador scripted a new phase in livelihood security through a judicious mix of watershed development, fodder banks and cow-milk production.

Traditionally, livestock rearing or animal husbandry is considered one of the major sources of livelihood for the rural poor, especially in the semi-arid regions of the country. It contributes towards household income significantly and also supports food security, improved nutrition, and insurance at the household level. However, sustaining animal husbandry has become challenging for communities in arid and semi-arid zones due to a precarious water situation, inaccessibility of fodder, inadequate health facilities, lack of market and appropriate technology. A combination of all these factors often force poor households to look for alternative livelihood options such as migration, local wage labour etc, leaving behind their traditional occupations. Moreover, in such situations, women are the worst affected, posing a greater challenge.

This case study gives a picture of a women's collective, Sairi Jo Sangathan, in the Nakhatrana taluka of the Kutch district of Gujarat, and highlights the efforts made for the revival of the traditional occupation of animal husbandry and the changes it has brought about in the community. In analysing the case, an effort has been made to bring forth the initiatives taken by the women for forming a community-level institution and the arrangements that have been made surrounding the resource use. In conclusion, this collective venture by women has not only revived traditional livelihood options of the village but has also intensified the practice of animal husbandry towards securing the livelihood of the community.

Context of the Women's Collective Venture

This section illustrates the socio-economic, institutional, and natural context in which the women's collective initiative evolved in the village of Dador.

Social Context

The village is inhabited by 118 households with a total population of 578 (298 males and 280 females). The residents belong to six communities and include both Hindus and Muslims. The number of households belonging to different religions and communities represented in Dador village is detailed in Table 1 below¹

¹Source: Primary Data from the field.

Table 1: Household composition in Dador

Community	Religion	No. of Households
Ahir	Hindu	35
Darbar	Hindu	1
Theba	Muslim	40
Verar	Muslim	34
Sameja	Muslim	5
Sayed	Muslim	3

The Ahir and Darbar are mainly agriculturists and own the maximum assets whereas other communities are traditional pastoralists. The households in the community have undergone occupational changes over a period of time. The traditional pastoralists have no more confined themselves to animal husbandry; rather they have begun to learn to do agriculture on their own or in others land. This change is also seen among the Ahirs who were traditionally agriculturists but in the recent past have taken up animal husbandry as well. This change in the village has brought the Hindu and Muslim communities closer in terms of sharing occupational knowledge, skills and information with each other. Every household of the village is part of a vibrant social network that serves as a strong support system during any crisis and day-to-day requirements in terms of exchange of goods, getting credit, identifying work opportunities etc. The underlying fact behind the development of a strong social network was not always economic. Rather, these communities have a history of participation in each other's ceremonies and festivals.

Prior to the intervention by the Kutch Mahila Vikash Sangathan (KMVS), the situation was different. The Muslim community, who are traditional pastoralists, were very poor and dependent on the Ahir community for economic support and work on their lands. Similarly, the Ahir community was dependent upon the Muslim community for human resources/ (agricultural labour) for their agricultural activities; supply of physical resources such bullock, camel etc. Behind all these factors, the hardships of the people during situations like drought and earthquake played the role of a catalyst in binding people together and accepting each other's support as the only way out for them to solve their problems in the absence of any kind of village level institution. Now the village has formed its own community-level institution, the details of which are mentioned in Table 2 below².

² Source : Moving towards reviving traditional occupations and bringing livelihood security – Annual Report for the year 2009-2010

Table 2: Institutions

Institution	Numbers	Members
Milk Producer Group	2	83
Farmer Mandal Member	1	34
Saving and Credit Group	4	95

Economic Context

Rain-fed agriculture, animal husbandry and casual labour form the primary occupations in the village with subsidiary occupations being handicrafts and services. Table -3³ represents different livelihood sources of the villagers

Table 3: Livelihood sources

Total work force	Agri-culture	Animal Hus-bandry	Agriculture+ Animal Husbandry	Casual Labour	Service	Handi-craft
118	74	47	121	86	15	35

Small and marginal farmers of the village do not have irrigation facilities. Even though the village had a pipeline laid in 1986 for supply of drinking water, the water was available for only three days a week. For the remaining days, they relied heavily on irregular tankers or the women had to fetch water from the nearby village of Vang at a distance of 3 km⁴, losing the earning opportunity for the day. The small, marginal and landless farmers engaged in agricultural and non-agricultural wage labour within the village and in the nearby villages or migrate to the city. The employment opportunity of the village was not the same prior to the initiative by the community and KMVS. The village, due to its geological location, faced acute water scarcity along with a high level of salinity in water, affecting both farming and animal husbandry as well as the availability of potable water. Poor harvest and unavailability of fodder for livestock forced the farmers and livestock owners to depend on the market to buy the required inputs. The livestock owner had to pay Rs 80 to 120 per maund in the open market for fodder. Therefore only the rich farmer could actually afford to access the market. The remaining households had to sell off their livestock or the male members had to migrate to distant places with their livestock in search of water and fodder and wage labour, leaving women alone back home.

