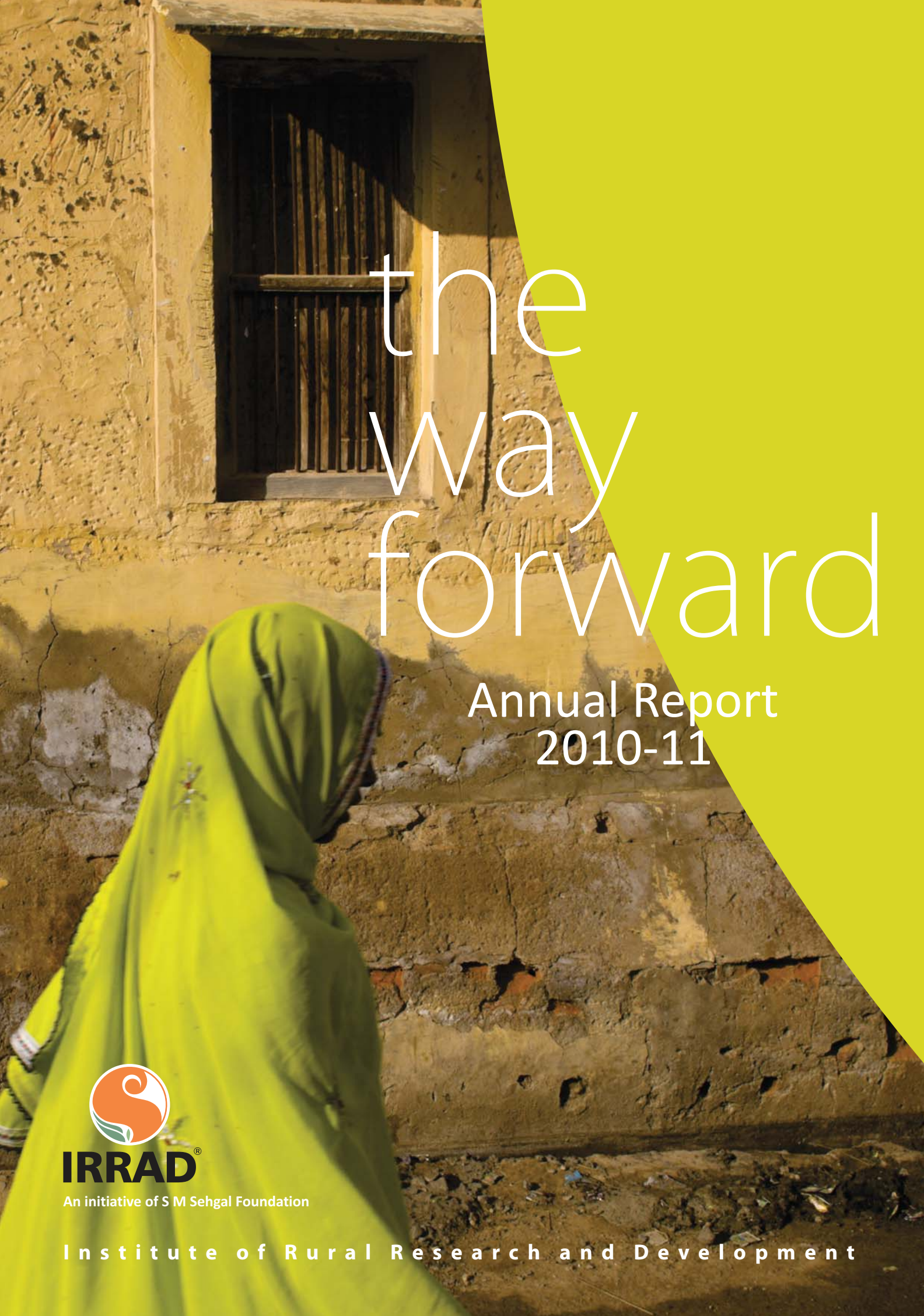


the way forward

Annual Report 2010-11

IRRAD®

An initiative of S M Sehgal Foundation

Institute of Rural Research and Development

the way forward

CONTENTS

MESSAGE FROM THE CHAIRMAN

We can look back with pride on what IRRAD has achieved in the past 10 years. In this period, we have focused our approach on developing innovative and replicable models that lead to integrated village development. These include models for agriculture; water management; sanitation, hygiene, and health; and empowerment of communities through good rural governance, including capacity building of *Panchayati Raj Institutions* (PRIs), the village-level governing bodies.

IRRAD's models are flexible by design, incorporating different components, or modules, that can stand alone or be combined to suit local needs. However, from the beginning we have been acutely aware that what counts at the end is a program's impact and sustainability. To assess impact, our Rural Research Center conducts a baseline survey at the start and then monitors the program and evaluates its results at different stages of implementation. Sustainability is assured through effective training of PRIs.

Our Integrated Water Resource Management model involves innovative and cost-effective interventions such as check dams, roofwater harvesting, recharge wells, and other tactics for collecting and storing water and replenishing freshwater aquifers. For the last decade, we have tested and perfected our strategy in water-stressed villages in Mewat District, Haryana. An impact assessment shows that the water table has increased by nearly four feet in areas where this model has been implemented, and water quality has improved because of dilution of contaminants. In recognition of this successful approach to water management, the Government of India this year presented IRRAD with a National Ground Water Augmentation Award for Best NGO, northern zone (for the year 2009). IRRAD was also named "Best Water NGO" by UNESCO and Water Digest for three consecutive years (2007-2009).

To provide everyday water security for rural communities, IRRAD has developed economical modules that have been put to effective use in villages and schools. Our community water tank module allows a village to store 160,000 liters of water for domestic use, which not only assures year-round water availability but also prevents the unhealthy stagnation of water in public areas. Our bio-sand filter module, in conjunction with roofwater harvesting and storage tank, provides continuous access to safe drinking water for schools. These modules have been recognized by the Government of Haryana and are being evaluated for replication on a large scale.

For villages with poor sanitation, hygiene and health, IRRAD has created a multi-faceted model featuring several practical modules. Delivery huts provide a comfortable and hygienic place for women to give birth; soak wells and soak pits allow safe disposal of wastewater; and inexpensive latrines (toilets) help prevent the unpleasant and unhealthy conditions that sully so many rural communities across India. Each of these modules has been successfully replicated in many villages in Mewat.

