Catalysing Change





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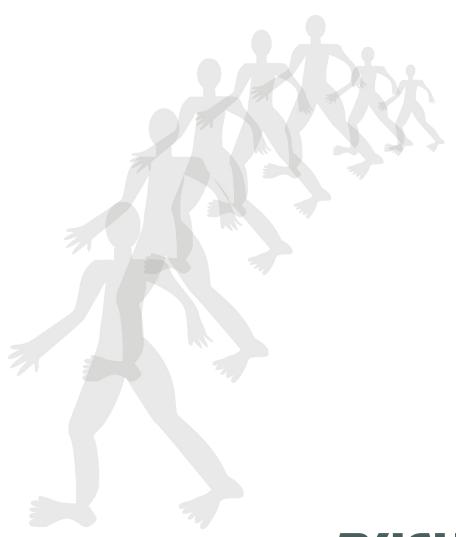
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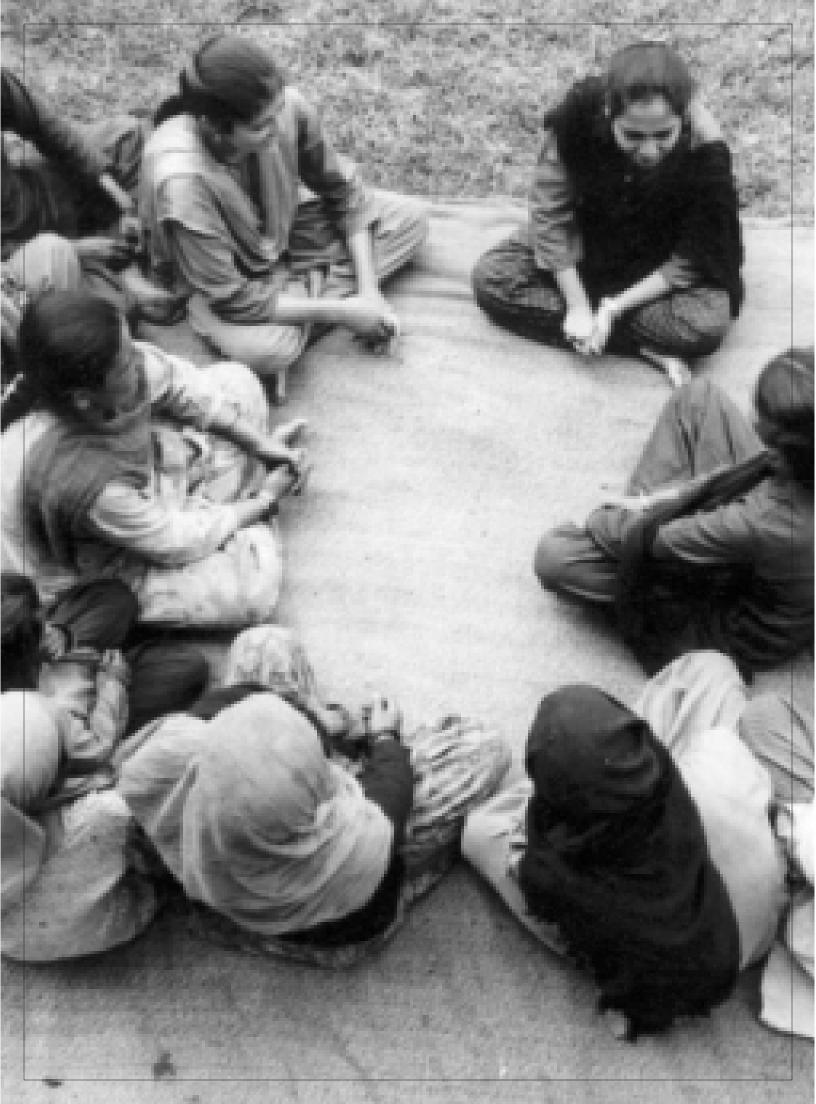
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A Note from the Director

RUCHI (Rural Centre for Human Interests) was born in early 1980s to improve the plight of rural folks in the north Indian state of Himachal Pradesh. RUCHI strongly believes that voluntarism is the central core of social action in a democratic society. Starting with limited resources as a social service agency RUCHI, over a period of time, developed expertise in various fields to become a sociotechnical resource agency. One of our proudest accomplishments is the introduction of rooftop rainwater harvesting in Himachal in the early 1990s and our subsequent training of government agencies and non-governmental organisations (NGOs) in this technology.

As a young NGO, we struggled to balance our aspirations to provide socio-technical expertise to the rural poor with our limited financial resources. Often, we had to tailor our programmes to fit the government's rural development schemes for which it had allocated funds, rather than prepare services uniquely suited to local needs. Our major breakthrough in financial independence came in 1986 when NORAD/Royal Norwegian Embassy provided us much needed financial support for our core administrative expenses. Our relationship with NORAD had started earlier that year when it provided a modest grant to help rehabilitate the survivors of a major fire in Chopal (Shimla district). In the 19 years since then our relationship has gone from strength to strength: NORAD's financial commitment to sustainable and participatory development coupled with RUCHI's technical and field expertise have transformed the lives of villagers in our project areas. (See Appendix III for a list of RUCHI's NORAD-funded projects.)

We have also been the fortunate recipients of several awards recognising our work: CAPART (Council for Advancement of People's Action and Rural Technology) has designated us a Technology Resource Centre and HUDCO (Housing and Urban Development Corporation, Government of India) has designated us a Building Centre. We are a District Resource Unit of the Ministry of Human Resource Development (Government of India) and a Nodal Agency of the Rashtriya Mahila Kosh programme of the Department of Women & Child Development (Government of India). Everything we have accomplished was possible only with the dedicated support of our funding partners: NORAD, OXFAM/Water for Survival, MISEREOR, Swedish International Development Agency (SIDA), the Embassy of Japan, the New Zealand High Commission, HelpAge International and various ministries of the Government of India.

Over two decades of development work later, we felt it was time to document our experiences and evaluate our achievements. We are grateful to NORAD for its financial support that enabled us to conduct

this process documentation.

I am grateful to my colleagues who worked as a team and always proved to be a strong foundation on which RUCHI stands, as well as the community people who work with us and who openly shared their thoughts and opinions while doing this study.

Finally, I must express my gratitude to Ms. Prabeen Singh and Ms. Ratna Menon who spent time with us in Himachal and produced this report. The document is a valuable resource of experiences and insights upon which we will draw as we continue in our efforts to make people-centred development a viable reality in Himachal.

May2005 Bandh village, Himachal Pradesh RUCHI Dharamvir Singh Founding Director,

RUCHI: An Introduction

On a sunny January morning, Captain Shanti Swarup (Retd.) invites his neighbours in Khadyal village to a meeting with RUCHI fieldworkers to discuss the status of their three year-old watershed development project. Over the course of its association with Khadyal, RUCHI has helped the villagers construct irrigation tanks, form Watershed Management Committees (WMCs) and establish a women's Self Helf Group (SHG). Khadyal is slowly being transformed from a water-starved, poverty-stricken hamlet into an economically self-sufficient and socially empowered community.

The discussion this morning revolves around RUCHI's long-term involvement with Khadyal: Captain Swarup and the other villagers are concerned about their future ability to maintain the project in RUCHI's absence. The conversation that follows is a testament to RUCHI's ability to inspire self-confidence in the villagers with whom it works. Patiently RUCHI fieldworkers retrace the history of their collaboration with Khadyal, pointing out that it was the villagers' determination, hard work, creativity and team spirit that made positive change possible in the first place. "What's important," the fieldworkers tell the people of Khadyal, "is not whether RUCHI will be here forever to lend you a hand. What's important is that you now have the skills to assess your situation, a knowledge of your rights and the wherewithal to pursue proper sources of expert assistance, be it from RUCHI or somewhere else. No matter what the problem, you now know how to go about solving it productively."

A belief in self-reliant, sustainable development has long been RUCHI's trademark. Originally a branch of SWRC (see Apppendix II), RUCHI was one of the first NGOs in Himachal Pradesh that worked to bridge the gap between the government's rural development infrastructure and the people to whom it was targeted. Its objectives include:

- Comprehensive and integrated rural development through active community participation and sustainable interventions
- Effective management of natural resources at the micro-level of watersheds
- Development and promotion of low-cost agricultural and construction technologies
- Promotion of gender equality
- Improvement of community health, with emphasis on preventive health care

- Promotion of non-formal education
- Economic, social and political empowerment of rural communities

RUCHI's work is premised upon a firm belief in:

- People-centred development and community empowerment
- Sharing of resources, information and technology
- Role of women as catalysts for community development
- Optimal utilisation of local resources for economic self-reliance
- Promotion of social change via economic change
- Capacity of people to improve their own condition when supported by appropriate infrastructure and interventions

In the late 1960s, Dharamvir Singh, who would later establish RUCHI, was studying Biology at the University of Delhi. However, the subject left him discontent and he was increasingly drawn towards the study of law and criminal justice. He acquired an LL.B. from the University of Delhi's Law Faculty in 1973, but soon found that his interests had evolved from criminal justice issues to social justice ones. In 1976 he completed an M.A. in Social Work from the Delhi School of Social Work and was assigned to work at the Social Work and Research Centre (SWRC) in Tilonia, Rajasthan as part of his degree requirements.

At SWRC he so impressed Aruna and Bunkar Roy, the group's founders, that they invited him back as a full-time employee. Singh was not yet fully convinced of his suitability for social work, so he agreed to work in Punjab for just one year, establishing an SWRC branch in the state and creating self-employment opportunities for educated youth. By year's end Singh had become a convert: understanding both the magnitude and urgency of the task of social development and acknowledging his evident skills, he decided to stay on in Punjab for some more years.

In 1979, when his Punjab assignment was completed, Singh worked for SWRC in Haryana, before deciding to establish a branch in Himachal Pradesh's Chopal block (Shimla district). The NGO was registered as the State Social Work and Research Centre (SSWRC) in February 1983, with Singh as its Executive Director. In 1986 the organisation changed its name to RUCHI (Rural Centre for Human Interests).



Dharamvir Singh came to voluntary work a discontent former scientist and lawyer. What he had thought would be a temporary career diversion soon became an all-consuming passion and his life's work when he realised the enormous potential of NGOs to bring about social justice. Combining an abiding commitment to participatory and sustainable social development with superb field-work skills, the ability to inspire and nurture his colleagues, a creative and holistic vision and the desire to harness new technologies for social good, Mr. Singh has created in RUCHI an NGO that stands as a beacon to its peers and a partner to the rural poor with whom it works.

In order best to understand RUCHI's activities, history and achievements we must first understand the geography, ecology and culture of the Himalayan region in which it is located and whose people it serves. The Himalayan mountain range—the world's highest—is characterised by a complex geological structure, snowcapped peaks, deep river gorges, large valley glaciers and rich vegetation. In northern and northeastern India the Himalayan range passes through the states of Jammu & Kashmir, Himachal Pradesh (where RUCHI works), Uttaranchal, Sikkim, Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and parts of West Bengal. The Himalayan belt covers 18% of India's area and, as per the national Census 2001, is inhabited by 51 million people, accounting for 6% of the country's population.

The Indian Himalayan states together constitute 33% of the country's total forest cover. Regrettably, however, the three northern states of Jammu & Kashmir, Himachal Pradesh and Uttaranchal account for only 25% of the total Himalayan forest cover and 9% of the total Indian forest cover. An interplay of geographical and climatic factors, patterns of resource use and socio-economic conditions

have led to severe natural resource degradation and associated developmental and environmental consequences in the Himalayan region.

The primary source of sustenance in the mountain states is agriculture, practiced in the shadow of extreme climatic variations, inaccessible terrain and severely over-exploited soil, water and forest resources. As of 2003, the Himalayan states comprise 22% of the Indian area under cultivation, of which only 18% is irrigated. When agriculture is primarily rain-fed, limited rainfall—in Himachal Pradesh 70% occurs during June, July and August—poses a severe constraint. Large-scale deforestation of the region's steep slopes and ridges



Massive deforestation has stripped the Himalayas of their forest cover, increased soil erosion and harmed the ecosystem.



Women carring heavy loads of fodder.

has accelerated soil erosion, increased water run-off and caused heavy sedimentation in downstream areas. The excessive use of chemical fertilisers and pesticides, practice of mono-cropping and reliance on high-yielding seed varieties—legacies of India's Green Revolution of the late 1960s—have leached formerly arable soil of nutrients, increased soil and water toxicity, decreased crop immunity to diseases and exacted a heavy toll on the region's bio-diversity. The region's natural water sources—mountain springs and streams—can no longer support the demands of its growing population and deforestation has caused a

fuel-wood crisis; both place a great burden on women who must travel increasingly longer distances to collect water and gather wood.

