EMPOWERING LIVES
THROUGH STRATEGIC INTERVENTION
STORIES OF CHANGE AND TRANSFORMATION

AMBUJA CEMENT FOUNDATION
A write shop organized by ACF during March 10th to March 13th 2013 at Rabriyawas in Pali District of Rajasthan helped the staff members of ACF come up and document various interventions done by them at various locations across the country. As part of the documenting the learning’s inherent to these actions ACF publishes these as cases for others who are also involved in similar efforts elsewhere. They will surely take cue from these learning’s and initiate actions for improving their own efforts to make MDG and women empowerment a reality. This publication is for wider circulation and dissemination.

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Acknowledgement

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ACKNOWLEDGEMENT

The facilitator would like to take this opportunity to acknowledge the work that ACF have done since so many years. It is their untiring efforts that we have tried to capture and appreciate through this exercise. These efforts have helped in bring smiles in families across the country.

The case write shop was conceived to document the learning inherent in these process. This book has been possible due to the efforts put in by the authors. They made the life of the case writers and facilitators both smooth and comfortable.

I would like to extend a special thanks to Mr. Devkant Viswakarma for his imaginative creation and depicting the interventions through sketches which now appears as part of this book.

I would also like to acknowledge the support extended by Ms. Bharti Gaur and Ms. Advaita Marathe in facilitating the process. A very special thanks to Mr. Sibaji Bose who helped the language editing of these cases and also to Ms. Sajana Jayaraj of ACF, who helped in the editing this book.

Nabarun Sen Gupta
Stories that speak of struggles and change, of movement and progress are always inspiring. Each day, team members of Ambuja Cement Foundation experience incidences that challenge our perceptions about rural India, about women, and the will of communities to bring in meaningful change in their lives.

As Ambuja Cement Foundation, we are the CSR arm of Ambuja Cements Ltd. We first began our social development work in the communities around the Ambuja plant in Kodinar, Gujarat, 20 years ago. Today, our work has expanded to 12 states and 22 locations across India. It has enabled us to work constructively in the areas of Natural resource management, Health, Education, Skill Training and Women’s Empowerment in rural India, impacting lives of more than two million people.

Each year, ACF enables field teams to hone skills in documentation and writing, enabling us to share our work better. The stories featured in this book span the core areas of education, health, sanitation and empowerment from across the nation. They have been written by the ACF field team and tries to put in perspective the challenges faced in the field, and ways to address them through a participatory development strategy.

This book features inspiring people, who individually and collectively are transforming lives in their villages through their work as health workers, animal care givers, teachers and entrepreneurs. Each story is a testimony to their self-belief, and I warmly invite you to read through these stories of empowerment.

Pearl Tiwari
Director
Ambuja Cement Foundation
The Social Development Agenda of ACF
Anagha Mahajani

An ability to respond to the felt needs of the community by taking the community along; and a strong belief in the capacity building of the locals, has helped ACF take a big leap in meaningfully reaching out to over 1.5 million people during last 20 years.

While working on MDGs, ACF strongly believes that its development initiatives will seek to produce expected, visible outcomes, while the processes strengthen people's ability to participate more fully. Hence, both - the projects and the process - are equally valued in ACF. In the broader development context, opportunities for participation are a path towards empowerment which is built through enhancing capacities and a sense of ownership.

ACF attempts to reach out to all sections of the community with a focus on facilitating participation of the marginalized. Women in this case become the center of focus considering their consistent and sincere efforts to change themselves, their community and the environment. ACF hence works closely with women, and has been able to evolve processes that create an impact on families, communities and villages.

Every effort documented in this book is an example of wide-ranging local initiatives by ACF and their interrelationship in bringing about overarching sustainable change in the living standard of the people. Each of the case mentioned here initially evolved as a small local initiative but subsequently grew as a model in itself and in long run has aligned itself with larger systems like NRHM, NBA or a federation. It’s been a journey on the path towards sustainable future for the initiatives.

The measured outcomes have been colossal including increase in earnings, positive change in yield, improved breed and hence better productivity. All this has led to improved access to finance and in turn freedom from exploitation for resources from economic position. But significantly achievements are numerous also in terms of improved technical knowledge and skills, better communication abilities and enhanced confidence as well as negotiating capacity.
The story of RRWHS brings in value of considerable reduction in drudgery to fetch water and its positive impact on community health and sanitation. Moreover it has been an opportunity for women to create their own role identity at community level like in case of swasthya sakhis, balmitras and pashu swasthya sevikas. Federation of SHG groups has emerged as an apex body highlighting the relevance of effective supply chain management by providing high value services and sharing dividend with the members.

Community members have come together for a cause, committed to work together by contributing, overcoming several challenges and have been able to resolve issues in cases such as sanitation. The effort has led to bringing harmony among community members as evident in the case of SHG federation and in case of PSS it is extended to improved harmony at family level since women are supported to take on the challenges involve in higher responsibilities.

With its mission ‘Energise, Enable, Involve communities to realize their potential’ ACF continues to ignite local talent in bringing about meaningful change in their own life. And the enhanced capacities continue to spin-off change in community’s vision for an enriched future for all.

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The Millennium Development Goals (MDGs) to which the Nation States are signatories have ignited a few sparks of responsibilities from many Corporate Foundations. Many corporate foundations have been working for a long time on issues like providing health facilities, undertaking educational interventions in schools and carrying out drinking water and sanitation programmes in villages in and around the factory premises. However, one can observe certain subtle differences in the methods that ACF adopts on these issues. As a result of ACF’s innovative approaches, sustainable changes have taken place and these initiatives, over a period of time, have become people’s movements. Herein lies the difference between ACF’s work and that of other corporate foundations. The cases in this volume seek to make an in-depth portrayal of the methods employed by ACF. We shall briefly dwell on this aspect before going on to share some outcomes and some important takeaways for those involved in similar initiatives elsewhere.

The initiatives, more than anything else, signify a challenging but progressive journey at all the locations where the ACF teams have intervened. In most of these journeys the beginning was made from nothing. In some cases, the teams had people with prior experience of working on these issues. In other cases, the team developed its own understanding as it worked on
the idea and then through time-bound implementation took the same to logical conclusions. At all times, there was always a strategy that guided the work. Let us examine some of them.

**Investments in learning by doing:** ACF invested a significant amount in experimenting around the idea. The ideation was informed by the time invested by the team in learning about the community and the issues. This helped the team to slowly but surely make efforts towards evolving robust strategies which worked in this context. Examples of these strategies can be seen in the case of knitting in Rupnagar (also called Ropar). The team experimented with different income generating opportunities with the women, which helped them in realizing the mantra of success. In the case of the women’s federation starting a business venture on behalf of its member self-help groups, the women members had to learn about business ventures prior to deciding on the mode of operation. Investments were made by the ACF team in exposure visits, market visits and visits to suppliers. In the case of both the initiatives on maternal and child health in Rajasthan and Maharashtra, the work started with the traditional strategy of sending mobile dispensaries to the far-flung villages. However, soon they realized that the strategy of initiating the preventive care approach would be more effective.

**Invest in HR at the grassroots:** One common strategy adopted by the ACF team was to work towards augmenting the skills and attitudes of the HR chosen from among the beneficiary groups. This strategy came at a reduced price, but became sustainable over a period of time. The investments made by ACF in selecting, training and providing honorarium to the health volunteers named swasthya sakhis, to the educational volunteers called balmitras in schools and also to the Para Vets in Darlaghat, Himachal, turned out to be extremely sound and prudent in the long run. These people, even after their disassociation with ACF, retained their newly learned necessary skill sets. Consequently, they were much better off than others in their own villages and stepped in to serve the community when the situation arose. ACF invested in training them through structured and well-designed sessions and also in helping them as they practiced the knowledge. They received honorarium from ACF for practicing and were also provided inputs throughout by the management team that monitored their work. All these investments led to the creation of a cadre of para-professionals. Some of them have since graduated to become government staff.

**Taking support of the state in making things work:** The strategy that probably helped ACF the most was taking into confidence the state machinery in
carrying out its work. In no location did ACF decided to go on its own. Even though they had their own resources and resources under their own control, they never intervened alone. Even at the grassroots they worked through consultation with the government functionaries.

A classic example of this strategy could be found in the case of Dairy at Ropar where ACF coordinated with the Milk Federation. The Para Vet training, where the local Animal Health Officer became the trainer of the Para Vets, is a similar case in point. In the case of the Para Vets the strategy included time to time training of the women. The animal husbandry officer would organize camps where the Para Vets worked with the medical teams in carrying out vaccination drives, etc.

In the same vein, the example of convincing the government officers at the block level to provide resources for building sanitation facilities in Maharashtra shows the importance ACF gave to these aspects. The balwadi support system also went through the channel of the Government. The Block education officer, the school headmaster and the Village Education Committee were consulted while selecting the balmitra candidates. The cases have proved that such coordination efforts with the government were critical to the success of these interventions.

Making people pay for the goods and services: This strategy, which is construed as having the essence of liberalization and thus having many detractors who swear by welfare economics, has actually shown some very positive results. People paying for a service tend to take the value of the service more seriously. As they pay, they put a stamp on its quality. ACF understood this from the very day it ventured into the role of taking service to the people. The knitting training came at a price – albeit a small one – and there was a fee. The knitting machines had to be purchased by the women who wanted to make a living out of it. ACF consciously did not provide any subsidy – though it had the resources to do so.

The dairy machines came from the contribution of all the three parties – the federation, the members and then ACF. The chaff-cutting machines in Darlaghat were paid for by the families that bought them while ACF provided the transportation cost. In the case of balmitras, the community started paying a token amount towards the honorarium of the balmitras, proving that the community appreciates quality and is ready to pay if the services offered have the mark of quality. This propensity of the community came to the fore in the case of the sanitation movement in Maharashtra and the drinking water initiatives in Rajasthan and Gujarat also. All those who wanted the services
paid substantial amounts to get the same. ACF derived its strategy from the belief that people must pay to avail the services. However, ACF paid its share in making people offer the services, the technical support, the HR support and the investments in awareness camps and exposure visits. These aspects require resources and ACF took up the responsibility.

**Making people do the work and supporting them on technical fronts:** This strategy has been the hallmark of the infrastructure support programmes for the people. The drinking water programme in Gujarat and Rajasthan was done following this approach. ACF discussed a design on Roof Rain Water Harvesting with the households that wanted to take ACF support. The parameters were discussed with the households and a transparent procedure was adopted to make ACF contribution reach the households. This strategy worked to ACF’s advantage as it did not have to get involved in managing the construction. In the case of the sanitation project, the responsibility was transferred to an institution of the people. They decided the modus operandi.

ACF provided its share when the institution came with its request on the amount that was agreed upon. However, in both the interventions, the technical specification was discussed threadbare with the community and they were clear on the technical aspects and also on the financial aspects. This helped in making the programme a hit and people accepted it as something that would certainly bring for them a better quality of living. Tight monitoring of quality and a lot of emphasis on awareness building through various means – street theatre, essay competitions etc, – have made the programme a people’s movement rather than an ACF-sponsored intervention. Only after the villagers resolved to make their village defecation free did ACF decide to put its financial stake.

All these aspects of strategy adopted by ACF have shown tremendous results. Some of them are:

**Empowerment of women has happened on a large scale:** In this case the scale is not just in terms of numbers but also in terms of the change in the quality of life of women. The women SHG members’ federated body at Kodinar, Gujarat, has over 3000 members, the drinking water project at the same location has covered 3000-odd households and another 1000 in Rajasthan while the MCH programme has covered over 30000 women in both locations. The sanitation programme has just made a modest beginning but with more and more villagers realizing that it is something that they need to do for themselves the movement has the potential of spreading in many other villages. All these have impacted many
of the MDGs. However, empowerment is also to be seen from the angle of women exercising control over critical decisions. The best example of this is the first women’s cooperative bank operated by the women’s federation at Kodinar. Though this coincided with the centenary celebration of the first cooperative bank of this region, the important aspect is that this bank will comprise women members only. Similarly, at Ropar, Punjab, the first-ever women's milk cooperative societies, controlled wholly by women, came up in four villages. The first set of women Para Vets in Himachal dared to do something unique in what had till then been a male bastion. Then there is the example of the sanitation drive which had one village flaunt the name of the women on the walls of the house they live in. These are small but important beginnings as regards empowerment of women.

**Impact is sustainable:** The most important aspect of the process had been to make the change irreversible. Many a time when the organization pulls out of the process the situation reverts to square one. Aware of this, ACF took effective steps to make change a permanent feature. The Para Vets who had been on the rolls as volunteers have slowly started earning something more as they offer services. The women members of the dairy have been running the dairy almost on their own as they have learnt the important skill of keeping records. Similar is the case of the women who had been in the forefront of health care delivery. ACF had pushed hard for many to acquire educational qualifications so that they have now been absorbed in the government healthcare services as ‘Asha’ workers. The sanitation movement in some villages has raised the consciousness level to such an extent that as a community they perform all kinds of actions from cleaning the road to watching out for those who break the unwritten diktat against open defecation. These have made the change sustainable.

**Confidence of women has increased:** One has to see to believe this. Women manage the accounts, take note of the fat level in milk and make timely payment of the milk procured in the cooperatives. The women of Ropar directly deal with the traders who supply them woollen yarn for making undershirts. They are contemplating launching their own brand soon. The women in the hills of Darlaghat, Himachal, interact with doctors and others and carry out animal diagnosis with élan. They carry out vaccination drives, inspect animals and are able to diagnose the problems and often prescribe the necessary medicines on their own. However, they communicate the problem to the doctor over telephone before they do the treatment.
The women of SHGs in Kodinar are able to manage their own bank and conduct various operations related to trading in essential commodities and selling of weather insurance products among their own members. The teaching methods and standards of balmitra women are almost at a par with that of trained and qualified teachers. The women para-health workers are today most respected in the villages. They are the first to be called in times of crisis as they have – time and again – saved lives in such situations. They are called not just for health related work but their opinion and support are obtained by men and women alike in many other matters. One can surely attribute this to the confidence that women have demonstrated through their actions.

The work done by the Foundation to set examples before us deserves special mention and recognition. These changes that have been highlighted above have not happened on their own but due to the processes adopted by ACF in making them happen. As ACF did its work, it also realized that working on these issues provides some important sets of learning. These are:

**Resources are required but one must use it at the right juncture:** There is a tendency among many and particularly among the CSR foundations to measure one’s worth in terms of the amount of money spent on CSR activities. ACF, however, went beyond this and with a difference. It used resources only for the right purpose. A foundation like ACF could easily have done a sanitation programme on a large scale using its own resources. But it understood that until and unless people’s stake in terms of contribution is there in the work, the programme will not have much of an impact. The same principle was adopted in the case of the drinking water intervention and in the case of the knitting intervention where the women were made to purchase their own knitting machines. The state should take cognizance of this and more so because in most of its income generation programmes giving sewing machines free of cost has become a tradition. Many other foundations also toe this line.

**Investment in building human capital must precede any other investment:** ACF realized this early on and investments in building human capital happened on a large scale in all the interventions. The nature varied from meetings, exposure visits, and sammelans to video shows, training programmes, cultural shows etc. Once the need was felt, people pitched in with their own resources. MDGs, which often drive the nature of investments coming from the state, must also take due cognizance of the design adopted by ACF. There is a carefully researched and thought out method in the processes that have
been adopted to correct the situations. The case also proves that resources if spent judiciously will make changes permanent. Corporate foundations which are new entrants in the business of development must realize the worth of wise and measured spending even in development work. ACF’s work on MDGs indisputably contains important learnings for replications.

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Nabarun Sen Gupta works as a freelance consultant and has facilitated the case write shop with a team and supported in documenting the interventions of ACF Social Development Initiatives.
Saving Two Lives
A Case of Maternal and Child Health Intervention by Bare Foot Health Workers
Introduction

Ambuja Cement Foundation (ACF) had been associated with provisioning of primary health care services to both mothers and children in Chandrapur District since 2005. The work on health had a modest beginning in 2001, when ACF realised that lack of facilities at the primary health outposts, was the prime reason for high mortality among mothers and children. The work initially started in 12 villages falling in the core area of the cement plant, but later expanded to cover another 160 villages across three blocks of Chandrapur district. The case describes the genesis of this intervention and touches upon several important areas for others to learn.

Context

Infant mortality is a deadly scourge the world over. Approximately 4 million infants across the world die in the very first month of their life, the majority of whom die within the first day itself.\(^1\) In India infant mortality rates (IMR) and morbidity figures indicate a grievous lack of care of infants. Maharashtra is no exception. Here over 80% of
infants die due to some infection or the other. Asphyxia and pre-term birth contributes to high IMR. Reducing IMR rates by two-thirds from 1990 to 2015 is one of the millennium development goals (MDG). Reducing the maternal mortality rate (MMR) is also one of the MDGs. Reasons for maternal mortality range from infections during birth, haemorrhage, and hypertensive disorders during pregnancy to complications of unsafe abortions.

A study\(^2\) conducted in Maharashtra revealed gruesome figures. Over 2,00,000 infant deaths are recorded every year in Maharashtra. One of the recommendations of this study was to train the women in the villages on maternal and child care practices. In accordance with this study recommendation, an organisation named Amhi Amchya Arogya Sathi (AAAS) has been actively working in Kurkheda block of Gadhchiroli, a neighbouring district of Chandrapur.

Chandrapur district of Maharashtra, where Ambuja Cements’ Plant is located, is also affected by this problem. Among the different caste and social groups, for example among the Kolam tribe, the woman is supposed to facilitate her own childbirth. The people consider the child to be a gift of god and hence do not feel the necessity to provide pregnant women with medical check-ups. They also believe that pregnant women should eat less or else she will face difficulty during delivery. Many communities in the villages of Chandrapur district labour under such beliefs.

The government provides health services through three rural hospitals, six primary health centres and one sub-centre for a population of 3000. For the people, the sub-centre is the first place for seeking medical services. However, as like most other sub-centres across the country, the nurses responsible for giving the services are not regular. The sub-centre has its own building but does not have an adequate stock of medicines and other necessities.

The National Rural Health Mission provides for two nurses to be appointed to these sub-centres. The primary health centres suffer from a similar fate. The doctor lives at a distant place and does a ten-to-five job. Medical emergency cases which come at night are referred to the district hospitals which are far away, and in some cases located at a distance of 100-150 km. The journey is thus not only costly, it is also extremely difficult for women in labour to travel such a long distance.

Thus at the village level deliveries are attended by traditional midwives, who are often untrained and little aware of hygienic conditions. They often use old and used blades, knives, cutter or
bamboo leaf to cut the umbilical cord. The mother is not given food and the child is made to sip syrup made of jaggery or sometimes sugar. The first milk of the mother is not given to the child. All these harmful beliefs and practices around child birth contribute to high mortality. Women who are expecting or who have just given birth suffer in silence. Medical services do not reach them. ACF in association with another organisation carried out a study to understand the ground zero situation of maternal and child health. The survey yielded startling figures. (Table 1)

In 2002 ACF had started providing health services at the village level through a mobile dispensary. But it soon realised that women did not much avail of the services. ACF then decided to train a woman at the village level to provide medical services. She was called Swasthya didi. This step gave instant results. Women in villages started sharing their health issues and came forward to obtain the critical services through the Swasthya didis. This experiment led ACF to contemplate a different strategy to take maternal and child health (MCH) services to the doorsteps.

**Intervention**

ACF started implementing the MCH programme during 2005-06. The work was initially implemented in the core villages of ACF situated near the cement plant at Upparvahi. These 12 villages received primary health care and services through 21 *swasthya sakhis* (VHFs) hired by FRCH. This organisation was working in this area on behalf of ACF. At that time the mobile dispensary run by ACF provided primary treatment to patients at the village level.

**Table 1: Baseline Data (phase – 1)**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Indicator</th>
<th>Pre-intervention data 2005 – 06</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stillbirth rate</td>
<td>31.64 / 1000 delivery</td>
</tr>
<tr>
<td>2</td>
<td>Neonatal mortality rate</td>
<td>77/1000 live birth</td>
</tr>
<tr>
<td>3</td>
<td>Infant mortality rate</td>
<td>82/1000 live birth</td>
</tr>
<tr>
<td>4</td>
<td>Child mortality rate</td>
<td>88/1000 live birth</td>
</tr>
<tr>
<td>5</td>
<td>Institutional deliveries</td>
<td>38%</td>
</tr>
<tr>
<td>6</td>
<td>Home deliveries</td>
<td>62%</td>
</tr>
</tbody>
</table>

*ACF Child Mortality study by Amhi Amchya Arogya Sathi in Aug.2006*
However, at the time the work started the *swasthya sakhi* were not much exposed to MCH issues. It was necessary, therefore, to take them to see the work being done by Arogya dhoott under the neonatal programme of SEARCH and AAAS. The *swasthya sakhi* were inspired by the work of Arogya dhoott and decided in unison to save the lives of mothers and new-born children.

In April 2006, ACF made budgetary provision for a home-based neonatal care project in its health budget. The organisation roped in AAAS for technical support. The work started with collecting baseline information on reasons for infant death. Support of the village Sarpanch was obtained and 12 surveyors were selected. They were given training on data collection by AAAS. The three-day training provided inputs on understanding different terminologies like live birth, dead birth, birth ratio, child death, infant mortality, pre-natal mortality, maternal mortality etc. The surveyors came to understand the difference between live birth and still birth and also how to determine the age of the child at the time of its death. They understood how they should ask questions, interpret the answers and fill up the survey sheets. Each of them was told to collect information from eight-ten households.

Data were collected for all deaths that took place between 1st August, 2005 and July 2006. The supervisor cross-verified the information collected and the coordinator of AAAS did the second-level verification. The data also included information on the village. The surveyors sought household information, obtained birth certificates, death certificates, and also panchnama forms. All this information was analysed and a report was submitted to ACF by AAAS.

The study helped the VHFs to see for themselves that households were not taking proper care of the women’s health during pregnancy. Age-old traditions and beliefs came in the way of the child’s being born alive. The interactions showed that almost 50% of the infants died within the very first month of birth and most of them died due to low weight at birth, premature delivery, giving bath to the child soon after birth, infections caused due to bacteria and sepsis due to practices done during home deliveries etc.

An important aspect that came to light was the utter lack of preparation prior to the delivery. The interviews conducted with pregnant women, traditional midwives, lactating mothers, and mothers-in-law gave insights into practices during pregnancy, at the time of birth of the child, the process of delivery etc. The VHFs realised that they had a big task ahead of them, which was to combat commonly held
beliefs and thus reduce the incidence of child death. This became their foremost goal. AAAS had developed a three-module (Table 3) training model. The first module was offered soon. This was followed by the second module after a gap of two months. The third module was provided again after a gap of another two months. During each of these modules the staff members would work in the villages and try to understand the inputs so given and do practices based around the same. This spacing between two modules and giving the inputs in measured but low doses helped the team to understand the nuances of the work.

**First Module**

- What is HBNC Programme
- Responsibility of sakhis, Supervisors, project officers in HBNC programme
- Communication skill
- Dialogue with community
- Preparation list for expectant mother and pregnant woman
- ANC registration for pregnant women
- Observation of delivery
- Counting breathing
- Hand washing skills
- Minor treatments.
Second Module

- Feedback from the first training module
- First observation for newborn
- Mother and newborn baby visits (2, 7, 15, 21 & 28 days)
- Skills – using the thermometer and weight machine
- Health education for ANC & PNC mothers
- Breastfeeding problem for mother and newborn
- Hypothermia diagnosis and management.

Third Module

- Feedback of the first and second module
- Pneumonia diagnosis and management
- High risk baby diagnosis and management
- Birth asphyxia diagnosis and management
- Neonatal sepsis diagnosis and referral evaluation

The training programmes proved very much empowering. The hands-on practice that was part of the inputs helped the swasthya sakhis to do a lot of work and learn from the same.

They collected primary information about the health of children and their mothers in the village. They prepared a list of women who were in the conceiving age group. They also prepared a list of pregnant women and documented the last date of their menstrual periods. They did their own calculations, as they had learnt to do during the training, to ascertain the expected date of delivery. They were also involved in checking up pregnant women. In addition to this, they were involved in educating the male members in the family on ways and means to take care of women during pregnancy. They also interacted with other family members, particularly the mother-in-law, to explain the different facets of care during pregnancy of the daughter-in-laws.

During the second module, the trainer gave them a possible list of ways and means to be adopted to solve the problems one may come across while working in the village. They were also given information on what they needed to monitor the delivery of a child. Information on how the birth takes place, how to check the breathing of the child during delivery and movement of the hand and legs, etc. was given. They were told about some simple rules that they should ensure were followed by midwives while facilitating births in home locations. These included:

- Use of clean thread for tying the umbilical cord
• Use of new blade (fresh blade) to cut umbilical cord
• Washing of hands before starting the entire procedure and
• Boiling of the thread and the blade before use.
Similarly, aspects like taking note of the time duration of delivery, and also noting whether the child has cried on its own or the midwife made it cry, were explained. The sakhis were told that they should note the duration of child birth. They were given information on the kind of check-up they had to do six hours before the child's birth and after an hour of its birth. They were made to understand how they could count the breathing rate and the kind of measurement they should do of the child as soon as the child is born. The arogya sakhis were thereafter given a wrist-watch for counting breathing and a five-kg weighing machine to measure the weight of the new-born.

As the sakhis began to use the different kinds of equipment, like a digital thermometer to measure the temperature of the child, many of the villagers started to regard them as performing the role of a doctor. The two-month gap after the second module gave the sakhis good exposure to practice.