IRRAD's Income Enhancement model aims to increase agricultural productivity through better utilization of water and soil. Training farmers in techniques such as drip irrigation and chiseling helps them to make more efficient use of limited water supplies; and our integrated approach to soil health, with particular attention to micronutrients and organic content, enables farmers to identify and correct deficiencies in their soil. Our module “Improving Sustainable Livelihood Security Using Proven Solutions to Land Degradation in Semi-arid Regions of India” was recently selected as one of the 30 most innovative projects, out of 300 from around the world, at the Global Conference on Agriculture, Food Security and Climate Change (The Hague, Netherlands, 2010).

Over the years, we have learned that sustainability of interventions at the grassroots comes from empowering communities and getting them involved in the development process. Without good governance at the local level, sustainability is hard to achieve. IRRAD's “Good Governance Now (GGN)” model is based on a unique experiment in clinical legal education carried out by IRRAD and the Jindal Global Law School. Select villagers are trained to create awareness amongst their community on their rights and entitlements provided by government legislation and programs such as the Right to Information Act, Mahatma Gandhi National Rural Employment Guarantee Act, Public Distribution System, Mid Day Meal, Integrated Child Development Services, and so on. The GGN model was a top-three finalist for the 2010 Global Development Network Award (under the “Japanese Award for Most Innovative Development Project” category).

Looking forward, we hope to take our models/modules to other parts of India. Our agriculture model, with emphasis on water and soil management, can trigger dramatic increases in agricultural productivity in the country and merits scaling up. Our modules on sanitation, hygiene and health can improve the quality of village life through proper wastewater disposal and putting an end to open defecation. Our water management modules can make clean water available to villagers and schools for drinking and household uses. Our GGN model can assure the sustainability of projects by empowering rural communities to take ownership of their own development.

Scaling up is a must if we are to make a greater impact, and it is IRRAD's mission for the next decade. Our strong belief is that if a model/module is replicable and sustainable, it can be taken to other parts of India and beyond after adapting it to local conditions. To do this, we need to work in tandem with willing partners in the public, private or nonprofit sectors. At present, we have partnerships with Mosaic India Pvt Ltd. on soil heath; the Department of Agriculture, Haryana, on soil mapping; Coca-Cola India Foundation on water augmentation; and KMG Foundation on education. We look forward to building strong partnerships with other reputed organizations to extend these efforts to other parts of the country and help secure a brighter future for the people of India.

Sincerely yours,

Suri Sehgal
Founder & Chairman

NATURAL RESOURCE MANAGEMENT

Water Management

Addressing water issues of 250,000 people

IRRAD's Natural Resource Management Center focuses on the efficient and effective use of natural resources (water, soil and forests) to improve the quality of life for present and future generations.

IRRAD develops innovative, cost-effective, sustainable methods for providing potable water in areas afflicted by saline groundwater and other causes of water scarcity. Furthermore, IRRAD strives to sensitize rural communities to the importance of safe water and proper sanitation for good health and to help them adopt better water practices.

IRRAD's Integrated Approach to Water Management

- **Collection & Groundwater Replenishment:** Check dams, roofwater harvesting, recharge wells, deepening of ponds
- **Purification:** Bio-sand filters and purification systems for schools, public places and households
- **Wastewater Disposal:** Soak wells, soak pits
- **Health & Sanitation:** Toilets, stand posts, community mobilization and literacy campaigns

CY 2010-11

1	1	15	3	14	4	25	14	83	178
Total to Date									
	29	47	52	58	68	184	262	335	672
automatic weather station	rejuvenation of traditional water structures	recharge wells	roofwater harvesting	check dams/ culverts/ loose stone structures	hand pumps/ wells/storage tanks	bio-sand filters	stand posts/ taps	water literacy sessions	soak pits/ soak wells

Innovative and Cost-Effective Model for Mass Recharging

Check dams are stable structures that check and collect flowing rainwater and enable it to percolate into the ground. The dams are typically constructed in the foothills to recharge fresh groundwater pockets there while restricting the run-off from entering low-lying saline groundwater pockets. Built at 30% of the traditional cost, the innovation lies in combining gabion structures, traditional check dam design, and silt drains to avoid high desilting costs. IRRAD's check dam model has been proven in semi-arid Mewat and has also been replicated at other locations in Haryana, Rajasthan and Madhya Pradesh.

Water Solutions in Village Patkhori

Households: 646; Total population: 4000

Water situation before interventions

- Fresh groundwater available at 150 meters below the surface
- Unreliable drinking water supply due to deep tube wells dependent on erratic electricity
- No water source for the high school; just one public water supply outlet for entire village

Issues addressed

- Water availability
- Dependence on electricity
- Wastage of water
- Groundwater depletion
- Water quality
- Women drudgery
- School attendance

Interventions

- A 25,000-liter community tank to store public water supply
- Roofwater harvesting system in school
- Use of abandoned and dry wells for recharging groundwater

Impact/ Beneficiaries

- Around-the-clock availability of domestic water serving 200 households
- Harvested rainwater meets drinking water requirements of 325 students over 8 months
- 11 dug wells recharging 14,506 KL of rainwater led to 20-50 feet rise in groundwater levels

Beneficiaries Speak

"Electricity is a problem in our village. The power cuts span hours or even days at a stretch. This means that we go without water. There have been times when we have queued up in front of the tube well in the wee hours with the hope of drawing water. But now because of this water tank, water availability is bliss."
– Asgari, a woman from Patkhori village

Way Forward

- **Reach out to new villages to raise awareness about effective water strategies and the judicious use of water resources.**
- **Access government programs for mass replication of water management interventions.**
- **Develop partnerships for scaling up elsewhere in the country.**

NATURAL RESOURCE MANAGEMENT

Income Enhancement

Soil mapping in 431 villages

Soil Mapping: A Big Step Towards Better Soil Health

Farmers in Mewat rarely test their soil or supplement it with calcium, magnesium, zinc, iron, or boron to increase crop productivity. In cases where soil tests are done, they are limited to nitrogen, phosphorus and potassium.

In order to assess soil fertility in Mewat, IRRAD and the Haryana Department of Agriculture prepared digitized fertility maps from soil samples collected throughout the district using Global Positioning System. The soil mapping provided a basis for developing an integrated soil health management plan. It also helped identify areas requiring immediate attention, thereby enabling government departments to take remedial measures and educational institutions to conduct further study.