Clearly, socio-economic progress in the Himalayan states must begin by addressing the fragile state and unique challenges of mountain agriculture. Development interventions and agricultural technologies that work in the plains cannot be applied here. It is equally important for development practitioners to be aware of Himachal's socio-political history: before India's independence in 1947, the region out of which Himachal Pradesh would eventually be created as a full-fledged state (in 1971) was comprised of numerous small feudal principalities. Although the British spent their summers in Shimla (now Himachal's capital), escaping the blistering Delhi heat, they were not interested in the rural area's development, a neglect that continued for a while after Independence as well. The people of Himachal live in tiny hamlets scattered far apart from each other and, as such, frequently did not qualify for the government's rural development schemes that were predicated on a certain population mass and geographical proximity of villages. The men traditionally served in the Indian Army or migrated to the plains in search of work; when home on leave, they drank heavily and domestic violence was rife. Basic medical facilities were nonexistent and primary education woefully inadequate. Eking out a frugal existence, most villagers were driven to the clutches of unscrupulous moneylenders. Rampant caste and gender discrimination combined with a deeply superstitious mind-set further hindered social progress.

As one of the first NGOs to work in the traditionally neglected areas of Himachal Pradesh, RUCHI did not have the benefit of tried and tested development models and field approaches. It has had to



formulate these on its own in the context of its ongoing work, emerging, over the years, as an expert in the socio-economic development of hill communities.

Himachal Pradesh: Statistics from the 2001 Census

Total area 55,673 square kilometres

Cultivated area 5,83,000 hectares

Forested area 20,640 square kilometres

Total population 6,077,248 Rural population 92%

Population density 109 people per square kilometre

Growth rate 17.5%

Overall life expectancy 63 years

Male life expectancy 62.3 years

Female life expectancy 65.3 years

Sex ratio 970 females per 1,000 males

Infant mortality rate 60 per 1,000 births

Per capita income Rs. 15,012.00 per annum¹

Overall literacy rate 77.13%

Male literacy rate 86.02%

Female literacy rate 68.08%

Himachal Pradesh: Administrative Scheme

Divisions	3
Districts	12
Sub-Divisions	52
Tehsils	75
Sub-Tehsils	34
Community Development Blocks	75
Villages (inhabited)	16,807
Panchayats	2,922
Panchayat Samitis	75
Zila Parishads	12

RUCHI in Shimla District

Community Development Blocks 8

¹USD 341.00 (approximately) at Rs. 44.00=\$1.00

Blocks in which RUCHI worked Chopal Villages covered 40

Period 1980—1990

RUCHI in Sirmour District

Community Development Blocks 6

Blocks in which RUCHI works Pachhad, Rajgarh and

Sangrah

Villages covered 126

Period 1984—present

RUCHI in Solan District

Community Development Blocks 5

Blocks in which RUCHI works Dharampur

Villages covered 60

Period 1994—present

RUCHI began its work in the Chopal community development block of Shimla district in 1980. The area was chosen because it was remote, undeveloped and neglected by both the government and NGO sectors. Given this situation, and the fact that RUCHI was a fledgling organisation with limited staff capacity and experience, it made a deliberately modest start: it selected 11 villages in the block and attempted to mobilise the support of villagers around a few issues of common import.

By 1986 RUCHI was working in 40 villages in the Chopal area. That year it also extended its activities to 15 villages in the neighbouring Pachhad block² of Sirmour district. With support from Foster Parents

Plan International (FPPI) from 1987 to 1989, RUCHI was able to extend its work in Sirmour to over 100 villages in Pachhad and Rajgarh blocks. In 1989, at the peak of its activities in Shimla and Sirmour districts, RUCHI was working in about 140 villages.

Today RUCHI is a flourishing organisation, with active programmes in 214 villages in Sirmour and Solan districts. It is headquartered at Bandh in the Dharampur block of Solan district and has a full-time staff of 38 people. Its annual budget of Rs. 80 lakhs³ is supported by government funding at the Central and State level, bilateral funding by foreign agencies including NORAD (although this is slated to end by early 2005, as per



In Chopal, as in most of RUCHI'S other project sites, villages are widely dispersed and remote. Here RUCHI's field-workers cross a river to attend a village meeting.



Government of India decree) and private donors including MISEREOR (Germany), HelpAge International (U.K.) and OXFAM (New Zealand).

RUCHI's Early Years: The Shimla Programme

Villages in the Chopal block are located 3,500 to 8,000 feet above the mean sea level. Heavy snowfall during the winter, coupled with frequent landslides, often renders villages inaccessible between December and February. "While RUCHI was headquartered in Chopal," says Dharamvir Singh, "I had to walk 52 kilometres to reach our office during the winter!" In 1980, when RUCHI began its work here, only about 20% of the total geographical area of the block was under cultivation. The undulating terrain necessitated terrace farming on small units of land and, because agriculture was rain-fed, the majority of farmers practiced subsistence and traditional farming, supplemented by non-agricultural daily wage employment with the Forest Department. As per the 1981 Census, the block's overall literacy rate was 22%, with female literacy at 11% and male literacy at 32%. Sanitation and health-care facilities were inadequate. Caste discrimination, exploitation of women and alcoholism prevailed.

As is frequently the case, in Chopal too women bore the disproportionate brunt of under-development. Although they were integral to the hill economy—they provided the bulk of labour on family farms—they wielded little or no authority in a patriarchal setup. Although the lack of drinking water and diminishing fuel-wood and fodder resources affected the entire village, it was women who had to walk miles every day to find water and gather wood. Again, as is frequently the case, RUCHI quickly identified women as the best recipients of development assistance. However, local villagers who already looked upon RUCHI with suspicion (fearing, in some cases, that it had an ulterior motive of land-grabbing), were hardly likely to condone its involvement with village women. Therefore, RUCHI decided to act through existing village panchayats,4 their pradhans (panchayat chiefs) and Mahila Mandals. In addition to securing the blessing of influential men, it also avoided having an explicitly feminist position so as not to alienate them.

²In 1995 Pachhad block was divided into two blocks: Pachhad and Rajgarh.

³1 lakh = 100,000; 100 lakhs = 1 crore

Rs. 80 lakhs = USD 181,818.00 (approximately) at Rs. 44.00 = \$1.00

'Gender-neutral' community issues around which the entire village could be mobilised and for many of which women could be motivated to be the primary agents of change included:

Provision of Potable Water

Although Himachal receives more rainfall than many other parts of India, it still faces an acute shortage of safe drinking water. For most villages here, the only source of potable water is the natural springs (bawadis). Fetching bawadi water from the source requires women to walk two to four kilometres daily. In many places, because of their excessive use, bawadis have either dried up completely or become seasonal. They are also often unhygienic (since domestic and wild animals use them) and clogged by leaves and other debris. Ensuring that water is potable and available close to home can significantly improve the health and well-being of a community by reducing the incidence of water-borne diseases and the drudgery involved in fetching water from distant sources. Since pumping river water up from valleys is technically complicated and financially prohibitive, the best solution is to construct low-cost storage tanks at the source (bawadis) and delivery points (villages) linked by a network of pipes for conveyance, ensure the cleanliness of the bawadi site and (as RUCHI pioneered in Rajgarh and Dharampur blocks in the early 1990s) construct ferro-cement tanks to store rainwater.

Bawadi development involves the construction of a covered and gated storage tank, an overflow tank for animal use and, if the site permits, a washing platform and rail for hanging clothes. This ensures that the natural water source is kept clean for human use, reducing the incidence of water-borne diseases, while still making the water readily available for other uses.

When selecting a bawadi site to develop, RUCHI considers the following criteria:

Whether the spring is seasonal or perennial

⁵Community-based women's organisations, established by government initiative. Village women of all castes are entitled to membership in their local Mahila Mandal.



⁴A system of village self-government introduced by the Government of India in 1958, which comprises an elected council for one or more villages, through which development programmes are undertaken. In 1994, the government introduced the Panchayati Raj Act, which significantly strengthened the panchayati system by decentralising planning and resource allocation.

- Whether the source will cater to households belonging to Scheduled Castes⁶ or those Below Poverty Line⁷
- Number of households that will benefit from the structure
- Whether the community is willing to provide a share of labour for construction
- Whether the community is capable of ensuring regular usage and maintenance of the structure

In Shimla, potable water supply schemes were executed through the active involvement of local Mahila Mandals, with villagers donating their labour (shramdan) and RUCHI providing technical expertise and materials. By 1990 RUCHI had constructed 22 storage tanks (made of stone) at bawadi sites and Atthis bawadi a gate prevents animals from soiling water delivery points in 15 villages of the district. Bawadi development continues in its Sirmour and Solan programmes, where RUCHI has developed 67 bawadi sites to date.



meant for human use. Outside the gate an overflow tank can be used by livestock and other animals.

In 1985-86, the men of Bagna village, Chopal block, opposed RUCHI's proposal to lay a network of pipes that would transport water to the village, on the grounds that it would diminish the government funds allocated to this area for the same purpose. The women—whose responsibility it was to trudge long distances daily in the search for potable water—saw no reason to wait indefinitely for government aid, and the area Mahila Mandal worked with RUCHI to lay the pipes. (The women were led by a health worker who was the first woman in the block to ask for alimony at a time when even the local Member of the Legislative Assembly had three wives.) Furious at being thwarted by the joint front of an outsider (RUCHI) and the Mahila Mandal, some men

dug up sections of the pipes and stole them. Once the vandalism and theft were discovered. RUCHI held a village meeting to discuss the matter, but not a single man attended. Determined not to be intimidated, RUCHI and the Mahila Mandal sent a message to the men warning them that a police complaint would be filed shortly. The men did not respond, but some days later the missing sections of the pipe reappeared.

Pipes (visible in the background) link storage tanks at the bawadi source to those in villages, where the water can be used for drinking and washing utensils.

⁶As per the Government of India's Schedule issued in 1956, Scheduled Castes (SCs), Scheduled Tribes (Sts) and Other Backward Castes (OBCs) represent especially underprivileged groups that are entitled to affirmative action in education and employment.

⁷As of 2002, the Government of India's Below Poverty Line (BPL) census (conducted at the beginning of each Five-Year Plan period) takes into account 13 socioeconomic parameters in assessing the poverty level of a rural household: operational holding of land, housing, clothing, food security, sanitation, ownership of consumer durables, literacy, labour force, means of livelihood, status of children, type of indebtedness, migration and nature of assistance preferred. [Source: Press Information Bureau, Government of India. May

Organising Social Education and Vocational Training Camps for Women

In its general awareness camps for women, RUCHI discussed social problems such as child marriage, dowry, alcoholism, casteism and superstitions. It emphasised the importance of education, preventive health care, family planning, etc. In addition to disseminating information in a sympathetic, non-threatening manner, RUCHI also sought to create an active forum for women to meet, exchange ideas, develop solutions for local problems and, in the process, gain the self-confidence to express themselves, assert their rights and negotiate their demands in a male-dominated society. Similarly, RUCHI's vocational training camps—which initially focussed on tailoring, soap-making and rope-making—provided women with a marketable skill and, in so doing, also increased their sense of self.

Provision of Community Health Care Services and Training

From its inception RUCHI has attempted to include a basic health care component in its package of programmes. Although its community health interventions would be fully developed only in the 1990s, when it worked in Sirmour and Solan districts, even in its early years in Chopal, it trained local women in the diagnosis and treatment of common ailments and injuries (for which it provided them with a basic first-aid kit); pre- and post-natal care; importance of regular immunisations; family planning, hygiene, sanitation and nutrition education and health education for adolescent girls. Beginning with five villages whose Mahila Mandals expressed an interest in the service and nominated one woman each for training, by 1988 RUCHI had trained 10 Community Health Motivators (CHMs) in 20 villages of Chopal block.

