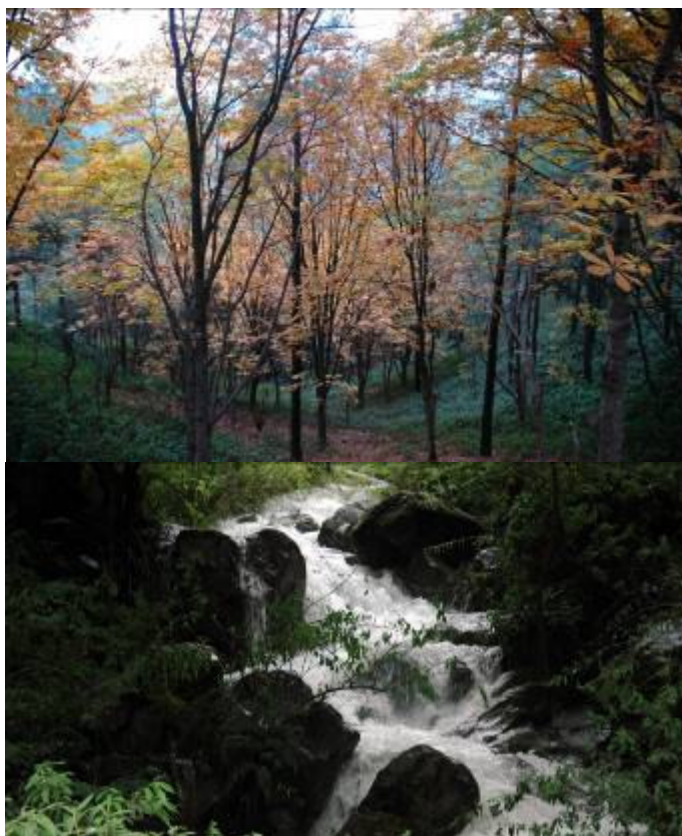




# **review**

## **2007-2008**



**Pan Himalayan Grassroots Development Foundation**

[www.grassrootsindia.com](http://www.grassrootsindia.com)



Outreach Program Office Village

## About Us

The Pan Himalayan **Grassroots** Development Foundation is established as a non-profit voluntary organization under the Societies Registration Act (1860) at the office of the Registrar of Societies, Delhi since November 1992.

The primary aim of Grassroots is to initiate peoples action at the grassroots for restoration of ecological security in languishing river basins through holistic mountain development programs, in order to improve the quality of life.

Over the past fifteen years, Grassroots has been able to evolve a holistic intervention strategy which channels resources - managerial, technical and financial - directly to people and associations of the communities, working at the village/watershed level. The emphasis is on self-help participation and the belief that average villagers have the desire, the right and the capability to promote their own welfare and prosperity and to participate in decisions that affect their lives.

Also implied in the mandate of Grassroots and incorporated in its approach and methodology is promotion of the entrepreneurial spirit - the belief that people can determine their own destiny, establish goals, take risks and invest their time and energy to achieve their aspirations for a better life.