Income enhancement interventions in Mewat

NATURE OF ACTIVITY	INTERVENTIONS	CY 2010-2011	TOTAL TO DATE
Field Demonstration	Demonstration plots (#) Effective microorganisms (EM) demo (#)	488 29	747 360
Agriculture Technology Promotion	Chiseling (Acres) Bed making (Acres) Soil tests on individual farms (#)	15 148.5 115	514 548 506
Capacity Building	Exposure visits and meetings (#) Field days (#)* Village meetings with government departments (#)*	89 42 14	210
Enterprise Development	Orchards (#)*	4	
Others	Animal vaccinations (#)*	3,715	
	Cash benefits to farmers through government departments such as Horticulture, Agriculture, Animal Husbandry (Rs) [US$]	690,747 [15,350]	

* New initiatives

431

villages included, covering all five blocks of Mewat

1565

farmers issued soil health cards containing crop-based recommendations

Results

- The soil is deficient in nitrogen, phosphorus, potassium, zinc and boron. Sulphur and manganese are present in sufficient quantities.
- On the basis of electric conductivity, the soil is moderately to highly saline except for a few pockets of normal salinity.
- The pH-based soil alkalinity is normal, except in some pockets of Taoru and Firozepur Jhirka blocks of Mewat.
- Though iron deficiency is found in a few pockets, the general status of iron is satisfactory.

Turning Threats into Income Opportunities

Salt Extraction over Wastelands

Increasing groundwater salinity has profound socioeconomic, ecological, environmental and health repercussions. Looking to turn this threat into an opportunity, IRRAD carried out a successful experiment involving salt extraction over wastelands (barren or otherwise uncultivable land) in village Karheda with the following objectives:

1. Setting up a commercial-scale salt extraction demonstration for promotion
2. Making productive use of saline groundwater
3. Enhancing the potential of salinity regression
4. Protecting freshwater sources from advancing salinity
5. Creating alternative livelihoods (employment opportunities)

The following projections from the pilot project indicate the immense potential of salt extraction over wastelands (average village has 40 hectares of wasteland):

Salt produced	88,750 kg/hectare
Value of raw salt produce	Rs 88,910/hectare
Operational cost	Rs 44,000/hectare
Income from salt extraction	Rs 44,910/hectare
Average income from agriculture	Rs 25,000-30,000/hectare
Additional income to farmers	Rs 14,910/hectare

Looking Ahead

Replicate and scale up this alternative model for income generation for farmers in other parts of India; engage technical partners who can share their expertise in developing low-cost desalination technologies.

A Farmer's Testimonial

"For the first time, I got my soil tested and for the first time I came to know about micronutrients like boron and zinc. Soil mapping has enabled me to know the reasons for low soil productivity and low income. I used to apply three times the manure of what I am currently using; I save a lot now. My average monthly income too has gone up. Earlier it was tough to even think of sending our children to school, as expenses were too much, but now it is possible."
– Ayub Khan, village Raniyala

Way Forward

- **Undertake integrated soil fertility management.**
- **Devise a cropping pattern suitable for areas within Mewat.**
- **Increase crop productivity per unit of water.**

POLICY, GOVERNANCE AND ADVOCACY

Governance wave reaches 150,000 people

The Constitution of India guarantees a dignified and decent life for all and mandates the state to create policies and programs that reduce poverty and empower the poor. IRRAD's Policy, Governance and Advocacy Center promotes awareness among rural communities on such policies that are meant to support the constitutional rights of the Indian people.

Journey - From an Idea to a Movement

IRRAD's “Good Governance Now” campaign was launched in 2008 in a few villages of Mewat to address the discrepancy between what rural communities are supposed to receive and what is actually delivered. IRRAD has trained villagers on their rights and entitlements under eight government schemes and the Right to Information Act.

Successes

IRRAD's interventions have empowered villagers and prompted government offices to be more accountable:

60	70	70	100	200	290	500	1600
functional ration depots in 70 villages	villages with effective implementation of the right to education	villages with functional Mid Day Meal programs	anganwadi (child care) centers functional	Right to Information applications filed	community members from 50 villages attended 170 training sessions conducted as part of "Good Governance Now" campaign	people employed under Mahatma Gandhi National Rural Employment Guarantee Act implementing projects worth Rs. 7,000,000 [US $156,000]	families living below poverty line benefited from improved government services related to food, nutrition, pension and housing

Papda Village Shows the Way

In Papda, a village in Punhana block of Mewat, irregularities in the Mid Day Meal at the middle school had become routine. Low-quality rations were being served at the local Anganwadi centers and no Mid Day Meals had been served to the school's 528 students for the last six months. Authorities ignored the issue until a group of villagers trained on “Good Governance Now” successfully paved the way for the speedy transformation of the faulty system.

Way Forward

- **Formally evaluate the first phase of the campaign.**
- **Seek partnerships with other law schools and social science departments of leading academic institutions.**
- **Expand the reach of the "Good Governance Now" campaign to the entire Mewat District and beyond.**

CAPACITY BUILDING

Members of 308 panchayats trained

IRRAD's Capacity Building Center aims to create an empowered and involved society by building the capacities of village-level institutions and communities.

Strengthening Local Governance Institutions

The three-tier governance structure for rural areas under the 73rd Constitutional Amendment envisions the devolution of powers to Panchayati Raj Institutions (PRIs), but the majority of panchayats (elected village councils) are not playing an active role.

IRRAD undertook the training of sarpanches (panchayat heads) and panches (panchayat members) in Mewat District after being given nodal organization status by the Haryana Institute of Rural Development. The training covered the 73rd Amendment and Panchayati Raj Act; Haryana Panchayati Raj Act, 1994; the roles and responsibilities of the gram panchayat, elected village heads, and the gram sabha (local body comprising the village electorate); revenue generation; village common lands; and rural development programs which can be used by the panchayat to leverage funds for development.

231

sarpanches and gram sachivs (panchayat secretaries) trained in second phase

1841

panchayat members trained in first phase

71%

of women enjoy safer childbirth in delivery huts

Successes

Several panchayats leveraged government funds to guarantee employment to resident villagers. Many villages also witnessed more efficient conduct of gram sabha meetings, which became platforms for the exchange of ideas and assessment of village works.

Gram Sabha Meeting in Rangala

The first meeting called by the newly elected Sarpanch of Rangala Rajpur generated high levels of excitement and expectation. At such meetings, residents get the opportunity to propose development plans and learn of budgetary allocations of their panchayat. However, the sarpanch's unilateral decision to cancel the meeting without notice or any concrete reason met with strong resentment. One of the panches who had attended the training program by IRRAD mobilized some villagers and informed them that under the PRI Act, a gram sabha meeting cannot be cancelled without cause. He put this before the District Development Panchayat Officer, who then instructed the gram sachiv (panchayat secretary) to conduct the meeting. The villagers actively participated in the meeting as scheduled and discussed many development issues directly related to their development.