In its early years RUCHI relied primarily upon State and Central government funds for its work. Its choice of activities, therefore, was determined both by its desire to begin development interventions and mobilise women without alienating local men, and by the fact



that these activities also happened to be funded by various government agencies such as Social Welfare Boards, the Ministry of Agriculture and Rural Development, etc. Although some of its interventions—such as the ones discussed above—were durable, others—including those listed below—were less so:

- Creation of Balwadies and Anganwadies (crèches for preschool children)
- Adult Education Programme for Functional Literacy
- Promotion of Smokeless Chulha (stove) and Environmental Education
- Provision of Agricultural Education in Collaboration with the Indian Council of Agricultural Research

Crèches and adult education programmes functioned only as and when government funds were available or were of the short duration

of a year. The smokeless *chulha* initiative was taken over by the government's block development programme within a few years. Given the necessarily project-based nature of government support and RUCHI's own organisational infancy, several important initiatives —such as the development and management of watersheds and the promotion of construction and agricultural technologies—would not be undertaken until the late 1980s.



A CHM meeting at RUCHI's office.

These circumstantial limitations notwithstanding, RUCHI gained important experience during this period. In addition to gaining the trust of local communities and honing its approach, RUCHI learnt what made for viable collective action in the area:

- Villages which are farther away from main roads or central locations—and, thus, usually out of the reach of the government's development apparatus—respond more readily to RUCHI's call for collective action to better their own situation.
- Villagers living in close proximity to each other are easier to mobilise as against those whose dwellings are dispersed over large distances.
- The smaller the number of members, the better the chances of success of any village organisation. (Naturally, groups that are too small cannot perform tasks successfully either, so the key is arriving at the correct membership figure for each group.)

- Working with Mahila Mandals—creating them where they did not exist and catalysing them where defunct—caused controversy among local men, but was an effective intervention strategy that was to become a hallmark of RUCHI's approach.
- By emphasising the development of village institutions, training and empowering villagers to negotiate solutions to their problems and relying on local participation to make its projects successful, RUCHI sought from the start to create selfsufficiency among villagers. Although it was originally mistaken for a government body or a private charity, RUCHI consistently clarified its role as a socio-technical expert rather than a grantmaking authority on which the villagers could depend in perpetuity.

This emphasis on self-sustainability is evident not only in RUCHI's development interventions, but also in its organisational history: in 1990, RUCHI handed over its Chopal programme to another NGO, the State Social Welfare Organisation (SSWO). Although RUCHI helped SSWO with administrative and technical funds and expertise for five years, the organisation is now self-sustaining and completely independent: RUCHI is not represented on its Board of Directors. Over the years RUCHI has established six branches, all now fully self-sustaining and independent: Manav Sewa Sansthan (Bilaspur district), Sawera (Kangra district), SSWO (Shimla district), Arti and Hitkar (Sirmour district) and Development Promoters (Solan district). It has also provided 16 other NGOs (working on development, environment, gender and youth issues) with technical assistance and training.

It was only in 1986-87 that RUCHI began attracting long-term financial support from foreign donors such as NORAD, FPPI and OXFAM. This funding freed RUCHI from its dependence on government project-based activities and allowed it to come into its own as an expert service provider with a comprehensive development package that includes watershed management, natural resource conservation, technology promotion, income generation, women's empowerment and community health care. RUCHI's long-term financial security, coupled with its growing work experience, community reputation and organisational confidence, enabled a strategic shift from individual-focussed, welfare and



awareness generation activities to more community-based and participatory technological interventions. These activities are discussed in the following chapters, in the context of RUCHI's work in Sirmour and Solan districts.



RUCHI Comes Into Its Own: The Sirmour and Solan Programmes

Villages in Sirmour district are located 3,000 to 7,000 feet above the mean sea level. Most families in the area are marginal and small farmers who practice agriculture and horticulture on small, terraced fields. As in Chopal, in Pachhad and Rajgarh blocks too, environmental degradation, soil erosion, lack of irrigation facilities and potable water, depleting fuel-wood and fodder sources and poor health, sanitation and educational infrastructures combined to create endemic poverty when RUCHI first surveyed the area in 1984. Casteism, alcoholism and an entrenched patriarchy created an environment of discrimination and violence.

Villages in Solan district are located 1,000 to 6,200 feet above the mean sea level. RUCHI works primarily in the Dharampur block of this district. Solan faces similar problems as Shimla and Sirmour, but unlike Shimla, RUCHI's project sites in Sirmour and Solan are more easily accessible: inclement weather does not cut them off completely as it does Chopal.

By the mid '80s RUCHI had extended its work into 15 villages of Sirmour's Pachhad block. It did not undertake any long-term programmes in Sirmour at this point, confining itself to activities such as the distribution of sheep and goats to marginal farmers through the government's Lab-to-Land programme already underway in Chopal, organising orientation camps for leaders and opinion-makers in villages, holding eco-development camps, conducting training programmes on the construction and use of bio-gas plants and assisting interested farmers in securing loans and support from the government and private banks in order to purchase bio-gas plants.

In October 1987 RUCHI entered into a two-year collaboration with FPPI. The joint project catered to the needs of the underprivileged and exploited poor by sponsoring children and, in so doing, assisting their families and the villages in which they lived. (This child-family-community approach represented a shift from FPPI's usual focus on just the sponsored child and it is to RUCHI's credit that it was able to persuade FPPI of the merits of a holistic approach in the Indian context.) The project selected one child per family from the SC, OBC and Integrated Rural Development Programme⁸ families in the area, and eventually sponsored about 2,000 children in approximately 120



villages in Sirmour. Major programming initiatives included: education, information dissemination, capacity building, networking, income generation, animal husbandry, micro-finance Self-Help Groups (SHGs), community health care and care for the elderly.

As it happened, the collaboration with FPPI also became a learning experience for RUCHI in foreign donor-grantee relations. Soon after the project was underway, FPPI began to insist that funds allocated monthly be expended in their entirety on a monthly basis, regardless of the project's progress on the ground. On the basis of its field experience, however, RUCHI knew that project activities would not always follow the stipulated timetable: progress might be slow one month, only to be made up the next or activities might exceed monthly targets. It requested FPPI to reconsider its fund expenditure policy with this reality in mind. When FPPI proved disinclined to do so, RUCHI decided to withdraw from the collaboration, only to discover that while the contract allowed the donor to end its programme support, there was no equivalent clause allowing the grantee to refuse aid! The partnership ended only upon completion of the contract term.

The experience with FPPI has been the sole exception in RUCHI's otherwise outstanding relationship with national and international donors. Its two decade long collaboration with NORAD, for instance, which began in 1986 and has covered the gamut of RUCHI's services (see Appendix III), has been a vital source of organisational stability and brought deep professional satisfaction to both donor and recipient.

⁸Launched in select districts by the Government of India in 1976, the Integrated Rural Development Programme (IRDP) was expanded in 1980 to cover the entire country. IRDP assists the rural poor to cross the poverty line by providing them income generating assets for self-employment ventures.

Watershed Management/Natural Resource Conservation: Working with Nature for a Better Future

As Himachal's population grows, its rising agriculture, fuel and fodder needs put increasing pressure on the region's fragile—and already over-exploited—natural resources: water, soil and forests. By the early 1990s RUCHI realised that the long-term needs of local communities went beyond merely ensuring adequate irrigation and potable water and, instead, involved micro-watershed management that would also address the development and conservation of natural resources. From 1992 to date RUCHI has developed 15 micro-watersheds in Sirmour and Solan districts, focussing on:

Bench Terracing

Bench terraces are constructed in order to check the high volume of water run-off on hill slopes. These narrow terraces have a low gradient and are angled inwards, so as to restrict both water run-off and soil erosion. Trees are planted on the edge to stabilise the terrace.

Gully Plugging

Gully plugging is done by constructing a dry stone masonry wall against the flow of water in the small gullies created as an offshoot of mountain streams. Gully plugging breaks the run-off velocity of water and prevents the erosion of fertile soil by halting it behind the wall. The soil thus collected can be removed and put into agricultural fields. On moderately steep slopes, gully plugs can collect up to a few hundred cubic metres of water. When check dams are constructed, gully plugging is necessary in the upper catchment area.

Contour Trenching

Contour trenching refers to the digging of small trenches approximately 30cms wide and 50cms deep. These trenches are used to trap the overland flow of water, thereby controlling run-off and soil erosion, extending retention time to increase water infiltration levels and improving sub-surface drainage for favourable aeration.



Check Dams

Check dams are small dams that check the velocity of flowing water and reduce its erosive force, affect the deposition of flood load and, as with contour trenches above, increase water retention time and, thus, recharge the water table. The dammed water can also be used for irrigation purposes. RUCHI has constructed 20 such low-cost dams in Sirmour and Solan districts.

Gabion Structures

A gabion structure is a dry stone wall held in place by a galvanised iron wire mesh that gives it extra strength. Gabion structures are constructed at sites where the soil is loose and prone to erosion to prevent land slides, check soil and water erosion and reduce high slope gradients.

Irrigation Tanks

Agriculture is the primary source of income for 92% of Himachal's population. Most of this agriculture is dependant on rainfall, 70% of which occurs over a period of three months (June, July and August), severely limiting the cultivation period, types and quantity of crops that can be sown. It is easy to understand why irrigation tanks are among the most popular of RUCHI's offerings. The water stored in these tanks is effectively channelled through pipelines to irrigate the maximum number of fields. Since it began work in Sirmour and Solan districts, RUCHI has constructed 121 irrigation tanks in 85 villages, increasing the irrigated land by 40% to 300 hectares and benefiting 750 families.



Villagers inspect a recently constructed irrigation tank with a capacity of 1, 10, 000 litres.

When selecting a site to construct an irrigation tank, RUCHI considers the following criteria:

- Whether there is an available water source for the tank
- Amount of land that can be brought under cultivation
- Whether the tank will cater to SC or BPL households
- Number of households that will benefit from the tank
- Whether the community is willing to provide a share of labour for tank construction
- Whether the community is capable of ensuring regular usage and maintenance of the tank



Villagers provide their labour (*shramdan*) to construct a local irrigation tank.

In 1996 RUCHI built a 40,000 litre irrigation tank for Thakur Tejpal, a farmer in Dhamareo village in Solan district's Dharampur block. Dhamareo is a tiny village tucked into the hillside, below which flows the Beja river. Only one family of about 15-20 people lives here. Tejpal and his nephew, Sanjeev, farm their family's 52 bighas⁹ of land by themselves, with seasonal assistance from Nepali farmhands. Dhamareo's tiny size and remote location mean that government assistance is



Thakur Tejpal (in blue jeans) with his nephew, Sanjeev (kneeling), at their irrigation tank built with RUCHI's assistance

hard to come by and, while some farmers might be content to wait as long as it takes for this assistance, Tejpal was made of more enterprising stuff. When RUCHI first approached him in 1996, he agreed to the installation of a hydraulic ram pump. Although he found the pump helpful in lifting water without any recurring expenses, he was concerned by the loss of water in operating the unit and was eager to try the irrigation tank as an alternative. With the tank and a sprinkler system (also fitted by RUCHI), Tejpal and Sanjeev have been able to bring 50 bighas (95%) of their land under irrigation. Where earlier they grew only wheat and maize, today they also

grow cabbage, cauliflower, garlic, peas, sugarcane, tomatoes and mango and also practice floriculture (gladiolus). They remain open to innovative technologies promoted by RUCHI (they recently experimented with plastic thread technology for growing tomatoes) and feel confident in asking it for new technical assistance (their most recent discussion with RUCHI weighed the pros and cons of lining their irrigation tanks with polythene sheets to maximise rainwater retention).

Percolation Tanks

Percolation tanks are constructed by digging an earthen (*kuchha*) pit in the ground and using the excavated soil to form a bund on the downward slope of the hill. Percolation tanks aid soil and water conservation by catching and slowing water run-off, allowing it to percolate slowly into the ground, increasing the moisture in the area around the tank and, ultimately, recharging the ground water. These tanks can serve as a water tank for livestock and also as a form of irrigation tank. RUCHI has built 42 percolation tanks in Sirmour and Solan.

When selecting a site to construct a percolation tank, RUCHI

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^{912.5} bighas = 1hectare

considers the following criteria:

- Whether there is a natural spring or agricultural fields below the proposed site
- Whether the site is a potential water catchment area
- Number of households that will benefit from the tank
- Whether the community is willing to provide a share of labour for tank construction
- Whether the community is capable of ensuring regular usage and maintenance of the tank
- Whether the community is willing to plant saplings around the tank

Planting

Not only do plants play an important role in soil and water conservation by preventing soil erosion and retaining soil moisture, they are also a key source of fuel and fodder for villagers. Since 1992, RUCHI has distributed approximately 200,000 saplings of cedar, drek, lahsunia, mulberry, poplar, robinia, silver oak and willow to select villages in Sirmour and Solan districts. Villagers plant the saplings under the supervision of their CHMs and watershed management committees (WMCs).