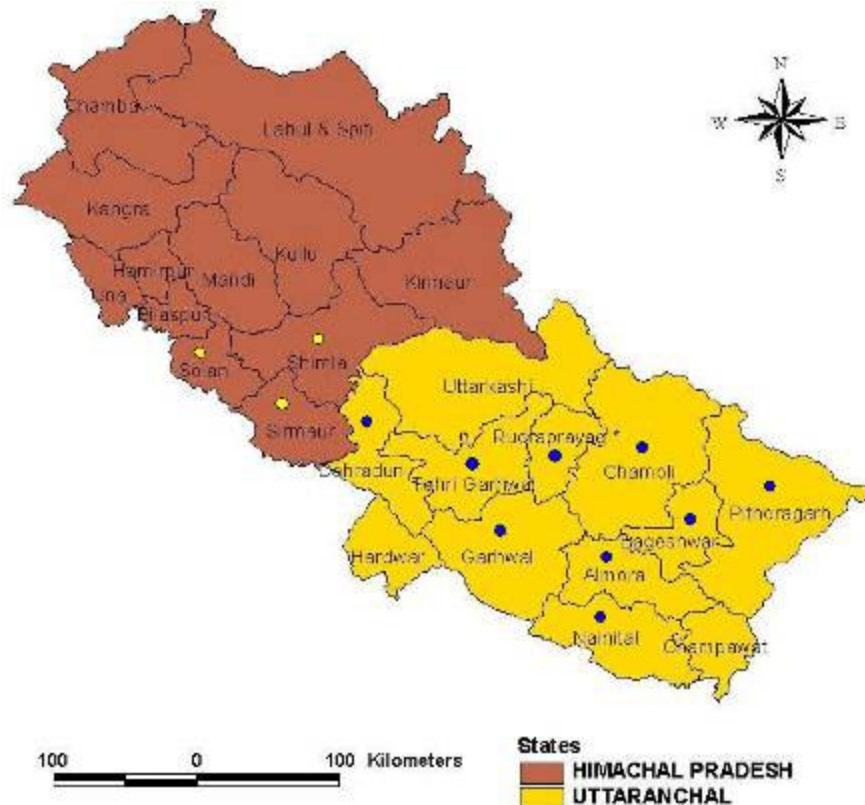
Grassroots continues to be a lean and independent organization, which reaches out to far-flung micro watersheds in the central and western Himalaya through **Outreach Program Offices** located in the states of Uttarakhand and Himachal Pradesh. The composite spearhead team comprises of twenty professionals-in-development, almost all of whom are from the rural areas of the Himalaya.

Over the years, Grassroots has been able to initiate programs on improving the quality of life of mountain communities through sustainable community development strategies, training and technology transfer, micro enterprises and marketing by strengthening the capacity of community based organisations, selected voluntary organizations and creation of new forms of organisations such as Kumaon Artisans Guild and Mahila Umang Samiti.

It needs to be acknowledged that each year, several key players of the Guild as well as Umang join the Grassroots team for furthering the scope and extent of outreach

programs.

Through forging such partnerships, Grassroots has been able to spread the benefits of various appropriate technologies to communities in 500 villages, spread over 27 Blocks in 12 Districts in the two states of Uttarakhand and Himachal Pradesh.



In order to address issues related to sustainable mountain development in a comprehensive manner, Grassroots has been involved with the Restoration of Gagas River Basin in Almora district of Uttarakhand for the past three years. The Gagas river basin plan has been endorsed by HELP, UNESCO as part of its global efforts for restoration of languishing river systems. The idea is to demonstrate the feasibility of a holistic river basin management plan, based upon the three pillars of ecology, economy and equity.



## **Eco-restoration of River Basins**

The interface between man and nature is a necessary condition for survival of mountain farming systems, which depends upon adequate flow of a stream, biomass supplies from the forest support area in terms of tree leaf-fodder and tree leaf-litter for organic compost - which may or may not have a market value.

The prevalent perspective, for over a century, of viewing forests as a natural resource of the state which could be harvested in terms of ancient trees and thereby provide an impetus to economic growth has been the single most important reason for creating the 'tragedy of the commons'. Economic growth at the cost of ecological security has certainly led to bullish market reforms which benefit millions of urban middle class people, but such policies have also led to the impoverishment of marginal mountain farmers who have been dependent upon forests as support areas for their livelihood.

The loss or lack of title to environmental assets is viewed, by Grassroots, as an additional component of poverty, leading to the conclusion that environmental conservation is actually a necessary fundamental to poverty alleviation. The poor are often forced to over-exploit limited local natural resources in order to satisfy immediate household necessities, and in a way, the poor are actually both victims and agents of environmental destruction and that policies addressing these issues ought to consciously consider both.

Briefly, concepts like sustainable mountain development are more like a mirage in the desert unless forest ecosystems are restored for adequate hydrological and nutrient recycling functions. At the same time, it ought to be understood that farming families occupy less than ten percent of the total land in a hill state like Uttarakhand.

The critical catchment areas adjacent to farm lands, defined locally as *gadheras*, would form another ten percent of the land. Thus, it is largely upon the state government and specifically the forest officials to mount effective programs to restore the ecological support areas under their direct control.