³ Source: Detailed Project Report by PIA & District Watershed Development Unit , Bhuj-Kutch- 2009-2010

http://www.ruraldev.gujarat.gov.in/pdfs/Kut_IWMP_12.pdf

⁴ Cited from - Lamba. H., Kapoor.D., (2005-2006); Sahjeevan's Renewable Energy Programmes- A learning Document.

http://www.sahjeevan.org/publications/thematic_areas/renewal_energy/Sahjeevan_Renewable.Energy.Programmes.pdf on 29th August 2011.

Not surprisingly, migration has often been considered one of the livelihood strategies at the household level but this strategy itself became stressful for the family members especially for women of Dador who were left behind at home to take care of the family in the village. She carried not only the burden of shouldering all responsibilities of the family alone but was often hindered by restrictive social norms, diverse work responsibilities, less access or rights to financial and productive resources, information and services. Migration increased the distress of women as multiple other problems cropped up such as sexually transmitted health problems among women whose men went out, nutrition deficiency due to overwork and less intake of proper food, curtailment in the number of meals, increased debt with high rate of interest from the money lender, selling of jewellery, mortgaging of assets etc. During such times, the village of Vang played an important role in the economy of Dador, drawing all its work from the village. External actors like moneylenders, local shopkeepers and relatives provided emergency livelihood support. However, while the local shopkeepers extended credit and goods without cash transactions, when credit reached limits of Rs 50,000 to a lakh, poor households in Dador were plunged into an extremely vulnerable state.

The continuous struggle of the pastoral community coupled with the loss of earnings from traditional occupations led to general apathy towards traditional livelihoods in animal husbandry. Moreover, decline in livestock, inadequate milk production, absence of a milk market, lack of treatment facilities further discouraged people from continuing this activity.

Natural Context

The Kutch region lies in Gujarat, bounded by the Arabian Sea to the West, the Gulf of Kutch to the South and the Great and Small Ranns of Kutch to the North and North-east. It occupies an area of 45,652sq km of the total area of Gujarat that makes it the largest district in India. According to the 2011 census, Kutch has a population of 20,90,313⁵ and its own very unique and fragile ecosystem. The major portion of the land consists of a desert and that brings Kutch under the semi-arid zone. The scanty rainfall, with only 13 average rainy days, results in frequent drought every two to three years. This erratic and variable rainfall results in scanty and thorny vegetation, leading to severe soil erosion in the streams, rivulets and the area around the Raan of Kutch.

Dador, which is located in the Nakhatrana taluka of the Kutch district, also experiences frequent drought. The village falls under the desert prone and uneven terrain. It is 60 km north-west of Bhuj. The village witnesses an average rainfall of 225 mm, which is less than the district average rainfall of 326 mm.

⁵ Cited from Census of India 2011, cited <http://www.census2011.co.in/facts/largedistricts.html> on 1/8/2011

Table: 4- The geographical area of the village is as follows⁶:

Land	Area
Total area of the village	2745.70 ha
Forest area	1808.90 ha
Land under agriculture	757 ha
Rainfed area	757 ha
Wasteland cultivable	176 ha
Non cultivable	3.80 ha

It is possible to use only a small proportion of the land for the purpose of agriculture. The texture of the soil is sandy loam and saline with brown to very dark greyish brown in surface colour. The continuous drought furthermore degrades the ecological condition of the village and contributes to the plight of the people.

The major portion of the village comes under forest cover. Before the intervention by KMVS, a large portion of the village land was encroached upon by powerful villagers from the nearby villages who forbade the local people to take their livestock for grazing on these lands or utilise them for the purpose of fodder.

Physical Resources

The village of Dador is situated at a distance of about 20 km from Nakhatrana, the taluka headquarters and at the time of intervention by KMVS, not too well connected with the nearest city. The houses were all kutchha with no electricity or sanitation facilities. But in the present context, because of government and non-government rehabilitation programmes after the earthquake, all have pucca houses and few houses also have sanitation. During day time the village is connected with a bus service, but at night there is no public transport available on that route. Children go to the primary school in the village. The primary health service centre (PHC) is in Nerona, which is 18 km away. The village does not have any grocery, wheat grinding or vegetable shop within its premises. The villagers have to go to the nearby village of Vang or Nakhatrana to get their household goods or any other necessities.

