



Grassroots Women's Approach to Capacity Building

"...it is important to learn from external knowledge but the critical task is to understand the application of any knowledge within our specific context." (Malatiben Chaudhari)

Indigenous knowledge context of a grassroots woman innovator

Malatiben Chaudhari is a female farmer in Gujarat, India who has struggled with her life in a challenging rural environment and disenfranchised community. In the face of these constraints, she has built and improved indigenous

M capacity to create efficient and profitable livestock enterprises, and supported sustainable development in her community and beyond.

Through her innovations, Malatiben has successfully transformed the economic activities of an agriculturally depressed region in the Mehasana district of Gujarat. Over the years, she has successfully built a thriving farm and livestock enterprise.

Malatiben Chaudhari's narrative summary presented here highlights two aspects of indigenous knowledge:

- Understanding by local community members of specific needs and their ability to find unique and sustainable solutions to seasonal and long-term problems; and
- The ability of grassroots women to overcome constraints and build capacity within their communities and regions

Malatiben Chaudhari's narrative

I am a woman farmer and livestock keeper. I always feel the urge to do something new despite difficult circumstances. I was born in a *Prajapati* family (a marginal caste group) in a poor rural community in Gujarat, India. As a child, I observed a local teacher who used to walk to the *Harijan* (Dalit) community every evening to conduct adult education classes. After a while, I gathered the courage to ask him whether I could also attend classes. These were my early lessons in 'literacy'. We had no school or classroom materials. We all wrote with a stick in the sand. I managed to study up to the 4th standard and then had to drop out because the high school was too far away. In those days, not many girls could continue their education beyond the primary school.

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My husband belongs to a Chaudhari caste family. Its social status is higher than the status of my family. After marriage the family gave us a small room in their home in the village. My husband's family did not own agricultural land and did not earn much. We tried to start a small grocery shop but failed. I was not happy and wanted a profession of my own that would make me proud of my work. Because of my parents' background as poor *prajapati* (pot makers), my husband's family never fully accepted me and considered me not capable of thinking on my own. My Sasri and the gam (in-laws family and village community) considered me ill-equipped for land ownership or farming. I had to face humiliations every day. They told me in many ways that my knowledge was not valuable and that I did not possess 'Aadat' (worthy skills).

I remained silent for a long time but continued to observe the village situation. Almost all families produced a monoculture cash crop Bajara (*Pennisetum glaucum*, Pearl Millet). Poor land quality and continuous droughts prevented viable or profitable commercial farming. People kept livestock

mainly for farm work. They concentrated on agriculture and not on livestock rearing and milk production as a source of income. Buffaloes and young calves were not given proper care. The livestock was always kept in crowded and unclean spaces. The young calves were given left-over fodder and received poor quality care. It took 6-7 years for the buffaloes and cows to produce milk. The average milk production per buffalo was 2-3 liters a day. It was clear that people in the region were wasting their money on the livestock. It was too much of a burden for the women to manage agricultural activities, children, household work and livestock husbandry.

I thought that it should be possible to grow local fodder in the poor quality soil. Why not try livestock management and earn money through selling milk? I was convinced that if we focused on livestock husbandry, the animals should produce milk within 2-3 years and we would save 4-5 extra years' expenses and efforts. The challenge was to achieve it all: no pesticides, utilization of local resources, high quality care for the livestock, manageable workload, improved overall milk production and incomes and community recognition of my knowledge. No one believed me. So it was important to demonstrate the new approach to the entire village.

Kudrati Niyam and scientific approach (natural logic and systematic efforts)

The way our children require nutritious food and constant care, calves also need special care. So in 1970, I decided to try out dairy livestock. I was determined to prove that I had the knowledge and the capacity to perform difficult tasks on my own. No one gives an opportunity to a woman...we have to find one and pursue it.

Initially I borrowed money and bought two calves for Rs. 40 in the local market. I looked after them day and night like my children. I thought carefully about the daily needs of the buffaloes and young calves, such as dry and green fodder requirements, health problems and home remedies, continuous water supply, clean environment, pregnancy cycle and other seasonal needs. My own family members and the village people ridiculed me to remind me that I did not have the required skills and knowledge to manage the livestock and that I was crazy to look after the livestock as my children. Yet, I was determined to work hard and learn more despite the lack of encouragement from my own family and community. I needed the milk money to support my family.

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Editor: IK Notes
 Knowledge and Learning Center
 Africa Region, World Bank
 1818 H Street, N.W., Room J5-055
 Washington, D.C. 20433
 E-mail: pmohan@worldbank.org

I always wanted to understand the ‘science’ of livestock management and at the same time rely on my *Kotha Sus* (context-specific knowledge and intuition). *Kotha Sus* is not exclusive like formal schooling and expert knowledge — even illiterate and poor women have it and use it. My mother taught me about taking care of animals. She had found home-made and quickly available remedies from the household or the nearby forest for treating livestock. I have also learned — and continue to learn — a lot by observing ecological and economic changes within my village.

I always believed that *Chila per chalava karata chilo padvo vadhare agatyano che* (it is more significant to set a trend rather than follow it). I agree that it is important to learn from external knowledge but the critical task is to understand the application of any knowledge within our specific context. It is also important to focus on innovation process and optimize it in order to facilitate a broader impact at the regional and national level.

Planning a locally successful enterprise: key principles and values

The critical aspects in livestock keeping are: knowledge of the daily care process; knowledge of available fodder material; continuous learning about innovative livestock husbandry practices. From the beginning I have focused on an integrated farming and livestock management approach.