Delivery Huts

Exemplifying Public-Private Community Partnership

In India, most deliveries in rural areas are carried out at home by traditional birth attendants commonly known as *dais*. To promote better reproductive child health, IRRAD mobilized the panchayat and community to construct a new delivery hut in the village of Notki and upgrade existing delivery huts in Uletha and Raniyala with equipment and staff.

The availability of delivery huts has led to an increase in institutional childbirths and lower infant mortality in the area. Almost 71% women in these three villages now enjoy safer childbirth in delivery huts, a marked improvement over comparable villages without such facilities.[1]

[1]Source: IRRAD impact assessment report 2011

Way Forward

- **Develop effective panchayats through capacity building of PRIs in 50 villages of Mewat.**
- **Build synergy with government departments and with other nongovernment organizations to create a consortium for effective functioning of panchayats.**
- **Continue to build capacities of village level education and health committees.**

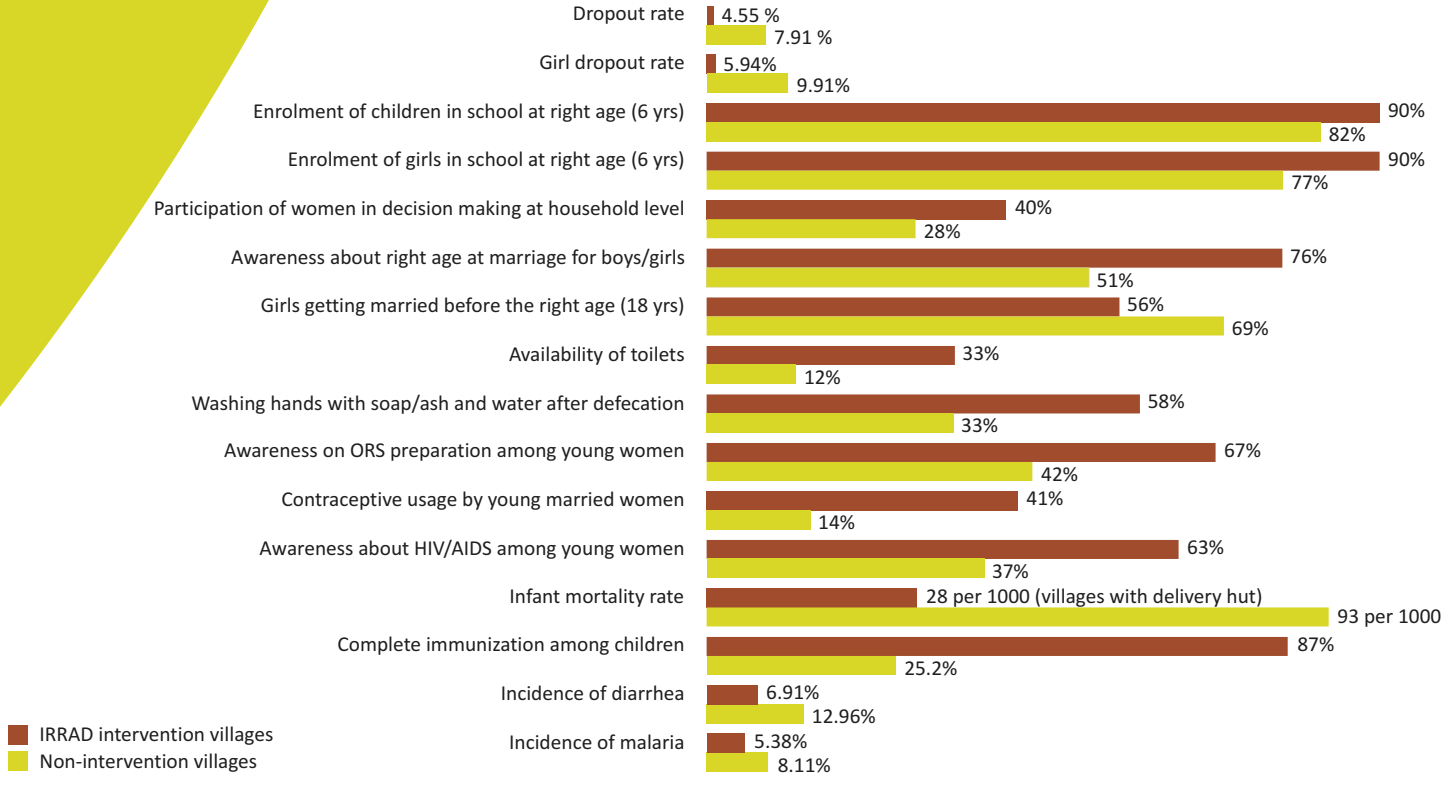
RURAL RESEARCH

Bringing impact to light

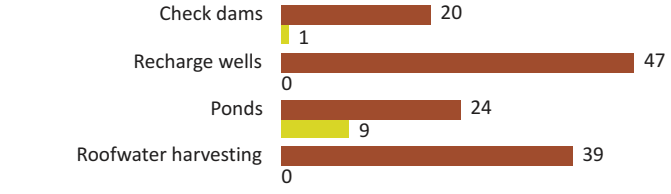
The Rural Research Center undertakes research critical for the design, implementation, and evaluation of IRRAD's programs.