Financial Resources

The village's greatest strength can perhaps be said to be its social capital. Persistent financial crises is often handled with the support of friends, relatives etc. Other than that, they have access to financial institutions like a bank and a credit cooperative society. Support from patrons also help

⁶ Source : Source: Detailed Project Report by PIA & District Watershed Development Unit , Bhuj-Kutch- 2009-2010 http://www.ruraldev.gujarat.gov.in/pdfs/Kut_IWMP_12.pdf

some of these households during times of need. There are a few cases of households/persons taking loans from the patrons to purchase a truck or tractor. The poor villagers often go to their neighbours or a known shopkeeper from whom they get goods without cash transaction and pay back the amount once they get cash in hand. This was however, not the case earlier. Before the phase of development initiatives in the village or before the earthquake, the system to help each other with monetary support was limited as the people did not have the ability to help other; villagers reported that they did not even have an excess of five rupees that they could lend at a time of crisis. People were totally unaware about the concept of having their own saving groups or credit society. The only source to get financial support was the moneylender who used to give loans with high interest rates. They did not also have access to bank loans as the bank was never sure about their repayment ability. In extreme cases, households used to resort to selling or mortgaging their assets like jewellery, land, livestock etc. Earlier the purpose of loan was for consumption but now villagers take productive loans for investment in agriculture, for buying livestock or sometimes weddings in the family. The village where households were almost on the verge of withdrawal from the traditional occupation of animal husbandry have now taken loans to purchase livestock after the revival of the occupation. The formation of the women's credit group generated a support system for the household. They no longer had to depend upon the moneylender and pay high rates of interest. Rather, they try to fulfil their requirements from their own savings. The bank also provides financial support to the group now.

The Women's Collective Venture

The journey of the collective venture can be described in the following stages

Entry point of the External Agency

In 1986-'87 and '88, there was a severe drought that reduced the livestock population in Kutch. Many animals died or migrated. Farmers dependent upon rain-fed farming became wage labourers. The major impact was on women, as water was not available in the village and they had to walk 3 km to fetch water. Entire families migrated with their animals and the movement disrupted the social equilibrium of the community.

During that period, the Kutch Mahila Vikash Sangathan (KMVS) began to work on a small scale in different locations in Kutch. A team of three initiated the interaction with women in different places to understand their situation. During that time the team visited Dador and witnessed the plight of the village, especially women, very closely. There was a realisation that it could prove beneficial to revive those occupations on which the women of the region were dependent. KMVS began to address

those issues first in alignment with their goal to empower women socially, economically and politically and develop their confidence in decision-making and gaining access and control over resources. The organisation initiated working with women with the understanding that they were not merely beneficiaries of their intervention, rather stakeholders by way of programme planning, designing and implementation⁷ of livelihoods projects undertaken in the area. In the initial days the team experienced resistance from the villagers, as outsiders were always looked at with scepticism. However, with regular visits and meetings, the KMVS team developed a rapport and gained the trust of the villagers.

Targeting the core problem

For the first time women were asked to identify and discuss their major issues and concerns when KMVS came to the village and tried to understand the situation of these rural women. This was the genesis of collective action. In the initial stages KMVS addressed two-three issues with women by forming groups. One was on health, adolescent girl child education and embroidery. Frequent dialogue with women repeatedly indicated to KMVS the fact of continuous resource depletion and degradation of the environment due to water scarcity, leading to a breakdown of the traditional occupations of agriculture and animal husbandry. KMVS realised that in order to bring about changes in the lives of rural women, their primary occupations needed to be strengthened. Water therefore was the first issue to be addressed. Continuous discussion with villagers and a survey revealed that earlier, the people had their own drought mitigation and management system. But with the passing of time the system had faded away. Moreover, women realised that government drought relief activities were not sustainable and understood the fact that until and unless there is work for sustainability there will be no solution.

Identifying unavailability of water as a root cause of the vulnerability of the women, KMVS along with the women themselves, took up the initiative to work towards ecological regeneration by reviving the traditional sources of local water and learning new skills of natural resource conservation and management. Soon the need for a technical support team was felt. The Jan Vikas Ecological Cell (presently known as Sahejeevan), joined hands with KMVS to provide eco-technological support for the regeneration of natural resources through decentralised and self-managed village institutions⁸. Women were given training and their capacities on natural resource conservation and management enhanced in order to equip them with skills in designing and managing environment-related projects. The illiterate women of Dador village took up the challenge to solve the drinking water problem by ensuring

⁷ Cited from Ramachandran. V., Saihjee.A. (2003); Flying with the Crane- Recapturing ten year's journey of KMVS

⁸ Cited from Ramachandran. V., Saihjee.A. (2003); Flying with the Crane- Recapturing ten year's journey of KMVS

community ownership and management built upon the foundations of indigenous knowledge and developed norms for its maintenance and operation.