Before the third module, the heightened level of confidence among many of the sakhis was quite palpable. The third module was specially designed to help the sakhis with skill sets to save a child who had stopped breathing at the time of birth. It gave them inputs on how to take care of a premature child and how to cover the child in a blanket or a hot bag if its body temperature is low. It also provided inputs on the difficulties regarding the first milking process. The sakhis were taught to understand the possible symptoms of pneumonia attack on the infant and the remedies. They were also made to understand the important parameters on the basis of which they should carry out regular health check-ups and document the same in a health-form 28 days after the birth of the child. The sakhis were given instruments like Ambu bags, mucus extractor, blankets and hot bags in a kit. Armed with these inputs the sakhis sprang into action. They would meet every fortnight and discuss the issues that they confronted and this was a learning process for everyone.

Since the area where ACF had initiated its work was a backward one, there was a total absence of quality human resources. Not a single gynaecologist or paediatrician was available in the nearby area. Villagers were fleeced by private doctors at the district level and even then they did not receive quality treatment. All these issues came up as the sakhis interacted with the villagers.
By then ACF had hired the services of a gynaecologist and a paediatrician. They would visit the villages twice a month.
Their services were a great support to the sakhis as they could refer cases to the specialists based on the suggestions obtained during the check-ups.

As the sakhis went about their work, they also established good contacts with government officers, Panchayat members and anganwadi workers in the villages. They also were known in the PHCs, rural hospital and in some cases even in the district hospital. However, many of them experienced difficulties in explaining their cases to the doctors and nurses. Many a time the attitude of the doctors and other staff came in their way. Though they were playing an important role, they were not given due recognition at times. It was thus important for ACF to start sensitising village level health workers at PHCs and rural hospitals, the district health officer, block health officer, panchayat member and village sarpanch about the importance of the health of the mother and child. They organised meetings of the sakhis with DHO, BHO, rural hospital staff and medical officers at PHCs, and cluster-level meetings with anganwadi workers and nurses at the panchayat level. These interactions proved effective as many of the officers came to realise – probably for the first time – the important role that these women were playing at the village level. These interactions were done on different national days. The work had to be coordinated and so the sakhis were kept under one supervisor. This person, apart from monitoring their work, was also involved in providing support as and when required. He would also verify the records that the sakhis maintained and would provide inputs on the issues thus identified.

**Saving not one but two lives**

Sunita from Sevadasnagar saved the life of an infant born to Laxmi Pawar. This was a critical case as the child was born 15 days after the due delivery date. The mother started to bleed profusely and her case was referred to the PHC at Jivti.

The doctor attended the mother and helped in getting the delivery done. The child made no efforts to cry or move. Understanding the situation, Sunita sprang into action. She cleaned the nose and throat of the child and helped the child to start breathing using her Bita Pump and Ambu bag. The boy soon cried and was thus saved. Both the mother and child are healthy now.

By the first two years, a lot of change had taken place. The pregnant women in the villages started undergoing check-ups as soon as they missed their menstrual periods. They met the sakhis before going to the nurses. The rate of institutional deliveries showed positive change. High-risk pregnant women
and the weak new-borns were taken to expert doctors for medication and proper care. Many of the indicators that had earlier showed low scores showed improvement. This pilot phase was thus a very successful one and it led the ACF management to think of expanding the programme to another 200 villages. This was the beginning of a large-scale programme. It was not easy to start work in 200 villages. The pilot phase had helped the team to develop a broad strategy to make the mother and child health programme work in the area. The components of this strategy (see box below) helped the team during this expansion phase.

**Components of Strategy Developed from the Pilot Phase (2006-07)**

- Study the child mortality status and reasons
- Study the traditional beliefs related to mother and child health in different communities
- Select village women as *arogya sakhis* and train them
- Supervise the work of the *arogya sakhis*
- Report the *arogya sakhis*’ work
- Link the sakhis with PHC and *Panchayat*
- Provide services of gynaecologist and paediatrician

The biggest challenge that came up during this expansion phase was the selection of the women who would work as *arogya sakhis*. ACF decided that they should go through the *Panchayat* and get the women nominated. The *Panchayats* were duly informed of the selection criteria.

**Selection Criteria for *arogya sakhis***

- Education between IV- VII Standard.
- In case a woman is illiterate, the husband should be willing to support.
- Should be married but not pregnant.
- She should not have a very small child.
- She should be willing to come for five day’s training and shall get honorarium after she starts working.

Those women, who fulfilled the criteria, came for the training sessions and for convenience a vehicle was arranged to help them reach the venue of the training. However, the process did not yield the desired results. Only 18 *arogya sakhis* could be selected. But all of them underwent the three trainings as mandated to be able to start working in their respective villages.

The second level of challenge was with regards to the area. Both Jivti and Koprana were predominantly tribal areas and the different sets of beliefs and traditions among the Gond and the Kolam tribes made the challenge bigger. The confidence of the leaders of the respective communities had to be won.
Many other processes of selection of supervisors and developing the system of meeting and feedback once every fortnight were incorporated. However, all these efforts did not culminate in the desired change in IMR in these villages. The work could not be expanded to 200 villages during 2008, and so again in 2009 efforts were initiated to select *arogya sakhis* in Rajura, Korpana and Jivti. By then many of the villages had heard of the success of this intervention and so some 64 *arogya sakhis* in 60 villages could be selected this time. However, the *arogya sakhis* could start work in only 48 villages.

**Health education given new life**

Bidabai was fortunate to receive the services of a Sakhi. She had given birth to four children and none of them lived beyond a few days. However, she was lucky the fifth time. Regular health check-up, blood and calcium tests, taking of iron and calcium tablets, undergoing periodic check-ups like blood test, urine test and sonography and finally getting the services of a gynaecologist during her fifth delivery at an institutional setting helped her to give birth to a healthy child.

It was not easy to supervise and organise meetings for all the 180 *arogya sakhis* working in the 160 villages. The last village of the project was 70 km away. Since the mandate was to have fortnightly meetings, seven supervisors were appointed to monitor the work of the *arogya sakhis*. The 160 villages were divided into nine clusters. ACF built an office in Jivti cluster and operated out of a rented building in Rajura block. These supervisors were given training for their work. Since the supervisors were males, they were given inputs on how they should work with the *arogya sakhis*. They were told that at no point mistakes committed by the *arogya sakhis* should be mentioned in the presence of the patients or their family members. They were also told that they were expected to meet the *sakhis* during the field visits and this should happen apart from the fortnightly meetings.

With the implementation of the NRHM programme in Maharashtra, ACF could put 43 *arogya sakhis* performing the role of ASHAs, of whom eight were nominated as ASHA workers. In 2011, ACF conducted the seventh module of HBNC for the work of ASHA. In Jivti and Korpana clusters the supervisors provided training to 110 ASHA workers. They began working with the *Panchayat* for village development as well. In 2011, nine *arogya sakhis* contested the election to the village *Panchayat* and are today *Panchayat* members. The MCH Programme received continuous support from ACF. Funding was never
a constraint. On the contrary, the ACF management was keen to expand and make the programme establish a model in the area of corporate citizenship. The health intervention received a funding support of ₹5.79 Million. The details of these costs are shown in the table below. The costs shown, however, do not include the cost incurred on the team which strove to make all this happen.

Table 2: Expenses incurred in the Health Intervention at Chandrapur

<table>
<thead>
<tr>
<th>Year</th>
<th>Incentive and travel cost (₹)</th>
<th>Training cost (₹)</th>
<th>Medicine cost (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>100000</td>
<td>167500</td>
<td>150000</td>
</tr>
<tr>
<td>2008-09</td>
<td>600000</td>
<td>500000</td>
<td>500000</td>
</tr>
<tr>
<td>2009-10</td>
<td>734000</td>
<td>500000</td>
<td>400000</td>
</tr>
<tr>
<td>2010-11</td>
<td>110000</td>
<td>300000</td>
<td>500000</td>
</tr>
<tr>
<td>2011-12</td>
<td>100000</td>
<td>114000</td>
<td>400000</td>
</tr>
<tr>
<td>2012-13</td>
<td>120000</td>
<td>100000</td>
<td>400000</td>
</tr>
<tr>
<td>Total</td>
<td>1764000</td>
<td>1681500</td>
<td>2350000</td>
</tr>
</tbody>
</table>

Outcome

The work done on maternal and child health in 160 villages across three blocks over nearly a decade now has had a very positive set of outcomes on key indicators of mortality and morbidity. These are as follows.

*The negative indicators on MCH and health have shown drastic reduction:

These include still birth rate, neonatal mortality rate, infant mortality rate and child mortality rate. All this has been possible because of increase in the percentage of health care services and institutional deliveries. The table below depicts some general statistics pre- and post-intervention:

Table 3: Pre- and Post-intervention Data

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Pre-intervention data 2005 – 06</th>
<th>Post-intervention data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Still birth rate</td>
<td>31.64/1000 delivery</td>
<td>25.44/1000 delivery</td>
</tr>
<tr>
<td>Neonatal mortality rate</td>
<td>77/1000 live birth</td>
<td>29.51/1000 live birth</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>82/1000 live birth</td>
<td>43.13/1000 live birth</td>
</tr>
<tr>
<td>Child mortality rate</td>
<td>88/1000 live birth</td>
<td>52.21/1000 live birth</td>
</tr>
<tr>
<td>Intutional deliveries</td>
<td>38%</td>
<td>75.19%</td>
</tr>
</tbody>
</table>

Source: ACF Annual HBNC Impact Study

All this has been possible as the *arogya sakhis* provided vital sets of information and health care services to pregnant women and their families. The reduction in still birth rate was possible as women in high-risk pregnancy were identified and referred to expert doctors of the government health care system. Where
such facilities were not available, the women were sent to private hospitals. About 78% of mothers received treatment from gynaecologists.

Expert doctors also provided services to infected infants (1583) and gave proper medication. In addition, information on services provided by the government was disseminated on a large scale. The monthly check-ups done by the arogya sakhis provided information and services and also prepared women and their families for institutional delivery. In about 40% of cases, women were accompanied by the sakhis to the hospital. Children (5387) below five years received immunisation services. All this resulted in improved indicators.

Health Status of women in the project area has improved: There are over 4000 women who are expecting. All these women are provided information by sakhis every month. Every month another 150 new women join this group. They got themselves tested for haemoglobin levels and, if required, are given iron tablets. They are provided with information and are prepared to go for institutional delivery. The family is informed of the need for nutritional food during the pregnancy period. Asking about what they should eat during pregnancy is a regular piece of dialogue that happens between the sakhi and the women in front of the family members.

Health care services helped in changing established social traditions: Among one tribal group the practice of making the mother take care of her own childbirth was common. The mother would receive no support from any one and she would have to face the ordeal on her own. Anyone helping her was considered as untouchable and would be penalised by the community. It was a difficult tradition that had to be broken. The arogya aakhi, accompanied by a few other women whom she prepared from the community, stood up against this inhuman practice and provided the much needed support to the woman and helped her to deliver during labour pain. They now attend to all births that take place in the village. Efforts are now on to make the community see that such practices are gone forever.

There is increase in the confidence level of the swasthya sakhi and she has started playing an important role in village development: Transforming a simple village woman through training and exposure has helped in making this woman the voice of development. Her confidence has increased as her task makes her interact with many from the outside world. She talks directly to the doctor over the phone and takes advice on the medical course of action. She also asks questions about village development in Panchayat meetings. The confidence has made 42 sakhis work as ASHA workers in the government
health care system and another 10 sakhis have been elected to the Panchayat body. They provide support in undertaking government surveys, help many social organisations in their work, motivate people to actively participate in the community development work, etc. The process has made a very humble beginning and much more is likely to happen in days to come.

Learning

The work done with the less literate set of women has helped established a model for health services provisioning. The services have worked wonders on many of the health indicators and are learnings for those doing similar work elsewhere. These learnings are:

A lot depends on what is done to prepare the village women for providing health services: Sakhis have played a very important role in mother and child health programmes. They hail from the same village and hence the community has faith in them and accepts their advice. Since the women communicate directly in the local dialect, people understand them well. However, it is not the women alone but also the process part that has made all this possible. Right from the days of her selection to what she should do were defined and wherever possible the stakeholders were informed. All this contributed to the success.

Training must be provided in simple and understandable language: The language of communication, which is often the crux of the matter, must be simple. ACF realised this and emphasized that in working with the neo literate women as sakhis, language would be an important consideration. It realised that providing the inputs must be done in the simplest way. Inputs must
be given in small doses and at periodic intervals so that the sakhis can retain the same and through practice can make it a part of their beings. The supervisor also plays an important role in shaping the spirit of thinking and behaviour of the sakhis. The teaching-learning method is followed by the supervisor to ensure that the sakhis follow it as well.

Never negate traditional practices but work to bring in the right modification: The traditional midwives, aged women in the family, mothers-in-law, are the ones who deal with issues on a day-to-day basis. They are the ones who are the first set of service providers. Often their wisdom is neglected and whatever they do is understood as negative. This approach of blanket condemnation of traditional practices does no good. Indeed, some of these practices may be much improved with modification. During the process of working, the team realised this at the very outset. Efforts were taken to make families understand the outcomes of these practices, with emphasis on which practices are good and which can cause harm. It was seen that people are generally sensible and understand what they need to change. The entire communication strategy was designed keeping this in mind and this worked to advantage.

The health care worker has to be sensitive: Sensitivity is the bottom line. Efforts were initiated to make the sakhis understand this aspect very early in their training. The sensitivity of the health care worker helped in resolving issues between the pregnant women and other women in the households. The sakhi does not work only with the pregnant woman but also with her immediate family members, and sometimes even with the larger community. She must be skilled in dealing with the community and household members in a sensitive manner. This quality can make or break the intervention.

Conclusion

The work done by the women health volunteers have helped changed the once gloomy face of the health index in many villages of Chandrapur. The health issues of women and children have been worked on not just from the medical but also from the social angle. The issue of women’s health has been tackled from the nutritional and also from the medical angle. The women who were involved in the delivery of these services were picked up from the community. They were trained and were given support. They have performed their role in a manner that has helped in improving the health index.

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Notes
Decorating the Education Landscape in Villages

A Case Of Education Volunteers Called *Balmitra*
Decorating the Education Landscape in Villages

A Case Of Education Volunteers Called Balmitra

Sangita Mulkalwar and Sopan Nagargoje

Introduction

ACF is engaged in the education sector to help improve the quality of education of children in the schools from target villages. The purpose of this engagement is narrated in the case on balmitra or ‘friend of the children’. Although the education intervention started with a focus on infrastructure, the orientation was later changed by bringing in the element of supporting the schools with extra human resources who were trained in pedagogy by ACF. Balmitras offer educational guidance to children in order to enable them to get well acquainted with their curriculum. The balmitra initiative has been of a great significance for the schools in the project locations as it has definitely helped the schools retain children by increasing their interest in education.
Context

Education is generally acquired to transform the knowledge learnt in schools into skills and good practices. Ensuring that children belonging to the marginalised sections, especially tribals living in remote areas, also receive good education is a matter of guaranteeing their fundamental right. This has been the philosophy behind ACF’s engagement in this endeavour. In 2003-04, ACF carried out PRA exercises in order to understand the social, economic, political and cultural condition of the target villages in Chandrapur. The exercise enabled ACF to understand that the services for basic education were lacking in most villages.

Based on this understanding, ACF decided to strengthen the infrastructure facilities of primary schools. It involved construction of school compound wall, playgrounds, kitchen shed along with benches and desks in each identified school. By 2006, ACF intervened in 12 villages with infrastructure assistance in order to attain the goal of guaranteeing the fundamental right of every child to get education. In 2006 an evaluation of these interventions by ACF however yielded a less than encouraging situation. The sample for this study consisted of 100 students studying in the intervened schools. The survey indicated that the focus on infrastructure did not do much to improve the quality of education in these schools and the dropout rates continued to remain on the higher side. The study also revealed that while some parents were dissatisfied with the quality of education provided in these village schools; for most parents work kept them so busy that they were not concerned about the quality of education provided in schools.

The District Level Household Survey (DLHS) data of 2007-08 also confirmed the high rate of school dropout in the district. The dropout rates of children between the 7th and the 9th standard were as high as 12.9%. Among boys the rate was 5.8% whereas among girls it was 13.7%. Another interesting observation was the willingness factor to learn. This was much higher in case of boys (21.1%) than in case of girls (9.1%). Another aspect that came up was teachers’ motivation. This was low in most cases and their engagement with responsibilities beyond teaching kept them away from schools for a major part of the day. ACF reflected on what it should do to improve this situation. The *balmitra* intervention came out as an answer to this issue to address the problem of low learning, high absenteeism and school drop-outs.

Intervention

ACF put forward a proposal to all the Principals of the primary schools and also discussed it in the general meeting.
of the Village Education Committee (VEC). The proposal, which was to have a few pairs of extra hands to aid the current set of teachers in the schools, was overwhelmingly accepted. These *balmitras* were to be selected from the village itself. ACF proposed that the selection be done by the VEC and the villagers together. In order to ensure that those selected were both capable and motivated, ACF came up with a set of selection criteria after discussion. These are as follows:

Selection Criteria for *balmitras*
- Should be from the village
- Should have passed 12th Standard
- Should be a motivated person

In addition to these, other criteria included giving first preference to women who were married and who could devote time and were willing to work. The process of involving the villagers and the VEC yielded very good results. Together, they selected 12 *balmitras*, who then received intensive training in creative teaching for about two weeks. The training included inputs on creative ways of teaching subjects like mathematics and languages.

ACF also later carried out refresher workshops with the *balmitras* and helped them learn newer techniques of teaching and provided an understanding on the methods needed to teach first
generation learners. During the course of intervention, there was a felt need to innovate on teaching methods especially while working with tribal communities in order to nurture their interest in education. The *balmitras* were also trained in developing standard-wise curriculum and making use of different tools for communicating educational messages to children. This training helped the *balmitras* in getting engaged with students and helping them to learn through play. Such skill development trainings were common events that ACF continues to sponsor almost on a regular basis even today.

ACF usually budgets an amount between ₹200000 to ₹250000 every year on improving the skill sets of the teachers in schools. ACF has been collaborating with the district education department, to implement Education Initiatives in target locations. ACF today has about 30 such *balmitras* and they teach children up to the 4th standard. Only after the *balmitras* received the first set of inputs on pedagogy were they assigned tasks to teach children during the first two hours in the primary grades. The *balmitras* initiated their work in *Bal Sanskar Kendras*. The teaching of the *balmitras* primarily included collective activities which helped the children learn to do things together and also learn off it.

ACF also provides books for the children to read in schools. These books are used as part of a programme called *chawali vanchan* implemented in schools. The programme aims to inculcate interest in reading among students. Now the *balmitra* programme has been expanded to another ten schools. Apart from teaching, the *balmitras* also organise family get-togethers, cultural events and parent-teacher meets. They engage students in arts and sports and endeavour to enhance their interest and ability in the same. Events like *Balmelas* are now common, attracting students from various schools to one location.

These *Balmelas* are attended by over 1500 students from various schools. In association with the Village Education Committee (VEC), ACF has placed a *balmitra* for the I and II standards and another one for the III and IV standards. In schools with fewer children, activities for students from standard I to IV are handled by one *balmitra* taking turns from one class to the other. These *balmitras* are also involved in helping the students in subjects like environment education. They help students learn by doing projects and through field trips and exposure visits. Interestingly, the average attendance of students attending the classes taken by *balmitras* is always on the higher side.

Since 2008-09 the School Management Committee (SMC), which was formed for monitoring the school’s activities and to ensure quality education, has
included the *balmitras* as members. The *balmitras* have taken their inclusion very seriously and have started playing active role in the general body meetings. The teachers, parents, principal and government officer participating in these general body meetings also have witnessed the role played by the *balmitras*. ACF compensates the *balmitras* for the time they contribute. They are provided with some incentives including a small honorarium of ₹ 500 for teaching the students and another ₹100 for participating in weekly workshops. They earn between ₹ 900 and ₹1000 a month on an average for giving two hours a day, six days a week, every month. In recognition of the efforts given by the *balmitras* the SMC in some schools has also decided to put in its share to keep the motivation level of these *balmitras* high. They have asked the parents of the children to provide a small subscription of ₹ 10 to 15 per child. This amount is deposited with the school principal. The SMC later compensates the *balmitras* and pays them an additional amount of ₹ 500.00 to ₹ 600.00. The efforts have been initiated in some schools which also prove that parents have felt the need to retain the *balmitras* in schools.

**Outcome**

The results achieved from this intervention have been very positive. These results have come not as a surprise to the team but as outcomes that had been envisaged. These are:
**Education in these schools has had a rebirth:** There has been a rebirth of education in the schools where the balmitras are providing support. The students enjoy learning through play and that is the strategy the tai (balmitra) adopts while teaching. The children are happy as they learn to write and read but are not kept too occupied. The schools today are brimming with children singing songs. There is good attendance in these schools, a feature which never existed before. The children engage in various activities like watering the plants, organising their classrooms and cleaning the classrooms. They wash their hands before taking their midday meals and are well dressed in school. The dropout rates have also reduced in these schools. Even the DISE data has recorded this change.

**There is a positive energy in everyone:** Not just the balmitra and the students in the respective schools, but also the teachers, the SMC and the VEC are all infused with a new kind of energy. The balmitras have revived the SMC. The members of SMC now attend meetings and are interested to learn what more will happen in future. They take active part in the monitoring of the activities of the school. The students display their newly learned skills passionately in the Balmelas, the teachers as well as the villagers take pride in their achievements. This kind of positive energy has now become a part and parcel of all the schools. The teachers of the same primary schools are also trying to adopt this child-centric pedagogy. This qualitative development is an outcome that was envisaged from the very beginning and all processes initiated by ACF was designed to achieve this goals.

**Other schools in the area are adopting the good practices:** The efficiency of the balmitras has established the need for similar efforts elsewhere. The balmitras do not limit themselves to educating the students but are also making efforts to bring change in the education system at the district level. With backing from ACF they have set up an educational tools centre to provide support to other schools. They provide inputs on the use of various tools in education. They have also developed a small booklet on how these tools can be used as part of pedagogy. They are also engaged in giving training to the teachers on the use of the different tools. Two balmitras, Mangala tai and Babita tai have graduated from the level of just being balmitras to being trainers for teachers.

**Balmitras today have the recognition and support of not just the SMC but also other community-based organisations:** The SMC today looks up to balmitras as people with ideas and involved in making the idea work for the development of education. In the primary school of Hardona village, the balmitra Shushilatai Shinde has been...
designated as president of the SMC. Normally such a position is given to the principal of the school. The villagers seek advice of the balmitras not just for education, but in other areas as well. Many balmitras, after working in such establishments, have found permanent jobs in the village. Few of them now work as anganwadi workers in villages. They are also active in participating in the meetings of the Panchayat and when they come up with some suggestion, it is valued.

**Learning**

*Balmitras* have contributed to making education child friendly which will ultimately lead to educating each child. They have been able to establish themselves in the formal environment of a school and educational system. The work since 2005-06 has given the ACF team many insights into what makes such engagement work for the betterment of education in primary schools. These are:

**Improving quality of education should be a continuous process:** Starting with some quality interventions especially in the field of education could be a beginning but this needs to be improvised, innovated and upgraded with time. One cannot stick to a few sets of tools and skills while imparting education. ACF understood this at a very early stage of their engagement.

They have been making significant investments of time and resources. *Balmitras* are given new sets of information in various workshops which they attend and are also made aware of different techniques such as sport for development, using teaching learning materials and designs for teaching. Exposure visits are organised to make them learn and later they are given support to use the new sets of learning for teaching.

**One cannot bring in quality through infrastructure alone:** The previous engagement of ACF has proved this point once again. An intervention like education needs quality infrastructure but that is just one aspect. One needs good teachers. One needs committed individuals who can help improve the quality of education at the primary level. In the end, infrastructure has to be put into use and that can happen if the teachers involved in education are motivated to do it. The curriculum designed by the school board has now a pair of dedicated hands to utilise the given infrastructure. Ways and means are innovated and children are made to learn through plays and projects.

**One should include every possible stakeholder to be part of defining the change:** The stand-post which indicates the change must be agreed upon and decided by all together. ACF involved the SMC and the VEC in selecting
the parameters for appointment of the balmitras. They were involved in making decisions on who were to be selected and also given the responsibility of assessing the performance of the balmitras. Teachers and parents and other community members have seen the performance of the balmitras for themselves. The agreement to pay a small contribution from the parents' side to the balmitras is an indicator of good performance of the balmitras. This has made the process acceptable and sustainable as well.

**Conclusion**

Quality education requires innovative thinking and innovation in delivery of curriculum. These are not always costly. The intervention carried out by ACF has made proper use of the existing realities and given level of infrastructure. They help improve education at the primary level and play an important role in motivating first generation learners. They have proved once again that a good teacher often lays a strong foundation. They help in building the urge to excel among students and this urge keeps them in school and inspires them to achieve something in life. The education landscape in some schools of Chandrapur has unarguably brightened.

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Notes
1. *Tai*: Marathi word used to address elder sister.
Reaching Health to Women and Children
A Case on MCH Intervention at Jaitaran, Rajasthan
Reaching Health to Women and Children
A Case on MCH Intervention at Jaitaran, Rajasthan

Kanhaiya Lal Sharma

Introduction

ACF carried out an intensive work on maternal and child health (MCH) in the Jaitaran Block of Pali District in Rajasthan. All the health indicators revealed that the women in the district suffered from extremely poor health conditions – anemia, for example – which was often the reason behind high maternal and child mortality. This grim situation was tackled by some bare feet health care volunteers armed with health related training provided by ACF. These women health care workers brought about significant changes in all the health indices. The case discusses the strategies that made this possible.