So it seems that the order of the day would be for organizations like Grassroots to establish a coalition between various stakeholders. And, to this effect, during the year

under review, activities in the two river basins in Himachal Pradesh and Uttarakhand have been as follows:

#### A. Palor River Basin in Himachal Pradesh

During the year, the Pidyadhar micro watershed development program continued to make progress in the hands of the five self help groups, in Sirmaur district of Himachal Pradesh. Over the years, communities have been able to protect close to 90 hectares of commons and plant-out and protect 60,000 saplings of native species which had been raised in local village nurseries. While the young saplings would grow into trees over a decade, the production of grasses has already increased significantly: from 50 tonnes per annum to 87 tonnes per annum.



Communities were also assisted to improve the existing open-channel upland irrigation system through laying of underground irrigation pipes and construction of appropriate inlet chambers at the headwaters. This has resulted in improving irrigation systems spread over 392 *bighas* (78 acres) and in addition brought 67 *bighas* (13 acres) of un-irrigated land into the fold. On the whole, 98 families are the beneficiaries of this diversion-based upland irrigation program. It is significant that these families contributed the entire labour for burying pipelines and investing in distribution pipes as well as sprinklers.



Fifty percent of the households in the micro watershed invested in installation of biogas units as a renewable energy option for cooking and thereby reduced the biotic pressure on scarce forest resources.

Small steps have been taken to establish market linkages for water-milled corn flour/ walnuts; which has been dove-tailed with the HimKhadya pilot marketing initiative.

## B. Restoration of Gagas river basin

The Gagas river originates in the sacred forests of Pandokholi in Almora district, of the Kumaon region in the state of Uttarakhand. The river evolves largely through the flow of over fourteen major streams or *gadheras* on both banks, and flows for about 50 kms prior to merging with Ramganga (West) river. Gagas river basin is spread over 500 square kms with a population of over 120,000 spread in 350 villages.

The focus on renewal of the hydrological cycle and its linkages with sustainable mountain farming systems has led to the galvanization of marginalized communities to form appropriate institutional structures at the grassroots – self help groups of women at the hamlets have led to the creation of a dynamic basin-level federation, which in turn has been able to initiate an effective dialogue with other stakeholders and thereby evolve a multi stakeholder platform.

This approach has forged a coalition of interest between stakeholders to share lessons regarding ecological restoration which leads to fulfilling the millennium development goals in the following manner:

- Providing a fresh vegetal cover on degraded commons and renewal of traditional methods for soil and moisture conservation
- Swift spread of appropriate technologies in cross cutting sectors like drinking water, environmental sanitation, renewable energy and rainwater harvesting
- Improving food security and livelihoods through land-use optimisation and establishment of market linkages directly between producer-farmers and consumers

Intra and inter basin dialogue is evolving strongly as a new feature: through regular meetings, capacity building workshops, cross visits and social audit of physical and financial matters. It is significant that the federation is chaired by a woman activist, chosen by the communities. The emergence of change, development and leadership at the basin level is slowly leading to affecting policy changes at the state level. Especially regarding the renewal of hydrology within the confines of the reserved forest areas which define the largest and most critical land mass in the river basin.

During the period under review, dialogues regarding eco-restoration were consolidated with residents of two major *gadheras* – Dusad and Kanari, as the idea is to spread similar initiatives across other drainage basins in a phased manner over the next few years.

The institutional pattern at the grassroots has been established in both these *gadheras* in the following manner:

1. Number of SHGs formed	88
2. Number of SHG members	1,415
3. SHG funds	Rs. 9.89 lakhs



4. Nubmer of <i>Gadhera Bachao Samitis</i> formed	27
5. Gram Kosh	Rs. 6.57 lakhs
6. Village Commons under protection	350 hectares
7. Village Nurseries	14
8. Species in village nurseries	35
9. Number of saplings being raised in nurseries	1.65lakhs
10. Number of mature saplings planted-out	80,000

The Manch organized a phenomenal gathering of several hundred residents from the entire Dusad gadhera to mark the occasion of World Water Day and several resolutions regarding the renewal of the hydrological cycle were discussed and adopted. The tradition of maintaining *khals* as an essential annual feature has been sought to be revived alongside the need to spread a renewable energy option like biogas units and more significantly to work towards total community sanitation.