When selecting sites for planting, RUCHI considers the following criteria:

- Whether there has been bawadi development or percolation tank construction in the area
- Whether there is sufficient space for planting
- Whether the community is willing to undertake planting and plant maintenance

Plantation remains an uphill battle. Although RUCHI trains villagers in plant upkeep, several factors have resulted in low long-term survival rates (15-20% after one year). Villagers frequently become lax about these non fruit-bearing plants because they do not derive an immediate tangible benefit from them. Even though stray animals destroy unprotected saplings, villagers remain reluctant to fence the plantation area. Saplings must get water consistently for at least a year if they are to survive, but infrequent rainfall and a chronic water shortage means they rarely get enough water. As with most interventions, plantation takes a while to be adopted and show results.



Seed Banks

In 1996 RUCHI established a seed bank at its headquarters at Bandh village. The bank is a marketing and service centre that operates through four field centres in Dharampur and Rajgarh blocks. RUCHI procures vegetable seeds in bulk from Chandigarh (capital of neighbouring Punjab and Haryana states) and from local farmers (who have them in excess), and supplies them to interested farmers at 20% below the market rate. The seeds are provided on interest-free loans for a period of six months. Repayment is timed to coincide with the harvesting season, allowing farmers to repay their loans after the sale of their crops. RUCHI's seed bank has loaned a total of Rs. 2 lakhs in the form of seed sales (approximately USD 4,545.00 at Rs. 44.00 = \$1.00).

Watershed Management Committees

In a region of scarce resources, unforgiving topography and harsh climactic conditions, RUCHI's watershed management approach seeks to conserve and develop natural resources through the careful and innovative application of technology. In all the villages in which it has worked, RUCHI has sought to improve agricultural techniques, increase the cultivable land, expand the crop range and, in so doing, improve local standards of living. Needless to say, development interventions are only effective to the degree that they respond to local needs and can be sustained by the community to whom they are directed and the natural environment of which they are a part. The key to RUCHI's success lies in its participatory, need-based and environmentally responsible approach. One manifestation of this approach is its formation of local Watershed Management Committees (WMCs).

When RUCHI begins watershed management in any area, it starts with the formation of a WMC, which is typically comprised of one representative per village (selected by the villagers themselves). Over the years RUCHI has refined its committee requirements and now a WMC must have at least three women members and three members of lower castes. (In a decision that has significant impact on the committee demographic, RUCHI does not allow the two quotas to be met simultaneously: in other words, a lower caste woman member fulfills part of only one quota—either that of female membership or that of lower caste membership—but not both together.) WMCs are responsible for the maintenance of created community assets, project decision-making, post-project follow-up activities and coordinating linkages with government departments. Through their WMCs villagers are in charge of the nature of development interventions directed their way. Monies collected by

the committee (each member is responsible for collecting his/her village's share) are expended on watershed maintenance. In some cases—as with Chambidhar below—members of the WMC are also part of the local SHG. In this case, each member is responsible for both his/her village's share as well as his/her own personal monetary contribution.

The Chambidhar WMC/SHG in Sirmour district's Rajgarh block represents an unalloyed success for RUCHI. When RUCHI held its first meeting here in September 1997, it was so poorly attended that a committee could not be formed. 25 people attended the second meeting the following month, but while they formed the committee, they couldn't even afford to provide tea at the subsequent few meetings! Eventually, WMC/SHG membership stabilised at 15 members, with an SHG contribution of Rs. 50.00 per person each month. Today SHG members each contribute Rs. 100.00 per month and the SHG kitty stands at Rs. 438,753.00 (approximately USD 9,972.00 at Rs. 44.00 = \$1.00).

Early on, members decided to lend money from the kitty to one another at 24% interest per annum. Loans were approved only for agricultural expenses—buying seeds, livestock, etc.—and were capped at Rs. 5,000.00. Today the loan limit has been raised to Rs. 30,000.00, loans are issued against a member's share of the kitty and can also be given to non-members provided a member serves as the guarantor. Loans above Rs. 30,000.00 are considered only if the borrower can provide a signed blank cheque as guarantee. The kitty is in constant circulation among members; monthly interest on loans is about Rs. 15,000.00. Because loans are given only to members or local villagers approved by members, judgements of credit-worthiness are unerringly accurate: no one has reneged on a loan as yet.

No new members have been admitted to the Chambidhar SHG since 1998 and membership rules are strict. A member who misses one group meeting must pay a fine of Rs. 20.00. A member who misses two consecutive meetings is fined Rs. 50.00. Non-attendance in three consecutive meetings is grounds for automatic dismissal. A dismissed member can be reinstated only upon group approval and after paying a fine the SHG sees fit to impose (Rs. 300-500.00).



When the WMC was first formed two women were included as members at RUCHI's request. (The three-woman WMC membership requirement was introduced post-Chambidhar.) Although one of them soon left, the other is still very much a part of the committee. She is unfazed by the fact that she is the only woman member: she is confident and articulate, her comembers respect her and there is no indication that she is simply being tolerated to meet a membership quota or that she is the puppet of a male family member who could not get committee membership.

The Chambidhar WMC is active and efficient: it has overseen the construction of 20 ferro-cement tanks, 22 irrigation tanks, 5 percolation tanks, 10 check dams, 20 NADEP compost pits, 600 cubic metres of gully plugging and 2,000 cubic metres of contour trenching. It has also supervised the extensive plantation of fodder and fruit plants. As a result of these measures—made possible by the villagers' shramdan—every field in the area now has access to irrigation water that isn't entirely rain-fed. The types of crops that can now be planted have also increased and include: peas, tomatoes, potatoes, french beans, ginger and red chillies. Several local farmers have entered into an arrangement with a transporter who sells their produce in Delhi.

The SHG is a generous contributor to various community development initiatives: it funds the construction of schools, roads, toilets, etc. It is also now completely self-sufficient and no longer relies on RUCHI for financial assistance. "When we started out," says Pratap Singh, SHG President, "we were worried about collecting the money; today we support the government in its public works projects."

On a smaller scale, but no less gratifying, has been RUCHI's work in Bhuman village, in Solan district's Dharampur block. In 2002, when RUCHI first came to Bhuman, most of the seven families that make up this small village mistook the NGO for a local spice-making company of the same name and feared that RUCHI would dispossess them of their lands. Once the misunderstanding was resolved and the panchayat approved RUCHI's project, the Bhuman WMC set about transforming the village.

There is absolutely no source water in Bhuman's vicinity. Until



RUCHI began working in their village, the women of Bhuman had to walk long distances everyday to collect water. Today Bhuman meets all its water needs through rainwater harvesting. The WMC, with RUCHI's technical guidance, coordinated the construction of eight over- and underground tanks, paved village

streets and planted trees at a total cost of Rs. 60,000.00, of which RUCHI contributed Rs. 25,000.00 and the villagers the balance as shramdan. Every drop of water here—rainwater, run-off, leakage from taps, kitchen waste water—is deposited into tanks that are connected via a network of pipes. Each drop is used and reused. The villagers' diligence has paid off: the village is prosperous, houses are properly constructed (pucca housing) and there is electrification.

Neighbouring panchayats are now urging RUCHI to work in their areas too. Unlike the villagers of Bhuman, however, who felt compelled to respond to an urgent need, the other panchayats are reluctant to contribute any money or *shramdan* for the construction of water storage tanks in their villages. Since RUCHI does not provide charitable aid, the villagers prefer to wait, as long as it takes, for the government to construct storage tanks for them.



A courtyard being paved in Bhuman village.



Bhuman after RUCHI's involvement with the village. Note the water storage tanks, pucca housing, paved courtyards and electricity wires.



In brief:

- The long-term needs of local communities go beyond merely ensuring adequate irrigation and potable water and, instead, involve micro-watershed management that also addresses the development and conservation of natural resources.
- RUCHI's watershed management approach seeks to conserve and develop natural resources through the careful and innovative application of technology. Bench terracing, gully plugging, contour trenching, check dams, gabion structures, irrigation tanks, percolation tanks and tree planting are some of the techniques that RUCHI promotes to manage Himachal's topography and resources in an optimum manner.
- The key to RUCHI's success lies in its participatory, need-based and environmentally responsible approach. One manifestation of this approach is its formation of WMCs.
- Through their WMCs villagers are in charge of the nature of development interventions directed their way.



Technology Promotion: Harnessing Science for Social Good

The optimal and responsible utilisation of resources in Himachal demands particular kinds of alternative technological interventions: cost-effective, locally manufactured, easily adopted, durable and environmentally sustainable. The development and transfer of such technologies increases the yield of natural resources, improves farming techniques, ensures food and livelihood security and raises the standard of living of rural folk. Beginning in the late 1980s RUCHI began testing and promoting alternative building construction and agricultural technologies and is now an acknowledged technical expert in the field.

In 1986, the unforgiving terrain and adverse climactic conditions of RUCHI's headquarters in Chopal, forced a shift to Shalana village in Rajgarh (Sirmour district). Shalana is a water-scarce area and by the early 1990s RUCHI had pioneered the use of rainwater harvesting using low-cost, highly durable ferro-cement tanks. In 1994, RUCHI began work on its new headquarters at Bandh village in Solan district's Dharampur block, using low-cost construction techniques to build its complex. (The complex was built at the modest rate of Rs. 150.00 per square foot, in contrast to a non low-cost construction rate of Rs. 250.00 per square foot.) That year, recognising RUCHI's contributions in the field of technology promotion—especially lowcost construction and water harvesting-CAPART (Council for Advancement of People's Action and Rural Technology, Government of India) designated RUCHI's Bandh office a Technology Resource Centre (TRC). RUCHI's Bandh campus was fully operational by 1996. The same year, in another acknowledgement of RUCHI's expertise in low-cost construction, HUDCO (Housing and Urban Development Corporation, Government of India) designated RUCHI's offices in Shalana and Bandh as Building Centres. These Centres are now used for the development and demonstration of low-cost construction technologies and for training farmers, artisans and other grassroots workers in watershed management, income generation, women's empowerment, community health, etc.

Ferro-Cement Construction/Rainwater Harvesting

Even more than bawadis, which have been over-exploited, rainwater is the most reliable solution to Himachal's potable and irrigation water scarcity. Since 1991 RUCHI has pioneered low-cost

ferro-cement technology as the best way to harvest rainwater and trained the government and other NGOs in the proper application of this technology. As the first agency to promote ferro-cement technology in Himachal, RUCHI has constructed over 600 ferro-cement tanks in both its own project areas and also on a demonstration basis at other NGO and government sites.

Rainwater that collects on the roof of a building is piped into a small multi-layered filteration tank placed on top of a ferro-cement storage



A pipe conveys rainwater collected on the building's roof to a filteration tank placed atop a ferro-cement storage tank.

tank. The filteration tank consists of layers of sand. dense, fibrous materials like coconut husks and small rocks. After going through a slow sand-filtration process, the water is stored in the ferro-cement tank underneath. These storage tanks are made of chicken wire mesh, steel rods and cement and sand in a ratio of 1:2. The tanks are easy to construct with locally available materials and cost less than brick, stone, iron or HDPE tanks. They are leak-proof, durable and easy to repair. Regular chlorination of the rainwater stored in ferro-cement tanks ensures a reliable and accessible supply of potable water, reducing both the drudgery involved in fetching water from distant sources and the incidence of water-borne diseases. The harvested rainwater can also be used for irrigation and for livestock.

When selecting households for whom to provide ferro-cement tanks, RUCHI considers the following criteria:

- Whether safe drinking water is available in the household's vicinity
- Whether the household is SC or BPL
- Whether the household is willing to make a financial contribution towards a portion of the cost of construction
- Whether the household is capable of ensuring regular usage and maintenance of the tank

When RUCHI first began constructing ferro-cement tanks, it asked for an in-kind financial contribution in the form of *shramdan*. Strangely, however, this failed to inculcate a sense of responsibility for the tank in the minds of the beneficiary householders. In some instances, RUCHI would arrive at the appointed time to begin tank construction only to find the beneficiary householders nowhere in sight. Tank maintenance was frequently lax. One way to counter this indifference, RUCHI finds, is to require a cash contribution to the



project. The cash is held as a deposit: if the villagers provide *shramdan* themselves, the deposit is used to pay them for their labour. If they choose not to provide *shramdan*, the deposit is used to pay hired labour.