Context

The condition of the women in the villages was grave when ACF started its work in 2002. On almost all health indices, women and children were at the receiving end. Child mortality and maternal mortality figures were very high. Such high figures (see table below) were a combined effect of multiple sets of factors like early age of marriage,
poor accessibility to health services and low immunization rates, among others. Health infrastructure and transport services were in a pathetic condition. Distances from villages to health centres were huge and health service providers never reached many villages. Births were attended by untrained women. The severing of umbilical cord was done using unsanitized blades and the cord was tied with thread and sometimes with clothes, which increased the chances of infection. The birth happened on the floor. The child was not given colostrums but fed on jaggery and honey, which had grave consequences.

Women during pregnancy never received the ante-natal services that are understood as critical. They worked almost till they had labour pain. They were very young, under-nourished and anemic – factors brought about by poverty, coupled with multiple pregnancies. They suffered in silence and the Purdah system added to their woes. Neither the mother nor the newborn child would access the health services at the ICDS centre or at the village health centre. Nor would they obtain health services from the health care personnel. The existing health care infrastructure was weak, but worse still, the services that were provided were not much accessed by the community. There were also huge gaps between the government services and schemes that were announced and those that were actually available at the village level. Lack of awareness of the community was coupled with a lack of willingness on the part of the service provider to make the community demand the services. Thus most of the villagers depended on traditional healers and religious quacks, which only complicated matters. The situation thus demanded intensive work and ACF took up the challenge to reverse the situation.

<table>
<thead>
<tr>
<th>Table 1: Data on some Health Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of girls getting married below the age of 18</td>
</tr>
<tr>
<td>Percentage of girls giving birth between 15 to 19 years</td>
</tr>
<tr>
<td>Percentage of institutional deliveries</td>
</tr>
<tr>
<td>Full ANC check-up</td>
</tr>
<tr>
<td>Child immunization percentage</td>
</tr>
<tr>
<td>Percentage of children suffering from ART infection</td>
</tr>
</tbody>
</table>

**Intervention**

ACF wanted to work with women and address their health issues. It wanted its approach to be guided by acceptability,
accountability and availability of health care services. In order to make this happen, ACF decided to develop a cadre of trained women from among the community as Village Health Volunteers.

**Getting accepted:** ACF adopted the FRCH model. ACF was implementing health care services at Chandrapur on similar lines. Here, too, ACF took the support of the Pune-based agency that had initiated the FRCH model. However, before this model was actually put in place, ACF got involved with providing first aid and basic preventive, promotive and some curative services in the project area. The process of engagement with the community gave the realization that an intervention will only be successful if the community engages in it and decides the agenda for it. Thus the team decided on the strategy of engaging young and enthusiastic women from the villages as Village Health Functionaries (VHF).

ACF also decided to collaborate with FRCH and obtain technical support from it. This included support to build the capacity of the sakhis (Village Health Functionaries also called VHF). One aspect that ACF always gave priority to was that the women should not just serve the health conditions but also be equipped to address issues that would empower women. It believed in this agenda as health comes when a woman is empowered. The VHF programme was thus started with the following objectives:

- It will be an integrated approach to health.
- It will be a village health movement spearheaded by the village women.
- It will deal with preventive, promotive and clinical aspects of health.
- It will aim at village mobilization for sustainable health and development.
- It will help in strengthening the existing system and will never create a parallel one.
- It will build bridges between the community and the various key systems.

The first step that ACF took on was to identify the women who could spearhead this process in villages. The identification of the VHF was the first major challenge confronted by ACF. Since ACF was new to the location, it had very little acceptability. With men heading the project team, the community would not allow women to come out of their homes and get involved in the programme. Thus it was imperative to first win the trust of the community. At the root of all the issue was the way the community perceived ACF. The community felt that ACF might do harm to them and their women. All possible processes to win the confidence of the family, the community and the leaders were undertaken. Extensive dialogue with
the family members, with the leaders of the community and the PRI members helped in breaking the ice. The process of making them understand what role these women would play took more than three months. Finally, they gave ACF the go-ahead with some conditions attached.

After the women were selected, their mothers-in-law would also attend the training. The husbands would wait outside the training hall and would have to be accommodated as guests. ACF agreed to provide transportation services to pick up the women from the villages and drop them home in the evening. In spite of all these efforts, the first training of 15 days by FRCH saw 3 women out of 15 turning up at the venue of the PHC which was near to their village.

The training topics included General Health, Anatomy and Physiology, Sanitation, Gender and Social Issues. The topics caused the women to walk out of the training due to pressure from their family members. The family members of the VHFs were being constantly harrowed by absurd comments from the community and also their own relatives. Some of the family members felt that if women get into this kind of work, the domestic work would suffer. However, the three VHFs seemed to have got interested in the training. Many of them got up very early to complete all the domestic chores so that they could continue to attend the training. It seemed that ACF was about to win half the battle.

Most of the women who were selected as sakhis were illiterate. Except one woman, Usha Sharma, who had studied till the 10th standard, the others were all barely literate. But they were young, in the age group of 25-28 years, and hence full of energy and enthusiasm. The condition of low literacy proved to be a short-lived barrier. In the initial days the sakhis could not explain and disseminate information properly to women with whom they were supposed
The sakhi (friend) in the Making

A woman from village Talab Payala would fall sick at regular intervals. The husband and the family did not care much about treating her. When the VHF learned about this, she went and counseled the husband. The woman was taken to a doctor for treatment. She recovered soon.

Another woman from village Balada was facing domestic violence and was on the verge of committing suicide. Here too the VHF played a role by intervening and talking to her and her in-laws so that things came to a happy end.

Another family was similarly saved in village Kesarpura. In village Balada, the VHF’s intervention led the family to seek medical advice when the woman was not being able to conceive. The advice worked wonders. The couple visited the doctor at Ajmer and subsequently the woman conceived. They have two children now. Many of these acts had actually nothing to do with medicine or medical services. However, the sakhis did play an important role. All this made them slowly and surely assume a significant position and win recognition in the community.

to work. Somehow the conventional practices also held them back. Practices like wearing veil, not arguing with elders and prohibition of speaking in public also held them back. The other barrier was that the community found it difficult to accept that women could have any knowledge.

After all, the sakhis were all bahus (daughters-in-law) and the community could simply not get used to the idea of taking them seriously. Some of the women were accused of having loose morals since they had defied convention and stepped out of home. The social mindset thus had to be reversed and only grit and determination could do so. Things were to change as the women were determined to find out ways to get accepted in their new role by the community. As part of the strategy to deal with ground realities, the VHFs were advised not to go alone but to go along with an ICDS worker or Auxiliary Nurse cum Mid Wife (ANM) also known as Nurse behen in the area. This would help them develop linkages with the formal system of medical care and also help communicate to the villagers that they were into supporting the existing women force in medical work.

This boosted the enthusiasm of the VHFs and also led to their acceptance within the community. The community started appreciating their work in birth registration, pregnancy registration
and registration of children at the Anganwadi Centres. The work with the existing para-medical team gave them hands-on experience and taught important lessons through practice. During this period they also did some very exemplary work and this made them win recognition and acclaim from the community.

Training the VHF was one of the regular features planned in the intervention design. Almost after five months into the programme, when these women had some taste of success and acceptance, an eight-day input training on diagnosis, treatment of general illness and conditions under which one must do referrals, was organized. ACF also provided them with some Ayurvedic and WHO-recommended allopathic medicines so that they could attend to some very basic treatment of villagers. They wanted the VHF to provide simple treatment and medicines for common ailments like indigestion, cold and cough and fever, do dressing on simple injuries and also be able to identify infection of reproductive tracts, etc.

A box containing these medicines was handed over to the VHFs and they were also told that they had to maintain records of which medicine was being given to whom and under what conditions. They were also told that if they had doubts they must first consult the doctor and then give the medicines. ACF staff made it a point to visit the houses of the VHFs at regular intervals and keep them updated. These fortnightly meetings also provided the
forum for discussion on the diagnosis made and each VHF learned from one another. Within a period of six months, over a thousand patients were treated by the VHF and this included mostly women and children. All these actions spoke of the VHFs increasing acceptance as para-health workers in the villages. Women who were suffering from various problems and were not in a position to discuss them with others or even their own family members, found they had a *sakhi* (friend) in the VHF and they came to discuss and take medicines.

The efforts carried out on a continuous basis were slowly transforming the intervention into a movement. The VHFs were now quite established in the villages. They were well accepted within the community and their opinions were being valued. The VHFs also took interest in other activities besides health. They started speaking about village development. They took to organizing drives against child marriage and female foeticide and for education of the girl child and similar agenda. They also started organising women into collectives like *Mahila Mandals* and SHGs. They accompanied women and even sometimes also the men to help them obtain benefits of government schemes. The role of the VHFs in establishing linkages for obtaining services gave them recognition at the Block level and even the government officials knew many of them by name and acted on their concerns. These were important milestones for many of the VHFs.

The VHFs were keen to attend the meetings of the village *Panchayat*. They would raise questions during the *Panchayat* body meetings on issues like drinking water that impinged on the health of women and children. However, the *Panchayat* often thought that these questions challenged its authority and many members were opposed to the interference of the VHF. However, with the community supporting the VHF, they preferred to remain silent. Such a success would not have happened without the efforts of ACF. Training programmes organised by the ACF on many of these issues inspired the VHF to engage in such activities. ACF also helped many of the *sakhis* to get educated so that they could attend to the requirements of their own families as well. Some of the achievement of the intervention of the first phase can be highlighted as under:

**Moving towards maternal and child health care services:** The first two-and-a-half years of work helped the *sakhis* establish themselves as important functionaries of village development. They were also able to raise the expectation levels in the community, which has led the community to demand better quality services from
the state. The analysis of data collected during the project gave enough inputs on what the VHF must focus on. The child and mother mortality figures were worrisome as the community never availed of services like ANC and PNC. Immunization rates of mothers and children were low.

The benefits which mothers and children could have drawn from the existing services were never resorted to. Collectively, ACF zeroed in on some strategies to reverse the trend. At around the same time, emphasis was given to the delivery of quality services at the doorsteps through the National Rural Health Mission. The selection of the ASHA model from the community for promoting the coverage of immunization and institutional delivery got a fillip. Thus ACF concluded that if VFAs were trained to do the same they could add to the strength of the model. ACF thus organized a 7-day training programme with the support of FRCH for ANC check-up/ PNC check-up/ adolescent girls’ check-up. The training provided hands-on inputs on ANC and PNC services like doing Blood and Urine Test, Weight and BMI measurement, measuring Blood Pressure and also detecting early warning symptoms of difficult birth, etc. ACF also procured some equipment like electronic B.P instrument, hemoters, baby and adult weighing machine, thermometers, hand gloves, and stethoscopes for the sakhis.

As part of the practical training each of the VFAs was made to conduct home visits and take some measurement. This gave them confidence in handling the medical equipment. They were then directly put on the job of handling pregnant women. Every month on a fixed day pregnant women would undergo periodic checkup and records would be maintained in a prescribed format. The VFAs also engaged in counseling the women and the family members regarding institutional delivery and other aspects like birth spacing and availing of referral services to reduce mortality. In many cases, the bonding with the women led the VFAs to accompany them to referral units for institutional deliveries. Since they had with them the records of services provided, these proved useful to the medical professionals attending childbirth.
diligence with which the VHFs did this work brought them to the notice of the medical fraternity at the referral units. The sakhis also carried out the PNC check-ups as they had been instructed.

What the sakhis achieved

The health department and the ICDS together wanted the VHFs to help in the delivery of their services. The deliverables of these departments, for example 100% immunization of children, 100% ANC, 100% institutional deliveries and birth registration, required local help. This was provided by the sakhis.

The local level para-workers, from the health and the women and child department, involved in the delivery of the services saw in the sakhis another set of hands providing much-needed support. The ANM and Anganwadi workers of the villages took support of the sakhis during home visits, follow-ups and also while providing critical care and support.

Since these sakhis were from the village the ANMs found them to be accepted by the people. Even the primary school teachers and the Balwadi workers took the support of the VHFs.

Visits to the house on the 3rd day, 7th day, 28th day and 42nd day helped them identify the early warning symptoms and this often worked wonders in saving lives. The entire focus of these visits was on infant care, which included aspects like sanitation, sufficient diet, birth spacing, child immunization etc. In addition, the sakhis were also engaged in social marketing. This included work like taking out water from pitchers using handed water pitchers, marketing of birth spacing pills and condoms, sanitary napkins, pregnancy cards etc. This provided the sakhis with some extra income. They also got an honorarium from the government for being engaged in programmes like pulse polio, Vitamin A, tuberculosis, leprosy etc. The community also provided them with a token amount when they felt that the services had been beneficial to them.

The visible impact ensured that the sakhis program expanded to all the project villages. The next batch of 15 VHFs was selected in 2009 from 13 villages. This time the selection process was easy. ACF did not have to struggle so much to convince the family and the community. These women soon underwent the slots of training before they were put into action. An interesting aspect of the training this time was the internship, where each new sakhis worked under close supervision and guidance of an old sakhis. The approach
enabled them to work and learn faster and what had earlier taken two years happened within nine months this time. The new set was as good as the old set within nine months. Another important achievement during this period was on the educational front. The process that had started in 2007 saw around 11 sakhis appearing for the 8th standard examination and another two appearing for the matriculation board examination. In addition to this the thirst for knowledge and certification made nine sakhis appear for the NIOS health certificate course.

**Spinning off:** Health being an important aspect of development cannot be an isolated one. The third phase of the interventions looked at many areas which were understood as incidental and co-incidental to the process. It was during this phase that many of the sakhis who had been received well by the community now needed some stability in life. The sakhis have been involved in a variety of services around maternal and child health in their respective villages. They have ensured effective conduction of MCHN days and conduction of VHSC meetings as VHSC members. The VHFs’ home visits and tracking of maternal and child illnesses has reduced incidences of cold, diarrhea, fever, malnutrition, anemia and other infections. The district medical and health fraternity has also taken cognizance of the training that these women were given. The output made them realise that if the same module is offered to the ANM and ASHA workers it would yield good results. The district administration took special permission from the Rajasthan state medical and health department and UNICEF to organise such training for village level health volunteers in the district. The district health department also authorised the VFA to use the government’s formats for recording incidents. District level officials visited the area and carried out supervision and analysis of the data that these women generated. District and block level officials recognised the VHF’s work and made them part of many governmental programmes.

VHFs were also given special status and provided with special seating facilities in many governmental programmes like *Prashasan Gaon ke Sath*, *Ratri Choupal*, *Gram Sabha* etc. All this, however, did not happen automatically. The sakhis worked hard to attain this elevated status. They attended *Gram Sabhas* and *Panchayat* meetings, wrote applications, followed up the same with government departments, formed women collectives, and linked them with banks. Some of these works have been shown in the table two. All this work certainly had some very specific outputs. Some of the linkages that these sakhis could establish are shown in the table three.
Table 2: Development efforts by *sakhis*

<table>
<thead>
<tr>
<th>Activities (No. of)</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gram Sabha/Panchayat Meetings attended</td>
<td>264</td>
</tr>
<tr>
<td>Proposals submitted to Panchayat</td>
<td>226</td>
</tr>
<tr>
<td>Hand pumps repaired</td>
<td>51</td>
</tr>
<tr>
<td>Proposals for road construction</td>
<td>29</td>
</tr>
<tr>
<td>Proposals for drainage constructed</td>
<td>82</td>
</tr>
<tr>
<td>Joint health monitoring visits</td>
<td>152</td>
</tr>
<tr>
<td>SHGs formed</td>
<td>125</td>
</tr>
<tr>
<td>Mahila Mandal established</td>
<td>19</td>
</tr>
<tr>
<td>Adolescent Groups established</td>
<td>17</td>
</tr>
<tr>
<td>Matratva Surekhsa Dals established</td>
<td>17</td>
</tr>
<tr>
<td>VHSCs strengthened</td>
<td>21</td>
</tr>
<tr>
<td><strong>Bal Sansads and Bal Panchayats</strong></td>
<td>22</td>
</tr>
<tr>
<td>No. of Youth Clubs</td>
<td>14</td>
</tr>
<tr>
<td>No. of Coordination Meetings attended</td>
<td>475</td>
</tr>
</tbody>
</table>

The VHFs also worked on sexually transmitted diseases. They identified 26 persons who were tested positive. These positive cases of HIV are now getting counseling and medical support under the state programme. The work done by the VFA has earned recognition from the state line department. Many of them see these women as potential staff of their system.

Table 3: Fallout of the *sakhis’* actions

<table>
<thead>
<tr>
<th>Name of the Schemes</th>
<th>Beneficiaries through VHF (nos.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indira Awas Yojna</td>
<td>65</td>
</tr>
<tr>
<td>Total Sanitation Campaign (TSC)</td>
<td>641</td>
</tr>
<tr>
<td>Widow Pension</td>
<td>46</td>
</tr>
<tr>
<td>Old Age Pension</td>
<td>93</td>
</tr>
<tr>
<td>Palanhar Yojana</td>
<td>24</td>
</tr>
<tr>
<td>MNREGA Job Cards</td>
<td>660</td>
</tr>
<tr>
<td>Handicap Pension</td>
<td>50</td>
</tr>
<tr>
<td>Kutir Jyoti</td>
<td>26</td>
</tr>
<tr>
<td>BPL Health Card</td>
<td>1057</td>
</tr>
<tr>
<td>Ration Card</td>
<td>9115</td>
</tr>
</tbody>
</table>

For ACF too, this has been a good opportunity for their programme. The *sakhis* are now part of some state programme. However, all this happened because the VFAs took initiative to pass the critical educational levels as prescribed to be part of the government system. At present, 17 of the VHFs
have appeared for 10th standard examination, seven VHFs for 12th standard and two VHFs are doing their graduation. ACF has also helped the VHFs start their own businesses. Seven of them run provision stores and are also into stitching and embroidery.

<table>
<thead>
<tr>
<th>Table 4: Details of sakhis’ Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sakhis’ Involvement</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>ASHA Sahyogani</td>
</tr>
<tr>
<td>Anganwadi Worker</td>
</tr>
<tr>
<td>AW Helper</td>
</tr>
<tr>
<td>Lok Shikskika</td>
</tr>
<tr>
<td>Other Govt. Scheme</td>
</tr>
<tr>
<td>Part Time Teachers</td>
</tr>
<tr>
<td>SHG Sahyogani</td>
</tr>
</tbody>
</table>

All the efforts so initiated during the last seven years came at a cost. ACF managed the entire expenses from its CSR funds as detailed in table 5.

<table>
<thead>
<tr>
<th>Table 5: Expenses incurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Expenses</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Capacity Building</td>
</tr>
<tr>
<td>Medicine and Equipment</td>
</tr>
<tr>
<td>Honorarium to sakhis</td>
</tr>
<tr>
<td>Programme Support</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Outcome

Some of the outcomes of this intervention that reversed the situation responsible for the poor health condition of women and children are as follows:

*Health consciousness among villagers has increased:* The VHFs have helped in increasing health consciousness among the community enormously. More and more villagers are now accessing health care services from trained health care service providers (see table below).

<table>
<thead>
<tr>
<th>Table 6: Number of services provided, year wise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>2005-06</td>
</tr>
<tr>
<td>2006-07</td>
</tr>
<tr>
<td>2007-08</td>
</tr>
<tr>
<td>2008-09</td>
</tr>
<tr>
<td>2009-10</td>
</tr>
<tr>
<td>2010-11</td>
</tr>
<tr>
<td>2011-12</td>
</tr>
</tbody>
</table>

Since 2008-09, the villagers have been taking services directly from the public health care system. The result of this has been a significant jump in institutional delivery (89.79%) in the project area, complete immunisation of about 53.64% children and almost 100% registration of pregnant women.
The ANC and PNC check-up rates have also increased. Infant mortality today stands at 37.9 per thousand, possibly the lowest in the district. Many villages, which had almost zero immunization rates for children, now boast of 100% immunisation rates. Even the Gurjars, who earlier refused to listen to the health care providers, now listen to the VHFs. Patan village is one such village where immunisation rates have jumped from 1% to 90% during the last ten years.

Men have a changed perception now: Perception of the men has changed. Seeing examples of successful women (VHFs) many men have come forward to get their wife/sisters/daughters nominated for the position. Men are allowing their women to work outside the four walls of the house. They are allowing them to take part in trainings and meetings. All this has increased the possibility of girls getting educated. Child marriage has become a thing of the past among some communities.

The programme has ensured accountability and has filled the gaps in the existing public health system. This had been one of the very important objectives of the intervention. The intervention was never aimed at replacing the existing system, but rather to complement the same. Community members are now more active in seeking the services from the government. They have also started demanding services, something which they had never done before. For e.g., the community of Ras raised issues of supply of medicine at Ratri Choupal PHC in front of the district collector and got the problem resolved. The community got involved in tracking the beneficiaries and made them avail of the services on maternal and child health and nutrition days.

Women’s stepping out of the house has ushered in change in the village. Women are now seen to be participating in different kinds of trainings and meetings at the village level. They are venturing out of the village to acquire knowledge and skills. Inspired by the VHFs, other women are also daring to dream. Many women are now members of SHGs and participate in various development processes beyond the health paradigm.

Infant mortality has reduced in Dayalpura

When the VHF started the work in Dayalpura, the village reported 11 infant deaths a year. However, things have now changed for the better, with the death of a single child recorded in the last three years.
Learning

The practitioners evolved as they did the work and learnt from them. They re-strategised when some actions did not give results. These learnings are now part of the knowledge which is understood to be critical. Some of these learnings are:

**It is essential to maintain records and share the same with the community:** During the intervention ACF realised that sharing of facts and figures, records, findings, etc. with the community gives better responses. For instance, sharing of figures affected by a disease may not have much of an impact. On the other hand, sharing the root cause of the disease and discussing what one can do to prevent it might interest the community. They will come forward with support if they know why they are doing something. Records are not to be kept to make analysis and reports but rather something to be shared with the community at large and seek their participation in the process.

**Refresher training to VHF is essential:** Regular training should be given to field level staff to refresh their skills set and knowledge set. This gives them the confidence and the motivation to work and overcome challenges beyond what they are expected to deliver.

**There must be liberty to make situation-based decisions:** VHF had the liberty to make any situation-based decision. There were no Do's and Don'ts for them. If they felt there was a need to call a community meeting and seek participation of PRI members, they had the freedom to organize the same. There were not bogged down by hierarchy. They led their own actions and remained responsible for the outcome.

Conclusion

The work with women on women’s health has been a real eye opener for ACF. They have almost reversed the situation from where they had started their actions. They have made many of the things that were understood as impossible, now possible. The action suggests that even less educated women can work wonders if guided. The message of involving the community in various processes is loud and clear. Things have worked as ACF involved the community in various processes and this has proved mutually beneficial.

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ATM of Drinking Water
ATM of Drinking Water
Shailesh Tulsibhai Dungrani and Manoj Kumar Chauhan

Introduction

The 10 million-plus population of over 1800 villages along the long coastline of Gujarat have been victims of great suffering in recent times. The salinity levels in the ground water have made it unsafe for drinking. This problem has been further compounded by the large scale and unchecked drafting of water from the underground aquifers as a result of various, mainly commercial, activities. The intervention described here has ensured the supply of clean and potable water to these affected households. The women who bear the responsibility of fetching drinking water are now much relieved as they have a pool of water within the premises of their house. This water is clean; it has no salinity and is available at any time of the day.

Context

High salinity in water, which is a result of salinity ingress in both shallow
and deep aquifers, is a relatively new phenomenon. Villages all along the sea coast have been facing this problem since the last two or three decades. This is a result of various economic activities that have seen a spurt in the area in the recent past. The large scale withdrawal of water for irrigation and various industrial uses is the reason for this situation.

The rainfall too has been erratic. Although the last few years recorded good monsoons, the earlier decade had low rainfall. There has been large scale electrification of farms and considerable increase in economic activities along the coast line. The population in some major towns along the coastline has also seen a boom. All this has had a tremendously negative effect on the water that people consume.

High levels of total dissolved solids (TDS) in the range of 500 to 1500 ppm have made the water undrinkable. Since the water supply schemes designed by the state depend on withdrawals from the deep aquifers, they too have not been able to provide good quality water for drinking. There are many villages where drinking water sources have dried up or are unusable. A survey carried out by Water and Sanitation Management Organisation (WASMO) in 2011 - 12 has indicated that the condition of drinking water in 30 villages (out of 200 villages) is grave (see table 1 below).

<table>
<thead>
<tr>
<th>Table 1: Water Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Figures in brackets signify permissible limits)</td>
</tr>
<tr>
<td>TDS (Less than 500)</td>
</tr>
<tr>
<td>PH (6.5 to 8.5)</td>
</tr>
<tr>
<td>Hardness (200 to 600)</td>
</tr>
<tr>
<td>Calcium</td>
</tr>
<tr>
<td>Magnesium (0.1 to 0.5)</td>
</tr>
<tr>
<td>Chloride (250 to 1000)</td>
</tr>
<tr>
<td>Sulphate (200-400)</td>
</tr>
<tr>
<td>Nitrite (less than 45)</td>
</tr>
<tr>
<td>Alkalinity</td>
</tr>
</tbody>
</table>

Source: WASMO water sampling results

These 30 villages have approximately 1800 families and a population of over 10000. These families have no option but to drink water that is not consumable. The water supplied by the WASMO intervention to many villages along the coastline is also not very regular and women in these villages have to depend on supplies from faraway places.