In the year 2010-11, the Center conducted an impact assessment of IRRAD's program interventions implemented during the previous decade under its Integrated Sustainable Village Development (ISVD) model. A total of 21 villages were selected for the study, comprising 14 experimental (intervention) villages and 7 control (non-intervention) villages having a similar socioeconomic profile. IRRAD's programs have been able to build trust and confidence in the villages with respect to what it has been doing; some of the resulting impacts are listed below:

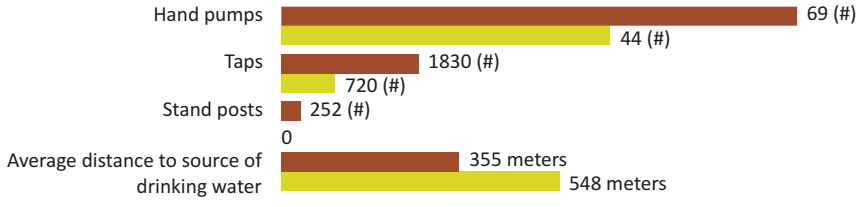
A COMPARATIVE SUMMARY OF IRRAD'S IMPACT IN EXPERIMENTAL VS. CONTROL VILLAGES AS MEASURED BY VARIOUS SOCIOECONOMIC INDICATORS



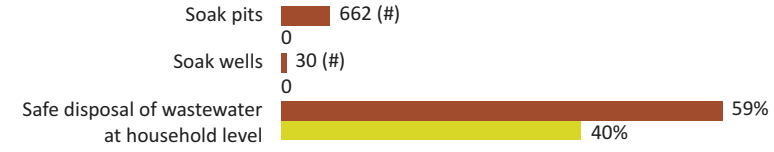
PHYSICAL INFRASTRUCTURE FOR RAINWATER HARVESTING (in numbers)



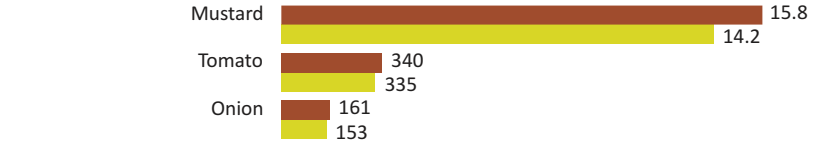
PHYSICAL INFRASTRUCTURE FOR DRINKING WATER



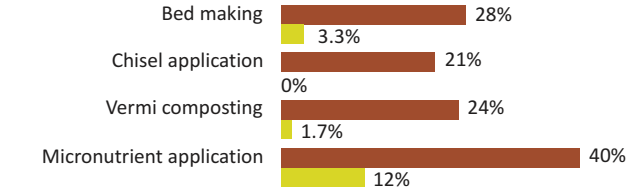
PHYSICAL INFRASTRUCTURE FOR WASTEWATER DISPOSAL



CROP YIELD (QUINTAL/HECTARE)



FARMERS PRACTICING MODERN AGRICULTURAL TECHNIQUES



Impact of IRRAD's Interventions in Mewat over the Past Decade

- Increase in age at marriage
- Improvement in self-esteem of adolescent girls
- Increase in awareness among adolescent girls about contraception usage, symptoms of diarrhea, oral rehydration solution (ORS) preparation, and causes and prevention of HIV/AIDS
- Better infrastructural facilities encourages children to attend schools with greater interest
- New/upgraded delivery huts led to increased institutional deliveries, lower infant mortality
- Improvement in immunization of children
- Reduced incidence of disease (diarrhea, typhoid, jaundice)
- Increase in availability of water for irrigation, domestic use, and livestock
- Reduction in women's drudgery due to improved access to and availability of water
- Safe disposal of wastewater through soak pits resulting in better hygiene and health
- Increase in crop productivity and farm income through better agricultural practices

Research Publications

- Mehta, P. (2010). Role of Information & Communication Technologies on Improving Livelihoods: A Case of Mewat
- Mehta, P, Saxena, N, Kumar, A. (2011). Impact assessment of IRRAD's interventions in select villages of Mewat
- Mehta, P, Saxena, N, Kumar, A. (2010). Baseline survey of 14 villages
- Palacios, A, Mehta, P. (2010). Food Security and Gender
- Rizvi, S.M. Haider. (2010). Livelihood Solutions through Mobile Technology: An Assessment

COMMUNICATIONS

The Communications Center follows a three-dimensional strategy aligned with the vision and mission of IRRAD:

- to work with and for the grassroots communities and provide them with the medium to share
- to build the equity of the organization
- to support and promote the work of other centers

Events

- Seventh International India Development Coalition of America (IDCA) Conference 2011 on "Working Together to Eradicate Poverty and Mitigate Climate Change"
- International Conference on "Good Rural Governance and Citizen Participation" in collaboration with Jindal Global Law School and University of Baltimore School of Law

Awards & Recognitions

- Winner of 3rd National Groundwater Augmentation Award 2009 for Best NGO, Northern Zone (covering Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Delhi, Uttar Pradesh, Uttaranchal and Chandigarh), for innovative practices of groundwater augmentation through rainwater harvesting and artificial recharge
- Confederation of Indian Industry Women Exemplar award to Kamlesh, one of IRRAD's grassroots workers
- IRRAD's "Good Governance Now" initiative recognized as one of the top three finalists amongst 250 projects worldwide for 2010 Global Development Network Award for Most Innovative Development Project
- Model project on sustainable agriculture among the 30 most innovative projects at the 2010 Global Conference on Agriculture, Food Security and Climate Change, The Hague, Netherlands
- S.M. Sehgal Foundation accredited under Credibility Alliance's Minimum Norms, which recognize organization's commitment towards enhancing accountability and transparency
- Member of Indian Green Building Council
- NGO member of Central Ground Water Authority, District Level Committee in Mewat chaired by Deputy Commissioner

Way Forward

- **Establish community radio as an additional medium for the marginalized community of Mewat; IRRAD's forthcoming station will reach over 60 villages and 130,000 people.**
- **Use media to promote the scaling up of IRRAD's demonstration projects to other parts of India.**

2	7	31	49
international conferences on poverty eradication and rural governance organized	new publications	students from universities in India and abroad visited	media reports in national media

RESOURCE MOBILIZATION AND PARTNERSHIPS

The Center aims to mobilize resources and identify, build and strengthen partnerships across diverse sectors.

Partnership Projects at a Glance

Partnering Organization	Project / Program Title	SMSF Implementing Center	Duration
KMG Foundation, India	"Making government schools functional through an empowered community"	Capacity Building	Three years (2010-2013)
Mosaic India Private Ltd.	"Enhancing farm productivity and improving livelihoods in selected villages of Mewat"	Natural Resource Management	One year (2010-2011)
Coca-Cola India Foundation	"Feasibility study and water mapping of five villages in Nagina block, District Mewat"	Natural Resource Management	Ten weeks (Aug-Nov 2010)
Haryana Institute of Rural Development	Training and capacity-building program for newly elected representatives of PRIs	Capacity Building	Five months (Aug-Nov 2010 and Feb 2011)
International Development Research Centre, Canada	"Livelihood solutions through mobile technology : An Assessment"	Rural Research	Eleven months (Oct 2009-Sept 2010)
Global Compact Network India	Training program on "Corporate Engagement with the Community"	Capacity Building	Two-day training program (Nov 2010)
Jindal Global Law School, India, and University of Baltimore School of Law, USA	International Conference on Good Rural Governance and Citizen Participation	Policy, Governance and Advocacy	Two-day international conference (Mar 2011)

Way Forward

- **Expand existing collaborations.**
- **Seek new partnerships with organizations committed to promoting rural development in India.**

CROP IMPROVEMENT, BIODIVERSITY AND CONSERVATION

In addition to its work in rural development through IRRAD, S.M. Sehgal Foundation (SMSF) also supports work in crop improvement, genetic biodiversity, and plant conservation.