Other low-cost construction technologies pioneered by RUCHI in Sirmour and Solan districts include:

- Rat Trap Bond Construction
- Micro-Concrete Roofing Tiles
- Random Rubble Block Construction
- Dry Stone Masonry

In 1996-97, with financial support from CAPART and under the Jawahar Rozgar Yojana, ¹⁰ RUCHI built 82 houses for the homeless in Rajgarh and Dharampur blocks, demonstrating the viability of low-cost construction materials and technologies.



Once filtered and chlorinated, rainwater is fit for human use.

Organic Farming Technologies

India's Green Revolution in 1966-67 ushered in the cultivation of high-yielding seeds and a large-scale use of the chemical fertilisers and pesticides that were necessary for their growth. These chemical fertilisers and pesticides were sold at subsidised rates, which further increased their liberal use. Nearly four decades later, the damage is evident in increased soil, water and air pollution. While the use of chemical fertilisers tends to result in short-term boosts to crop yield, their continued use degrades soil fertility and, in the long-term, ever increasing volumes of fertiliser are required to maintain high yield levels. Not only does this present a financial burden for the farmer, it also exacerbates the environmental damage: the nutrient value of the soil continues to decrease and fertiliser run-off poisons water bodies.

Organic farming is one way to reverse the adverse effects of chemical fertilisers and pesticides. Manures, which are low-cost natural fertilisers, replenish soil nutrients and restore soil texture (for better water retention and soil aeration). Although farmers have always used natural fertilisers—primarily farmyard manures—poor composting techniques have diminished their effectiveness. Cow

¹⁰Named in memory of independent India's first Prime Minister, Jawaharlal Nehru, the Jawahar Rozgar Yojna (Jawahar Livelihood Scheme) was launched by the Government of India in 1989 to generate employment opportunities.



dung, for instance, is traditionally just piled on top of the ground, exposed to the elements: the air causes it to dry out and ammonia conversion and water run-off when it rains causes manure to lose nutrients. RUCHI has promoted both the principle and proper technique of organic farming, with special focus on:

NADEP Composting

The disadvantage of manure is that its high organic matter content:low nutrient value ratio means that it must be applied in inconveniently large quantities. In 1992 RUCHI introduced the NADEP composting technique to the region. NADEP composting uses less cow dung and more biomass and soil, and subjects the mixture to aerobic processing over a period of two-three months to create a product with high nutrient value. NADEP composting can produce up to 40 kilogrammes of manure from only one kilogramme of cow dung, which means that one animal can be the source of 80-100 tonnes of manure annually.

When selecting a household for whom to construct a NADEP composting pit, RUCHI considers the following criteria:

- Whether the household needs organic compost and is willing to accept the NADEP technique
- Extent of the household's landholding
- Number of household members
- Number of household's livestock
- Whether the household is SC or BPL
- Whether the household is willing to make a cash and labour contribution towards compost pit construction
- Whether the household is capable of ensuring regular usage and maintenance of the compost pit

RUCHI has constructed 210 NADEP composting pits in Sirmour and Solan districts, providing farmers with a low-cost, easily accessible and environmentally sustainable technology to fertilise soil and improve crop yield.

Vermi-Composting

Vermi-composting is the process of decomposition of organic matter (domestic, kitchen, animal and agricultural waste) by the earthworm Aesinia Fatide, in controlled conditions. Usually, 5,000 earthworms can convert 500 kilogrammes of waste into vermi-compost in just 45 days. Vermi-composting is fast and

cost-effective; it increases soil fertility and improves crop quality; it lowers the amount of water needed for irrigation and serves as a pesticide. Since 2003 RUCHI has begun to introduce vermicomposting in Sirmour and Solan districts.

TerraCottem Soil Conditioner

TerraCottem, a granular compound of over 20 substances including water-stocking polymers, mineral fertilisers, organic substances and natural root growth activators, has been promoted by RUCHI in Sirmour and Solan districts since 2002. TerraCottem helps retain soil moisture, aerate the soil and limit

its possible compaction, limit the leaching of nutrients, stimulate microbiological activities and root growth and reduce fertiliser run-off.

Along with promoting organic farming, RUCHI is also encouraging farmers to re-evaluate their wholesale commitment to high-yielding varieties of seeds. Like chemical fertilisers, high-yielding varieties are profitable in the short-run, but require increasingly large financial investments to sustain and take a damaging toll on bio-diversity. Swimming against the tide is no easy task: in a context where the government infrastructure rewards certain types of cultivation and conditioner achieve prodigious sizes without any loss of taste where short-term financial benefits are attached to or other side effects associated with chemical fertilisers. certain crops or seeds, it is a challenge to persuade



Vegetables harvested from soil treated with TerraCottem

farmers not to give up on indigenous seeds and subsistence farming altogether. Yet RUCHI believes that the key to sustainable livelihood security in the long-term lies in maintaining bio-diversity and it teaches farmers to look beyond the immediate gains of high-yielding varieties in order to plan for a healthy future for their communities and the environment.

Hydraulic Ram Pump (Hydram)

The hydram is a fuel-less device for lifting water to heights of up to 150 feet. It is low-cost, virtually maintenance-free and efficient for micro-irrigation. RUCHI has installed 20 hydrams in Rajgarh and Dharampur blocks since 1996.

Other low-cost technologies promoted by RUCHI include:

- Biomass-Based Biogas Units
- Fuel-Efficient Chulhas
- **Fuel-Efficient Crematoriums**



On an exposure tour organised by RUCHI, men and women learn about the benefits of irrigation tanks.

- Agri-Film Lining Pond
- Electric Fencing
- Agriculture Extension

Agriculture extension seeks to promote sustainable agricultural development by consistently providing farmers with information on and training in new production technologies. Extension enables the prompt transfer of innovative technology to the field and the interaction between trainers and farmers also allows the specific needs and problems of farmers to be brought to the attention of the scientific community. In

2000, with the financial assistance of the Directorate of Extension, Ministry of Agriculture (Government of India), RUCHI undertook an agriculture extension project aimed at farmers in Sirmour district.

Agriculture extension activities are comprised of three broad categories: information support, training support and extension management. Every year RUCHI organises:

- Frontline demonstrations
- Farmers' fairs (Kisan melas)
- Exposure tours
- Training camps

Topics covered by the above activities include:

- Watershed management
- Natural resource conservation
- Social forestry
- Rainwater harvesting
- New irrigation practices: drip and sprinkler irrigation
- Organic farming: organic manures, herbal and biopesticides
- Seed culture
- Nursery culture
- Kitchen gardening in plastic sacks
- Fruit plantation
- Pruning techniques
- Post-harvesting management
- Mulching technologies
- Tomato, garlic and ginger cultivation

Since 2000, RUCHI has arranged 800 frontline demonstrations and *kisan melas*, 160 exposure tours and 222 training camps, reaching over 6,000 farmers in 120 villages. In an earlier collaboration with the National Bank for Agriculture and Rural Development (NABARD), RUCHI also established 10 farmers' clubs in Rajgarh and Dharampur blocks (Sirmour and Solan districts respectively) from 1994 to 1999. The clubs facilitated bank loans, provided need-based expertise and further promoted the transfer of agricultural technology.

Traditional methods of tomato cultivation require four to five sticks per sapling to hold the plant upright. Each season a farmer plants around 5,000 saplings, which amounts to an incredible 20,000-25,000 sticks per farmer. Although the sticks last for two seasons, the region simply cannot sustain this level of wood use

In brief:

- The optimal and responsible utilisation of resources in Himachal demands particular kinds of alternative technological interventions: cost-effective, locally manufactured, easily adopted, durable and environmentally sustainable. RUCHI has emerged as an acknowledged expert in the field of such building construction and agricultural technologies.
- Since the early 1990s RUCHI has pioneered the development of low-cost ferro-cement technology to harvest rooftop rainwater for drinking and agricultural needs.
- RUCHI has also pioneered other low-cost construction technologies such as rat trap bond construction, micro-concrete roofing tiles, random rubble block construction and dry stone masonry.



Through the agriculture extension programme, RUCHI has promoted plastic thread technology for tomato cultivation. Stringing is a cost-effective, long-lasting and environmentally friendly technology.



- In order to reverse the adverse long-term consequences of India's Green Revolution, RUCHI promotes organic farming technologies that include NADEP composting, vermicomposting and TerraCottem soil conditioner.
- In collaboration with the government, RUCHI also coordinates agriculture extension programmes that provide farmers with information on and training in new production technologies.



Income Generation: Expanding Self Employment Horizons

Over the years, RUCHI has advocated both crop diversification and certain types of non-agricultural initiatives to generate additional income in Sirmour and Solan districts.

Horticulture and Floriculture

From a natural resource management perspective, agricultural practices such as mixed cropping, crop rotation and crop diversification are all vital for ensuring soil fertility. From an economic perspective, these practices allow for the cultivation of those fruits and flowers that are cash crops. Since 1998, RUCHI has promoted horticulture and floriculture in Sirmour and Solan districts by demonstrating their market potential on its campus farms, training farmers in appropriate agricultural techniques, providing seeds and saplings at discounted prices and helping to arrange the sale of these crops.

Fruits customarily grown in Himachal include apple, peach, pear, plum and walnut. RUCHI has introduced the cultivation of high quality apple varieties, almond, apricot, kiwi and strawberry. It has also introduced the cultivation of carnation, chrysanthemum, gladiolus and marigold.

The Swayam Sahayata Samooh (Self-Help Group) in Gajyo

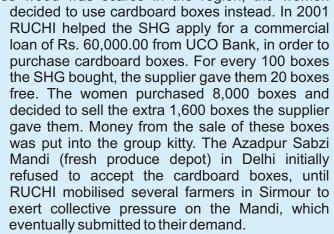
village in Sirmour's Rajgarh block has 10 women and was established in 1999, as part of RUCHI's watershed development in the region. Members pay Rs. 20.00 per month and RUCHI has contributed a revolving fund of Rs. 5,000.00. In 2000, RUCHI organised an exposure tour for villagers from the area's Ranaghat panchayat to the University of Horticulture and Forestry (UHF) in Nauni (Solan district). After learning about chrysanthemum cultivation at UHF, the SHG decided to rent a small piece of land (less than one bigha) from a local farmer on which to begin an



Women of the Gajyo SHG with their chrysanthemum harvest.

experimental chrysanthemum nursery. The women received community support because RUCHI had taken both men and women on the exposure tour. RUCHI supplied the SHG with seeds from its seed bank and also arranged a loan of Rs. 50,000.00 at 12% interest per annum from the Rashtriya Mahila Kosh.¹¹

Flowers are usually transported to the market in wooden boxes but, because wood was scarce in the region, the women





A Gajyo SHG member explains chrysanthemum cultivation to farmers on an exposure tour organised by RUCHI.

Floriculture is now flourishing all over Sirmour, thanks in no small part to the Gajyo SHG's experimental spirit, diligence and creative business sense.

Rabbit Rearing

In 1992 RUCHI established an Angora rabbit farm at its Rajgarh complex in order to explore the feasibility of rabbit rearing as an income generating initiative. In response to local demand, it also set up a wool carding unit at the TRC in Bandh. By the mid-1990s, however, the government policy that had made the rabbit-rearing project possible was abruptly withdrawn and the project was forced to close. Unfortunately, the capriciousness of government policy sometimes means that the proven viability of a project, the investment that RUCHI has made in it and the evident interest that people have demonstrated are no guarantee of its continuation.

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¹¹Established in 1993 by the Government of India's Department of Women and Child Development, the Rashtriya Mahila Kosh (National Credit Fund for Women) funds micro-credit schemes, channelling aid through NGOs to promote socio-economic development for women.

Promotion of Handicrafts

From 1995 onwards RUCHI trained local craftspeople to knit, sew and weave at its Bandh TRC with a view to creating employment opportunities and simultaneously reviving dying craft traditions. As with the rabbit rearing project discussed above, RUCHI had to discontinue its handicrafts programme in 2000 when a change in government policy meant that funds were no longer available to sustain the project.

Employment for Community Service Providers

Under its various programmes, RUCHI has consistently hired local labour in order to boost employment opportunities in the area, and encouraged panchayats to do the same. Masons, semi-skilled and unskilled labour are all hired locally.

A development approach based on participatory, need-based interventions relies for its success on field workers who can engage villagers in a mutually respectful and productive dialogue. Such field workers are not easy to come by and, given the notoriously high staff turnover at NGOs, even harder to hold on to. For both these reasons, Nagender Chauhan is one of RUCHI's most valuable assets. He has worked here for 17 years, in three districts and two states, on watershed management, natural resource conservation, technology promotion, income generation and disaster relief.