In order to understand the gravity of the issue, ACF carried out a survey. The survey results indicated that over 18000 households living in the coastal area were facing difficulties in getting drinking water and the quality of the water they consumed was far below the prescribed standard. Women from these households spent hours on fetching water, which was available at a distance of 300 to 2000 metres from their homes. This laborious and time-consuming
work wreaked havoc on the livelihoods of the families. Since a family of five required 50 litres per day for drinking and cooking purposes on an average, more than 5-6 hours was required to fetch the water for the requirement of the household.

The high TDS level in drinking water and the poor quality of water obtained from untreated sources had a devastating effect on health. People suffered from diseases like jaundice, gastro-intestinal disorders, high blood pressure, typhoid and kidney stones. The survey carried out by ACF revealed that the incidence of stones in kidney was among the highest. At least one member per household suffered from this. People were aware about the reason for such problem, but in the absence of any alternative they continued to suffer silently. Armed with this understanding of the problem, ACF devised an intervention. It had already seen how beneficial the concept of Roof Rain Water Harvesting (RRWHS) had been and now decided to promote this method in the villages of Kodinar. ACF wanted the people to accept the idea before launching the intervention. The process thus was initiated.

**Intervention**

During 1995 and 1996, ACF had implemented a watershed project of the state government as project implementation agency (PIA) in the Jafrabad block of Junagadh district. As part of this project, 30 villagers from Jafrabad and Kodinar were taken on an exposure visit to see similar work being done by the Aga Khan Rural Support Programme at Sayla in Surendranagar district. The visit gave them a chance to see the model of an underground water storage tank called the RRWHS.

The villages falling under the watershed project of Jafrabad, namely Nana and Mota Sakriya, had a very typical problem. The geographical formation of this area was such that these two villages could not opt for digging underground wells like the bore wells. The underground soil profile had a higher proportion of yellow soil which caved in and came in the way of digging bore wells. The mud would slide and not allow the water to be lifted. These two villages were once on the bay and probably this soil structure is a result of this. With no other alternative available, the villagers would fetch water on bullock carts. This meant that at least two members from every household of the villages had to be engaged for five to six hours every day – throughout the year – to fetch water. This exposure visit proved insightful to the villagers. As a part of this watershed project, ACF also demonstrated a model of underground water tank. The initial design was a square tank with a capacity of around 20,000 litres. Since it was estimated that a family needed 45-50 litres of water per
day, any structure with a storage capacity of 15000 litres would be sufficient for the family for the entire year. ACF modified the size and later also the dimensions. Cylindrical tanks of 15000 litres capacity were constructed. These cylindrical structures were understood to be technically appropriate as any pressure from the outside would get diffused on the walls and internal damages could be avoided. In a square structure, there would be the risk of damages coming up at the corners.

In the initial days, people in most villages were not too convinced about the idea of drinking stored water and that too water stored for a period of an entire year. They believed that they should drink fresh water every day. In order to break this myth the villagers were taken on exposure visits to places where people drank stored water. ACF also organised training sessions to generate awareness among the villagers. The trainings not just talked on the benefits of storing water in underground water tanks but also on ways to maintain the stored water and efficient use of water. Those who were convinced approached ACF and thereafter the construction process was started.

During the construction of the water tank the ACF team also provided specific skill sets to the masons. In the initial days, many families would use the rain water for all kinds of purposes, apart from drinking. They did not know that the rain water is of too good a quality and hence too precious to be used indiscriminately for other domestic chores as well. Such thoughtless usage succeeded in exhausting the stored water in a month or two and thereafter the family would have to do the storing again by hiring tankers. This practice, however, has now come to an end as people have realised that since rain water is probably the purest form of water it should be used only for drinking and cooking. A lot of training sessions and dialogues with families had to be held to make this change happen.

An important training provided to all the households was what to do with the first rains. Women were told to use the first rain to clean the collection surface. Inputs were also provided on the maintenance of stored water. The households were told to keep the area around the tank clean. Women were also told to use lime kept in a clean cloth inside the tank. The lime would act as a disinfectant and kill the bacteria. Hand pumps were installed with all the water tanks. This would avoid direct contamination of the stored water with the utensils. The hand pump also kept the tank air-tight, thus preventing the growth of bacteria inside the tank. The water was to be kept away from direct sunlight. The women were advised to get the water tested at the laboratory once every three months.
In the initial days, ACF organised this water testing. The households were told that the tanks must be cleaned annually – possibly before the monsoon set in. The tank could be kept dry for a few days before the first monsoon. These trainings and inputs worked slowly but surely. These steps have now become part of the people's practices.

The process of construction also had its protocol. The applications once obtained from the beneficiary would be followed by a site visit by a member of the engineering team. The site visit was made to assess the technical feasibility and also to engage in the process of making the family understand how the entire process of construction will be done. If things were acceptable to the family, the lay-out for the digging operation was given. The digging of the pit was the first engagement with the family. This came up as a share of the family in the construction cost. Once the digging of the pit was done, the family was expected to inform the ACF team member. The extension volunteer (EV) from ACF thereafter would explain the process of civil construction to the mason. The selection of the mason was done by the household. The EVs were also responsible for day-to-day supervision of the structure and were paid a small service fee by ACF. The engineer from ACF would monitor construction quality.

A small pamphlet containing all the information related to the construction of the water tank, the materials to be used, the time and the cost of
construction and maintenance of the tank in the post-construction phase was given to the household making an application for construction. The pamphlet also spelt out the contribution that ACF would provide as support. In the initial years ACF provided a contribution of ₹10000 for the construction of the tank. The support was only provided when the person constructing the tank had done with the civil work. Before this and during the construction ACF would provide 20 bags of cement as per its estimate. The fitting of the hand pump and the water inlet was done by materials supplied from ACF as these needed certain technical parameters, which, if not adhered to, would make the system work less efficiently. The final payment was done by cheque after deducting the amount of cement bag and costs incurred in other fittings.

The demand for this water tank has increased gradually and this has reduced support from ACF. People in many villages who have with them resources have made their own structures and have not looked to ACF to provide support. The current contribution for the structure is ₹5000 from ACF. ACF also implemented some government schemes regarding RRWHS. During 2005-06 the cost of one underground water tank was ₹20000 and as per the guidelines set out by WASMO, an above poverty line (APL) household was provided support up to 50% of the cost. In case of below poverty line (BPL) households, the support provided was 70%. The work under the scheme followed some part of the protocol but with some degree of departure. Instead of the 20 bags of cement which ACF provided earlier, the households selected under the scheme would have to get the cement supplied from a trader fixed under the scheme. Thereafter, once all the masonry work was completed to the technical satisfaction of the engineers the second installment was handed over to the household.

<table>
<thead>
<tr>
<th>Year</th>
<th>Unit cost</th>
<th>Beneficiary contribution</th>
<th>ACF share</th>
<th>Supporting organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996 to 1999</td>
<td>15000</td>
<td>5000</td>
<td>10000</td>
<td>ACF and DRDA</td>
</tr>
<tr>
<td>2000 to 2005</td>
<td>19000</td>
<td>12000</td>
<td>7000</td>
<td>ACF, SRTT, WASMO</td>
</tr>
<tr>
<td>2006 to 2008</td>
<td>22000</td>
<td>16000</td>
<td>6000</td>
<td>ACF, SRTT, WASMO</td>
</tr>
<tr>
<td>2009 to 2011</td>
<td>25000</td>
<td>20000</td>
<td>5000</td>
<td>ACF, SRTT, WASMO</td>
</tr>
<tr>
<td>2012 to 2013</td>
<td>32000</td>
<td>27000</td>
<td>5000</td>
<td>ACF, SRTT, WASMO</td>
</tr>
</tbody>
</table>

(Source: ACF Records)
The pipe-fitting work was carried out by the appointed EVs from the village. The purchase of the materials including manhole lid, hand pump set, PVC pipes and other necessary equipment was done by ACF. The final payment was done after adjusting these amounts.

ACF has always collaborated with other agencies and taken financial support from them. This enabled access to resources available with the state and private agencies. For ACF, the larger question was to see that households in its project villages had such water tanks irrespective of the source that provided the same. It ensured that it would stick to some non-negotiable aspects regarding the construction. The rest was done as per the other partner’s broad guidelines. As of date 2969 such RRWHS have been constructed, with funds sourced from four other partners.

<table>
<thead>
<tr>
<th>Name of the Agency</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACF</td>
<td>581</td>
</tr>
<tr>
<td>District Rural Development Agency (DRDA)</td>
<td>41</td>
</tr>
<tr>
<td>WASMO</td>
<td>988</td>
</tr>
<tr>
<td>Sir Ratan Tata Trust (SRTT)</td>
<td>1259</td>
</tr>
<tr>
<td>CN Hilton Foundation</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2969</strong></td>
</tr>
</tbody>
</table>

ACF also innovated in terms of materials used. The iron trench which collected the water from the roof did not serve the purpose as saline winds rusted these trenches. So these were replaced by PVC pipes of 6 inch diameter, split into two parts. A pipe of good quality works for 5-6 years though it is also susceptible to damages due to hardness. Over the years, the team has come to some understanding that
Enhancing Livelihoods

This was not the situation with many households in Kanjotar village of Sutrapada block. Some of the labourers actually borrowed money from the SHGs to pay for the cost of the construction, believing that water security would also mean income security. The family members can spend time outside the home and can remain gainfully employed. They have since then paid back the borrowed capital.

the cost factor and the share from the beneficiaries’ end have often come in the way of poor households constructing these RRWHS. The creamy layer of the community does not require the support with many constructing tanks without ACF support. But such luxury cannot be exercised by the poor. They need the support and cannot have their own structures because of financial constraints. Economic compulsions have made them continue to depend on public sources for fetching drinking water and bear the consequences of the same. ACF made a case for higher contribution for the poor households and approached CN Hilton Foundation through its partner agency, CSPC. This proposal now has approval for support. The tanks under this proposal will be slightly smaller in size with a capacity between 7000 and 10000 litres. In this project the unit cost of construction of a water tank, which comes to ₹ 28000, will have 70 %, i.e. ₹ 20000, paid by the CN Hilton Foundation. The work on this project has started.

Outcome

The construction of nearly 3000 RRWHS has been of great significance, particularly the impact on health and on the lives of women. Some of the outcomes include:

One time investment is a solution for a lifetime: People of this area have faced immense difficulties in obtaining drinking water. After the construction of the water tanks there has been a significant change in their living standard. They are able to save their time and this has increased their income. The women from these households can go for labour work and can also earn. This has helped in increasing the income of these households.

Spending on medicines for water-borne diseases has reduced: In many of the coastal villages the incidence of morbidity due to water-borne diseases was high. Ailments like kidney stone, viral fever, jaundice, typhoid and high blood pressure were common. The construction of RRWHS has helped bring down the cost on medicines, resulting in savings for families mainly due to reduced incidences of illnesses.
**Reduction in healthcare costs**

On an average, a family in Damli village would spend `10000 every year on medicines. Costs on medicines have come down to `2000 a year, since the construction of a RRWHS in 2008 - a fact that has been observed across families in these villages.

**Women's burden of fetching water for the family has reduced:** Women bore the major responsibility of fetching water for the family. They had to wake up early in the morning for fetching water; travelling distances from 200 mts to 3 km every day and spend on an average 3-4 hours a day to obtain water for the family. Today, the number of trips have reduced. The availability of drinking water within the house itself has saved at least two trips per day, though they do go to get water for other household chores.

**The benefits-to-cost ratios are on the positive side:** ACF constructed 2969 tanks during the last 15 years. A simple, back of the envelope calculation would show that the benefits-to-cost ratios to be on the positive side (table 4). Since the life of such a structure is 10 years, the families would recover the costs so incurred in the middle of the second year itself. Over the remaining eight and a half years, the benefits would keep on accruing to the family. ACF has been able to generate a savings of about `5.08 crore for the people.

**Table 4 : Cost To Benefit Estimation**

<table>
<thead>
<tr>
<th>Cost incurred</th>
<th>Savings/ Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction cost</td>
<td>20000</td>
</tr>
<tr>
<td>Interest on the cost</td>
<td>2000</td>
</tr>
<tr>
<td>Total Cost</td>
<td>22000</td>
</tr>
<tr>
<td>Time (@ `25 per day)</td>
<td>9125</td>
</tr>
<tr>
<td>Medicine</td>
<td>8000</td>
</tr>
<tr>
<td>Savings (yr-1)</td>
<td>17125</td>
</tr>
</tbody>
</table>

**Positive impact on environment:** The storage of rain water has saved over 1.22 MCFT (Million Cubic Feet) of underground water every year. Assuming 3000 tanks and each storing 20000 litres would mean a total savings of six crore litres of water. This water would have otherwise been pulled out from underground aquifers. Also there has been significant savings on the energy front as well. With such structures using hand pumps to draw out water, the households have saved on electricity. Withdrawal of this quantity of water would have required burning of at least 10000 KW hour of electricity.

**Learning**

Securing drinking water for 3000-odd households along the coast of Gujarat took a little over 15 years and has been an interesting intervention. Those involved in it have learnt certain lessons and feel
that these are important considerations for all who wish to initiate similar work. Some of these learnings are:

**Cylindrical shaped water tank is more advisable than rectangular one:** Initially ACF constructed rectangular underground water tanks. In this design the water pressure increases at the corners, which could, over a period, create leakages at the corners. In the cylindrical shape, since no corners exist, such a possibility is nullified. The tanks thus serve for a longer period of time.

**Construction work should be carried out by trained and experienced masons:** The design of the water tanks in round shape requires experienced and trained masons to maintain the quality of the work. The finishing work and workmanship are important considerations. The use of Bela stone for construction of the round shaped water tanks would require masons with slightly more skills than usual. The corners of these Bela stones have to be given a round shape. Only masons who have been trained to do such work earlier can do the same properly.

**Technical staff are needed to manage the process during construction:** The construction of the water tank should be carried out under the supervision of technical staff. There are times when certain site conditions are not supportive. The technical staff could evolve designs to suit the site conditions. There are many places where the work was done without technical supervision of qualified engineers. Those structures have shown problems since. The fitting of hand pumps, the manhole covers and other fitting materials also require experts. The material quality is also an important consideration.

**Coastal areas must use PVC pipes and PVC spares:** Corrosion is a larger problem in coastal locations. The trenches made to collect water from the roofs earlier used galvanised iron trenches. These have suffered as a result of corrosion. PVC pipes cut from the middle are used now. They do become brittle due to exposure to sunlight but serve more number of years.

**Conclusion**

The work done by ACF to ensure the availability of good quality and potable water within homes of about 3000 households in the coastal region of Gujarat has had tremendous impact. These families have benefitted in terms of both health and the wealth. The availability of drinking water within the house premises has been a boon to women, allowing them time for income generation activites. The drinking water tanks are like ATM machines providing pure and good quality water any time and throughout the year.
Coming Together
A case of women’s empowerment through SHG Federation
Coming Together
A case of women’s empowerment through SHG Federation
Motiben Chavda and Ajeet Singh

Introduction
ACF had initiated the formation of SHGs in Kodinar district of Gujarat, way back in 1999. These SHGs have been instrumental in motivating the village women to save some money every month, and use the pooled savings for small-time credit requirements. The SHGs have been functioning well. The case describes the processes adopted by ACF to initiate the formation of a federation of women SHGs. This combined body has taken up a few activities and is slowly but surely moving to become an independent organization of women. The case brings forth some very critical understandings on the social processes that if followed will aid towards the making of such people’s institutions.

Context
ACF has been promoting women SHGs since 1999 as part of its women
empowerment programme. This project was initiated in 1999 with 85 women of 5 SHGs. They started with a monthly saving of ₹ 30 which facilitated internal lending, bank loans etc. Since then every year, women in different villages were motivated and by the year 2010, a total of 130 such SHGs with 1,850 active members were formed. The groups have amassed savings worth ₹ 64.16 lakhs. Since the initiation of the project, ACF had undertaken various capacity building efforts for the development of SHGs. These included regular meetings and exposure visits.

Many income generation activities were attempted like Sorath Mahila Consumer Store, onion nursery, spices marketing, dairy cooperative, tailoring, weather insurance, National Pension Schemes, soap and detergent making, vaseline and pain balm making etc. These income generation activities could not be sustained as they required different skill sets like producing quality product to market, and in most cases women as individuals or as collectives did not possess this. In April 2010, an exposure visit was organized by ACF at Mahiti Sansthan, Dholera in district Bhavnagar, in which 65 members from different SHGs participated.

The purpose of this visit was to make the women see how Mahiti Sansthan was engaged in women development programmes through its federation and how the federation was engaged in giving loans and managing a cooperative bank. Interestingly, at that time Kodinar in Junagadh was celebrating 100 years of the cooperative movement and it was observed that all the cooperatives were formed by men. The visit was a great success. On their way back, the women resolved to start their own bank. ‘If women in Dholera can do it we also will be able to do it’ – was the resolve they made in unison.

**Intervention**

A group meeting was planned to share the resolve that the women had made after the exposure visit. This meeting saw the participation of members from 15 SHGs. The meeting concluded with a determination that they shall initiate the processes towards the formation of the federation. They also resolved that one of the first activities of the federation would be to run a grocery shop. This was needed by the women as they faced difficulties in obtaining the supplies. They shelled out money but were never assured of the quality. They also decided that the federation would also do work like running counseling centres for family disputes, establishing linkages with government and other development agencies for help in obtaining schemes on women’s health, etc. The SHGs also resolved that efforts would be made to bring in other SHGs as members of the federation.
### Box 1: Questions raised on SHG federation

- Will the federation be able to work for the betterment of women in remote locations?
- How would the independence of SHGs continue when they become members of a federation?
- Who will be responsible for the operation and management of the federation? How will the federation handle the huge amounts at its disposal?
- How will the selection of leaders take place?
- How will the federation ensure representation from all caste groups?
- What will be the roles and responsibilities of the governing bodies and who will draft the by-laws?
- How will the dividend and profits be shared among the members?
- What shall be the role of ACF in case of financial mismanagement in the federation?
- How will ACF help to prevent such irregularities?

### Box 2: The answers to the issues identified

- The federation will help SHGs obtain credit from banks and other institutions and help even the remote SHGs with resources.
- The federation will be managed by an executive committee whose members will be drawn from among the SHGs in accordance to the by-laws.
- The federation will meet once every fortnight and discuss its plans for conduct of business.
- Any SHG member can approach the federation executive members over the phone.
- The work of the federation will be audited by an independent body and occasionally by ACF.
- The profits earned by the federation will be shared among its member SHGs and this will be declared in the annual general meeting to be held every year on 7th July.
- Representation of all castes will be ensured in the executive committee, and even among the leadership and office bearers the same would be ensured.
- The SHG members will have the right to alter, modify and fix the tenure of executive members as and when required.
Two meetings were convened with other SHGs, but they could not adequately convey the necessity of coming under a federation. The ACF team then decided to do an internal assessment to identify the benefits of a federation and to understand the reasons why other SHGs were not motivated in forming such a body.

The study revealed that the women members in most SHGs had no idea about the functioning of a federation. The idea that the leaders shared did not convince them much and they saw the suggestion of putting aside another amount of savings as an additional burden. Adding to the woe was also the poor literacy status of the women. They were poorly educated and did not have much exposure. Hence, they could not visualize how a federation of SHGs would help them in their current operations, i.e. savings and credit. The team then realized that much more efforts were needed.

Constructive strategies were formulated to act upon the survey findings and dispel the doubts women SHG members had about the federation. Attempts were also made to understand if the decision to initiate a grocery unit would interest the women. A group meeting was called in July 2010-11 in which more than 400 SHG members participated. This was a good enough gathering to thresh out the idea and take some decisions on how to go ahead. The meeting served as an eye-opener for the team. The women members who came from simple backgrounds raised questions (see box below), which needed serious discussion and introspection. It was necessary for the women to find out answers to these questions. ACF played an important role in channelling the thoughts and making them understand the issues and their solutions. This was in itself an important process, and as the ACF team realized, they took all possible steps to make them part and parcel of any federation in the making.

Issues were taken up one by one and the answers were considered by each and every member of the SHGs. Almost the entire day was spent in finding out answers (see box 2) to these important questions. It was this process that eventually gave the women the courage and the conviction to take up the decision to form their own federation and carry out activities like opening a grocery store.

The day ended with the women members together taking out a total amount of ₹20000 towards the first seed capital of the federation. In order to carry out its business the federation needed a legal identity. The choice had to be made by the members. The members decided to take the advice of existing experts from the region. They were guided on finer points of by-laws and legal formalities.
by the Chairperson, the General Manager and the Finance Manager of the Kodinar Cooperative Union Bank. The by-laws were developed and thereafter a meeting was called where the SHG members discussed the same and, subsequently, the processes for initiating the registration were carried out. The federation was registered under the Gujarat State Act for Registration of Cooperative Societies of 1962. This process of formulating and discussing the ramifications of every aspect of the society’s rules and regulations took a little more than three months. This time was extremely necessary as the rules and regulations are very important for all institutional processes and if the members are thoroughly aware of the nitty-gritty that really aids in the working of the society.

The process yielded some very important suggestions from the members. They expanded the scope of the cooperative’s work from a mere commercial organization to something that held meaning for them. They included the
provision that the society would initiate counseling centres for resolving family disputes. They also decided that the society would organize health camps and work on the education of girls. They also expanded the commercial scope of the federation to undertake businesses like dairy, cold storages, godowns and the like.

A governing body consisting of 17 members, including a President, Vice President, and one representative from ACF, was selected by the members and they named their cooperative Sorath Mahila Vikas Sahakari Mandali. Interestingly, this was the only all-woman cooperative society that came up in the region well-known for its cooperatives for a century.

Armed with the registration, the federation moved to establish its first endeavour. Till then, the federation had not been able to take any concrete steps to get the grocery enterprise to start functioning. Since the process of registration took some time, the women who were convinced about the grocery shop and its associated benefits parallely continued the process of dialogue to motivate others. They discussed the various aspects of the functioning of the store and took the suggestions given by others seriously. Not that all could be accommodated, but they were clear about the perceptions of the members. Some women from the SHGs wanted the grocery shop to extend the credit line for a period of three to six months on the purchases made by them from the store. However, doing so would mean difficulties in managing the fund flow and hence the grocery unit might not be able to sustain the flow of grocery items for its members. ACF decided to assist the federation by sanctioning a revolving fund of ₹ 50,000 and thereafter the federation approached the Kodinar Cooperative Union Bank for providing it with a line of credit of ₹ 2,00,000. They also garnered another ₹ 88,900 as share fees from the member SHGs. This capital was enough to start the operation.

However, some member SHGs still continued to oppose the idea. They wanted the operation of grocery store to be postponed for a year and they argued that the amount they had was not enough to start a business.

They wanted the federation to first look at giving support to its SHGs in garnering credit and for on-lending work and not to get into buying of rations and making a business out of it. Perhaps they had their own requirements. Since, they had very valid grounds, the executive members took cognizance of the demand and made a provision to keep aside ₹ 1,00,000 as emergency fund to tackle such issues. They asked the 50 SHGs who were members of the federation to put aside ₹ 2,000 each
with the federation and this could be used as emergency fund. The launching of the store was announced. However, on the suggestion of senior members from the ACF team, an exposure visit was organized to understand the processes adopted by another federation in the Gir periphery. The APNA Bazar, an SHG federation shop managed by the Sidhi Community, whose members are mostly illiterate and poor, had made a similar effort at Talala Gir which was at a stone's throw away from Kodinar. The women members of the SHG federation had a two-day long interaction with the women of the Sidhi Federation and learnt the ways and means and also the dos and don'ts of managing a grocery unit. This visit also inspired the women to think that if others could run a similar store for over two years, they too would be able to do the same. The exposure visit gave them the realization of how critical it is to adhere to business principles to run such a store.

Now the business had to start. The Talala exposure visit helped members understand decisions on purchase and stocks should be made collectively. As such, two SHG members visited Gondal (around 150 Km from Kodinar) to purchase red chillies, cumin, turmeric and coriander. The market at Gondal deals in wholesale rates and hence purchasing larger quantities made it a profitable proposition. The women came armed with information and contacts. At around the same time the ACF staff along with 10 SHG members visited the Kodinar sugar factory to secure supplies of sugar at wholesale rates. The MD of the sugar factory at Kodinar assured that 7,000 Kg of sugar would be supplied to the grocery shop.

The executive members also approached the president of the Taluka Panchayat and the president of Kodinar Nagarpalika, as well as the local MLA and the MP to get a prominent space for their grocery store at the Kodinar

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**Varshaben Could Save Her Child**

Varshaben Bajubhai Rathod from Dudana village was in distraught as her child needed to undergo an operation and she needed money for the same. She approached the federation for an advance and the matter was discussed in the federation since the SHG rules prevented it from advancing her the required amount (₹ 25,000) for the operation as she had savings of only ₹ 5,200. Her child underwent a very critical operation and the credit support extended by the federation saved the life. The federation has thus redefined its role and has been helping its SHG members with the kind of support that one would require.
market yard. After some follow up, three shops were allotted to them by the Nagarpalika. This was a recognition that came from a public institution and it boosted the morale of the federation members.

The other members of the executive body were involved in contacting wholesale dealers and production units for ensuring regular supplies of various grocery products at wholesale rate. They were also involved in finalizing the business terms and conditions. The members also visited the owner of a soap and detergent making factory at Veraval, who assured them of supplying detergent and soap at wholesale rates. Similarly for supplies of tea, they met the General Manager of Tulsi Tea. The company agreed to supply the product on credit basis.