Utilization of agricultural waste: I observed that many residues of dried Bajara (*Pennisetum glaucum*, Pearl Millet) were left behind after harvest in the fields. I tried to mix the residues with fodder grasses and created a special ration for my livestock. *This has become a highly nutritious fodder formula used by other farmers and communities in the region.* The mix is always prepared especially for the animals depending upon their health, weight, height, size and current condition. A special mix of several local ingredients including green and dry fodder, crop residues, government recommended nutritious feed additives and other secret home-made ingredients such as Jaggery (unrefined brown sugar) are mixed to prepare a local feed. I am strongly against the use of chemicals and artificial ingredients in farming and livestock management. *The total milk production per buffalo/cow in my stable is 2-3 times higher than the average in the region.*

High-quality care

People in the village were shocked when my buffaloes produced a total of 17.3 liters milk per day for the first time. This was double the average of milk produced by other animals in the village. Soon the livestock management experts, agriculture scientists and government veterinarians came to see my small farm and innovative practices. Both buffaloes won awards in the local livestock and regional milk quality contest. For the first time in my life, I won Rs. 25 (approximately US\$0.50 at present rates) and Rs. 200 as a reward in various contests. Finally my hard work had paid off and someone had recognized my efforts. My knowledge had become valuable.

Once my livestock enterprise got stabilized and I could hire more help, I began to focus even more on the special needs of my animals rather than on increased milk production alone. The question I asked myself was “If I feel the need to drink water anytime, animals probably feel the same way”. So I installed a continuous water supply system for drinking and insisted on keeping the animals and stable clean.

At present, five workers look after the stable day and night. All animals are given baths three times a day. I make sure they do not get ticks. A clean environment and not medication prevents ticks. Residual fodder from the trough is removed immediately to maintain a clean stable. The young calves, buffaloes and cows receive fresh fodder mix according to their age, size and weight. All workers ensure that fodder is not mixed up with droppings. Many other farmers do not pay attention to these details. Most male farmers own 4–6 animals and use family labor (mainly women) to manage their livestock. It is very difficult for a woman to take care of so many animals, given the household, family and farm responsibilities. It is so important to have a small number of livestock that is manageable for the women in the family.

Knowledge sharing and learning

I also believe that specialists in the field and professional institutions must test local experiments and new knowledge. I attend local and national innovation-related workshops and livestock management related events. I always interact with government and foreign veterinarians, agricultural scientists and other dairy-management experts during their visit to the

area and during a village level meeting or a workshop. Women are not supposed to attend these kinds of institutional gatherings but I make it a point to participate. I am trying to convince other women in my village to do the same — but it is not easy. *It is so important for rural women to have access to institutions of knowledge and external networks.*

Regional impact

A few years ago, I heard about a specially prepared animal feed mix distributed by the AGRO Research Company and the Doodh Saagar Dairy (Regional Milk Dairy Cooperative), which was not popular in the area. The animals did not like it very much and therefore farmers did not buy it. I mixed the feed with the locally available fodder in a particular way and animals started to eat this new, very nutritious feed. *Now I feel proud because farmers in the district are using the same feed by using my methods to increase milk production.* I am happy to have set a trend. Company representatives visited my farm and thanked me for developing the local version of their product.

Many farmers in the area are now focusing on dairy keeping rather than farming. Initially, the women in the region observed my practice carefully and adopted them. The male farmers took some time to recognize the new approach. Now we grow crops for subsistence purposes only and fodder for milk production. Many farmers and communities in the region now rely on dairy keeping. *We support the second largest Milk Cooperative — Mehsana Doodh Saagar Dairy — in the region.*

Grassroots women's participation and asset ownership

Today I own two buffalos and nineteen cows (Sankar Gai — the local breed). My livestock averages 10–12 liters of milk per animal per day, which is more than double the average in the region. I am earning well and live a comfortable life. The Mehsana Dudh Saagar dairy in the village has computerized its functions and now we women can measure the fat percentage in our milk and receive the appropriate price for the milk. This way it is easier to keep track of daily production and monthly income. I have purchased land with this income, employed four full-time workers, renovated the house, installed a bore-well in my farm and sent my son to the university.

My status in the family and within the community has changed — now I command respect and moral authority. Life is never easy for women, but they have to learn to struggle despite difficult circumstances. I believe that ‘Mushkeli to Sanshodhani Janamdata Che’ (Hardship is the mother of innovation).

My only fear is that the next generation expects quick results and forgets that details such as a clean stable or continuous water supply are critical components of successful livestock keeping. The younger generations have received formal education and do not respect ‘rural professions’ or the knowledge of the rural poor people. *It is a tragedy that acquiring formal education means the loss of Kotha Suz and Atmagyan (indigenous knowledge and wisdom).* My only hope is that organizations like SRISTI, which recognize and support our efforts, will preserve innovative and sustainable indigenous practices.

Narrative by Malatiben Chaudhry, Gujarat, India.

Documentation, translation and adaptation to the IK Notes format by Preeti Shroff-Mehta, Washington, DC, USA. (prtshroff@aol.com)

The narrative presented here is part of the doctoral research study prepared by Preeti Shroff-Mehta at the State University of New York at Buffalo during 2000–2002. Prof. Anil Gupta at Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI), India, www.sristi.org, guided the field study in Gujarat and Tamilnadu states in India.