Nagender heard about RUCHI from his roommate at Shimla University, where he was studying for a Master's degree in Political Science. Curious about RUCHI's work, he applied for a job as a field worker and was assigned to Shimla district where he promoted potable water schemes, community health and horticulture. In 1991, he was part of the RUCHI team that worked in Uttarkashi (in the north Indian state of Uttaranchal), rehabilitating people after the devastating earthquake in the region. Here, too, he promoted new agricultural and irrigation technologies and developed income generation programmes. He stayed in Uttarkashi for three years, returning in the mid 1990s to Bandh (Solan district), before moving to Rajgarh to manage RUCHI's work in Sirmour district.

In Rajgarh he has been instrumental in establishing the hugely successful SHGs in Chambidhar and Gajyo. "When we were

working in Chambidhar," he says, "I spent a year-and-a-half in the village, sleeping one night on one farmer's floor and the next night in another's farmer's hut." He became an integral part of the community and the villagers were reluctant to let him leave. When he visits today, the mutual affection and joy is palpable. "Stay for a few days," the villagers cajole him, "you can always sleep on our floor!"

According to Dharamvir Singh, "Nagender is that rare breed of field worker: able to blend effortlessly into a community, eliciting villagers' trust and affection and promoting development initiatives in a way that makes villagers want to invest in them. He loves his job and it shows in how good he is at it. You don't often find a male field worker who is completely comfortable working with village women and so welcomed by them in return. RUCHI is extremely fortunate to have such a field worker in Nagender."



Women in Charge: Socio-Economic Empowerment of Women

Although Himachal's agro-pastoral village economy runs on the strength of women's labour, women traditionally had little or no decision-making authority, financial independence or social freedom. Yet, as is common knowledge in the development community, RUCHI knew that women would make the most powerful catalysts for socio-economic change in their communities. Empowering women without alienating men has been a challenging task and one in which RUCHI has succeeded admirably.

In its early years (in Chopal) RUCHI focussed on creating awareness among women through meetings, training camps and exposure tours. By the mid to late 1980s, as it gained work experience and credibility in the community, RUCHI shifted strategic focus to women's economic empowerment through income generation and micro-finance schemes. The Mahila Mandals, with which it worked, had modest kitties, but they used the money only for community functions. Women felt an acute need of money to buy seeds and livestock, repay crop loans, finance new agricultural initiatives, pay for medical care, etc. With support from NABARD and the Rashtriya Mahila Kosh, RUCHI organised women into savings and credit groups called Self-Help Groups (SHGs) to enable them to manage their own informal rural banking system. (In principle, SHGs can have all-male, all-female or combined membership. The Chambidhar SHG discussed earlier, for instance, has both male and female members. In this section, we discuss only all-female SHGs.) By establishing SHGs, RUCHI sought to:

- Empower women to become economically self-reliant by having access to monetary funds to meet immediate credit needs.
- Encourage women to save money in a fund that is theirs alone and not under the control of male relatives.
- Develop the technical and managerial capabilities of women by entrusting them with the operation of a savings and credit system.
- Enable women to obtain and manage financial aid from the formal credit infrastructure.
- Provide employment opportunities for women.
- Create a forum which provides not just economic, but also strong social support.

• Develop women's self-confidence in their ability to respond creatively and efficiently to their needs.



A RUCHI field-worker (extreme right) exchanges information with

An SHG typically has 10-20 members, all from the same village or, if villages are small, from two or three neighbouring villages. The women elect an executive committee—president, secretary and treasurer—that oversees the smooth functioning of the group. SHGs formulate by-laws to facilitate group activities—especially loan disbursal, timely repayment and book-keeping—and maintain discipline. The group meets once a month and each member contributes a fixed amount (varying from Rs. 10.00 to Rs. 100.00) to the kitty. The interest rate on loans is usually 24% per annum and interest income is reinvested into the kitty.

SHGs are a forum where women come into their own. Surrounded by a supportive financial infrastructure and emotional network, women develop into responsible and compassionate fund managers, creative and enterprising business owners. They manage group kitties with aplomb, channelling loan support into individual and community improvement projects. Wherever it has established SHGs, RUCHI has witnessed a sea change in women's attitudes that has led, in turn, to transformations of the traditional pattern of male authority/female submissiveness and to remarkable improvements in community standards of living.

Once established, SHGs are also a key link between RUCHI and the village. Information about new community development initiatives, including community health, is presented at the monthly meeting and then disseminated by members to the entire village.

Given the enormous social changes that SHGs bring in their wake, it is not surprising that men often vehemently oppose the formation of the groups in their villages. In these instances, RUCHI field workers employ not only their skills in creative diplomacy, but also call upon reserves of stubborn determination and courage! The struggle to form the Raksha Swayam Sahayata Samooh in Dhanyon (Dharampur block, Solan district) is a case in point.



In 1998, RUCHI field workers Neelam Anand and Sarla Thakur proposed a joint SHG to the women of Thedpura and Dhanyon villages. The women of Thedpura were unenthusiastic and the

men chased Neelam and Sarla off village property! This scene repeated itself each time the two field workers visited Thedpura; one man, in particular, threatened Neelam and Sarla in strong terms. Even if they formed an SHG, village women told Neelam and Sarla, this man would refuse to allow it to function, so why bother wasting time and energy on an enterprise that was bound to fail? Undeterred, Neelam and Sarla went uphill to Dhanyon, to suggest that the women consider forming a group by themselves. The Dhanyon women also refused, so worried were



Members of the Dhanyon SHG (left) meet with RUCHI field workers (right).

they that the man from Thedpura would disrupt their meetings. "Finally I confronted the Dhanyon women," says Neelam. "I asked them to consider why RUCHI thought it worthwhile to invest so much effort in the SHG. RUCHI derived no financial benefit from the SHG, so its insistence that the group be formed must have to do with the benefits it thought the Dhanyon women could derive. I asked the women whether they were willing to entertain this possibility." As it turned out, they were. The Dhanyon SHG (with women from surrounding villages, but not from Thedpura) was established later that year on an experimental basis. Six years later the group is going strong. And, after observing the Dhanyon SHG in action, the women in Thedpura decided to defy male opposition and, with RUCHI's help, formed their own group after all.

"When you visit the Dhanyon SHG today," says Neelam, "the women will unanimously tell you that they are fortunate in their lot of male relatives: that there was always widespread male support for the SHG!" However they choose to remember history, these women have formed a thriving SHG and getting this group off the ground is one of Neelam's and Sarla's proudest accomplishments.

SHGs are not the only means through which RUCHI mobilises women. In the early to mid 1990s it worked with Mahila Mandals in Rajgarh block (Sirmour district) to wage successful campaigns around issues such as the manufacture of country liquor, quality

of medical care and the status of educational infrastructure.

Around 1991, as RUCHI field workers met the block's Mahila Mandals, one pressing concern that emerged was the production and consumption of country liquor by men. Alcoholism was a financial strain on families and domestic abuse increased when men were drunk. As a first step, RUCHI asked the Mahila Mandals to speak to those women whose husbands manufactured liquor and convince them to request their husbands to halt production. Although some men did desist, several others refused to heed their wives' requests. With RUCHI's support, the Mahila Mandals filed police cases against these men. To evade prosecution, the liquor manufacturers shifted their operations to adjoining forest areas. With tacit police consent, the women began to break the barrels in which liquor was stored and transported. In the meantime, however, liquor producers from outside Rajgarh block had stepped in to make up for the decreased production, so Mahila Mandals began filing police cases against them too. Finally, after discussing the situation with RUCHI, the Mahila Mandals decided to impose a fine of Rs. 100.00 on men for each incident of drunken behaviour. The money was deposited into the Mandal's kitty. If a drunkard beat his wife and/or children, women from the Mahila Mandals would gather together and beat the man in retaliation. After approximately three years of sustained activism, alcoholism and liquor production declined dramatically and remain negligible to date.

The next campaign waged by the Mahila Mandals in 1994-95, with RUCHI's advice and support, was even more dramatic. The government hospital in Rajgarh town was filthy and poorly staffed: there were no surgeons or women doctors (either general practitioners or ob/gyns). The hospital had been built with funding from the United States Agency for International Development (USAID), but the government hadn't budgeted for its maintenance. Mahila Mandals mobilised men and women of the community to storm the building, clean and whitewash it themselves. After this incident the government contracted a private company to clean the hospital and installed an incinerator for the disposal of medical waste.

The matter of medical staffing took longer to resolve. On RUCHI's advice the Mahila Mandals were careful to submit all their demands in writing—so as to follow proper channels of communication and maintain written records of actions—although they also confronted the Chief Medical Officer of Sirmour district publicly and made skillful use of the media. They



held a silent rally and went on a hunger strike in order to call attention to their demands and compel the authorities to respond promptly. The hunger strike was broken by the Additional District Magistrate, who promised to depute medical staff within 15 days. When that deadline passed without staff being assigned, one group of women returned to the hospital premises to stage another rally and refused to vacate the grounds until a written order deputing staff was issued and made physically available on site. In anticipation of this move, the Sub-Divisional Magistrate had shifted hospital furniture onto the grounds outside to prevent women from occupying the area. The women moved the furniture; RUCHI supplied carpets and blankets to see them through the night. Another group of women went to Shimla (the state capital) where they lobbied state government officials. By now the women had acquired a reputation as determined and savvy activists, so state officials capitulated and issued a written order. Within days doctors had been assigned to the hospital.

The final campaign in 1995-96 was equally significant. The Senior Secondary School in Raigarh town adjoined an abandoned building, originally part of the old district hospital. The school premises were insufficient, as is frequently the case with government schools, so several classes were held in the open. The old district hospital had been built with public funds and, after its move to new premises (funded by USAID as mentioned above), the State Assembly ordered the Department of Health to hand over the building to the Department of Education. These orders were ignored; the old building continued to be used to conduct postmortems and as a storage facility. When their written appeals to the authorities yielded no results, approximately 300 women gathered in the complex, broke the locks and took it over. Although the Department of Health sued these women, it lost the case and, today, the building has been made over to the school.

Throughout these campaigns RUCHI provided steadfast support and technical advice, but stayed out of the limelight. There were two reasons for this (both blessed by the Mahila Mandals): first, and most important, RUCHI's objective was to empower village women and train them to resolve local crises and handle media attention on their own; second, for RUCHI's own organisational security, it was best not to draw government attention to the extent of RUCHI's involvement in these campaigns.

Social work changes both the community and the field-worker: in promoting women's development among villagers, RUCHI's female field-workers become empowered themselves. Neelam Anand joined RUCHI in 1996, at the age of 22, on the recommendation of her sister who was already a field-worker with the organisation. "I was preoccupied taking care of my sister's children," says Neelam. "I wanted to do something more productive with my time and develop my skills." She was first assigned to work on income generation initiatives and, after the Angora rabbit rearing project shut down, assigned to women's empowerment and community health programmes.

Neelam comes from a conventional background. She was allowed to study only until the 10th grade and was then expected to marry young, have children and tend house. Before joining RUCHI she had lived only with her family and was not permitted to travel alone anywhere in Himachal. As a RUCHI employee, she now lives by herself in the NGO's co-ed dormitory on its Bandh campus. She is financially independent and a member of the local Bandh SHG (which she also helped establish). In addition to acquiring field-work skills, Neelam has also taught herself to use the computer and now provides administrative assistance at RUCHI's Bandh office.

Neelam has been at RUCHI for nine years, a wonderfully long tenure since women in Himachal still tend to marry young and then stop professional work. Her parents no longer pressure her to get married, respecting instead her work and her wishes in this regard. Where earlier she would have unquestioningly submitted to her parents' choice of groom, today Neelam confidently says she will find herself a mate who shares her commitment to social development. "RUCHI has consistently encouraged me to explore my interests and develop my skills," she says. "It has trained me to be a good field-worker and, in so doing, opened up new personal vistas for me."



Community Health Interventions: Prevention is Better than Cure

Since its Chopal days RUCHI has assiduously incorporated community health and hygiene interventions into its development package, focussing on training women Community Health Motivators (CHMs) who can provide basic preventive, first aid and obstetric care in remote areas. Its community health programmes in Raigarh and Dharampur blocks have evolved into sophisticated and comprehensive ones; a brief description of the Dharampur community health Dharampur's CHMs discuss community health issues at a package, where 10 CHMs cover 30 villages, follows.



meeting with RUCHI staff.