For supply of oil, they approached Tirupati Oil, a famous and popular brand of the region. The SHG members approached the GM who, initially, was not convinced by the idea of supplying oil directly to the grocery shop. After 15 communications had failed, ACF approached the company to impress upon them the need for such supplies. It was then that the company agreed to supply 1,500 tins of oil at concessional rates. After ensuring supplies, the grocery shop was inaugurated at Kodinar Nagarpalika market yard on 20th March, 2012. This grocery shop has been running since then and advancing supplies of rations to its members from SHGs at a price much cheaper than the market rate. Women also purchase items on credit and are expected to settle the account before taking another consignment.

During the first eight months, the store recorded a total sales of over ₹ 6,90,459 and has a stock worth ₹ 4,07,588, thus obtaining a margin of ₹ 77,918 from these sales. The operation of the store is in the hands of one member, whose responsibility it is to open the store and maintain the accounts of the sales and stocks. She is given a salary of ₹ 100 per day for her efforts. The accounts and other formalities of the federation are in the hands of an external person who works as accounts head with the cooperative bank. He makes the profit and loss account and other transaction details of the store every three months and these are important issues that the executive members of the federation take up at the discussion table for decisions.

The federation has also been seeking capital from the member SHGs. These SHGs advance a capital of ₹ 300 per month which becomes the seed capital of the federation. As of date the federation has a total receipt of ₹ 6,91,200. With time, more and more SHGs have now been convinced of the need for a federation and have been joining the
endeavor. As of date the federation has 96 SHGs as members. The first eleven months showed a total profit of ₹60,773 from the operation. It has also paid back the amount that it had borrowed from the bank. The meetings of the federations are conducted at regular intervals. They discuss various other options of expanding the business for the advantage of its members. They take up issues at the discussion table when they feel that doing so will help the members and also will hold a financial benefit for them.

Outcome

The decision to come together and do something beyond savings and credit operations has been a big step for the women SHGs from the coastal town of Kodinar. Over the years, they had been doing the safe work of amassing capital through small amounts of monthly savings and advancing the same to its members for small and sometimes big credit requirements. The SHGs also helped women in crisis situations and saved them from paying exorbitant rates of credit charged by moneylenders. However, they decided to start their own organization and do something beyond all this. The search for what to do and how to do it took time. However, they have been able to run their own operation, including a grocery store. This store has been a great success. Some of the broad outcomes of
starting the store and other activities of the federation are listed below:

*Grocery shop has been an important platform for women to gain on the economic as well as the social front:* This federation-run grocery shop has served over 1,232 women from 96 SHGs. The women have together contributed to the building a corpus of over ₹6.9 lakhs. This grocery shop is just a face of the federation. The federation has helped its members to approach hospitals, obtain ration cards, AADHAR cards and NPS (National Pension Scheme) benefits. As of date the federation has helped open 500 NPS accounts for its members. The recognition of the work of the federation enabled it to obtain a support of ₹11,000 from the Bank of Baroda for buying of furniture. They also gave 10 sewing machines worth ₹75,000 to the federation on the eve of International Women's Day this year (8th March, 2013). The federation will be taking the initiative to distribute these machines among their members.

*Ensuring the delivery of schemes among the members:* The federation has assisted the members as well as non-members by selling to them agriculture crop insurance. About 2,578 farmers from Kodinar have been given claims worth ₹58 lakh during the last one year. The federation has also helped in the distribution of water purification systems among 40 members from two villages. Over 1,000 women have benefitted with kitchen gardening kits provided under the National Horticulture Mission Project. Around 300 women farmers have been linked with the ATMA project whereby they have been provided with agriculture equipment, seeds, training and exposure visits for adaptation of best agriculture, farming and animal husbandry practices. A total of 1,500 smokeless, eco friendly chullahs are also to be provided to women members as part of government schemes. The federation thus builds the vital link between the government departments and its members.

*Old conflicts have been resolved as women gain prominence in social space:* Although there has been only one such incident, yet it is an incident that deserves special mention. The conflict between two caste groups was reflected in its wrath towards one woman. She was not allowed to be part of any community affairs and was almost boycotted. However, as she rose to a prominent position within the federation as one of the executive members, the rivalry came to a halt. The Patels now have been inviting her to be part of all functions.

*The federation supports its members to gain on the economic front and stand on their own feet:* One of the women members was an unfortunate
circumstances. Her husband died of cancer and she lost her eyesight after a small injury which she neglected. But today she is a proud owner of a small grocery store as a result of the support the federation extended to her. She runs the shop and manages her family with the profit that she generates from the store. Almost on similar lines are many stories of other women for whom the support of the federation came at a critical time.

Learning

Federations of women SHGs are institutions of significance as they establish linkages and guide the member organizations. These institutions, if empowered with skills and capacities, can effectively discharge the role that agencies involved with promoting SHGs currently play. The work done by the ACF team in this process has yielded a substantial set of learnings. Any organization contemplating such actions should make a study of the same.

**One should make attempts to assess the needs of women SHGs before initiating the processes of creating institutions like SHG federations:** Assessing the need is necessary and an essential exercise that one should always engage in before initiating the activities towards establishing SHG federations. The grocery shop was taken up as one of the activities of SHG because it answered their needs. Also important were the processes initiated to identify the need of women for grocery items. The choice of the product as well as the brand is also an important consideration. It should be noted that one of the weaknesses of the grocery store is that it still has good amounts of stocks of some products that it has not been able to sell as they did not go for a thorough exercise to assess the choice of brands.

**One must go beyond the leadership:** In most cases training and exposure visits are given to leaders at village institution levels. However, it is found that they get empowered with information and skills but they rarely share the same with others if it is not mandated through some processes. There are many examples of such information not getting percolated to general members within groups. The best one is the reduction of interest rate from 2% to 1% as part of the welfare and wider acceptability of the federation. This message remained confined only to a few members.

**One must form the governing body with representations from smaller clusters of SHGs:** This was attempted by ACF. However, the size of such clusters mattered. The governing body represented 25-30 SHGs and hence often they could not bring out issues
from all of them. Smaller clusters of 8-10 SHGs would make sense.

**Learning and capacity building must be a continuous process and agencies must keep on investing in it:** It is of prime importance that the members in positions of management as well as those belonging to the general body undergo trainings and capacity building sessions to keep them well-versed in whatever is happening around. The role of promoting institutions like ACF is to formulate such training programs and keep offering them at regular intervals. These investments are necessary for long term sustainability of people's institutions. The promoting institution's role change strategy must have this as its predominant role.

**Conclusion**

Federations of SHGs have been accepted as a working strategy in livelihood missions all across the country. The case depicts the process, outcomes and important learning for state agencies interested in promoting such institutions. It is important not just to form institutions, but do the same following a process and nurture the newly created institutions in a way that it takes ahead the ethos for which it had been formed. These federations have to be alive and kicking institutions and this can happen if adequate thought is given by the promoters while they involve themselves in promoting such institutions. The processes are important areas as they can make or break the institutions if not designed and followed meticulously.

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An Emerging Livelihood Portfolio
A Case of Women-Run and Managed Dairy Cooperative
An Emerging Livelihood Portfolio

A Case of Women-Run and Managed Dairy Cooperative

Amandeep Saini

Introduction

Punjab is a state well-known for adopting the Anand model of Dairy Cooperatives. However, cooperative dairy activities never took off on the desired scale in the villages of Rupnagar district located near the border of Himachal Pradesh. Since dairy cooperatives did not exist in many villages of the district, the situation was very well exploited by milk vendors who collected milk from the area and traded it at a higher price in the markets of Ropar and sometimes even in Chandigarh. ACF, which had started its intervention with women self-help groups (SHGs), observed this as a neglected aspect and hence an area for intervention. Many of the women members of SHGs had borrowed capital for dairy activities, but were unable to get a better deal as regards milk price. ACF thus intervened to make the cooperative sector initiate the process of establishing its collection centres in the area. This case describes the processes that were adopted by ACF to establish dairy cooperatives controlled and managed by women from the villages of Ropar.
Since 2003 ACF had, with financial support from NABARD, been involved in promoting SHGs with women in its project villages. Getting women to come together and start SHGs was a difficult proposition. The situation was further compounded by the fact that many chit funds that operated in Punjab had defaulted and people in general considered SHGs to be just another form of chit funds. However, as NABARD was behind the process, people took it a little more seriously and slowly joined in.

The efforts gradually resulted in the formation of 35 SHGs in the project villages. These groups were mostly involved in savings and credit operations. As the groups formed and began some credit operations, they requested ACF to help them with livelihood activities. To address this demand, ACF organised training programmes where women were provided training in pickle-making and book-binding. However, these initiatives were short-lived as the women could not really grasp these two vocations and make a living out of them.

In 2007, the Punjab Milk Federation initiated a scheme called ‘Support to Training and Employment for Women’ (STEP) with the objective of linking SHGs with the existing dairy cooperatives. The local milk vendors were mainly involved in procurement and selling of milk. They procured milk at their own rates and never bothered about the quality aspect.

As a result, they offered their own price, which made animal husbandry a loss-making proposition for most families. Animal husbandry proved expensive to farmers as putting aside a part of the farmland for fodder grass, which was a common practice in the villages, gave them less returns. Had they used this land for growing other crops the returns would have been much higher. Due to low returns from milk production, many farmers sold off their animals or were on the verge of doing so.

It was around this time that the ACF team organised a meeting with officials of the Punjab Milk Federation. The purpose was to discuss the STEP scheme and link SHGs with this programme. The data on probable milk collection was estimated by ACF to be around 500 liters every day. The estimation done by officials from the Verka Dairy at Mohali stood at less than 300 liters a day. The mismatch led to a meeting with the SHGs in Ropar. ACF invited the officials to come over to Ropar and see for themselves if the collections were enough for them to go ahead with the linking-up. The visit proved to be successful and led to linkage helping both the Federation as well as women.
**Intervention**

The officials from the Punjab Milk Federation were convinced that starting a collection centre with SHG women in villages would help them to procure milk. They gave ACF the green signal and also asked to extend its support in mobilising the community. The STEP programme was aimed at linking the women members of SHGs to milk cooperatives and thereafter with the Federation. The Milk Federation would provide the same benefits to these all-women cooperatives as it did to any other cooperative. The facilities included transportation of milk to the chilling centres, services of a veterinary doctor for treatment and vaccination of the animal population as and when required, organising medical camps at intervals, and services of the vet on emergency calls for free of cost.

The members of the village cooperatives would also be given seeds of green fodder and subsidy on different products sold under the brand name ‘Verka’. In addition to this, the members would be given the price of milk based on the fat content and not on quantity supplied. They would also be entitled to get a bonus from the profit that the Milk Federation declares once a year. After having heard about these benefits the SHGs decided to form their own village dairy cooperative. The Milk Federation officials carried out all the required formalities to register the group under the Punjab Cooperative Society Act of 1961. The members paid ₹ 100 as membership fees. The Federation provided some essential equipment to measure fat content in milk to the cooperative society. These machines, priced at ₹ 15000 in the open market, were given free of cost.

The formation of the cooperative society was not easy. The community in Alampur village was socially fragmented. Almost 99 per cent of the members of the Arjun SHG belongs to the SC community, whereas the village was predominantly inhabited by the Seni (open category) community and there was not much love lost between the two communities.

However, interestingly, Surinder Kaur, a woman from the Seni community was also a member of the SHG group. She was literate and also had excellent rapport with the households from the SC community. Since most of the other women were not literate, even though they represented the largest section in the group, they unhesitatingly put forth Ms. Surinder Kaur to take up the leadership role of a secretary. They were sure that she would work on the principle of trust and cooperation. This played an important role in bridging the barriers between the two communities in the village and paved the way for others to join the cooperative dairy.
In the beginning, the women members of the SHG which formed a cooperative were hesitant to work with men whom they did not know. They also found it difficult to measure the fat content in the milk and keep the records. ACF organised a week-long training to build capacities of women participants in record keeping and measuring fat content from the milk.

An ACF team member worked alongside the group to provide on-job support. This strategy proved to be beneficial in boosting the motivation and confidence of the women participants. Staff members from the cooperatives also came over to demonstrate the use of the machines and help the secretary of the group to carry out the procedures involved in the estimation of fat content in milk and record keeping. The secretary was also explained the formalities like inward and outward registers and how to tally the records against the day's collection. Record keeping proved slightly difficult for the secretary but she soon mastered the process. She also received support from her family members as well in taking up the activities.

In the beginning the process of initiating the cooperative was bumpy. On the first day the cooperative could collect only 35 litres of milk. The situation did not change in the next one month. When the Federation noticed that collection of milk was scanty, it realised that the route was uneconomical and conveyed this to the women members and ACF. The women were in confusion and distress. They were unable to find out ways to increase the collection. Some of them almost gave up hope. The ACF team immediately realised the gravity of the situation and in order to motivate the women organised an exposure trip to Madoli where some farmers had made a similar effort. This visit proved very educative for the women. In addition to the overall work of the society, participants could observe new technologies being adopted by farmers on feeding practices and breed improvement efforts. They learnt that it would take time but if efforts were focused, they would surely be able to increase their collection from the same cattle stocks. They returned with new hopes and eager to tackle the situation they were in.

During the group level meetings the women from different SHGs decided to bring in cows and buffaloes of new breeds. They also decided to obtain loans from banks for the purchase of good breeds. A buffalo would cost ₹22,000 and in all 11 women applied for a loan of ₹1,10,000 from the bank. They also contributed their own money and invested another ₹1,32,000. Each of them thus got one buffalo. Immediately, the milk collection rose from 35 litres to 65 litres a day. The news of the women
starting a dairy in Alampur was a topic of discussion in other SHGs in the neighbouring villages. After almost two months, one of the groups requested ACF to help them to start their own dairy cooperative. ACF was looking for this opportunity and took these women on an exposure visit to another village where those who had started the dairy and were economically not that well-off. Women from Lohgadh Fide village were inspired and they decided to start their own cooperative dairy.

However, the ACF team suggested that the women do a survey in their own village as to estimate the probable collection. The survey revealed that they could get around 150 litres a day. ACF then called in the Federation staff and the dairy registration process was initiated. This dairy soon became operational and they could, on the very first day, despatch 75 litres of milk.

Ranjitpura followed suit. This village had slightly better milk yield. Located at a distance of 7 km from the thermal power plant, the village supplied a major part of its milk to the thermal power colony and also to the Ambuja Cements Colony. The collection and distribution were in the hands of the milk vendors and they took home the profits. When the other SHG groups came to know about the women's milk cooperative society, they too formed their own cooperative and were soon able to collect over 150 litres a day. Thus in a period of six months three women cooperatives started functioning in the area. This was a big leap for the SHG women who were doing far more than what they had initially imagined.

Formation of the milk cooperatives was one effort to institutionalise the process. However, efforts to work with cooperative members and help
them obtain the required expertise in managing their own animals proved more difficult. ACF conducted trainings on animal care and management with support from the Milk Federation and also from the dairy department. In these trainings women were informed about disease management, feed and fodder management and also on general hygiene conditions of cattle sheds.

In addition, linkages with the veterinary department and the Milk Federation helped them obtain support in animal care and artificial insemination. In addition to this, support was obtained in feed and fodder management. Green fodder seeds were supplied; mineral mixtures were piloted before scaling up on commercial lines; and tablets of de-worming were distributed among the members. Some members were also provided with new breed of cattle where ACF invested ₹ 4000.00 and the rest came from the members themselves. Some new breeds like HF were also introduced among the members. The members together brought in 20 such HF cows and these helped in increasing the milk collection. All these efforts increased the milk collection. The three cooperatives together collected more than 300 litres on an average day.

Conflicts within the dairy cooperatives were a common phenomenon. One of the reason for this was the perception among the members that they were not compensated as per the quality and quantity of the milk they supplied. They had doubts about the calculation of the amount of fat in their milk. The process of estimating the fat content was done manually and the women SHGs members who did it did not follow the proper method and hence the members were suspicious. Thus the conflict continued to simmer and finally erupted as some women discontinued the pouring of milk. When ACF came to know about this, it immediately provided training to all members on fat estimation techniques. The dairy federation staffs were invited and, together with the members, ACF organised a day’s training on milk fat estimation. The understanding on the process could ease the conflict for some period but it did not come to a stop. The doubts continued.

ACF was clueless as to what more to do. The Milk Federation declared that men’s cooperatives at other places never faced such issues and suggested that ACF give up this endeavour with women and initiate an all-men dairy cooperative. Women members were shocked when they heard this. They felt that their hard work would all go down the drain. However, the ACF team had full faith in the women and were by no means convinced by the suggestion of the Milk Federation. The ACF team subsequently learnt that a dairy cooperative in another location
nearby used a high technology device – an electronic machine which accurately read the fat and SNF content in the milk. The visit to village Brahmpura was thus organised for all the cooperative women. When the women saw the device used at Brahmpura, they wanted to get it installed in their own dairy too. However, the machine was too expensive for them to buy on their own. The Milk Federation provided some subsidy, but even with that it was beyond the capacity of the women to procure the device for themselves.

ACF was approached by the women to provide some support in buying the machine. After mulling over the issue, ACF agreed to a format wherein the machine would come with contribution from the Milk Federation, member cooperatives and also from ACF. The agreement was that ACF would contribute ₹10000 in addition to the ₹8000 from the Milk Federation. The rest of the amount would come from the women members who were in the dairy. The cost to be shared by the members of the dairy cooperatives was to the tune of ₹17000. The members of the dairy cooperatives contributed to get the machine installed. All the three groups, namely Lohgadh Fide, Alampur and Ranjitpura, got the machines installed. Thereafter the conflicts among the women members has reduced.

The “all women dairy cooperative society” runs without much problem now. Both men and women from the dairy cooperative pour the milk twice during the day, morning and evening. The milk collection and the estimation of the fat content are done by the secretary who does the work with precision. She also enters the data in the pass-book of
the members and records the data in her log book. This is thereafter tallied with the Milk Federation data. The sample of the entire milk with its weight and the fat content is taken before the same is taken by the Federation. The records are again tallied by the woman secretary. The amount that comes every ten days from the Milk Federation is distributed among the members after calculating the total milk poured with the fat content and the unit price as it is fixed. Though it is a cumbersome process, but the secretary has now mastered it well, sometimes aided by her family.

Women also calculate the bonus, and the amount is distributed among members as percentage of the product of milk poured and fat content. The system is transparent as the secretary calculates and shares this information with the cooperative society. The process of doing all this estimation and calculation requires at least an hour every day beyond the time that any women member gives to the collection. Although her incentives are low, she has also gained visibility among other members in her group and also in her village. It has been empowering for the other women members as well.

**Outcome**

The work initiated with SHG members around formation of all-women milk cooperatives has had visible impacts.

**The production of milk has seen a significant increase:** Milk production has seen an increase by over 152% during this period (see table 1 below). This has been possible because many others, apart from the members, have joined in pouring the milk. The guarantee that the milk will be procured by the cooperatives has given these households the courage to invest in cattle and this is the reason behind the increase in milk collection.

<table>
<thead>
<tr>
<th>Year</th>
<th>Per year milk production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>70000 litres</td>
</tr>
<tr>
<td>2012</td>
<td>176894 litres</td>
</tr>
</tbody>
</table>

**Dairying as an activity has increased its share in the household income basket:** The income which the families now derive from this livelihood option has increased. The increase is significant. It is more than three times (see table 2 below). This increase has been calculated at a constant price (price of milk during 2008). If it is calculated at the current price, which is ₹ 42.00 per litre, the income would have been seen to increase up to five times.

<table>
<thead>
<tr>
<th>Year</th>
<th>Income from milk (yearly)</th>
<th>Income per HH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>70000 x 22 = 1540000</td>
<td>14666</td>
</tr>
<tr>
<td>2012</td>
<td>176894 x 22 =3891668</td>
<td>37063</td>
</tr>
</tbody>
</table>
The status of women in the community has improved: There is a visible improvement in the status of women. In one family the husband had once been driving his own truck. However, economic problems forced the family to sell the truck and depend solely on the agricultural land they had. It was a difficult time for the household. At this juncture Ms. Surinder Kaur began to work with the management of the dairy cooperative. The small incentive that she got and also the little amount which came from the family pouring the milk in the dairy helped them tide over the crisis. She could invest the money that she earned in her sons’ education. Her elder son learned printer repairing work and currently earns ₹ 20,000 a month. The younger son is studying mechanical engineering. She has also been able to get her old house repaired.

Similarly, Ms. Narendra Kaur from Ranjitpura, who was a widow and a poor wage labourer, today makes a decent living by selling milk. She had taken a loan to buy a buffalo. She was able to clear her loan and then invest the income in expanding her stocks. She bought another buffalo. She is today a proud owner of assets worth at least ₹ 50000.

Sri Surjit Singh Barnala, Governor of Tamil Nadu, visited the Alampur women’s dairy and appreciated this endeavour which has proved to be an inspiration for the women participants. Men from the target village also expressed that it was due to the efforts of women cooperatives, that the village had the honour of a visit by a high profile dignitary. This has also boosted the morale of the women members of the village cooperative.

The women members today demonstrate confidence and leadership: Women have been taking an active part in attending the Republic Day celebrations and making presentations on how they have managed their own cooperative. They also took out a procession of their work and drove a tractor all by themselves. Ms. Jasbir Kaur, the secretary of Lohgadh Fide also contested the Panchayat elections and won a position. Similarly, the women are now being called to present their achievement and success story to other women SHGs. They are called by NABARD and by the Milk Federation to demonstrate their achievement at various meetings and events.

There is a general improvement in breed and in the number of milch animals: With the dairy initiative, the animal population has seen an increase. Many families, seeing the possibility of getting their milk collected, have invested in milch animals. Good breed cows and buffaloes can now be seen in the villages. These include HF and Jersey in cows and Murra Breed
among the buffaloes. People have also started adopting AI practices for breed improvement.

**Academic institutions have come forward to document the story:** MSW students from the Punjab University came down to document the success story. Similarly, over the last two years, bankers and government officials have visited the villages to learn about the secrets of the success.

**Learning**

Dairying as an activity and dairy cooperative as an institution can succeed provided some essential elements are understood and paid attention to. These are the major learnings:

**Where there is will there is always a way:** The willingness of women groups to run a livelihood activity has brought them to this stage. They have proved that if there is a decision, accompanied by the willingness and determination, to do something, then it can always be achieved.

**Hard work is a key component of success:** Despite difficulties, women did not give up their hard work. They continued to work and tackle difficulties and were successful.

**For successful functioning of a dairy cooperative awareness plays an important role:** Constant motivation is an important requirement and so is being aware of what is happening. Awareness can help in reducing and avoiding conflicts in institutions. ACF played an important role in making the women understand how milk contents are measured. They also brought in machines to help remove the human error. All this has been responsible for the success.

**Conclusion**

Dairy cooperatives managed by women have given an impetus to many households in the area to invest in dairying activities. The processes adopted by ACF in association with the Dairy Federation have helped in increasing the income and also have given women recognition. Women have been running the entire operation from managing the collection to the distribution of benefits among the cooperative members. The dairy sector is slowly emerging as an important portfolio in the livelihoods of the farming community in rural Ropar. The process made a modest beginning but the results illustrate that dairying is possibly today the second most important livelihood portfolio of many households in the area.
Where Doctors Did Not Reach
A Case of Bare-feet Women as Veterinary Service Providers
Introduction

Women all over the world have been historically involved in animal care. Himachal Pradesh is no exception. ACF zeroed in on this fact and got involved in identifying women who could be engaged in extending veterinary services in villages. It was a challenge for the women to provide the service to people of their own villages. This intervention is an important learning for organisations involved in similar efforts elsewhere.

Context

ACF started its intervention in Darlaghat in 2002. Almost around the same time it started its work with women. The work initially started with the formation of women Self-Help Groups (SHGs). By 2007-08, the women of these SHGs had started demanding for income generating (IG) activities. ACF responded by giving them training in different IG activities like making pickles, paneer and tomato puree. However, these trainings were
However, practices adopted by villagers in Darlaghat reduced the milk yield substantially. The other option was to improve the local breed through artificial insemination (AI) process. This would, however, take a minimum of four years to produce any results but would be more suitable to the conditions and hence sustainable.

It was seen that the women of the villages were mostly engaged in agriculture and animal husbandry. Interestingly, the men were not engaged in any of these activities as they went out of the villages to pursue other vocations. Given the rural nature of the project location, ACF started its intervention around families with farm-based livelihoods. Agriculture was given the first focus. Since the area was primarily rain-fed, only one crop was grown in a year and thus it was difficult to engage families round the year. Horticulture was given some preference as crops like tomatoes were seen to be grown by farmers, who had access to some irrigation sources, during the non-rainy months.

However, even this was not easy as damage to crops by pigs and monkeys was very common in the villages. The only option left to ACF was animal husbandry. The villagers owned local breed animals. With maximum milk yields of 1.5 to 2 litres a day, milk production was very low. One option that was tried out was to replace these animals with Jersey cows from Punjab. These Jersey cows had capacity to give more than 25 litres of milk a day. The veterinary doctor served a population that resided in 100-odd villages spread across 10 Panchayats. The personnel in charge of the area included a doctor who, along with one pharmacist, stayed at Darlaghat and three other pharmacists who stayed close to the three sub-centres. Each of the pharmacists catered to 25-30 villages on an average. The hilly terrain came in the way of services reaching within the appropriate time. The Veterinary Hospital was situated at Darlaghat. This was not far in terms of distance. The hilly terrain, however, made it difficult as it took time to cover the distance of 25-30 km. As a result, artificial insemination was used very sparingly.

not very successful. This setback led the ACF team to decide to invest in building capacity of women in vocations which could provide them with a regular source of income and also ensure for them a modest livelihood.