In-house research: SMSF conducts crop research focused on collecting and cataloguing elite inbred lines and improved populations of maize from the International Maize and Wheat Improvement Center (CIMMYT) and other international centers and public institutions, including the Directorate of Maize Research, India; Kasetsart University, Thailand; and North Carolina State University, USA, among others. This material has been classified into multifunctional heterotic groups and, after multiplication, is being made available to breeders in the public, private and nonprofit sectors.

Standard lab and field disease-screening techniques have been used to identify 110 disease-resistant sources for distribution. Molecular marker techniques were used for DNA fingerprinting of 700 maize lines; this information is improving the efficiency of conventional breeding in creating new germplasm.

SMSF organized the third “Mega Maize” Field Day at its R&D center at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) on March 14, 2011, which was attended by 105 maize scientists from private and public institutions. The participants were impressed with the diversity and genetic quality of the material and selected 2,533 accessions for use in their own breeding programs. Since 2008, a total of 7,330 seed samples have been supplied to scientists in India at their request.

Funded research: Towards genetic improvement of pearl millet, sorghum and pigeon pea, SMSF is supporting ICRISAT through an endowment fund and membership in the Hybrid Parents Research Consortia for these three crops. Similarly, SMSF supports CIMMYT's maize research through grants and membership in the International Maize Improvement Consortium – Asia.

Biodiversity and Conservation

SMSF also supports the Suri Sehgal Center for Biodiversity and Conservation at the Ashoka Trust for Research in Ecology and the Environment (ATREE), Bangalore, Karnataka, India, and the William L. Brown Center at the Missouri Botanical Garden, St. Louis, Missouri, USA.

Way Forward

- **Expand elite maize germplasm collection and multiplication from sources worldwide and make it available to breeders upon request.**
- **Continue the refinement of heterotic groups as new germplasm is added to collections.**
- **Continue the improvement of genetic material using selfed progeny bulks and well-designed S3 recurrent selection methodology.**

110	700	2,533	7,330
disease-resistant sources identified for distribution	maize lines fingerprinted for DNA using molecular marker techniques	accessions at ICRISAT "Mega Maize" field day selected for use in breeding programs	seed samples supplied to scientists at their request

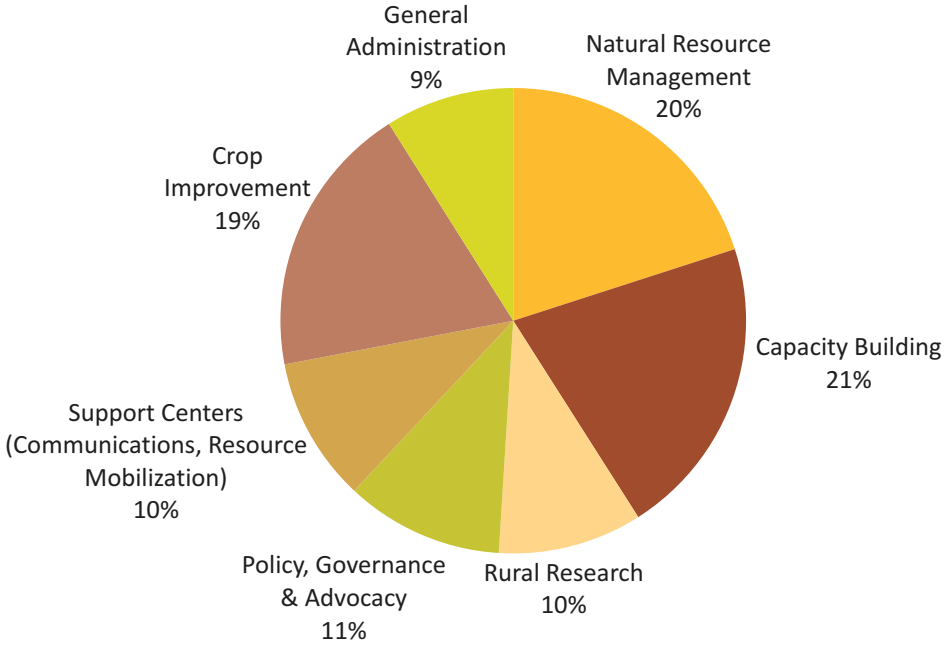
FINANCIALS 2010-11

In FY 2010-11, Sehgal Family Foundation grants to S.M. Sehgal Foundation amounted to US$ 3.8 million (Rs 173,361,949). S.M. Sehgal Foundation also received funding from International Development Research Centre, Canada, for a research study on the Impact of information and communication technologies on rural livelihoods (Rs 164,506); Mosaic India Pvt. Ltd. for Krishi Jyoti Project (Rs 184,700); Coca-Cola India Foundation (Rs 200,000); KMG Foundation, India, for making government schools functional through an empowered community (Rs 950,000); S.R. Trust c/o Meenakshi Hospital & Research Centre, Madurai, for facilitating the study tour of students from the University of Iowa, USA (Rs 847,334); Haryana Institute of Rural Development for training of newly elected panchayats (Rs 364,803); Global Compact Society for a training program on corporate engagement with community (Rs 86,150); and rent income (Rs 23,316,239).

These funds were used for natural resource management 20%; capacity building 21%; rural research 10%; policy, governance and advocacy 11%; support centers 10%; crop improvement 19%; and general administration 9%.

Capital expenditure incurred during the year was Rs 46,810,126 and donations to other organizations totaled Rs 230,500.