RUCHI asks villagers to nominate women that it shall train as CHMs. In most cases it requires that the women have at least five years of primary education; women who have a background or special interest in health care are preferred. These women are then required to participate in two three day-long training sessions organised by RUCHI that address the following issues:

- Causes and prevention of common diseases prevalent in the area:
 - Malaria
 - Diarrhoea
 - Jaundice
 - Asthma
- Infectious diseases:
 - HIV/AIDS
 - **Tuberculosis**
 - Leprosy
- Pre- and post-natal care
- Importance of:
 - Timely and complete immunisation of mother and child
 - Balanced diet and good nutrition
 - Personal hygiene
 - Family planning
 - Sex education for adolescent girls
- First aid procedures (a first aid kit, equipped with nonprescription medication, is provided)
- Formation of SHGs
- Environmental sanitation and natural resource conservation in the area

Each CHM is assigned 3 villages where she is responsible for:

- Building productive relationships with villagers and serving as a liaison between them and RUCHI
- Providing basic preventive, first aid and obstetric care
- Disseminating information to villagers about community health, environmental sanitation, natural resource conservation and new development initiatives and technologies
- Establishing SHGs and overseeing their smooth functioning

CHMs meet with each other and RUCHI staff at RUCHI's headquarters thrice a month, where they exchange information, share problems, suggest solutions and monitor progress. As respected community members they make successful field-workers: Dharampur's CHMs, for instance, have been able to ensure that



A government health worker administers a pulse polio dose to an infant in Dharampur block.

every eligible baby in their charge has been administered the complete course of medication as per the government's pulse polio programme. Polio eradication is entirely dependent on complete and timely immunisation coverage of an area and field-workers frequently struggle to persuade anxious parents of the safety and necessity of immunisation. Polio programmes elsewhere in India have sometimes failed because of non-compliance; in light of this, the achievement of the Dharampur CHMs is all the more admirable.

Pushplata has been working as a CHM in Dharampur block for almost two years, before which she was an anganwadi worker. She has

been quick to grasp her responsibilities, is very active in the three villages assigned to her (which include her parental and marital villages) and has rapidly become a figurehead in these communities. After she has finished her household work and eaten lunch, for five days each week Pushplata spends her afternoons attending SHG and panchayat meetings and visiting individual households to discuss RUCHI's development initiatives, monitor the progress of RUCHI-sponsored activities and disseminate health information. With RUCHI staff she has helped to resolve local disputes when consensus on development interventions has been hard to achieve. Despite the hard work involved, Pushplata loves her job. She has been trained in health care and environment management, she is

empowered to be a principle agent of change in the community and she has gained a new network of friends in her CHM colleagues and RUCHI staff. "RUCHI has taught me everything," she says. "It has trained me in how to interact with people, provided me with technical know-how and skills and encouraged me to make a difference in my community."

The Deeb village SHG in Dharampur block, where Pushplata is a CHM, beautifully demonstrates how well SHGs and CHMs work together, providing a safe arena for women to gain a measure of financial security, develop skills, access important health information and seek medical care in a supportive context.

The SHG was formed in September 2003. Members say that the SHG is the only place where they feel safe discussing personal health concerns, specially STDs and family planning. Pushplata patiently explains medical issues to both husband and wife and then takes them to doctors for treatment if needed. If a woman's husband or parents-in-law deny her medical care, the women of the SHG say they feel personally responsible for ensuring her prompt and safe treatment against all odds.

It is a welcome change to meet rural women who are well-informed about STDs and family planning methods, proactive in seeking information and treatment, assertive in their dealings with male relatives in this regard and insistent that adolescent girls be given sex education for their own health and well-being. Although they reflexively consider sex education and family planning to be girls' and women's responsibility, they are willing to consider the importance of sex education for boys and men too.

Empowerment works both ways: as they set up SHGs and train CHMs, RUCHI's field workers also become more aware, confident and assertive in their personal lives. Poonam Sharma has managed RUCHI's community health programme in Dharampur since 2001. She recently got married and her mother-in-law (who belongs to the Dhanyon SHG discussed earlier) is fully supportive of her career. As a result of everything she has learnt at RUCHI, Poonam says she brings to her marriage a spirit of equal partnership that would have been unimaginable earlier. This is especially— and remarkably—true of her sexual relationship with her husband. "I train CHMs about HIV/AIDS," she says, "so before I got married I knew the responsible thing





Pushplata (extreme left) at a meeting of the Deeb village SHG.

was to discuss my fiancé's sexual history with him. There's no need to be embarrassed about such things: we owe it to ourselves, and to the children we will someday have, to be candid with each other."



Other Activities: From Professional Networking to Environmental Sanitation

Environmental Sanitation

Latrines

The majority of villagers in the areas in which RUCHI works do not have access to a household latrine. They defecate in adjacent grass or forest areas, sometimes having to walk a considerable distance to find an appropriate spot. To ensure some privacy, this is usually done prior to sunrise. The construction of latrines assists individuals (women and the elderly, in particular), contributes to a sanitary environment and also educates people about environmental sanitation as they observe and appreciate the benefits of clean surroundings.

In 2003 RUCHI began building latrines for select households in Solan district's Dharampur block. As in all its building activities, RUCHI requires that beneficiaries provide in-kind contributions in the form of *shramdan*. Interestingly, informal surveys conducted by RUCHI indicate that while 100% of RUCHI's project beneficiaries are using and maintaining their latrines, only 50% of the beneficiaries of other, non RUCHI-sponsored, latrine construction schemes (both government and NGO) use their latrines. The poor response of villagers in these latter schemes is a result of bad construction, inadequate awareness generation and the lack of *shramdan* or similar in-kind contributions that encourage people to invest in development interventions aimed at them.

Soak Pits

Soak pits make productive use of waste water by increasing moisture in the vicinity of the pit and rendering it fit for cultivation. They simultaneously improve environmental sanitation by eliminating a potential breeding ground for flies and mosquitoes. Soak pit beneficiaries are required to dig a 3' X 3' X 3' pit and fill it with a mixture of small and large stones. RUCHI provides a concrete lid to cover the pit and lays pipes to connect the pit to the water source. Soak pits are cost-effective, easy to construct and bring immediate and tangible sanitary changes in their wake. RUCHI has found them to be highly popular in the target area of Dharampur block.

Kitchen Gardening

Once a soak pit has been constructed, RUCHI gives beneficiaries tomato, onion and cauliflower saplings with which to start a kitchen garden. The soak pit and surrounding soil serve as an effective contaminant filter for waste water and the moisture of the soil around a soak pit make kitchen gardens a safe, viable and productive use of the land. Villagers who adopt this technology and maintain their gardens can successfully produce nutritional crops for household consumption at minimal cost.

Care of the Elderly

In collaboration with HelpAge International, RUCHI has run the Adopt a Granny (AAG) scheme in Dharampur block since 1992, providing financial, medical and other assistance (food, clothing and utensils) at their doorsteps to 143 women and men in 36 villages.

Assistance in the value of Rs. 1,350.00 to each beneficiary per quarter is combined with first aid and emergency medical and non-medical assistance. Able-bodied beneficiaries are encouraged to meet at RUCHI headquarters once a month to discuss their needs with RUCHI staff and, equally important, to socialise with other beneficiaries.

Although RUCHI's Bandh campus has the infrastructure needed to establish an old-age home, it has deliberately chosen not to offer institutional care to the elderly, as the vast majority prefer to continue living in their own villages and homes. Providing a portion of the aid in cash assistance goes a long way in alleviating a major source of tension between the aged and the families who support them: instead of being financially dependent on employed relatives, the elderly become financially productive family members themselves.

Animal Husbandry: Dangar Dais to the Rescue

From 1997 to 2000 RUCHI trained 20 female veterinary attendants (dangar dais) in Rajgarh block (Sirmour district). The dangar dais were equipped with basic medical kits and trained to treat common cattle ailments (including eye infections, dysentery, hookworms and tapeworms, foot & mouth disease, infertility, coughs, swelling of the neck and minor injuries). The medical kits were replenished on a monthly basis by RUCHI and farmers no longer had to seek routine

medical care for their cattle from far-off government dispensaries. Although many farmers were initially hostile to the idea of women para-vets, they eventually acknowledged the *dais'* expertise and sought them out for medical advice and referrals.

The animal husbandry programme, like the rabbit rearing and handicrafts projects discussed earlier, was discontinued after a change in government policy meant that financial assistance for the programme was no longer available. Unlike those projects, however, the dangar dai programme has been sustained informally by the people themselves.

Disaster Management and Support

After the 1991 earthquake in Uttarkashi (Uttaranchal state), CAPART assigned RUCHI the task of constructing model earthquake-proof homes and community centres in four villages of Donda block to rehabilitate the displaced community. It also promoted income generating activities by training villagers in spinning, weaving, rabbit-farming and horticulture.

Information Dissemination and Networking

RUCHI has long emphasised the importance of the free flow and exchange of information among all stakeholders in the development community. It publishes a quarterly newsletter, *Headstart*, for circulation among NGOs, government agencies, universities and research and development facilities. It also publishes occasional, moderately priced, papers on government schemes, technology transfer, non-formal education and health.

From 1990-1994 RUCHI initiated networking initiatives among 70 NGOs in Himachal so as to promote development activities in the state, share experiences and skills, strengthen voluntarism in the area and create a lobby of regional NGOs.

Student Summer Placement

Indian university students in the fields of social work, management and forestry are required to gain work experience through "summer placements" in the field. Since 1986 RUCHI has hosted students from the Delhi School of Social Work (University of Delhi), Tata Institute of Social Sciences (Mumbai), Forest Research Institute

(Dehradun), Institute of Rural Management (Anand), Xavier Institute of Social Sciences (Ranchi) and Indian Institute of Forest Management (Bhopal) for a period of four to eight weeks every summer. Students are required to study topics related to the development sector in general, with specific focus on RUCHI's activities. Over the years this has evolved into a mutually productive arrangement: students gain practical experience and skills and RUCHI is exposed to new ideas and suggestions.



A Totem volunteer (left) at work.

Totem International Volunteer Programme

In 2002, the International Year of the Volunteer, RUCHI began its Totem Programme which allows international volunteers to spend a period of three weeks participating in RUCHI's work. Totem volunteers from Japan, New Zealand, Papua New Guinea and the U.K. have visited RUCHI, exchanging ideas and cross-cultural experiences. The Totem programme inspires not just the volunteers, but also the local population and RUCHI staff, as they discuss topics of common interest. As RUCHI tries to become financially independent, the Totem programme is also a potential source of revenue.



Conclusion

topography and weather

The following chart helps us appreciate the nature of RUCHI's accomplishments in Himachal, given the historical context of extreme deprivation in that state. Faced with a disempowered community struggling to survive in a harsh environment and deeply skeptical of aid workers, RUCHI has been spectacularly successful in gently introducing economic and technological measures which eventually—and inevitably—serve as catalysts for broader social progress.