As the team got engaged in understanding the prospect of animal husbandry, it realised that veterinary care in the area remained at a very rudimentary level. Not that services were not available, but it took too much time for veterinary service providers to reach the distant locations. The hilly terrain came in the way of services reaching within the appropriate time.
The 5-member team, however, found it impossible to reach out to all. The ACF team discussed this problem when it was contemplating starting some initiatives. The team came up with the idea of having one person in each village who could serve as a link between the Animal Health (AH) department and the people. The person would have some emergency medicines in stock and enough of training to be able to identify the problem and begin first-aid before the veterinary doctor arrived. Since the entire operation of animal care was in the women's domain, having women to work as the contact personnel was understood to work better. With SHGs in the villages operating for quite some time, ACF considered training one woman from each group for this role.

**Intervention**

The actual work on the ground started in 2008. ACF selected 15 villages falling under its project area and identified women who would help in taking the veterinary care services to the rural households. These villages were near the Ambuja Cement Plant. The selection of these women was done through a consultative process. During the SHG meetings discussions were done to identify volunteers. To the surprise of the ACF team, the women showed great willingness and thus started the process of selecting women from the SHGs. ACF wanted the women so selected to be literate. This condition was rather difficult to fulfill. There were unmarried girls who were educated, but ACF did not want to involve them in the process as there was always the possibility of their getting married elsewhere and moving off to their in-laws’ place, in which case ACF would have to start from scratch and train new ones to replace the married ones. On the other hand, it was really difficult to find married women who had some education.

Finally, some women SHG members were identified. Twenty-three women from 23 villages were selected during 2009 and all of them were given a few days’ inputs on how they could identify diseases from the symptoms. Two doctors belonging to the government veterinary services and one of them in charge of the Veterinary Hospital at Darlaghat, provided these inputs to the women. Inputs were also given on preventive care and they were told which medicines should be given against which symptoms. The women were called Sevikas. This training lasted for four days. The women were given a medical kit after the successful completion of the training. This kit included some simple medicines for worms, liver diseases, constipation and also some nutritional supplements for animals. This kit was provided by ACF. ACF took the support of the two doctors to get the kit prepared.
After the training it was seen to be a challenging task for the women to carry out the medical work in the villages. None of them had ever done such work before and an input of four days could only serve towards building some basic knowledge. The women were hesitant to venture forth on the basis of their newly-acquired knowledge. The most difficult task was to break the ice among the community. The community had never seen women into such tasks and so had considerable reservations. They had always seen a man performing the diagnosis. They preferred men to these women any day.

The process of getting accepted by their own community took time. The willingness and determination of the women slowly made this possible. The trained women initially started with awareness campaigns in the villages. They started discussing animal diseases and their symptoms in the village meetings and SHG meetings. They could identify the early warning symptoms and could initiate medical services early and this often helped.

Since the programme was done in coordination with the government, the Sevikas could establish contact with the doctors and also write prescriptions. In many cases, the doctors would give the names of the medicines over the phone and this helped in tackling emergency situations. The women would explain the symptoms and take a note of the diseases in the diary and also the medicines so prescribed. As they did the same process a few times, they could also understand the problem and do the needful. The doctors would later provide consent on the medicines and this boosted the morale of the Sevikas. Almost alongside the process of spreading awareness on animal care, the Sevikas also carried out some assessments. One was the assessment of the breed and also the milk yield in the villages where they were engaged in the work. The data of the initial survey is shown in the table below.

### Table 1: Data on Breed and Milk Production

<table>
<thead>
<tr>
<th>Type of animal</th>
<th>Number of animals</th>
<th>730 litres of milk production per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Jersey</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>Hybrid cow</td>
<td>227</td>
<td></td>
</tr>
<tr>
<td>Buffalo</td>
<td>94</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Survey conducted by PSS 2009*

### Table 2: Condition of Cattle Sheds

<table>
<thead>
<tr>
<th>Condition of Cattle Sheds</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airy cattle house</td>
<td>8</td>
</tr>
<tr>
<td>Khurliya</td>
<td>3</td>
</tr>
<tr>
<td>Cemented floor in the cattle house</td>
<td>11</td>
</tr>
<tr>
<td>Colouring of cattle shed</td>
<td>14</td>
</tr>
</tbody>
</table>

*Source: Survey conducted by PSS 2009*
The survey carried out by the Sevikas served as an eye opener for the ACF team. They realised that local breeds dominated. As such the milk production was also low. Villagers preferred using the milk for their own consumption. Added to the problem was the condition of the place where the families kept their animals. These places were filthy. The cattle owners also did not give the animals medicines for worms. The survey findings thus called for action. The women were taken to the National Dairy Research Institute (NDRI) Karnal, Haryana. There they saw different breeds of milch animals, a few of which gave as much as 65 litres of milk a day. The Sevikas also came to know about the importance of proper animal keeping and fodder preparation.

The women were motivated after this training. They took these observations and inputs for discussion in village meetings.

At the ACF level, meetings with the PSS were a very regular event. It would happen twice every month. The PSS would provide records of the medicines they gave and get them refilled with fresh stocks of medicines. These meetings would also discuss seasonal illnesses and symptoms and medicines. All this armed the women with knowledge of possible line of treatment.

The inputs they received armed them with information which they shared in the village meetings. Each of them would conduct meetings as part of
their responsibilities and also do a lot of home visits during the month. ACF gave them a small honorarium for their work. The honorarium varied between ₹ 400 and ₹ 500 and came as an incentive to them. The Sevikas gradually became accepted in the community. They could provide the support and also treat some illnesses without depending much on the doctors. ACF also organised animal health check up camps in the villages.

In one such camp during a home visit, the team of doctors came across a cow that was given AI some eight months ago. The family understood the cow to be pregnant but on investigation the cow was found not to have conceived. This was a blow to the family. Subsequently, the discussions that followed in the monthly meeting with the villagers revealed to the ACF team that these were common incidents and many AI never fructified. The problem was identified to be in determining the stage at which the AI should be done. Since the AI personnel had to be called for the task and informed at the right time, there often were delays in coordination and hence in many cases AI was done at inappropriate times. Thus there were expenses but no outcome. Thereafter, it was felt that PSS should be given training in pregnancy tests of animals. The women were given a hand-held machine which helped them to determine the pregnancy of the animals. With this machine in hand and their skills being developed through training inputs, the women began doing a good job and both the villagers as well as the staff at the animal husbandry department benefitted. The machine helped in determining the proper timing for AI of the animal and the doctor was called thereafter. With the women handling many cases on their own, and that too with dexterity, the second phase of their training began. This seven-day training on breed improvement and nutritional fodder was given by officials of the animal husbandry department. This was followed by another exposure visit to NDRI, Karnal. This phase saw the Sevikas being involved in spreading awareness on breed improvement, fodder and feed supplements etc.

In one of the meetings of the PSS, the women members complained about the improper vaccinations being done by the department staff. This was brought to the notice of the officials who in turn came up with their own arguments, one of which was the misconception prevalent among the community that animals would stop giving milk if vaccinated. The geographical locations of the villages and the houses further compounded the problem. The government staff further pointed out that during the daytime the men were generally away from home and women found it difficult to control the animals and so vaccination was a difficult task. All these were reasons for low rate of
success of the vaccination drives. All these called for action and instead of indulging in a blame game, ACF and the team of 23 Sevikas took the course of action.

The third phase of the training was thus designed to help the Sevikas attain skill sets so that they could handle vaccinations on their own. The women were not sure if they could do such a difficult job. The veterinary doctor gave them three days’ practical training on administering vaccination. However, the involvement of the women in the vaccination job caused an amount of trepidation in the pharmacists, who feared that their position in the village would decline now that women would be vaccinating the animals. When ACF learnt of this, it designed a strategy to ease the tension. Senior officials of the veterinary department were roped in to make the strategy succeed. The strategy was that the next time when vaccination was done, the role of the Sevikas would be to aid the pharmacists in doing the documentation work. This strategy was right to an extent. The government functionary would do the job, while the record would be maintained by the Sevikas. Gradually, with time, the pharmacists came to realise that the Sevikas were actually

Sunitadevi of village Raudi was struggling when her animal was to give birth. The PSS diagnosed that the neck of the calf had got stuck inside. She implemented the procedures explained to her and the calf came out of the womb. Sunitadevi is all praise for the Sevika as she understands that the Sevika has saved two lives – that of the cow and of the calf.
complementing them and helping them in their work. So the pharmacists now have a pair of extra hands to fall back on and they now appreciate the fact that the presence of the Sevikas has made their work easier. The vaccination drive has been extremely successful. Around 2626 animals have received inoculation doses. In many of these cases, the Sevikas vaccinated the animals. With the support of the pharmacists, the Sevikas have slowly become experts in administering vaccination.

Another important aspect that came to the forefront was the need for having the travis. The villagers had been requesting ACF to put this infrastructure in place for quite a long time as it would help the Sevikas to carry out their responsibility without fear of being injured by the animals. ACF responded to their request but also sought their cooperation. The Sevikas collected ₹. 50 from each household and the remaining amount came from ACF. These structures can now be seen in almost all the village locations. They are important for the Sevikas and the pharmacists to do vaccination and also for carrying out AI.

Action was necessary on another input that came from the villagers. During meetings with villagers, many Sevikas came to know that fodder was not given to cattles in the proper manner. The women gave the fodder without doing the necessary shredding and cutting and often gave dry fodder instead of green fodder. Since the fodder was not properly cut, the animals had to spend too much energy in chewing it. The discussion on fodder mixing and the proper ratio of green and dry in the fodder thus attracted the interest of the women. People were influenced by these discussions and were ready to purchase grass cutter for cutting the fodder properly.

ACF decided to provide some support. Purchasing the machines in bulk would fetch a good discount and ACF would chip in with its support by providing for the cost of transportation. Women in the villages mobilised ₹ 70,000 and this helped them procure 14 grass cutting machines. ACF chipped in with the transport cost which came to ₹ 18,000. In the next phase, the Sevikas were taken to the veterinary college at Palanpur for training on feed processing. In this training-cum-exposure tour, the women were taught how to make healthy fodder from the fodder available in the hills of Himachal. They were also given information on preparing the feed in such a way that it would care of the deficiencies commonly found in animals. The Sevikas were supplied with feed mixtures and they traded the same in the villages at ₹ 50 per bag. The price differentials came as an incentive to them. The feed mixture soon became an item procured by the people in large
quantities as they realised that it helped in increasing the milk production. The time was ripe for thinking of making the programme run on its own. By the end of 2011 it was thought that for sustaining the benefits of this programme, it would be necessary to make the Sevikas self-dependent, for which some community-based initiative would be needed. The beginning to this was made in 2011-12, when it was decided that the villagers should start paying certain small costs.

For example, the medicine that ACF provided to the Sevikas should now onwards be charged. However, as expected, when this was discussed in the villages, the response was negative. But ACF was strict about its proposal and stopped the supplies. Soon the villagers had to purchase the medicines from the open market and then they realised that accepting the suggestion of buying the medicines from the Sevikas would save them both time and money. They, therefore, accepted the proposal.

Since the medicines were bought in large quantities, they came at a price which at times was half the MRP. The Sevikas were given the medicines and were told to charge a small amount as service fee above the price at which they were given to them. Even with the small service fee so charged the price of these medicines came to only about two-thirds of the market price.

The service fees went to the Sevikas whereas the medicine price recovered was used to replenish the medicines at regular intervals. In short, ACF maintained the bulk purchase of some essential medicines and supplied them on credit to the Sevikas. On depositing the amount the Sevika would again get her stocks replenished. This system has been working well for the last one-and-a-half year. Sevikas have established a
group among themselves and opened a bank account. The Sevikas have now assumed an important position in the village as service providers.

Outcome

These women veterinary service providers provide the much-needed emergency services and help the families in the area receive immediate support as regards veterinary health services. Some of the results of this interventions are listed below:

There has been a noticeable increase in the confidence level of the women service providers: Training received by these Sevikas have boosted their self-confidence. Once confined to household chores, these women now go out and interact with women and men. Their world view has undergone a sea change. They attend to emergencies with dexterity and skill. Sevikas are called for whenever any animal in the villages falls sick. They have become self-reliant, confident and have been able to establish their own credentials. They have deconstructed the myth that veterinary service is a male profession making them confident within their own families and in the community.

Women have started getting support from men: After witnessing the benefits of this intervention, men have come up to support the Sevikas.

There has been a definite increase in the production of milk in the villages: The work of the Sevikas has helped in increasing awareness about animal care and health. It has helped families in increasing their income through increase in the production of milk. Milk production has shown a singular increase and is depicted in table 3.

Table 3: Milk productions in villages

<table>
<thead>
<tr>
<th>Year</th>
<th>Milk production (per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>730</td>
</tr>
<tr>
<td>2012</td>
<td>1754</td>
</tr>
</tbody>
</table>

Source: Records of PSS at Village-level

Practice of Artificial Insemination is now accepted by the community: There has been an increase in artificial insemination adoption. Village farmers are now engaged in improving their breeds. The earlier low success ratio has significantly changed for the better.

Table 4: Number of AIs done

<table>
<thead>
<tr>
<th>Type of animal</th>
<th>AI in 2008</th>
<th>AI in 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Jersey</td>
<td>87</td>
<td>338</td>
</tr>
<tr>
<td>Hybrid cow</td>
<td>227</td>
<td>334</td>
</tr>
<tr>
<td>Buffalo</td>
<td>94</td>
<td>103</td>
</tr>
<tr>
<td>Total</td>
<td>408</td>
<td>829</td>
</tr>
</tbody>
</table>

Source: Records at PSS level

Diseases in animals have reduced: Earlier, worm infestation in the stomach
was one of the common illnesses among animals. This took its toll on both milk production and the mortality rate. Today, both diseases and the mortality rate have significantly reduced. With the Sevikas to provide timely treatment and advice, people have become increasingly aware of the diseases and take proper care of their animals. Vaccination drives have reached almost all the animals in the area, with 310 families vaccinating 2,737 animals.

**Marked improvement can be seen in animal management:** Feed, fodder and general cleanliness are some of the important areas that have seen a marked improvement. Regular follow-up by Sevika’s and her inputs have certainly made women more knowledgeable about fodder and cleanliness of sheds. This has been one of the reasons for increased milk production.

The percentage of households providing feed and fodder was as low as 15% before the intervention. Almost 75% of them now have understood the importance of good feed and have been giving the same to the animals on a regular basis.

<table>
<thead>
<tr>
<th>Table 5: Management of cattle sheds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement in cattle house</td>
</tr>
<tr>
<td>Airy cattle house</td>
</tr>
<tr>
<td>Outlets in cattle shed</td>
</tr>
<tr>
<td>Cemented floor</td>
</tr>
<tr>
<td>Colouring the cattle shed</td>
</tr>
</tbody>
</table>

Source: Records at PSS level

**The relationship with the government department has improved:** The veterinary doctors are also feeling involved with this process. They have been involved in training the PSS and hence share part of the credit for the results. They attend to calls of the Sevikas and provide quality inputs. The phone numbers of all the PSS are with the veterinary doctors. They pick up the phone and offer guidance.

The government considers the PSS as its extension arm in the remote villages.

**Community is now a willing partner to the process:** This programme at the village level has been able to get the support of the community. The

<table>
<thead>
<tr>
<th>Table 6: Contribution of the community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community support</td>
</tr>
<tr>
<td>Medicine</td>
</tr>
<tr>
<td>Feed and fodder</td>
</tr>
<tr>
<td>Travis and chaff cutter</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: Records of PSS
community understands that it also needs to chip in with the needed support – human and financial – as and when approached. ACF has thus helped in making this intervention sustainable with the support of the villagers. The health care support provided by the Sevikas and the government department has made the change happen.

Learning

The involvement of volunteers from among the community in providing medical services to animals and helping with medicine and other support has provided immense learning to the team involved in this intervention. Some of the key learnings are:

*Management of feed and fodder is as important as provisioning of medicines*: They are not ‘either/or’ intervention. The dairy intervention requires not just medicines and services from the veterinarians but also inputs on feed, fodder and knowledge on animal care to keep diseases away.

*Necessity is the mother of invention*: Here the model of veterinary care as suggested by the government never worked. On the contrary, a model that helped to train volunteers and make them the first set of doctors to provide the essential services has proved to be successful.

Success rests on willingness and determination: A lot is achieved if there is willingness and determination. The intervention proved that difficulties will come but have to be faced. The women veterinary service providers showed this determination.

Education is never a barrier: The women who served as PSS were not highly educated. They were provided inputs in small doses and thereafter were supported so that they could learn while they put the newly learned things into practice. They have shown that they could do well despite the odds.

Conclusion

The intervention around veterinary care in a far-flung location of Himachal has been an eye-opener for the team. The women who were trained were poorly educated but armed with inputs, they have been able to work wonders. The inputs came in small doses for the women to imbibe through practices. They have been able to play the role that was envisaged for them. The results have shown this model to have worked.

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If You Save Water, Water Will Save You

A Case of Low Cost Method for Obtaining Potable Water in Fluoride-Affected Villages
If You Save Water, Water Will Save You
A Case of Low Cost Method for Obtaining Potable Water in Fluoride-Affected Villages
Brajesh Singh Tomar

Introduction

This is an account of the intervention around securing potable drinking water for villagers in Marwar Mundwa, Rajasthan. The drinking water in this area had high levels of fluoride and Totally Dissolved Solids (TDS), causing dental and skeletal fluorosis. This intervention depicts how Ambuja Cement Foundation (ACF) provided a simple solution, whereby families interested in the programme joined hands and ensured the availability of safe drinking water for themselves.

Context

Water is life. It is the driving force behind all development. Water has been the reason for establishment and for destruction of civilizations. Annually, over 3.4 million persons in the world die of water-related diseases\(^1\). Excessive amounts of fluoride in drinking water are responsible for the dreaded disease of fluorosis. According to WHO, F > 1.5 PPM is considered to be toxic. Too little (< 0.5 mg l\(^{-1}\)) or too much (> 1.5 mg l\(^{-1}\)) fluoride in drinking water can affect bone and teeth structure.\(^2\)
Higher fluoride concentration disturbs the course of metabolic processes and may cause an individual to suffer from skeletal fluorosis, dental fluorosis, non-skeletal manifestation or a combination of the above. Fluorosis has almost become a global epidemic and is a cause for concern from the point of view of public health.

Rajasthan is among the most highly fluoride-affected states due to high concentrations in drinking water. People in several districts of Rajasthan are forced to consume water with fluoride concentration up to 44 mg l⁻¹. Almost 50% of fluoride affected villages in India are in the state of Rajasthan. The number of fluoride-affected villages/habitation has increased from nearly 19% in 1991 to 25% in 2006. Nagaur, the fifth largest district of the state, has more than 80% of its population living in rural areas. The mean annual rainfall in the district is 320 mm and over 90 per cent of the precipitation takes place over 20 rainy days.

As such, the ground water recharge is low and is also affected by low infiltration capacity due to the clayey soil. In the recent past, the district has also experienced high level of water extraction from underground aquifers. Due to this exploitation of ground water resources, problems of high salinity and a high incidence of fluoride in the ground water are common.

Drinking water provided by the tube wells in the district has been declared as unfit for human consumption. The problem of high salinity (TDS) and high fluoride content in water is a major one in villages falling under the project area of ACF in Marwar Mundwa block of Nagaur district. The groundwater, which is the only source of drinking water, contains fluoride levels ranging from 3-8 PPM and also very high TDS levels of 500-3000 mg/l. Consuming this water is indisputably hazardous to health. It is common to come across children with discoloured teeth and elderly people reporting about back and knee pain.

In response to the drinking water problem the Public Health Engineering Department (PHED) embarked on a scheme to supply drinking water through tube wells called ground-level reservoirs (GLRs). The analysis of water sample obtained from 10 PHED tube wells in the ACF core villages revealed that it too had high fluoride content (>1.15) and also high TDS (>1318).

Thus, the people had no option but to drink the pond water and use the GLR water for animals, bathing, cleaning and other household work. Those who could afford to collect pond water through tankers did so and stored it in tanks. Most of the households, however, obtained water through head loads or using cycles.
Table.1 Number of villages and habitations suffering from water quality problem in Nagaur

<table>
<thead>
<tr>
<th>No. of villages</th>
<th>No. of habitations</th>
<th>% affected by drinking water quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1374</td>
<td>1972</td>
<td>1996</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2001</td>
</tr>
<tr>
<td>42.5</td>
<td>58.5</td>
<td>82.7</td>
</tr>
<tr>
<td>89.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Water Digest 2012

Many families used both sources. In most cases, the responsibility of collecting water lay on women and they spent 4-6 hours per day on average and over 8 hours during summer to fetch the daily requirement of water. As part of its welfare orientation, the government had decided to obtain water from the Indira Gandhi Canal and supply it to the district.10

Access to safe drinking water was thus a major challenge, aggravated by the fact that there is no perennial source of water in the district. People mainly depend on village ponds or nadi for drinking water, which was found to be free from fluoride (<1 ppm) and TDS (< 500 PPM) but not safe because of biological contamination. Analysis of water sample from the village ponds showed the total califorms to be about 14-28 in 100 ml of water, against the desirable limit of 1. Rainwater harvesting, the collection and storage of rainwater from areas such as roofs and other natural catchments, is an ancient practice prevalent in this area.

ACF initiated the process of harnessing rainwater in the village of Marwar Mundwa in Nagaur district in 2005.

Intervention

ACF began working in 25 villages surrounding the proposed cement plant in 2005. As part of its efforts to win the confidence of the community, it carried out interventions like health camps, and repair and maintenance of rural infrastructure. These activities helped in building a rapport with the community.

Understanding the issue: ACF also carried out village level meetings, and undertook door-to-door contact during this initial phase. Interactions with the leaders of the community and the Panchayats were also done. During these dialogue processes, ACF understood the needs of the community. One of the most discerning needs was drinking water. This was a grave problem faced by households as water for drinking had to be fetched from long distances. The water from ponds had high bacterial

10
contamination whereas the water supplied by the Government Water Supply had high TDS level and high contents of fluoride. Thus both these sources posed specific health problems.

The interactions with households and the community gave ACF the mandate to initiate work on the issue of drinking water. ACF decided to intervene with the community in the area of Water Resources Management. This included pond deepening work, renovation of old tanks, construction of diversion canals etc. All these were taken up in the initial days and were very necessary as the only sources of drinking water for humans and animals were the ponds. Although the water thus obtained was better than the one supplied by the government, it still was not ideal for human consumption. ACF realised this and thus decided that it would provide support to households interested in constructing RRWHS (Roof Rain Water Harvesting Structure). However, since this benefit would go directly to a household, ACF decided to bear only a part of the total cost.

Making the decision to construct such underground water storage structures was easy. However making the community accept the idea of having
Table 2: Showing RRWHS/WST constructed year-wise

<table>
<thead>
<tr>
<th>Type of WHS</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>RRWHS</td>
<td>74</td>
<td>56</td>
<td>53</td>
<td>47</td>
<td>30</td>
<td>24</td>
<td>24</td>
<td>33</td>
<td>341</td>
</tr>
<tr>
<td>WST</td>
<td>0</td>
<td>29</td>
<td>33</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>93</td>
<td>365</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>85</td>
<td>86</td>
<td>97</td>
<td>80</td>
<td>74</td>
<td>84</td>
<td>126</td>
<td>706</td>
</tr>
</tbody>
</table>

Table 3: Showing year-wise expenditure and community contribution

<table>
<thead>
<tr>
<th>Year</th>
<th>RRWHS</th>
<th>WST</th>
<th>Total</th>
<th>CSR in % of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>Community</td>
<td>CSR</td>
<td>Community</td>
<td>CSR</td>
</tr>
<tr>
<td>2005</td>
<td>1.00</td>
<td>4.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2006</td>
<td>1.20</td>
<td>5.00</td>
<td>0.80</td>
<td>2.80</td>
</tr>
<tr>
<td>2007</td>
<td>0.30</td>
<td>2.75</td>
<td>0.15</td>
<td>1.10</td>
</tr>
<tr>
<td>2008</td>
<td>2.33</td>
<td>6.00</td>
<td>1.15</td>
<td>1.95</td>
</tr>
<tr>
<td>2009</td>
<td>1.44</td>
<td>4.96</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>2010</td>
<td>1.13</td>
<td>2.60</td>
<td>1.00</td>
<td>2.46</td>
</tr>
<tr>
<td>2011</td>
<td>1.08</td>
<td>3.72</td>
<td>1.20</td>
<td>6.30</td>
</tr>
<tr>
<td>2012</td>
<td>1.93</td>
<td>8.58</td>
<td>1.80</td>
<td>8.40</td>
</tr>
<tr>
<td>10.41</td>
<td>28.61</td>
<td>6.30</td>
<td>23.21</td>
<td>16.71</td>
</tr>
</tbody>
</table>

such underground water storage devices needed a lot more effort. RRWHS, which is locally called tanka, has been traditionally used as storage tank in some of the project villages. These structures were constructed by families who could afford the cost. The tankas were filled up by tankers and were built in the main house or the courtyard. They were circular holes made in the ground, lined with fine polished lime, in which rainwater was collected. This water was used only for drinking. If during a year, there was less than normal rainfall and the tankas did not get filled, water from nearby wells and tanks was obtained to fill the household tankas. ACF took to creating awareness about the importance of these traditional water tankas through its village meetings, rallies and street plays. Households were also informed about the technical aspects of RRWHS both individually as well as in community meetings.
**Designing a strategy:** ACF designed a strategy to take these traditional structures to all the households in the area. It drew up a technical plan (design) and also a financial plan (cost-sharing formula) and thereafter took it to the people. The plan was discussed thoroughly with the people. The households showing interest in having the structures were explained the technical aspect of the design, the cost sharing formula and the administrative aspect of the same. Those who accepted the terms and conditions were asked to go ahead with the construction. The design and the capacity of these RRWHS were drawn up through consultation with the family members, especially the women. The men were involved in the discussion of the cost sharing formula. The capacity of these structures varied between 15,000 and 20,000 litres, which was understood to be sufficient for a 6-member family for a year. The water requirement of a family was worked out after considering the family size, daily water requirement and the time period. The daily minimum water requirement of a person varies between 4 and 10 litres, depending upon the season and work stress. The cost of such structure thus varied between 25 and 30 thousand rupees. The factors that contributed to the high price included hard rock and labour support during construction.