Operating Expenses During FY 10-11
US$1.5 Million (Rs 67 Million)



ABRIDGED BALANCE SHEET AS ON 31st MARCH 2011

Amount in '000

Particulars	Current Year Amount (Rs)	Current Year Amount (US$)	Prev. Year Amount (Rs)	Prev. Year Amount (US$)
Assets				
Fixed Assets	268,417	5,965	242,098	5,380
Loans and Advances	14,136	314	2,910	65
Current Assets	82,791	1,840	5,357	119
Income & Expenditure A/C Balance				
Total	**365,344**	**8,119**	**250,365**	**5,564**
Liabilities				
Corpus Fund	1	1	1	1
Current liabilities	4,966	110	5,221	116
Income & Expenditure A/C Balance	360,377	8,008	245,143	5,447
Total	**365,344**	**8,119**	**250,365**	**5,564**

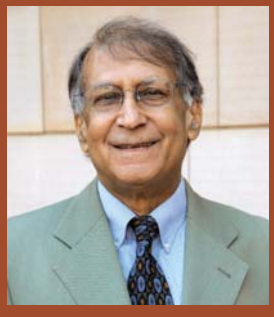
ABRIDGED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2011

Amount in '000

Particulars	Current Year Amount (Rs)	Current Year Amount (US$)	Prev. Year Amount (Rs)	Prev. Year Amount (US$)
Income				
Self Generated Income (Rent, Interest and other receipts)	25,412	565	20,526	456
Grants				
Indian Sources	3,583	80	3,053	68
International Sources	173,526	3,856	9,831	218
Total	**202,521**	**4,501**	**33,410**	**742**
Expenditure				
Program	48,272	1,073	51,681	1,148
Management	18,253	406	17,084	380
Others	20,761	461	23,667	526
Total	**87,286**	**1,940**	**92,432**	**2,054**
Surplus/(Deficit)	**115,235**	**2,560**	**(59,022)**	**(1,312)**

Average US$=Rs 45
Disclosure: S.M. Sehgal Foundation has not paid any remuneration to its trustees.

BOARD AND TRUSTEES



Suri Sehgal
Chairman of the Board of Trustees
Suri Sehgal holds a PhD in plant genetics from Harvard University and a diploma in business management from Harvard Business School. He is the founder and chairman of Misr Hytech Seed International, Egypt, and Hytech Seed, India. He is the former Chief Operating Officer and member of the board of directors of Plant Genetic Systems, Belgium, now a Bayer CropScience Company. He is founder and former chairman of Proagro Group of Companies, India, which were acquired by AgrEvo-Hoechst Schering in 1998 and are now owned by Bayer.

Edda G. Sehgal
Edda Sehgal is a co-founder and trustee of the Sehgal Family Foundation, USA, and S.M. Sehgal Foundation, India. She was born in Breslau, Germany, and immigrated to the United States in 1962. Edda was co-founder of Proagro Group of companies, India, and served on its board until 1998. She served on the board of Global Technologies Incorporated, USA, from 1990 to 1998.

Trustees

Ganesan Balachander holds a PhD in ecology and evolution from Rutgers University and an MBA from Carnegie Mellon University, USA. He was the Ford Foundation's South Asia representative for about six years until late 2008. Prior to that, he was engaged in conservation projects, working on tropical forests and coral reefs with the World Wildlife Fund and the Nature Conservancy, developing green businesses, and working in the Himalayas as the Asia Director for the Mountain Institute. He currently serves on the Consortium Board of the Consultative Group on International Agricultural Research (CGIAR), overseeing the reform process across the 15 centers in the system. In his earlier career he was a vice president at Citibank, New York.

Jayshree Balachander holds a master's degree in public policy (development studies) from Woodrow Wilson School for Public and International Affairs, Princeton University. From 1979-1992 she was a part of the Indian Administrative Services (IAS), serving various government departments. Since 1992 she has worked for the World Bank in South and East Asia and Africa on issues such as health, nutrition, human resource development and education.

Kamal Bawa, an evolutionary ecologist and conservation biologist, is Distinguished Professor of Biology at the University of Massachusetts, Boston. He is the founder-president of the Ashoka Trust for Research in Ecology and the Environment (ATREE) based in Bangalore, India. He holds a PhD from Panjab University. A prolific scholar, he has received many recognitions from prestigious organizations worldwide.

Nishat Farooq has retired as director of State Resource Centre, Delhi, which also included the National Nodal Centre for Gender Planning. Currently she is a member of the National Quality Assurance Committee of the National Literacy Mission Authority, Ministry of Human Resource Development and an independent consultant for UNESCO, NFUAJ (Japan) and NGOs.

Jan Leemans is the former (1983-1999) research director of Plant Genetic Systems, now Bayer CropScience, Belgium. He was a board member of Hoechst Shering AgrEvo, Germany; of Nunza, The Netherlands; of CropDesign, Belgium; and of the Flemish Institute for Biotechnology (VIB), Belgium. Currently he is a board member of Misr Hytech Seed Company, Egypt, and of Devgen, Belgium, and a member of the steering committee of IPBO, Belgium. He holds a PhD in chemistry from the Free University of Brussels, Belgium.

Y. C. Nanda is chairman of Agriculture Finance Corporation Ltd., Mumbai, and holds leadership positions as chairman/director/trustee of a number of organizations, mainly in the microfinance and development sectors. He retired as the chairman of the National Bank for Agriculture and Rural Development (NABARD) following 38 years of experience in the rural banking and central banking industries. He is a former member of the National Commission on Farmers.

Air Vice Marshal (Retired) S. Sahni has been associated with the NGO Development Alternatives, Inc. (DAI) since 1985. His main areas of work have been in integrated watershed development in Bundelkhand areas of UP/MP, increasing farmers income by proper land use, introducing the tropical legume *Dhaincha* for agricultural purposes, sustainable livelihoods mainly for women in nonfarm sectors, and rejuvenating degraded forests.

Ben Sehgal holds a PhD in biophysical chemistry from Northwestern University, Evanston, USA, and worked as researcher in cell biology for the Feinberg School of Medicine, Northwestern University, Chicago, USA. Ben is a member of the board of directors of the Sehgal Family Foundation, USA, and primarily assists IRRAD with its publications and outreach efforts. He is a board member of the William L. Brown Center at the Missouri Botanical Garden, St. Louis, USA.

Raman K. Sehgal holds an MBA from Ateneo de Manila University, Philippines, and is an established professional in all aspects of the seed business. He is currently the managing director and a member of the board of directors of Misr Hytech Seed International, Egypt, and a member of the board of directors of Hytech Seed, India.

Rajat Jay Sehgal is the executive vice president of the Sehgal Family Foundation, and a representative of the S.M. Sehgal Foundation in India. An alumnus of the University of Iowa, USA, he worked in information technology in leading private-sector organizations in the US and India for sixteen years and served as director of information technology at Proagro Group of Companies, India. Jay served as the managing trustee and executive director of S. M. Sehgal Foundation and IRRAD for 10 years.