The work began with a geological survey in which few patches were identified where there was sandstone due to which there was a possibility to get water recharged. For the first two-three years, there was not much increase in water. After that three water harvesting structures were constructed - the Prabasar talab, Debrai and then the Dakhai dam. With these structures, the storage area for water increased. Ultimately in 2003-'04, the community, under the supervision and management of the women's collective with support from KMVS and Jan Vikas, made a tube-well and well for drinking water. At last, the village got its own water. Not only that, the recharged water tank also increased the water table of the farm land, which in turn gave farmers the hope for an increase in agricultural production. The entire watershed programme was implemented by the women of Dador village. However the problem of taking the water to the village and developing a sustainable distribution system remained to be addressed. Mechanical pumping was not the solution. That was when the women realised the need to form rules and regulations for management. They formed their own water committee for the management of the water and tax collection from the community. With this collective effort, women managed to plan, guide and supervise the entire activity with the support of the external agencies and it enhanced the confidence and status of women in the family and society. For the first time the community came up with the concept of a group well that provided irrigation facilities to poor farmers and their households. The formation of this village level institution by women brought tangible changes in the community in terms of developing interest and hope towards traditional occupations, generating self-sufficient water sources within the village and increased the confidence and decision making abilities of women.

After the earthquake of 2001, it became clear that the women of Nakhatrana block could work independently and they registered a community-based organisation in the name of Sairi Jo Sangathan (SJS) under the bigger umbrella of KMVS. Many women leaders came up from Dador village.

Systematic Planned Development

The success of the watershed programme motivated the women to take the next step towards the revival of the traditional occupation of animal husbandry and give it a business model which would enhance the economy of the village and bring livelihood security. The collective began by addressing the problems associated with the rearing of livestock such as fodder crisis, shrinking grazing land due to encroachment, proper

health facilities, infrastructure for drinking water, high-cost cattle feed, non-availability of credit for the purchase of livestock etc. Through regular group meetings, dialogue with external agencies, bargaining and negotiating with the authorities at different levels, SJS began to tackle these issues one by one. The first initiative taken in this regard was the generation of a fodder bank. The idea was to develop a model for a fodder bank that could support animal husbandry during drought and they realised that a solution lay in reclaiming the community land that had been encroached on by influential people from adjoining villages. The women came forward and resolved the problem with the help of the Panchayat along with community participation. A systematic model was designed with the support of the external agency. A village Samiti was formed with five women, three community leaders and one Panchayat member for the process of adopting and setting up a Joint Forest Management System⁹ (JFMS) in the village for fodder plantation where grass seeding on forest land in groups and promotion of green fodder cultivation on private land was done. The external agency provided seed and paid all the expenditure for crop formation for the initial year. When the grass was produced, the Samiti looked after the fodder distribution system within the community and used the revolving fund every year for further investment.

Women into Dairy Business

The next interesting initiative that was taken up in Dador was dairying. Most households in Dador keep cows, buffaloes, goat and sheep. However, what was missing was a market for milk. In the beginning they used to make mawa (cream) and sell it. During the peak season (June – July) for marriages they used to get a decent price for the cream. But during winter and the rainy season the rate would dip and the market would become irregular. Ten years back when the dairy system collapsed in Kutch no one had thought that it could be revived. Dairy revival happened in Powerpatty first and women from Dador took the lead role. The village of Powerpatty took the initiative to work towards the revival of dairying and Sahejeevan tied up with NDDDB with an understanding that the collaboration of both the organisations would revive the animal husbandry sector in the area. NDDDB set up its bulk milk cooler or dairy with assurance from the producer that they would supply milk to NDDDB in summer and in drought. The entry of NDDDB made the milk market vibrant in that belt because of the increased price rate and assured market.