**The modus operandi:** ACF designed a protocol and explained the same

### Steps for Project Execution

- Interested households (HHs) approach ACF field workers or ACF office for construction of RRWHS/WST.
- A simple application form is created and field workers collect application form from the participating households.
- Field worker/engineer then visits the household and finalises the design after looking at factors like location, capacity etc.
- The engineer then draws up the layout of the tank in consultation with family, especially the women.
- Construction work is then started by the household and ACF provides technical support.
- ACF representative makes visit during construction at least thrice, at three stages of construction - completion of foundation, during construction and completion of the fittings.
- After completion of the work the household submits the detail of expenditure incurred by it for construction.
- ACF contribution towards the construction is then done through cheques after due verification by field team.
to all households showing interest in the construction. The protocol is elaborated in the box titled ‘Steps for Project Execution.’ The design of an RRWHS would require about 50 square metres of roof area. This would help collect 12000-16000 litres of water if the average annual rainfall was between 300-400mm.

During the construction of RRWHS, many difficulties were experienced. These included difficulties in getting the necessary space for the tank, deepening of the foundation due to hard strata at low depth, connection with roofs and escalation of cost of materials. In general, people preferred rectangular shape as it was easy to construct and also fit well with the room shape. The recommended shape being circular, they objected. This objection was dealt with by explaining the advantages of a circular construction to the people. Finally, people withdrew their objection as they understood that a circular
construction would be stronger, require less space and since it would have no corners, there would be little chance of cobwebs forming and contaminating the water. The problem of space was dealt with by adopting site-specific design for RRWHS. In the beginning, very few trained masons were available. ACF provided mason-training to the people who were engaged as unskilled labourers in construction work and thus, over the years, trained masons developed.

Another and possibly the most difficult part of the intervention was the dialogue that took place between the engineers, the field team staff and the family members. Making them see the strength of the design; agreeing to follow the protocol, getting them to agree to pay for the construction initially; and thereafter getting the ACF’s share, was a very difficult proposition. It took at least three-four consultations before the families agreed to start the process.

Initially ACF focused on larger capacity tanks but as many families who showed interest in constructing RRWHS that did not have sufficient roof space, ACF decided on variable size. This helped in increasing the coverage as now anyone interested in such a structure could construct the same after taking technical advice from ACF.

Thus from the second year, ACF started providing support to families for construction of tanks with storage capacity of about 8000 litres. These structures were classified as water storage tanks (WSTs) and in most cases they were not connected to roofs. However, if they had provisions for such connection, the same was suggested to the families. Those who did not have roofs would fill these tanks bringing water by tankers from the ponds. This would ensure water availability at home. These families were also provided with understanding on keeping the water clean and also given chlorine tablets to keep the water free from biological contamination. ACF organised school rallies, street plays, World Water Day celebration and seminars to create awareness about water harvesting and drinking clean water. Families who constructed the RRWHS were also provided help in creating awareness within the villages as well as in other villages where their relatives resided.

The work progressed slowly but surely. At the beginning of every year, based on the previous year’s experience, ACF team members prepared a budget and subsequently ensured the utilisation of the same. The budget provided a fair idea of the number of such structures that could be completed based on its assumption of the supervision time and the needs that were expressed by households in meetings. Box 2 explains
the number of such structures that were constructed every year since the programme was launched.

ACF has also been providing its share of financial support for the purchase of external items such as pipes, filters, hand pumps and cement. This supply thus reduces cash outflow for the families. They mostly pay for buying the stones, getting the sand transported and take care of the masons’ cost. People have evolved their own methods to make this happen. The costs that ACF had incurred in this intervention since the beginning and the share of the households in the construction can be seen in Table 3 below. The data reveal that the share of ACF in this intervention was between 10 and 30% whereas the rest came from the households who benefitted from the intervention.

Outcomes

The work done in villages falling under the core areas of ACL has had tremendous positive effect on life and livelihoods. Some of them are as under:

The intervention has ensured supply of potable water: There has been an increase in potable water supply for 706 households. Before the construction of RRWHS these households would depend on GLR or supplies from village ponds. Women today have direct access and control over the drinking water source and do not have to worry about fetching water from long distances. Whenever they need water for the household they can have the same. During the last eight years over 80.35 lakh litres of potable water were consumed by these 706 households.

Drudgery of women has reduced: Usually it is the women members of the households who are expected to go out and fetch water from the village delivery points. The time they required to fetch water has reduced significantly as they have the source now within their own house. The time saving has actually increased the ability of parents to spend more time with their children. Also they are able to attend SHG meetings and do other economic activities like farming and handicrafts. This change was perceived by the users during various interactions.

Saving of hard-earned money: One of the outcomes that the families shared during interactions is the savings they have made. They no more need to spend on hiring labourers for agricultural operations. Earlier women of families walked several kilometres to get water for the family. Since now drinking water is available at home they are able to devote that time to work in their own fields thus reducing the number of
labourers they had to hire for working in their farms. This has led to saving of money.

**Expenditure on health has also reduced:**
As the water that the households brought earlier were from the ponds and the GLR was not fit for consumption and was the source of various water-borne diseases like diarrhoea and fluorosis, the families would have to spend a lot of money on health-related problems. Ever since they have started using rain water for drinking purpose their annual expenditure on health has reduced. An interaction with an SHG member gave estimate of just how much they saved. An average family would spend ₹ 2500 per annum on medicine for its members suffering from water-borne diseases - now reduced to around ₹ 500 per annum.

**Stored water has reduced water withdrawal from underground aquifers:** Water is an important component of the environment and with the construction of RRWHS the extraction of the precious groundwater has reduced to a large degree. The long-term impact of these structures is thus significant and one can also quantify the savings in terms of energy required for pumping water. On both counts the impact is positive for the environment.

The intervention has thus played an important role not only in saving time and money but has also played an important role in making use of the saved time in generating income for the families. It has also helped in saving of energy and extraction of groundwater. All these outcomes would certainly tilt the balance towards greater benefit compared to the cost incurred in this intervention.

**Learning**

As the work progressed and the ACF team got engaged in implementing the water storage structures in villages, they did learn a few good lessons. Many of these lessons are important and would be useful for those involved in similar interventions elsewhere. They can take a cue and incorporate these learnings in their actions. Some of the learnings are:

**Decentralised systems in water supply are efficient:** The traditional systems of water harvesting, like the tanka system, which is prevalent in this part of Rajasthan, is viable and cost-effective. This system needs to be improved and utilized on a large scale. It can meet the requirements of drinking water for the
rural population and also provide quality water supply to our rural population. Since the management of this resource is owner driven and owner controlled it is sustainable and more efficient.

**One must do a thorough consultation with families before the construction begins:** This is an important aspect as it helps in ensuring sustainability. The design and capacity of RRWHS must be decided in due consultation with the family including women and men. During this process of consultation issues like cost, contribution, design and future repair and maintenance are openly discussed and families thereafter take informed decisions. They know exactly their role in making these structures work for them.

**A prototype model will not work:** One of the important learnings is that prototype models need to be replaced by flexible ones. The model would vary as it needs to suit parameters like site and the socio-economic conditions of the family. Such consideration in design results in long term sustainability of the intervention.

**Give the reins in the hands of the beneficiary:** The entire construction is done by the family and hence they exercise control over the cost. The families are aware of the contribution that ACF would provide. Thus they take their own decision on size and features that they would like to install. Since the families are directly involved in the construction, these structures get built at a lesser cost compared to when the construction is done by an external agency.

The cost reduces as the beneficiaries take most of the responsibilities such as supervision, local transportation and construction through their own family labour. The role of ACF thus remains limited to overseeing the quality and monitoring the adherence to the set technical parameters.

**Conclusion**

The intervention around providing quality drinking water to rural households in Rajasthan provides scope to others involved in similar efforts elsewhere to learn from the process adopted. The water that the rural families consumed had problems of high TDS and high fluoride content. Drinking this water led to health hazards. ACF provided a simple solution and a decentralised system to these rural households. The collection of rain water in underground water tanks has resulted in household water security and also had a direct, positive impact on health.

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Notes

1. A Tutorial for water managers. WHY GEN-DER MATTERS by Cap Net. March 2006
6. Out of 33,211 fluoride affected villages in the country; Rajasthan has 16,560 villages
8. District Census Handbook
Knitting Fortunes
A Case on Intervention in Knitting at Ropar, Punjab
Knitting Fortunes
A Case on Intervention in Knitting at Ropar, Punjab
Anasuya Dutta

Introduction

The intervention described here is of an income generating activity that gave women members of SHGs a sustained income. This activity was successfully introduced after a few initial failures. Women members of SHGs were given skill training and inputs on knitting and were also linked with some wholesale traders of Ludhiana and Chandigarh. These women, trained in knitting, now complete their assignments at home and earn some extra income. Though the income so derived is not substantial, the intervention has given them confidence and provided them a degree of economic independence. This account of the intervention describes the process, outcomes and learnings acquired along the way.

Context

Economic empowerment is one of the primary components of the overall empowerment and development of women. Keeping this in mind, ACF
began organising women in Self Help Groups (SHGs). These SHGs gave women access to financial resources at a very low rate of interest and without having to pledge any collateral. The SHGs also helped these women earn a small amount as monthly saving. The SHGs also helped them pool together such incomes, so that it will act as a buffer in times of crisis.

However, such savings and credit intervention through SHGs did not give these women financial independence. Women continued to depend on their spouses to obtain the savings amount as well as the amount to service their borrowings. ACF realised that providing income generating activities to these women would help them earn some money. With land holdings in the project area fragmented and estimated at an average of two acres per family, the income derived from agriculture was not enough to meet the requirements of the households. Some women members were involved in agriculture and some were into animal husbandry. Initially, dairy activity was promoted as a vocation. But within the group there were women whose husbands were into all kinds of odd jobs, working as labourers on a daily wage. Except for a bit of homestead land, they had no land and thus could not invest in dairy activity. Hence, this was ruled out and ACF was left with fewer options for income generation intermediation.

Families in Punjab tend to have a high expectation from whatever vocation they engage in. Maintaining a good lifestyle is something they aspire and make efforts to achieve. The women also had aspirations to send their children to good schools and provide them with private tuitions. All these demanded sustained income. The women would bring up these issues in the meetings of the SHGs and expected ACF to help them out in some way or the other. They were hard working and for them taking up a challenge was but a way of life.

In its attempt to identify an appropriate vocation that would help them tide over their economic crisis, ACF introduced various income generating activities. Women were trained in detergent, soap and pickle making. But due to lack of adequate skills and ready availability of markets, none of these activities succeeded. ACF thus began to look out for an activity that would help women earn, be sustainable and won’t need too much involvement of the organisation. It was around then the idea of initiating knitting of woollen garments as an activity for women emerged.

**Intervention**

From the very outset ACF intended to introduce a sustainable model of livelihood for the women. Previous experiences had taught that feasibility study of any trade was an important
component and had to be done before introducing the project to the community. In the effort to understand the knitting business, a hand-made baby suit was taken up for further exploration. In the local market, a study was initiated to find out how vendors procure hand-made products and sell them in the market.

This study gave a new understanding of the business. The team learnt that even in a market as remote as Ropar, there were two local vendors who provided wool to rural women, who then hand-knitted products for children. The women were provided labour charges on a piece-rate basis for the knitting work. This insight gave the ACF team the idea of taking into account the Ludhiana wholesale hosiery market, which supplies woollen products not only to the country but also to different corners of the world. The team realised that if linkages were explored with this market, generating income from knitting would flourish.

Consequently, the team also explored the market in Ludhiana. The team understood that the entire knitting operation was carried out by women at their homes. Production under a single roof had the singular disadvantage of requiring more capital. Hence, the vendors had adopted the policy of having the production units decentralised helping vendors save space and costs. The team also realised that the production could be carried out on a wide range of knitting machines, which were all available in Ludhiana. While some simple machines were priced at ₹ 2,700, some of the sophisticated and multifunctional ones cost up to ₹ 500,000. Since there was a huge demand for baby undershirts in the market, and these could be stitched on a simple machine which in 2011 was priced at ₹ 3,000, the team decided that the women should be taught to operate these machines.

After exploring this business model, the ACF team carried out a feasibility study to find out if it would be a cost-effective model for the women of Ropar to get linked to a market almost 100 km away. The study revealed that if the women took up the work collectively and did the transportation together, they would be able to share the cost among themselves and thus reduce the cost of working with a vendor located so far away.

This aspect was discussed with the SHG members. They showed interest and also understood that being together would help them. They decided to work together. Though they had to do a part of the operation together, the women were happy because they could do the actual knitting work within the comforts of their own home and at their own convenient time. These two aspects appealed to them the most.
Once the ground rules were set, the team decided to start the training of the women in knitting. The team decided that they would only train married women and not young girls. The training programme was kept open for all. However, one aspect that was understood as non-negotiable was the selection of needy women.

All these aspects were considered to ensure that vendors were attracted to give orders as there would be more women to carry out the work. The women also had to see if the returns were commensurate with the time they put in and remain motivated to do the work. It was after all these considerations that the training programme was launched.

ACF purchased 5 knitting machines and trained 13 women from the nearest village of Nuhon. The trainer also happened to be member of one of the SHGs. She knew how to operate the knitting machine, but was not completely into knitting work. The trainer was sent to Ludhiana for a few weeks to sharpen her skills so that she could later train the selected women. She was a fast learner. She also picked up some elements of designs and taught the same to her trainees. During the training, the women were taught to make undershirts and other woollen products. They were also trained on how to carry out simple repairs to the machines on their own.

As an important strategy, none of the women members of SHGs or those who attended the training were provided with any subsidy in purchasing the knitting machines. Thus one of the major challenges was to motivate the women to purchase their own machines. Since most of them came from low-income families, spending half the family's monthly budget on buying a knitting machine was not easy. It was something that needed conviction in the project as well as determination. However, the women proved their mettle and purchased the machines by borrowing capital from their own SHGs. Out of the 13 women of the first training batch, seven purchased the machines by taking loan from their SHGs.

Another challenge was to understand the importance of maintaining the quality of the products. One woman was selected from among the members to keep a check on quality. A small pass book contained the details of all the transactions that took place as regards to wool supplied and the weight of finished products. Finally, the first order was obtained. On the basis of the samples made, the women's collective got orders of 40 kg wool without depositing any amount with the vendor. The women started their work at the rate of ₹3 per undershirt, which has now gone up to ₹6 per undershirt. This piece-rate work was attractive to them and they continue to do the same even today.
As the orders kept increasing, ACF realised the need to expand the number of trained women. ACF purchased more machines and today the collective has 15 simple knitting machines and one high-end machine. The high-end knitting machine cost ₹24,500. The training centre is not situated at a fixed place. It moves from one village to another so that women from different villages can attend the training programme when it is offered without having to travel outside their villages. The trainees also pay a nominal contribution of ₹ 50 per month towards the cost of the training, each lasting three months.

The strategy of linking up with markets is diligently pursued even today. New markets are constantly explored so that orders keep pouring in. One such linkage that is being explored – the initial dialogue has taken place – is with a market at Sector 38 in Chandigarh. This market deals only in locally made woollen products. The vendors provide wool and also give a better deal on piece rate. Since it is near to Ropar (Chandigarh is only 45 km away) transportation costs are likely to reduce if the deal works out. Although women were trained and linked with the Ludhiana hosiery market, during
the winter the collective discovered a good demand for sweaters. The news of women making sweaters spread fast and many members received orders from friends, relatives and neighbours. Some of the orders also came from other villages.

During the winter, nine women made an extra income of ₹ 6,000 per month from such orders. This experience has encouraged the collective to explore the possibility of opening an outlet. The returns would be higher as the women charge ₹400 per kg whereas the Ludhiana market provided ₹160 per kg. In an effort to take such ideas forward, the women have formed an informal body and named it ‘Ekam’, meaning unity.

They know that to earn profit they have to work collectively. The name ‘Ekam’, they believe, will always motivate them to work in unity. The group has a governing body. The women have selected 10 members from among themselves to manage different aspects of the group like maintaining unity, resolving disputes and having regular dialogues with ACF staff. The group will soon deal with quality and quantity management and also enter into dialogues with vendors.

The intervention has taken place at a much reduced cost, as is evident from the details in table 1.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Particulars</th>
<th>Amount spent by ACF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Equipment</td>
<td>83000</td>
</tr>
<tr>
<td>2</td>
<td>Raw materials</td>
<td>9000</td>
</tr>
<tr>
<td>3</td>
<td>Honorarium</td>
<td>148000</td>
</tr>
<tr>
<td>4</td>
<td>Exposure Visits</td>
<td>24000</td>
</tr>
<tr>
<td>5</td>
<td>Transport</td>
<td>5000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>269000</strong></td>
</tr>
</tbody>
</table>

Above table depicts the cost incurred by ACF towards providing training to the participants. The approximate cost for providing training to one participant comes to ₹2,831, which is likely to further reduce as more and more women get trained (approximate cost for the per trainee in the batch of 15 women comes to ₹ 1,250). The major part of the costs lies in paying honorarium and in the maintenance of the knitting machines which is a recurring expenses whereas expenses incurred towards purchase of the equipment are non-recurring. Table 2 describes the contribution made by the participants to complete the course and start their own business.

Through this initiative ACF has demonstrated “Owner Driven Strategy”, which involves consideration of contribution from the participants to start their own enterprise by purchasing the equipment. ACF believes that this
model is particularly relevant in order to attain commitment and ownership from the participants. After being trained by ACF, participants have contributed ₹4,800 for purchase of machines. The monitory and the material contribution of the participants ensures sustenance of the programme. Besides it is an evidence of their trust on the interventions of ACF and its team.
Sarbjit Kaur had once been in deep depression. She would be alone at home for hours as her husband would be away with the truck and the children were in busy with school and studies, and this loneliness manifested itself in various ailments. The family spent money on her treatment but to little avail. However, after she took up knitting work her complaints seem to have vanished. She hardly visits the doctor anymore. Her involvement in knitting work has helped her utilize her time fruitfully and build up her inner strength.

### Table 2: Contribution by Participants

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Particulars</th>
<th>Amount contributed by the SHGs to set up enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Equipment</td>
<td>240000</td>
</tr>
<tr>
<td>2</td>
<td>Raw materials</td>
<td>68000</td>
</tr>
<tr>
<td>3</td>
<td>Training Fees</td>
<td>11760</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>319760</strong></td>
</tr>
</tbody>
</table>

### Outcomes

The work done with women in the villages of Ropar, Punjab, has yielded some very immediate outcomes. Many of these outcomes have been what these women aspired for. They have been using the extra income judiciously and for the well being of themselves and their families, apart from investing a part in other sources. Some of the outcomes as mentioned by the women are:

**With financial independence women now feel confident:** ‘I can earn’ is a great feeling and it has helped change their attitude. Many of the women, once shy and hesitant to step out of their homes and attend trainings are today contributing to their families’ income. They also deal with vendors and customers, exude confidence. It has given them both financial independence and confidence. They now participate actively in social events than ever.

**Financial access has led to empowerment of the women:** Women today feel great as they have gained financial independence. It is a wonderful feeling for the women who had always been financially dependent on their husbands. But now that they themselves earn – whatever the amount – they have gained the right and confidence to spend as per their own wish and need. The small income has given them freedom and the entire process has been an empowering experience.

**Women now make productive use of their time:** It is not that the women were not engaged earlier. But they did spend a lot of time watching television and chatting with neighbours. This spare
time is now utilised to carry out income generating activities. Knitting has given them a productive engagement.

Women have started investing in the future: In most cases, women have invested their income in better education for their children. Indeed, one of the major motivations for getting involved in this income generating activity has been the desire to provide a better education to their children. They believed that with this extra income they would be able to send their children to private schools or get them extra tuitions. Earlier, the women members of the SHGs borrowed money from the SHG to manage their children’s school fees but after this intervention they can give their children something better with the income they now have.

“We eat enough and also eat good food”: During the interactions, the women have often revealed that their extra income is helping them purchase fruits for their children and also for themselves. They do not go to sleep with half-empty stomachs and they consume good and nutritious food. The consumption of milk and other protein-rich foods has also increased.

Learnings

As the intervention progressed, the team involved in making this intervention acquired some very specific learnings as elaborated below.

Strategic planning and designing of the intervention is the key: Establishing a sustainable model for any income generating activity requires proper
strategic planning and designing. The plan must be on paper. A written document gives a better picture of various issues that one may confront. A provisional roadmap helps one to plug the gaps and prevents one from taking hasty decisions. Cost analysis and feasibility studies are part of this process and help one to find out whether the model is pragmatic or not. This approach helps one to refrain from being merely experimental.

A provisional roadmap helps one to plug the gaps and prevents one from taking hasty decisions. Cost analysis and feasibility studies are part of this process and help one to find out whether the model is pragmatic or not. This approach helps one to refrain from being merely experimental.

Whatever you do, do it based on the need of the community and not on the need of an implementing agency: It would be well nigh impossible to mobilize the community if the intervention so designed does not address their need. Had these women been from a better economic background or had they been occupied in farming, they would not have been motivated to work for 6 hours a day on knitting and in the end earn some ₹ 100. Since these small amounts were substantial for the households with whom ACF engaged, they could sustain the motivation and make the project succeed.

IGA without assured market never succeeds: Before promoting any income generation activity (IGA) model, one should be sure about the market and the ways and means to develop linkages to one’s advantage. What is mostly done is to provide training to the community and thereafter locate the market for the produce. Most of the IGA activities die a natural death because of such short-sighted strategy. It is a very demotivating for both the community and also for the implementing agency.

One should begin small and slowly leap big: It is good to start small, say through a pilot project. It will help one to establish the feasibility of such project. In the knitting model, ACF started the training with 5 knitting machines and a group of only 13 women. After getting the market linkages, ACF expanded the model. This saved money, energy and time, and also helped the team develop a rapport with the community.

One must gauge the skill set before introducing any IGA: Skill is an important consideration before any...
trade is taken up. Sometimes these skills can be inculcated and sometimes not. There was an outlet in Chandigarh that helped rural women to sell their phulkari or dari work. The team initially thought of promoting phulkari and dari work among the women but the women of the area didn’t have the required skill set for this work. No matter whatever efforts were made, these women would not have mastered the phulkari art and hence would not have achieved the desired target. On the other hand, knitting was something all of them did. Instead of doing it by hand they were taught to use machines for the work.

Kiranjit Kaur from village Daburji has been involved in knitting since September 2011. Her husband, a daily wage labourer, used to earn around ₹ 4500 per month. The family was desperately in need of money to better their situation. Kiranjit’s income of July and August 2012 enabled them to hire a small place at the truck yard of Ambuja Cements Ltd. Her husband today does a brisk business of selling eggs to the truckers. He makes an additional earning of ₹ 3,000 per month from this enterprise. This has been possible because of Kiranjit and her husband also acknowledges her contribution.

One must build ownership among the community. This will make the efforts sustainable: Along with promoting an IGA, it is important to build the ownership among the community. Otherwise, the community will remain dependent on the implementing agency and will never be self-sustainable. From the very first day, this was the mantra. ACF gave the women the training and thereafter left them to make their own choice and buy the necessary machines. Unlike in other schemes, ACF did not provide any grants to buy these machines. The women made their own investment. This made them work hard and make the programme sustainable.

Administering the process of collective efforts would require one to follow the principle of good governance: Good governance is a key component which often is the reason for success of a collective effort. It is important that the principle of transparency is adhered to in order to maintain trust and confidence among the members. This was done through honest and open discussions so as to prevent differences and conflicts among the members.

Conclusion

Existence of an opportunity is often understood as the beginning point for any intervention. However, one also needs to understand the processes to be adopted to make the opportunity work
for the betterment of the members. The knitting intervention of ACF provided enough understanding of the processes that have been adopted. Women who joined the intervention are a happier lot. They have started earning small amounts, and that has shown them that they can earn more as well. Their contemplating of starting their own retail outlet is in itself an indication of the confidence that they have in themselves as individuals and also as a collective. The processes adopted along the way have been the reason.

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Reforming Mindset
A Case of Sanitation Intervention in Maharashtra
Introduction

The intervention in health care initiated by Ambuja Cement Foundation (ACF) necessitated an action on sanitation. The situation in most villages where ACF worked in Chandrapur, Maharashtra, was grim as far as access to sanitation facilities went. Although many villages had earlier been nominated for and also given the Nirmal Gram (Clean Village) award, the situation had deteriorated sharply since then. The villagers never used the sanitation facilities that were provided to them. They continued with open defecation. However, ACF’s intervention in sanitation, which started a year-and-a-half ago, has now taken some of the villages by storm.