RUCHI's Approach: Economic and Technological Interventions as Catalysts for Social Empowerment

A harsh environment An unaware community An impoverished society Unaccustomed to new ideas Struggling to survive in a depletion: Unaware of new technologies worsening environment Unable to optimise resource use water, fuel-wood and No knowledge of how to fodder scarcity; infertile Low status of women improve their situation and Dependent on government aid little power to facilitate Challenging topography Little knowledge of citizens' rights change Poor access to government Inclement climate infrastructure Economic and technological interventions Natural resource conservation/ watershed management Technology promotion Income generation Women's empowerment Community health Environmental sanitation An enlightened community A powerful and self-reliant A well-managed environment Optimal utilisation and Receptive to new ideas and Capable of directing the conservation of water, fueltechnologies nature of development wood, fodder and land Adept at managing natural interventions aimed towards it resources resources and environment Possessing the income, Innovative use of technology Women with social-economic desire and ability to facilitate to maximise productivity in authority and resources change and improve living the context of mountain

Aware of citizens' rights and able

to negotiate government

infrastructure

standards

Practicing sustainable and

self-reliant development

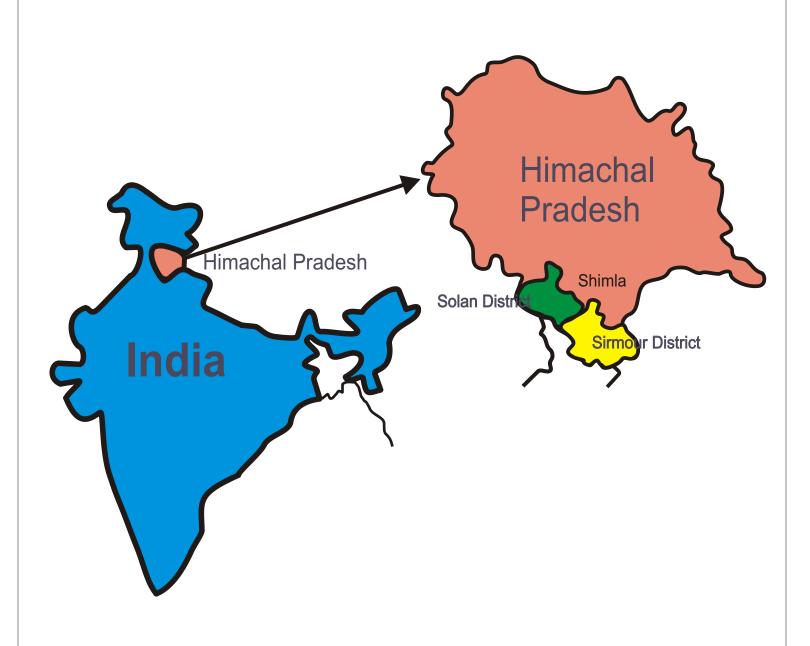
Over the years, as RUCHI has gained organisational stability, financial security (thanks to donors like NORAD) and work experience, it has made great strides in developing an integrated development package, consolidating its service delivery and exploring new strategies and interventions. It has an especially impressive record in balancing its role as a socio-technical expert: its package of skills and interventions runs the gamut from the purely technical (ferro-cement technology, for instance) to the deeply social (women's empowerment, for example); it serves a wide demographic—young and old, farmers and non-farmers, men and women—promoting children's education, agricultural technologies, women's SHGs and care for the elderly, to name just a few; and its aid is directed to both daily needs (watershed management, say) and emergency scenarios (disaster management, for example). By skillfully adopting a multi-pronged approach, RUCHI has transformed the formerly antagonistic and unsatisfactory relationship of farming communities with their land into a mutually beneficial and productive one. Labour outmigration rates, traditionally high in Himachal, have reduced dramatically, a clear sign that RUCHI's community development approach has borne fruit.

Its other remarkable achievement has been its success in using economic and technological change to serve as the impetus for deep-seated social change. Watershed management and technology promotion have had a wide-ranging ripple effect: with food and livelihood security, people's standards of living have risen and they are more responsive to social interventions.

Equally important, it has done so in a comprehensive, sustainable and participatory manner, empowering the rural poor to help themselves. According to Dharamvir Singh, "Everyone has the capacity to grow. You just identify the hidden talent, develop the personality and then a person can demand their dues from the government and society." Thanks to RUCHI, thousands of villagers in Himachal are demanding their dues and improving their lives.



Appendix I: Map of India and Himachal Pradesh Indicating RUCHI's Project Areas



Appendix II: History of Voluntary Organisations in India

Indian society has long had a heritage of voluntary effort and group organisation. Affinity and identity, not only with family, caste, village, religion and language, but also over a variety of new issues and interests that cut across these traditional barriers, have provided an environment conducive to association activity. In the nineteenth century this voluntarism manifested in the social reform movements that began to challenge the feudal system prevailing in the country. These reform movements did not always coexist harmoniously with the burgeoning nationalist movement. At one level, the nationalist movement begrudged the time expended on social reform concerns, and nationalists like Bal Gangadhar Tilak directly challenged the priorities of the social reformists. Social reformists, on their part, were not averse to building alliances with the British Raj in order to promote social reform legislation. The rise of social consciousness among the urban elite and a colonial political regime not favorable to either private or public initiatives for social intervention characterise the background to the evolution of voluntary social work in India.

By the early twentieth century—the 1920s and 1930s in particular—the impact of Mahatma Gandhi and his philosophy had reinforced the voluntary movement. After Independence (1947), however, almost through the end of the 1960s, the once vibrant sector of Gandhian organisations declined, while the more religiously inclined voluntary groups (both Christian and non-Christian) continued their activities during periods of famine and distress.

The 1960s also saw a rising rate of student unrest on campus and the birth of extremist groups within the Communist Party itself. The Naxalite movement—an armed peasant uprising—began in the Naxalbari district of West Bengal and soon spread to the southern states of Kerala, Andhra Pradesh and Tamil Nadu. Around this time many leaders of the Gandhian movement 'migrated' to the more lucrative sector of Congress party politics and governance. Their organisations became bureaucratic and moribund and their reliance on government funds increased so that, gradually, little difference could be seen between their work and the government's social welfare programmes.

In the 1970s dissidence within the Congress Party and the growing trade union movement in different parts of the country challenged state power. Many were inspired by Jaiprakash Narain's call to fight corruption and social injustice. For young people who had not been exposed to the freedom struggle, this was their first exposure to



poverty, inequality and exploitation in rural India. Disillusioned by the 'passive voluntarism' of the '60s and the disappointing results of Naxalism, they began to engage in a more constructive activism that responded to the specific needs of target communities.

Widespread popular opposition to rampant corruption in the Congress Party government was suppressed by then Prime Minister Indira Gandhi's declaration of a State of Emergency in 1975. Two years later the Congress Party was ousted in a landslide victory for the Janata Party, which remained in power from 1977 to 1979. Beginning with the Janata period, the discourse on non-governmental interventions has undergone a sea change. On one end of the spectrum is a tendency that identifies itself with both the pre-Independence national movement phase and the anti-Emergency struggles. On the other end is a tendency which reflects a revised formulation of the 1950s and 1960s, namely, one that regards non-governmental organisations (NGOs) as an essential link between the government and the people in the process of planning and development.

This period from the late 1960s to the early 1980s saw the growth of several voluntary organisations (more appropriately called social action groups), in response to a rising frustration with the inability of canonical models of development to solve the problems of poverty. deprivation, hunger, unemployment, etc. Alternative approaches and movements typifying them-began to gain ascendancy. Thousands of young people outside the formal framework of party politics and government infrastructure formed groups and initiated activities aimed at the rural and urban poor. To the earlier concerns of poverty, inequality and social injustice were now added issues of human rights (land entitlement, minimum wages, abolition of bonded labour), the environment and women. The famous Chipko, Silent Valley and Narmada movements which strongly challenged the conventional wisdom that destroys the environment and displaces the poor in the name of development and progress all date from this era. The Indian women's movement, which took off in the late 1970s, was responsible for ensuring that women's issues became an integral component of all government and non-government socioeconomic development programmes.

'Struggles' and 'movements' for organising the poor, 'people's empowerment' and 'consciousness-raising' were the key words for social activists. Politics once again became central to activism. The non-governmental sector began to acquire a professional identity and be assessed in terms of its efficacy in promoting new issues, helping organise the poor and contributing towards a new framework

of rights and entitlements. At this time, some NGOs also began to provide their colleagues with management support and issuespecific expertise. Social action now encompassed issues and campaigns related to gender, human rights, land alienation, bonded labour, housing rights, environment, pollution, natural disasters, etc.—all of which required a degree of professional expertise: technical, legal, administrative or otherwise.

As the voluntary sector was shifting its focus from social service to democratic struggle, both international donor agencies and government bodies increased their support for development activities. In the 1970s NGOs started to receive bilateral funds from foreign governments channelled through embassies and aid agencies such as the Norwegian Agency for Development Cooperation (NORAD), Swedish International Development Agency (SIDA), Swiss Development Cooperation (SDC) and the Canadian International Development Agency (CIDA). Multilateral bodies like the World Bank also funded NGOs directly. Although the increased funding helped to enhance the number and scope of voluntary groups, it also often functioned as a mechanism to co-opt them, deradicalise their agendas and influence their activities. Some NGOs began to single-mindedly focus on management and private entrepreneurship, where achieving technical efficiency and economic expertise was the main goal. All too often income generating projects were emphasised and marginalised people were linked to market activities as the panacea for their problems. In some NGOs a form of 'careerism' developed, in the sense that procuring additional funds and sustaining the group overshadowed actual work in target communities.

Needless to say, as the voluntary sector began to flourish and embrace a wider range of issues, its activities become more complex. NGOs were no longer exclusively local groups; they expanded to regional and national levels. NGO federations began taking on tasks as diverse and large-scale as non-formal education, disaster management and policy research. By the mid 1980s this expansion led to the birth of intermediary organisations in the voluntary sector. These intermediary organisations can be of three types: 'umbrella' (discussed below), 'mother' or 'support' agencies.

Most NGOs begin by concentrating on one sector or a specific activity, but partly due to the imperatives of funding and partly because of the pressures of working with local communities, find themselves diversifying into a range of activities spanning different sectors. Their activities broadly encompass four categories:



- Delivery of services
- Organising production of essential services
- Undertaking research, training and technical support activities
- Social action and mobilisation activities

Umbrella organisations also engage in the above activities, but they represent an association or federation of grassroots voluntary organisations, either established in a formal manner or maintained informally. These associations or federations can be regional or national, broad or narrow in the scope of their work. Historically, umbrella organisations have arisen in response to certain felt needs of field-based voluntary organisations promoting development. These include: the need to share experiences, information and expertise, the need to provide support and encouragement to groups working in isolated areas and the need to form a united lobby for greater impact at the state and national level.

The Social Work and Research Centre (SWRC), established in the late 1970s in Tilonia, Rajasthan, has developed into an umbrella institution over the years. Several people who worked at SWRC were encouraged to set up independent and self-sufficient branches all over the country. By the early '80s SWRC branches were active in Haryana, Himachal Pradesh (the branch here would become RUCHI), Orissa and Tamil Nadu.



Appendix III: NORAD-Funded Projects

Since it first helped RUCHI rehabilitate survivors of a major fire in Chopal in 1986, NORAD has provided steadfast support to RUCHI, allowing the NGO valuable freedom to develop and implement innovative programmes. At its best, the donor-grantee partnership allows creative development interventions to effect long-lasting and socially responsible change in target communities—and this has certainly been the case with the NORAD-RUCHI collaboration in Himachal Pradesh.

Project Description	Project Location	Project Duration
Development of natural resources for self-reliant social action in mountain communities	Bughar Kanita watershed (Dharampur block, Solan district)	December 2001—June 2005
Documentation of RUCHI's initiatives for environmental conservation and development and women's empowerment	Sirmour and Solan districts	December 2004—March 2005
Natural resource conservation and development through participatory micro-watershed management: Phase II	Bandh micro-watershed (Dharampur block, Solan district)	December 1998—December 2000
Natural resource conservation and development through participatory micro-watershed management: Phase I	Bandh micro-watershed (Dharampur block, Solan district)	December 1996—November 1998
Promotion of women's self-employment opportunities (computer training and handloom skills)	Dharampur block, Solan district	November 1993—November 1995
Networking workshops for NGOs	Rajgarh block, Sirmour district	October 1992—March 1993
Construction of training centre	Shalana village (Rajgarh block, Sirmour district)	April 1987—June 1989
Support for administrative expenses	Shalana village (Rajgarh block, Sirmour district)	April 1986—March 1989
Aid for fire victims	Chopal block (Shimla district)	March—May 1986

Appendix IV: Acronyms and Glossary

BPL Below Poverty Line

CAPART Council for Advancement of People's Action and Rural

Technology

CHM Community Health Motivator

CIDA Canadian International Development Agency

FPPI Foster Parents Plan International

HUDCO Housing and Urban Development Corporation IRDP Integrated Rural Development Programme

NABARD National Bank for Agriculture and Rural Development

NGO Non-Governmental Organisation

NORAD Norwegian Agency for Development Cooperation

OBC Other Backward Caste

RUCHI Rural Centre for Human Interests

SC Scheduled Caste

SDC Swiss Development Cooperation

SHG Self-Help Group

SIDA Swedish International Development Agency

SSWO State Social Welfare Organisation

SSWRC State Social Work and Research Centre

ST Scheduled Tribe

SWRC Social Work and Research Centre TRC Technology Resource Centre

USAID United States Agency for International Development

WMC Watershed Management Committee

Anganwadi Crèche for pre-school children Balwadi Crèche for pre-school children

Bawadi Natural mountain spring

Chulha Stove

Dangar dai Female veterinary attendant Jawahar Rozgar Yojna Jawahar Livelihood Scheme

Kisan mela Farmers' fair

Kuccha Non-permanent, earthen Mahila Mandal Community-based women's

organisation

Panchayati Raj Village self-government system

Pradhan Panchayat chief

Pucca Permanent, firm, solid

Rashtriya Mahila Kosh National Credit Fund for Women

Shramdan Donation of labour

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