However, various problems cropped up with the NDDDB association such as less space in decision-making, lack of ownership, lack of faith in the central level fat measurement system in which there were variations etc¹⁰

⁹ Cited from Moving Towards Reviving Traditional Occupations and Bringing Livelihood Security – Annual Report for the year 2009-2010

¹⁰ Source : Moving towards reviving traditional occupations and bringing livelihood security – Annual Report for the year 2009-2010

for which the producers felt the need to run the dairy themselves. The women took up the challenge to get into the milk business themselves and formed a women's dairy, where women engaged in milk collection and selling. The milk was collected in the village and sold in the nearby villages. Finding direct milk selling less profitable, the women decided to sell its by-products such as butter milk and ghee. The women's milk producer group got into the venture of ghee-making from cow milk and set up a ghee-making unit in the village with proper infrastructure. Presently, 34 women are associated with the ghee-making unit in Dador.¹¹ The revival of the dairy sector reshaped the practice of animal husbandry and the rearing of cows and buffaloes in the village. The women also set up a cattle-feed centre which they maintain and manage, providing villagers with cattle feed at subsidised rates. As production intensified in the village, concern over animal welfare also took centre stage. An animal health service centre has been set up by the women of SJS and Sahejeevan in response to the poor quality of health services for the livestock.

Outcomes of the Collective Venture

The livelihood security achieved by the systematic collective action of the women led to an increase in agricultural production, local institution development, and establishment of inter-linkages with external agencies, development of women's capacity and decision-making powers, reduction in migration, access to resources etc. as stated by the villagers. The successful management of different initiatives not only brought livelihood security among the poor households in Dador but also strengthened women's empowerment. The pastoral community who had once lost all hope in livestock rearing for a livelihood, returned to their traditional occupation with new aspirations and motivation rather than considering livestock a burden, especially during drought. In the present scenario it is observed in the village of Dador that animal rearing has become a gender neutral practice where both male and female members, even the young boys and girls, share the workload, show interest and take care of the animals. Enhanced individual and collective capacities of women acted as an effective safety net for the community in the revival of animal husbandry. The experience of women revealed that the process of revival required them to be in continuous dialogue with different agencies, pooling resources, designing on-time services etc which is not possible without capacitating and preparing themselves and their group to meet the demands of the task.

The back-up system developed by SJS resulted in the purchase of more livestock and intensified the livestock rearing practices. As reported by the SJS coordinator, there is increase in the number of loans taken for the purchase of livestock as people see profit in animal husbandry. Sixty-per

¹¹ Source : Moving towards reviving traditional occupations and bringing livelihood security – Annual Report for the year 2009-2010

cent of the loan goes for animal husbandry and 40 per cent for agricultural purposes. The development of effective back-up plans enabled the milk business to become a viable source of income for the poor households. A total of 85 households are associated with milk selling and approximately 500 litre of buffalo milk and 140 litre of cow milk is collected from the village in a day. The per-day earnings of the household have increased by Rs 50 because of dairying after all expenses have been met. Furthermore, the collective action helped the small producers of the village to access the large and competitive market. Most households owning livestock reported that the animals provided food security, income and status in the community. Training in animal health and management, and access to veterinary care have controlled animal diseases and increased productivity.

The revival of animal husbandry would not have been possible if the core problem of water scarcity had not been solved. Water conservation work carried out in the village improved the agricultural output. Earlier there was no skilled person in the village. With the task of infrastructure development such as check dam, talab etc., people developed skills in masonry and many have taken it up as an occupation. Earlier the income of a mason was about Rs 60-70 a day. Now, with increased skills they can earn about Rs 200-250 per day. Intensification of agriculture and extension activities have increased opportunities for employment and better wages for those who were dependent on wage labour. Earlier, the landless and wage labour were assured of only four months work in the village. For the rest of the time they were dependent on government hand-outs or other labour work outside the village. Now, only 30 per cent of the population migrate for work.

To ensure the sustainability of the intervention, institutional development at the local level played a vital role. Different groups were formed by way of four savings-and-credit groups, two milk producer groups, one farmer mandal, one water committee, which ensures proper management by the locals themselves and proper utilisation of resources. The inter-linkages with the external agencies over a period of time for technical inputs and services has strengthened the institutions and developed the confidence of the illiterate women to take decisions and improved their ability to have dialogue, design and implement the programmes on their own, do business, bargain and negotiate with the market and demand their rights with the government and Panchayat.

The most innovative aspect of the whole intervention was the initiative to conserve cow milk along with ghee in a market that is dominated by buffalo milk and its by-products. The second interesting aspect was the women-led watershed programme. Generally, women are always sidelined in such projects but in Dador the entire intervention was made

by women with the support of external agencies. The challenge however lies in sustaining the institution for which expansion and large-scale production is required. Thus the women need support in developing better marketing skills, processing technology and skill, heavy investment and brand building. The other challenge is to keep a check on over exploitation of water resources.