The formation of the Manch has also led to focusing upon the vital livelihoods improvement issue and the following steps have been taken:

- Orientation of farmers regarding Organic Farming Systems and Certification
- Training of paravets in order to improve local livestock
- Promotion of Horticulture
- Establishing market linkages for traditional rainfed crops under the brand name HimKhadya
- Field trials for high value crops like chamomile and aloe vera
- Supplementing incomes through off-farm micro enterprises like production of hand-knitted garments.



Towards the end of the year, the Manch has also been encouraged to actively engage in collecting data and monitoring indicators for floral, geological, hydrological and meteorological aspects. Members of the community are being trained to monitor biodiversity in the commons, stream flows in the *gadheras* as well as the quality of drinking water. It is significant to note that ten weather stations are being operated by barefoot hydrologists and data is being shared with communities through a quarterly newsletter, called ***Gadhera!***

The Grassroots strategy which is evolving in the Gagas river basin was presented in the UNESCO-HELP Symposium held in South Africa in November 2007 amongst a gathering of fifty other partners involved with similar restoration of languishing river basins. It is significant to note that participants at the symposium felt that the Grassroots strategy was rather holistic, as it views ecology and economics as two sides of the same coin.

## **Millennium Development Goals & Partners-in-Change**

*At the World Summit on Sustainable Development held in 2002, India along with 147 heads of state, pledged to adopt 8 goals to be achieved by 2015 that respond to the world's main development challenges.*

*It is realised that human development is about much more than rise and fall of national incomes. It is about quality of life, the level of human well-being and the access to basic social services. The pressures on environmental and natural resources and the repercussions of their degradation on low income livelihoods have become a source of increasing concern.*

A decade prior to this declaration, Grassroots had set out to select local youth and provide them with sufficient skills and knowledge to spread the benefits of appropriate technologies in cross cutting sectors like drinking water, environmental sanitation,



renewable energy and rainwater harvesting -with the idea of improving the quality of life for mountain communities, here and now.

These efforts led to the creation of a dedicated team of *barefoot engineers* - Kumaon Artisans Guild in Uttarakhand and a similar Association in Himachal Pradesh. During the period under review, the Guild has been able to consolidate its operations as an independent organization and Grassroots is viewed as a shadow organization, with the primary task of strengthening the managerial capacity of the Guild. Over the year, processes have been set in motion to enable the Guild to emerge as the key player in promoting appropriate technologies in the central Himalaya.



Barefoot Engineers of the Kumaon Artisans Guild

At the end of the year, cumulatively, the benefits of appropriate technologies have reached over 60,000 people spread over 12 districts in the states of Uttarakhand and Himachal Pradesh.

### **Spread of Appropriate Technology in Uttarakhand and Himachal Pradesh**

- |                            |                  |
|----------------------------|------------------|
| • Drinking Water           | 340 villages     |
| • Environmental Sanitation | 3,180 households |
| • Renewable Energy         | 1,230 households |
| • Rainwater Harvesting     | 350 locations    |

During the period under review, Grassroots has also been involved with consolidating the ongoing partnership with selected voluntary organizations in the state of Uttarakhand and forging fresh alliances with the state governments in Uttarakhand and Himachal Pradesh as partners-in-change to further spread similar initiatives through a ‘technology transfer’ program.

The success of this strategy would be measured in future through the depth and spread of appropriate technologies through the active participation of various partners-in-change. And, while doing so, Grassroots would continue to strengthen the platform of *barefoot engineers*, as change makers, in order to achieve the Millennium Development Goals.

## **Partners-in-Change**

### **A. Jal Sangsthan, Government of Uttarakhand**

The Jal Sangsthan is the apex organization in the state, along with the Jal Nigam, in planning, implementing, operating and maintaining drinking water supply systems for 16,000 villages spread over 13 districts in the state of Uttarakhand. Through a workshop, the Jal Sangsthan was exposed to the concept of Infiltration Wells as an appropriate technology option for community managed drinking water systems and discussions revolved around the benefits accruing to communities in over 300 hamlets/villages, who had been empowered to adopt this appropriate technology.