Context

The 2011 census of Chandrapur district revealed an alarming picture. Almost 54% of the households in the district practised open defecation. Despite the efforts made under the Total Sanitation Campaign, the situation had
not improved much since 2001. With such a state of affairs, the likelihood of the district to meet its Millennium Development Goal (MDG) target by 2015 seemed a remote possibility. The situation was naturally worse in rural areas. The district health data showed that in rural areas of Chandrapur about 67.5% of the households practised open defecation.¹

ACF collaborated with UNICEF on a project titled ‘Village-level Water Safety, Security and Environmental Sanitation’. The collaboration of the Chandrapur Zilla (District) Panchayat helped ACF cover 73 Gram (Village) Panchayats (GPs) of Korpana, Rajura and Jiwti Blocks under this project. This included a total of 149 villages, and about 14,839 households. The survey carried out under this programme revealed that out of the 4,039 toilets once constructed only about 1,380 were in use.²

On the basis of this information ACF decided to cover 73 GPs under the sanitation campaign, giving priority to 31 GPs. Interestingly, out of these 31 GPs, nine had earlier been awarded the Nirmal Gram Puraskar by the Chandrapur Zilla Parishad. The purpose was to help these GPs fulfill the criteria of 100% toilet construction. The survey showed that since in most cases the low-cost toilets were constructed some 10 years ago, and that too on a paltry budget of ₹500 per toilet, the quality was extremely poor and hence they had never been used. Many of them were also damaged in course of time because of poor workmanship.

Going out for open defecation was especially hard on the women. They faced humiliation, harassment and molestation. Hence, many avoided the day time for defecation. Consequently, they suffered from abdominal pains and other problems as a result of withholding the bowel movement till dusk. Open defecation also caused dysentery and other water-borne diseases. During certain months, snake and insect bites were common. These were all causes for concern. Since ACF had initiated its efforts around Maternal and Child Health, total sanitation came up as a priority activity.

Table 1: Household Survey Data

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Villages</td>
<td>149</td>
</tr>
<tr>
<td>Households</td>
<td>14873</td>
</tr>
<tr>
<td>Families</td>
<td>18186</td>
</tr>
<tr>
<td>Toilets Constructed</td>
<td>4039</td>
</tr>
<tr>
<td>Toilets in use</td>
<td>1380</td>
</tr>
<tr>
<td>No. of soak pits built</td>
<td>381</td>
</tr>
<tr>
<td>Garbage disposal system (individual)</td>
<td>53</td>
</tr>
<tr>
<td>Village level Garbage disposal system</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Data of Household Survey, ACF
**Intervention**

As indicated, the baseline study of the 73 GPs in Jivati, Korpana and Rajura blocks provided important clues to ACF. These blocks were selected for the sanitation programme as here ACF had also been carrying out the HBNC (Home-Based Neo-natal Care) programme. It also had with it a set of trained VHF (Village Health Functionaries) cadre, the *sakhis*. The survey carried out by the *sakhis* threw up very worrisome data (see table below).

These data were enough to raise concern and surprise. The Zilla Parishad that had earlier worked on the sanitation initiative had difficulty in believing the data. UNICEF was also taken aback. They both had intensively worked on this issue for the past many years and they now realised that total coverage continued to remain a far cry. ACF saw this as an opportunity and submitted a proposal to UNICEF. Since UNICEF had worked with ACF earlier, the former agreed to sponsor this proposal. UNICEF sanctioned ₹4, 50,000 towards conducting micro-planning for the GPs and capacity building of the functionaries. This was to be initiated in three blocks with 73 GPs.

UNICEF also provided ACF with technical support such as identification of agency to train and build capacity of *sakhis*, providing IEC materials and helping in developing linkages with district and block officials. Two consultants from the Mumbai office of UNICEF provided ACF the support to implement this programme. ACF did this entire work with a dedicated team of 10, which included a programme manager, two field officers and seven supervisors. The Zilla Parishad also provided its support to this initiative.

The partnership between these three agencies ACF, UNICEF and Chandrapur Zilla Parishad ensured the training of a cadre of dedicated frontline workers who could generate demands of services around drinking water and sanitation. This helped the Zilla Parishad to make proper allocation of resources from the State and Central Government funds under different flagship schemes. The purpose of the project thus could be realized.

The process got underway with a day’s interaction. In March 2012, ACF organized a meeting, which was attended by the Block Development Officers (BDOs) of all the 3, and the UNICEF and the ACF team. PRIMOVE, an NGO based in Pune (introduced by UNICEF as the technical partner for the project), also attended the meeting. In the meeting it was decided that a two-day workshop would be facilitated by PRIMOVE for all the stakeholders and they would learn about the nuances of micro-planning. It was agreed that along with ICDS workers, the *sakhis* associated
with ACF, the Village Sarpanch, the deputy Sarpanch and the Gram Sevaks would participate in this workshop. Youths of the villages were also to be involved in this micro-planning. This would help to ensure the support of the villagers and the participation of the youths in their own village planning. A total of 167 members, representing 71 GPs, participated in this workshop. PRIMOVE provided the trainees with hands-on training in micro-planning. This was done in the villages of Dhonda, Arjuni, Upparwahi, Manoli, Aheri and Nandappa.

The training included complete demonstration of the PRA process. The trainees learnt doing Social Mapping, Time Line, Seasonal Calendar and Transact Walks. All these exercises were focussed on understanding the issue of drinking water and sanitation from all dimensions. Following the training, ACF also carried out the preparation of the micro-plans for all the GPs. In doing this exercise, the support of PRI members was taken. The micro-planning exercise was followed by the preparation of the action plans which were later presented in the Gram Sabha.

ACF compiled all the plans and came up with a document that provided a snapshot to the block officials about the status of sanitation in each block. The PRA findings revealed that almost 80% of the population practised open defecation. Those who had toilets constructed under some or the other state or central government programme used the toilets for other purposes like bathroom and sometimes even for storage.

Based on the results of the planning, ACF selected 31 GPs and carried out awareness campaigns in all the villages under these 31 GPS. This was done as part of building the environment for people to understand the need for constructing and using toilets. In the review meetings strategies were formulated towards building open defecation free villages through community mobilization and School Awareness Programmes. The second review meeting held in July provided inputs to work on safe drinking water, open defecation free villages, hand washing and management of child excreta. The Chandrapur Zilla Parishad obtained support from ACF to initiate the process in nine villages, which had once been nominated for Nirmal Gram Puraskar.

The situation in the villages nominated for the prestigious Nirmal Gram Puraskar was pathetic. The villages were far from being Nirmal (clean). The villagers had been provided with sanitation facilities almost a decade ago when the government had constructed low-cost toilets spending ₹500 per toilet. The workmanship was poor and
these toilets – those that still existed – were all in severely damaged condition. ACF understood that a different strategy was required and thus embarked on the strategy of creating awareness among the community about the necessity of total sanitation. Focused group discussions were organized in Jamni, Bailampur, Phugdipathar, Yergawan (R) and Shedwahi (B). These meetings proved to be extremely effective in generating awareness. According to plan, soon after the meetings, people divided themselves in various teams to work towards cleaning and beautification of their village. Of the nine nominated GPs, four GPs, namely Jamni (Phugdipathar), Babapur (Shedwahi), Bhendvi and Belgaon, took the lead. After the meetings, the villagers themselves dug the pits for the sanitation blocks.

It was now time for some action. As part of a larger strategy, ACF organized an exposure visit to Rajgad in Mul Block of Chandrapur district. The visit was an opportunity for the villagers to get an insight into different techniques used to promote sanitation. The villagers also discussed the issues and challenges faced while implementing the sanitation plans and this made them realize that it was they who had to take the call.

ACF also organized shows of Satyapal Maharaj’s Samaj Prabodha in some villages. The show used folklore method
to emphasize safe sanitation practices and also touched upon other social evils like corruption and drug addiction. The show proved to be effective. The use of folklore method and local language made villagers relate to the show easily. The show attracted large gatherings of 3,000-4,000 people.

ACF also screened a documentary film Gharcha Dagina on total sanitation. Thirteen such shows were organized in three blocks. The audio-visual shows attracted a large number of people from all ages in the villages and proved quite effective in driving home the point. In addition to these, ACF understood the need for other strategies like slogans and paintings on village walls which reflected ways to prevent diseases, and underlined the importance of cleanliness and hygiene. Painters were hired for this task. The help of arogya sakhis and other village leaders was obtained for locating the best places for displaying such messages.

It was almost time for the people to start construction. Construction work required masons. ACF trained masons at Babapur Shedwahi and Phugdipathar. As part of its strategy, ACF hired semi-skilled masons so that they could get skilled, which would in turn reduce the cost of the construction. The Gram Sabha helped in selecting the semi-skilled masons for the trainings. Alongside this process, ACF also decided to take stock of the drinking water situation. It obtained water samples from 6 GPs and forwarded them for testing of organic and inorganic contents. Forty-one samples were obtained from various drinking water supply points, namely bore-well, taps, public wells and hand-pumps, and sent to the Bhujal Sarvekshan Department (ground water testing laboratory of the government).

The results of these tests were later shared with the Gram Sabha. As the work in motivating the villagers and the micro-planning exercises were being conducted, ACF carried out some very specific interventions through its association with the village schools. These were done to create awareness on health and hygiene and also aimed at creating a demand for sanitation from the children's end within households. Some of the important sets of activities that were done included hand washing, essay and drawing competitions.

Children participated in these events in large numbers. ACF helped in celebrating the International Hand Wash Day in 69 villages and their schools – across 26 GPs – at the Block level. The topic in essay competitions was ‘Clean and Beautiful Village’. The teachers were the judges of these events. Drawing competitions were conducted for children in the primary standards and later the children were given prizes. One of the most unique strategies
that played an important role in the villages was street plays. UNICEF had initiated a theater group which went around performing plays on “Menstrual Hygiene and Adolescent Issue” as part of the hygiene and sanitation campaign.

A group of 12 girls from Hardona village was provided training on drama and theatrics by UNICEF consultants. The exposure helped these young girls who could later perform in their own shows on various other issues like disadvantages of early marriage; gender sensitization; menstrual hygiene and total sanitation; evils of dowry and necessity of girls’ education. The performance of the play was followed by an open discussion in the village where the spectators put up questions to the group on what they saw and what they felt. The group facilitators answered these questions. ACF sponsored 26 such plays in the villages and created an environment on the need for sanitation.

The process of motivating the communities in the nine nominated GPs resulted in two GPs expressing desire to take the process ahead. The villages of Phugdipathar and Babapur (Shedwahi) wanted to be open defecation free (ODF). Both these villages had started the Gram Swachhta initiative of regularly cleaning their own villages. They had formed a youth committee consisting of males interested in keeping the village clean. Responsibilities were distributed among the members of the committee. They stopped the villagers from practising open defecation. They kept watch during the early morning hours and a fine of ₹ 500 was slapped on those who did go for defecation in the open.

Since both these villages had been nominated for Nirmal Gram award, there was no possibility of getting funds for the construction of new toilets for individual houses. Interestingly, many of them never had such toilets. They were eager to make their village ODF. The ACF team, keeping a watch on the initiative of the village, felt that something had to be done to help the village obtain some kind of support. The team met the Extension Officer at the Panchayat level and discussed the initiative undertaken voluntarily by the village. The Extension Officer promised to come over to the village and see things for himself. His visit to the village motivated him to look for avenues, within his discretionary power, to allocate funds for the said activity. He had an amount of ₹ 2,00,000 available under the environmental scheme and he made out a case to provide ₹ 50,000 for sanitation helping to make a beginning.

With the fund, work could be done only up to the plinth level. ACF with the villagers conducted a Gram Sabha and requested additional support. A demand of ₹ 1,20,000 was placed before
My loss is everyone’s gain

Yadav Kannake from Phugdipathar took a decision on his own. He was inspired by the Satyapal Maharaj show. He ran a small grocery store in his village. He realized the damage that he was causing to his own friends and relatives by selling tobacco. He stopped selling tobacco after announcing his decision in the Gram Sabha. He says that although his daily income has certainly dipped after this decision, he made the decision consciously since the consumption of tobacco affected the health of a large number of people. Inspired by his decision the other grocery store in the village has also stopped selling tobacco and the villagers have taken an oath to stop consuming the same.

the Extension Officer and after some arguments the amount was agreed upon. The work then started. With this amount the remaining work in all the households were completed. Things proceeded almost along similar lines in the other village, Phugdipather. The villagers were charged up after seeing the film and the street plays. But there were no funds forthcoming from the state. The villagers completed the digging of the pits by themselves. ACF requested the GP to provide them funds under the Rural Employment Guarantee Act, which could go towards payments for such unskilled work. The Gram Sevak took up the matter under the MNREGS and made a representation for a sanction of ₹4,500 per unit.

The Panchayat Samity turned down the proposal as the village had earlier been declared as Nirmal and hence for similar work no additional funds could be released. The ACF team made a formal request to the BDO who also expressed his inability to sanction the amount under any other scheme. In the meantime, the villagers went ahead on their own to seek funds from some known sources but that too did not work out. It looked as if the work could not be taken ahead.

However, the villagers as well as ACF were determined to go ahead. Both had made efforts to knock at the doors of the government as well as the private sector. But nothing seemed to work for them. ACF could have funded this initiative from its own funds. But the catch was that this village was not one of its designated villages. However, as the last resort, ACF team made out a case and explained the cause to its management. The management looked at the efforts and realized that if it also behaved like
the government, it would create a very negative impression and motivation levels of the people would get affected. So the ACF management decided to provide some financial support from its Health Budget for toilet construction at Phugdipathar and approved a small sum of ₹ 60,000 for this purpose.

Although the amount was not much, it was enough to inspire the villagers to take up the construction work. ACF convinced the villagers to contribute the remaining amount, which would be mainly through their own labour. The villagers agreed to this proposal. The amount would be enough to cover the cost of construction up to the plinth level (see table 2 below showing the cost structure). The villagers could then take up the construction work beyond this level and till that time could use temporary materials to maintain privacy.

**Table 2 : Cost of construction of one Sanitation Unit**

<table>
<thead>
<tr>
<th>Material</th>
<th>Cost. (₹.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement (2 Bags)</td>
<td>600</td>
</tr>
<tr>
<td>Sand 50 cubic feet</td>
<td>300</td>
</tr>
<tr>
<td>Bricks 150 Nos.</td>
<td>600</td>
</tr>
<tr>
<td>Toilet Sheet and PVC fitting</td>
<td>300</td>
</tr>
<tr>
<td>Pit Digging</td>
<td>500</td>
</tr>
<tr>
<td>Mason</td>
<td>300</td>
</tr>
<tr>
<td>Cover of Pit</td>
<td>250</td>
</tr>
<tr>
<td>Partition Wall</td>
<td>300</td>
</tr>
<tr>
<td>Total Expenditure</td>
<td>3150</td>
</tr>
</tbody>
</table>
The funds provided by ACF were enough to cover the cost of bricks, sand and cement. All the families also decided together that they would make a cash contribution of ₹ 300 each and also work during the construction. A part of the labour works, i.e. the digging of the pit, had already been completed. Within no time the families contributed their own share of ₹ 300 and a total amount of ₹ 12,900, i.e. from all the 43 households, came through. The villagers nominated from among them five members to be part of the purchase committee. This committee went to the market to look for toilet seats and PVC pipes. They also repaired the approach road to allow the vehicles to reach with sand, bricks and cement. The materials were purchased and after they reached the villages they were distributed among all the households.

The committee gave the contract for the construction work to a youth of their village who had taken the mason training programme organised by ACF. The construction work started on 5th January, 2013. At around the same time, the villagers also decided to stop taking Ghutkka and tobacco and one of the villagers who used to sell the stuff also decided to stop selling it. Though it was an economic loss for him, he felt that he should not make money at the expense of the health of his own brothers and sisters. The masons continued with the construction in full swing and completed it within a month. The work was monitored throughout by the committee. Interestingly, others also chipped in and did their bit to help.

Once the work was completed ACF understood that bringing in a high-profile person from the government would help open doors. The Tehsildar and Sabhadhipati of Rajura Panchayat Samity came for the inauguration. Seeing the enthusiasm of the villagers and listening to their stories he announced the drinking water scheme and said that papers would be moved for sanctioning ₹ 2,00,000 for the same.

Villagers have started using the toilets. Some neighbouring villages visited the village and have started working towards similar goals. The villagers also decided to colour the exterior walls of their house green, which indicates a sign of prosperity, and also put up name plates on all houses bearing the name of the women. They have started using the garbage pits for dumping the waste and using the ladle to take out water from pots. Small behavioural changes like hand wash have now become routine among the villagers. It seems that they have taken all the messages very seriously.

**Outcome**

The intervention had a tremendous impact on the villagers. The processes
adopted by ACF to understand the issue and thereafter work on it with the villagers and with the administration contributed to the success. Let us go through some of the outcomes. These outcomes can be seen at various levels: individual, community, school level, adolescent girls’ level and government level.

**Individual level**
*Every citizen is today linked to sanitation:* Sanitation is now a movement. Everyone is attached to sanitation in their own capacity. They participate in meetings and decide together. They know for sure that if even one villager is not linked, the entire purpose becomes a lost proposition. Very interestingly, every single individual has contributed as per his/her capacity. One of the girls who had earned a prize of ₹ 1,600 in the dance competition held at her school came forth to contribute ₹ 900 towards building the Village Development Fund.

**Community level**
*One is stopped from going out in the open:* Building individual toilets and soak pits is one thing, but making use of the same is another. Gram Swachhata (Village Cleanliness) is now a movement. Family members from all households are required to regularly take part in cleaning the roads in front of their own house and also the approach roads to their village. Four of the villages which were declared Nirmal Gram earlier are really Nirmal now. All this has been possible because of the initiatives of the community. One dares not go out in the open to relieve oneself. If caught, the issue will be discussed in the village the same day and the person will be fined in public. Babapur Shedwahi, Belgaon, Bhendvi and Jamni (Phugdipathar) have influenced Mangi and Hardona to start similar efforts. Sanitation, which was probably their last priority, has become their first priority now.

**School level**
*Children are ambassadors of clean practice:* In the schools rigorous campaigns were organized around the issue of washing hands. Children have taken the lessons of such clean practices to their parents. They have influenced their parents to keep soap in the toilets and they have even complained to their teachers if their parents did not heed their advice. The teachers too have taken such complaints seriously and have engaged in dialoguing with parents and also in bringing out the issue in the Gram Sabha and other meetings. The teachers have helped in improving the sanitation practices at school and have extensively used the sanitation kit which today is an important educational kit in the school curriculum.

**Adolescent girls**
*Menstrual health and hygiene issues are openly discussed:* The theatre group
performed on this issue to help improve knowledge and practices among adolescent girls regarding menstrual hygiene and sanitation. This also created awareness among the community and parents. The theatre group has gained economically through these shows. But more is the gain of the girls who today feel empowered to discuss this issue with their parents (mothers) and with others in school. Talking of it is no more a taboo.

**Government**

**Successful demonstration of IEC as an essential strategy:** The concept of sanitation, which was once seen more as part of infrastructure, and needed engineers and contractors to design and implement, has now changed. The efforts have showcased the effectiveness of awareness campaigns and communication strategies in sanitation programming. The strategies clearly point out that if change has to be permanent, the community perception must change too.

**Learning**

The work with the villagers on the sanitation issue has been a real eye-opener for the team. The efforts proved that changing the mindset is possible. The strategies identified has proved to be responsible behind this huge success. Some of the learnings which emerged from the action that was followed thus stand as important for practitioners engaged in similar efforts elsewhere. These are:

**ACF’s initiative complemented the Government’s efforts to attain Millennium Development Goals:** Working on sanitation needs the state to pitch in with resources through implementation of Total Sanitation Campaign programme. However, the word ‘campaign’ was somehow getting lost in the cement and the bricks. In addition, the policy of the government of sanctioning the grant only once needs a serious review in order to attain sustainable behavioral change. In our case, a village once given the status of Nirmal Gram became ineligible for any further support. Nevertheless some officers who understood the problem tried within their limited powers to get resources from one or the other scheme. However, those were individual efforts and not what the rule book explicitly suggests.

**Effective communication can bring in the much-needed behavioral change:** Behavioral change is often permanent. Since it changes the way a person looks at an issue it brings in the much-needed change. Sanitation programme needs a focus on this change aspect. The shift from a cement and brick to that of campaign can happen if emphasis is laid on communication strategies. ACF demonstrated that such efforts targeting
all sections of the population made the change possible. People voluntarily paid for the facility because of this strategy.

**Owner-driven strategy:** ACF demonstrated that its emphasis on making the community realize what damage it was doing to itself by going for open defecation made villagers contribute larger amounts from their own hard-earned money to make things happen. The villagers have owned the process as they have seen for themselves that unless they take charge of the situation things will not improve.

**Cleanliness brings prosperity:** Sanitation is a part of health; if our surroundings are not clean our health status will remain poor. Villagers have taken Gram Swachhata as their mission. They want to prevent water-borne diseases and losing their hard-earned money on medicines. They went on to act when they saw for themselves what flies do to their food. The effects of demonstrating the same have made people take up such cleanliness drives.

**United effort brings changes:** Making village ODF cannot be possible by one person. Everyone has to give his or her own share to make it happen. People in the villages have understood this. They have come together under the single banner of Gram Swachhata and taken up the work. They have realized that unity is power.

**Conclusion**

Sanitation was never a priority for these villagers. However, the campaign strategy devised by ACF has made this their top priority. They have realized that they should not wait for the state to give it to them, but should chip in with whatever resources they have to obtain the facility. They have realized that a dirty and unclean environment directly affects them, particularly their health, and this affects their income and well-being. They have, with support in some places from good officials and from ACF, carried out the construction of sanitation units. But they have taken up the issue far seriously than what one had envisaged. Their earlier mind-set that ‘others will work for us’ has now changed. ‘We will have to work for ourselves’ is what the campaign has helped them to see and learn.

***

Notes
2. Survey data of ACF in April 2011. This was carried out by Health Volunteers called sakhis.
Ajeet Singh works as Project Executive and has been associated with ACF at Ambujanagar.

Amandeep Saini works as Project Officer and has been associated with ACF at Ropar.

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Yogesh Sharma works as Project Officer and has been associated with ACF at Darlaghat.
**Abbreviations**

AAAS  | Amhi Amchya Arogya Sathi  | MDG  | Millennium Development Goals  
ACF  | Ambuja Cement Foundation  | MMR  | Maternal Mortality Rate  
AI  | Artificial Insemination  | MNREGS  | Mahatma Gandhi Rural Employment Guarantee Scheme  
ANC  | Antenatal Care  | MSW  | Master of Social Work  
ANM  | Auxiliary Nurse cum Midwife  | NABARD  | National Bank for Agriculture and Rural Development  
APL  | Above Poverty Line  | ATMA  | Agricultural Technology Management Agency  
ART  | Assisted Reproductive Technology  | NABARD  | National Dairy Research Institute  
ATMA  | Agricultural Technology Management Agency  | NPS  | National Pension Scheme  
BDO  | Block Development Officers  | NRHM  | National Rural Health Mission  
BMI  | Body Mass Index  | ODF  | Open Defecation Free  
BPL  | Below Poverty Line  | PHC  | Primary Health Centre  
CSPC  | Coastal Salinity Prevention Cell  | PHED  | Public Health Engineering Department  
CSR  | Corporate Social Responsibility  | PIA  | Project Implementation Agency  
DLHS  | District Level Household Survey  | PNC  | Post Natal Care  
DRDA  | District Rural Development Agency  | PPM  | Parts per Million  
EV  | Extension Volunteer  | PRA  | Participatory Rural Appraisal  
FRCH  | Foundation for Research in Community Health  | PSS  | Pashu Swasthya Sevika  
GLR  | Ground-Level Reservoirs  | RRWHS  | Roof Rain Water Harvesting Structure  
GM  | General Manager  | SC  | Scheduled Caste  
GP  | Gram Panchayat  | SHG  | Self Help Group  
HBNC  | Home-Based Neo-natal Care  | SMC  | School Management Committee  
HF  | Holstein Friesian  | SRTT  | Sir Ratan Tata Trust  
ICDS  | Integrated Child Development Services  | STEP  | Support to Training and Employment  
IG  | Income Generation  | TDS  | Total Dissolved Solids  
IMR  | Infant Mortality Rate  | UNICEF  | United Nations International Children’s Emergency Fund  
MCFT  | Million Cubic Feet  | VEC  | Village Education Committee  
MCH  | Maternal and Child Health  | VHF  | Village Health Functionaries  
MCHN  | Maternal and Child Health Nurses  | WASMO  | Water and Sanitation  
MD  | Managing Director  | WHO  | World Health Organisation  
153  |  | WST  | Water Storage Tanks  


Ambuja Cements Ltd has been working for community development in and around the Company’s manufacturing location through its community development arm, Ambuja Cement Foundation (ACF). Today, ACF works in 22 locations in 12 states, on various issues including water resource management agro-based livelihoods, skill based livelihoods, health, education and women’s empowerment.

ACF’s work in community development is in line with its mission statement ‘Energize, involve and enable communities to realize their potential. Stakeholder engagement is key to all of ACF’s interventions. Programmes are designed, developed and implemented with the direct participation of the community members. ACF has over the years partnered with many NGOs and Governmental organizations for its developmental programmes.