Thereafter, the Chief General Manager (CGM) along with his team of senior executive engineers observed the feasibility of Infiltration Wells through intensive field visits to several villages in both the Kumaon and Garhwal regions of the state.

Towards the latter part of the year under review, Jal Sangsthan requested Grassroots to play the key role of a resource organization, with the aim of transferring the lessons of this appropriate technology to all its executive offices in the hill districts of the state. Since then, Grassroots along with senior *barefoot engineers* of the Kumaon Artisans Guild, have been actively engaged with offices of Executive Engineers located in Almora, Bageswar, Nainital and Pithoragarh districts in the Kumaon region and Tehri, Pauri and Rudraprayag districts in the Garhwal region.

It is envisaged that this partnership with the Jal Sangsthan would continue for the next few years with the idea of enabling the department to spread this appropriate technology to over 3,000 villages which have been identified with chronic water shortages.

### **B. Agriculture Department, Government of Himachal Pradesh**

Over the past five years, Grassroots has been demonstrating the feasibility of biogas units as a renewable energy option for cooking, especially in view of scarce forest resources as well as dependence on subsidy-driven fossil fuels like LPG. So far, the benefit of this appropriate technology has been experienced in about 400 households, mainly in Sirmaur district.

During the period under review, the state government agreed to be a partner with Grassroots in consolidating and spreading the benefits of this renewable energy program to at least 150 to 200 households each year. It is envisaged that this partnership would grow and mature over the next few years in order to benefit at least 500 households each year.



### C. Senior Schools in the state of Uttarakhand & Himachal Pradesh

Schools in the hill states often do not have access to water and sanitation, largely due to its location. Over the years, Grassroots has solicited the cooperation of parents, teachers, governments and the children to demonstrate the benefits of harvesting rainwater from the roofs of the school buildings and utilizing the stored water for maintaining toilets within the school campus.

During the year under review, ten more schools participated in this program. Totally, twenty schools in Uttarakhand and ten schools in Himachal Pradesh have been actively engaged in this effort, supported by the Ministry of Water Resources, Government of India.



#### D. Voluntary Organisations

During the period under review, a total of 12 VOs participated in the program – eight from the Kumaon region and four from the Garhwal region of Uttarakhand. The partnership was strengthened through regular workshops and consolidation of processes involved with transfer of appropriate technology.

The partnership enabled the VOs to spread the benefits of Infiltration Wells to 20 hamlets/villages, Rainwater Harvesting to 110 households, Sanitation to 330 households and Biogas Units as a Renewable Energy Option to 275 households.

Briefly, this partnership seems to be developing in the fashion it ought to, notwithstanding the need to strengthen it further. Especially as this coalition is probably the way forward for reaching out to more and more communities in the central Himalaya. The lessons of this partnership would also be significant, for engaging civil society organizations elsewhere in the Himalaya.

### **Livelihoods, Food Security & Micro Enterprises**

In fragile ecosystems in the Himalaya, forests play a pivotal role in supporting mountain farming systems. The degradation of such essential support systems has affected traditional food security and the enhanced risk to human health add to the burden of women, making them one of the most vulnerable groups.. To find a fresh balance in the quality of lives for such marginalized farming communities, Grassroots has been involved with creating a platform for establishment of pro poor business ventures, with women as the primary stakeholder.

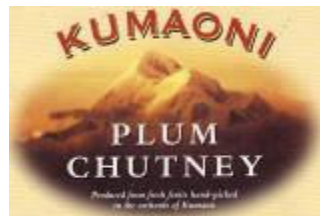
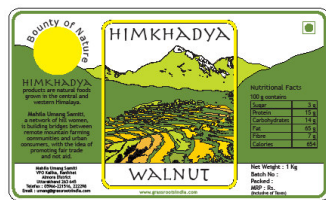
Along with spearheading eco-restoration efforts in Gagas river basin, Grassroots has been involved in consolidating a network of over 2,000 women who are involved with various viable business activities, which provide small yet significant incomes on a sustainable basis. This has been largely possible through the efforts of women spearhead team members of Grassroots who ‘hived-out’ to establish a collective of several self-help groups – Mahila Umang Samiti.

All products of the network are marketed under the brand name ***Kumaoni*** and ***HimKhadya*** and it is Umang’s belief that those who purchase these products are directly assisting resource poor households through ‘trade and not aid’. The turnover during the year under review has been over Rs. 33.00 lakhs. Besides this, about 400 women have also earned Rs. 13.00 lakhs through rearing of free range backyard poultry..

During the period under review, Grassroots initiated the consolidation of a new venture, tentatively named, **HimKhadya**, which has drawn-in more than 350 small and marginal

farming families. The objective of this initiative is to provide a platform for intra-regional trade in farm products, especially with the following focus areas:

- promote trade of grains between watersheds which produce a surplus and those which suffer a deficit, through the institutional mechanism of self help groups
- increase the production of traditional millets, through improved processing and value addition
- market walnuts, pomegranates, oranges and other farm produce, and, alongside, initiate the process of organic certification.



However, the most significant aspect of these local efforts in promoting the spirit of enterprise is a concern of the *institutional framework at the grassroots*. Each and every business activity is directly controlled by the producer-groups. They own the assets and all are equal shareholders of the business. This arrangement enables the greatest portion of the consumer's rupee to reach the producer.

During the period under review, Umang was able to distribute Rs. 1.00 lakh as bonus to fruit growers and knitters in proportion to individual participation in the total business. It is also significant to note that for three years in a row, Umang has been able to function as a business enterprise, without any grant-in-aid, even though the organization invested in building upon the capacity of people and enabled the formation of a social platform, aspects which are usually not within the mandate of a regular business enterprise.

Grassroots feels that the lessons of these enterprise development programs ought to be documented and discussed widely, especially in a fast changing global economy which is pushing ahead with neo-liberal ideologies that may further marginalize resource poor farmers. Value addition and marketing of local produce ought to be organized on behalf of farmers in a manner which enables and empowers them to participate in the process and gain from the benefits of modern processing facilities.

The current decade actually provides an opportunity to create large numbers of pro-poor enterprises, which would take care of economics, ecology and equity. Based on these considerations and the aspiration of the people in the Gagas river basin, it is clear that these livelihoods opportunities and micro enterprises need to be scaled-up in the near future.

It is therefore certain that the form of Umang would require to be changed from that of a voluntary organization to a more appropriate business entity. Discussion with leaders of



self help groups is slowly but steadily leading to a consensus that Mahila Umang Samiti would be changed to Mahila Umang Producers Company. Grassroots would assist this process of transformation as well as scaling-up of business opportunities in the near future.

<b>Livelihoods &amp; Micro Enterprises</b>		
	Rs.in lakhs	
	<u>Cumulative</u>	<u>This Year</u>
Hand-Knitted Products	84.06	19.66
Fruit Preserves & Pickles	26.99	6.02
Natural Honey & Spices	20.90	3.50
Beeswax Candles	1.15	0.09
Country Hens	37.47	13.00
Roofing Tiles	25.32	0.82
HimKhadya	5.27	3.32
	<u>Rs.201.16 lakhs</u>	<u>Rs. 46.41 lakhs</u>

## **Capacity Building**

During the period under review, concerted efforts have been made regarding building upon the capacities of various stakeholders, viz., core team of Grassroots, Kumaon Artisans Guild, Mahila Umang Samiti, Partners-in-Change, SHGs, Gadhera Bachao Samitis and other CBOs.

The themes have been varied and as per the needs of various outreach program components. However, the main focus has been on the following:

- Community-Based Conservation
- Appropriate Technology
- Organisation Development Processes
- Logical Framework Analysis
- Management of SHGs
- Right to Information
- Mainstreaming Gender
- Livelihoods Improvement
- Management of CBOs

A summary of various capacity building workshops attended by staff members of various organizations and other stakeholders is provided below:

<u>Organisation</u>	<u>No.of CapBuild Workshops</u>
1. Grassroots	12
2. Mahila Umang Samiti	15
3. Kumaon Artisans Guild	25
4. Partners-in-Change	7
5. Other VOs from Kumaon & Garhwal	3
6. Self Help Groups	15
7. Gadhera Bachao Samitis	12
	.....
	69

Alongside, Grassroots continued to encourage the participation of several other organizations and individuals for furthering capacity building in the development sector. During the year, the following participation needs to be mentioned:

1. MIT, Cambridge, Boston, USA - Orientation of MIT students to rural Himalaya and challenges of appropriate technology designs.
2. Lakeside School, Seattle, USA – Orientation of students regarding social/economic/ecological aspects of people in Himalaya through HomeStays.
3. Interns from Schools of Social Work, in New Delhi/Kerela and Business School, Columbia University, USA.
4. Interns from Change Looms, New Delhi – for Youth Leadership Development
5. Change Makers from Timbaktu Collective, Andhra Pradesh – for exchange of ideas and actions.
6. Women entrepreneurs from Kashmir Valley – for orientation to the concepts of self help and establishing micro enterprises to add value to local produce.



## Mountain Development Documentation Cell

During the period under review, the nascent Cell has been able to document some of the field experiences which have proved to be rather useful for the purpose of sharing lessons with other stakeholders.

1. Infiltration Wells – An Appropriate Technology for Community Managed Drinking Water Systems. This has assisted in providing not only basic information but more so regarding training of people at various levels, including senior engineers of Jal Sangathan, Government of Uttarakhand.



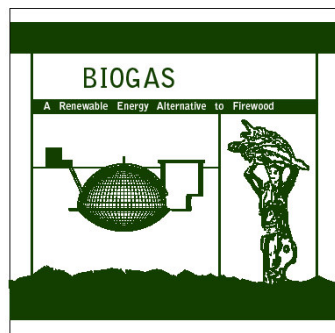
(Front Cover)



2. Biogas – A Renewable Energy Alternative to Firewood. This provides a comprehensive argument regarding the role of biogas technology in times of climate change. This DVD is not only significant for policy makers but also deals with basic information for operation/maintenance of biogas units and complete details regarding construction methodology of a biogas unit; most useful for training of barefoot engineers as well as for conducting user-group workshops.



(Front Cover)



**3. Biogas Users Manual** – This is a ready reckoner for users of biogas technology with the aim of assisting families to trouble-shoot operation and maintenance issues without the help of any *barefoot engineer*.

**4. Infiltration Wells** – A manual has been widely distributed to panchayats with the view of empowering communities regarding an appropriate technology option while discussing water sector reforms. Similarly, a poster on this technology has also been produced for the same purpose.

**5. Newsletter** – A quarterly newsletter called **Gadhera!** Provides a voice to the primary stakeholders in the Gagas river basin as well acts as a tool for social accountability.





## **Council of Governors**

Mrs H Bedi  
Chairperson

Mr V B Eswaran\*      Mr Deep Joshi      Mr Ganesh Pangare  
Mrs Sumita Ghosh      Mr Naren Karunakaran  
\*(Retired 15 August 07)

The Council of Governors and the Executive Officers of Grassroots  
would like to acknowledge the assistance received from the following organizations  
during the year under review : 2007-2008

Ashoka: Innovators for the Public, USA  
Dept. of Agriculture, Government of Himachal Pradesh  
Ministry of Water Resources, Government of India  
Dept. of Rural Development, Government of Uttarakhand  
Jal Sangsthan, Government of Uttarakhand  
Lakeside School, USA  
National Research & Development Corporation, New Delhi  
Sir Dorabji Tata Trust, India  
Sir Ratan Tata Trust, India  
Swiss Agency for Development & Cooperation, India  
Terre doc Creations, France  
Uttarakhand Organic Commodity Board  
Uttarakhand Livestock Development Board  
UNESCO, New Delhi  
Foundation for Ecological Security  
Friends of Grassroots

**The financial records of Grassroots are a matter of public  
record and as such are available**

Post Bag # 3, Ranikhet 263 645, Almora District, Kumaon, Uttarakhand, India  
Phones : 05966 - 221516, 222298, 221654  
email : [kpaul@grassrootsindia.com](mailto:kpaul@grassrootsindia.com) and [apaul@grassrootsindia.com](mailto:apaul@grassrootsindia.com)  
[www.grassrootsindia.com](http://www.grassrootsindia.com)