Jagadish Shukla, PhD, DSc, is a professor and founding chair of the Department of Atmospheric, Oceanic and Earth Sciences at George Mason University, Virginia, USA, and president of the Institute of Global Environment and Society, USA. One of his major weather and climate research themes is to demonstrate the existence of predictability in the midst of chaos. This work has led to the creation of new institutions worldwide to produce dynamic seasonal predictions of climate. Shukla also established Gandhi College in his native village in Ballia, U.P., to help educate rural girls.

Gensuke Tokoro is president and CEO of aRigen Pharmaceutical, Inc., Japan. He holds an honorary position as professor (special appointment) at the Institute of Innovation Research at Hitosubashi University, Japan. He served as the president of Nippon Biological Inc. and executive director of Nippon Pharma Promotion. He is a specialist in the licensing and restructuring of businesses in the field of pharmaceuticals, plants and animal genetics, vaccines and food.

Suhas P. Wani works as a regional theme coordinator (Asia) and principal scientist (watersheds), Global Theme on Agro Ecosystems, ICRISAT, Patancheru. He specializes in integrated watershed management, wasteland development, biodiesel plantation, integrated nutrient management and carbon sequestration, with the aim of conservation of natural resources and their sustainable use for improving livelihoods in the semi-arid tropics.

Advisors

S.K. Vasal is an accomplished plant breeder and geneticist from CIMMYT whose research on maize led to the development of high quality protein maize. He is the World Food Prize laureate for the year 2000. He is also the recipient of many awards including Dr. M.S. Swaminathan Award for Leadership in Agriculture, Chinese friendship award and international service in crop science and agronomy awards from American Society of Agronomy.

Bhamy Shenoy is a graduate of IIT Madras and PhD from University of Houston. After working abroad, he returned to Mysore to get involved in India's development. As an activist, he has been associated with Mysore Grahakara Parishat, an NGO for consumer protection and Pratham, an NGO for providing education to slum children. He writes articles regularly on social development and energy sector. He is senior advisor to Center for Energy Economics at UT-Austin.

Amitabh Kundu, PhD, is professor of economics at the Centre for the Study of Regional Development and dean of the School of Social Sciences at Jawaharlal Nehru University, New Delhi. He has been nominated as a member of National Statistical Commission in 2006.

Consultants

M.D. Asthana has 38 years of experience as a member of India's premier central administrative service, the Indian Administrative Service, in the fields of public administration, good governance and public policy.
Email: md.asthana@irrad.org

Ryan Clutter, IT Consultant, holds a degree in computer science from Grand View College, Iowa, USA. He has worked as a senior network engineer at a leading US mortgage company, as well as at a regional US hospital prior to becoming a consultant for IRRAD.
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Murali Dhar Gupta, a PhD in genetics from Indian Agricultural Research Institute, New Delhi, established the crop improvement project in July 2002 at the ICRISAT campus near Hyderabad and had been its technical director until May 2007. He is now associated with SMSF as an honorary technical advisor. He has 37 years of experience in plant breeding research with national and international institutes and in seed enterprise management with two multinational companies.
Email: m.d.gupta@cgiar.org

Ellora Mubashir holds a PhD in biochemistry from Jawaharlal Nehru University, Delhi. She was manager of biotechnology regulatory affairs at Proagro Seed Company (now Bayer CropScience). Subsequently she was communications program leader at S.M. Sehgal Foundation for five years.
Email: ellora.mubashir@irrad.org

Ajay Kumar Pandey is a lawyer and a human rights practitioner. He has 16 years of experience of working with voluntary organizations. He holds an MPhil degree in International Law from Jawaharlal Nehru University, New Delhi and an LLM degree in Clinical Legal Education from Vanderbilt University, USA. Currently he is Associate Professor and Assistant Director, Clinical Programmes at Jindal Global Law School.
Email: ajay.pandey@fulbrightmail.org

OUR TEAM

Rural Development (Gurgaon)

Anjali Godyal, Program Leader, Capacity Building Center, holds a degree in rural management from the Institute of Rural Management (IRMA), Anand, Gujarat. She has over 5 years of experience working with rural women and children in the areas of health, education and governance.
Email: a.godyal@irrad.org

Ramesh Kapahi, Director, Finance & Administration, holds a master's degree in finance and marketing from Lal Bahadur Shastri Institute of Management (LBSIM), Delhi. He worked as an internal auditor for 16 years before joining IRRAD.
Email: r.kapahi@irrad.org

Pawan Kumar, Program Leader, Income Enhancement, holds an MSc in agriculture economics from G.B. Pant University of Agriculture and Technology, Pantnagar, and an MSc in forestry, science policy and management from Oxford Forestry Institute, Oxford University. He has 16 years of experience working with small and marginalized farmers in agricultural development, watershed management, and natural resource management.
Email: pawan.kumar@irrad.org

Aparna Mahajan, Director, Resource Mobilization and Partnerships, holds an MBA and a World Bank Institute (USA) certificate in corporate social responsibility and sustainable competitiveness. She has worked in the private and development sectors with leading organizations in India and abroad, including the UN as international consultant and country specialist/consultant. A World Guide expert contributor, she is author of the UAE chapter and co-author of the India chapter in The World Guide to CSR, by CSR International, 2010.
Email: a.mahajan@irrad.org

Anjali Makhija, Group Leader, Capacity Building, holds a master's degree in social work from Delhi School of Social Work, Delhi University. She has 18 years of management and training experience working with various NGOs in the areas of education, health, and community development. She is an invited member of the UN Global Compact Subcommittee for Training.
Email: anjali.makhija@irrad.org

Pradeep K. Mehta, Senior Scientist, Rural Research, holds a PhD in economics from Institute for Social and Economic Change (ISEC), Bangalore; an MPhil degree from Indian Institute of Technology (IIT), Bombay; and MA and BA degrees in economics (honors) from Punjab University, Chandigarh. He has 4 years of experience in teaching and research.
Email: p.mehta@irrad.org

Pooja O. Murada, Director, Communications, holds a bachelor's degree in English (honors) from Delhi University; postgraduation in communications; management program from Tuck School of Business, Dartmouth College, USA. She carries over 15 years of work experience in both corporate and development communications. She is an invited member of the UN Global Compact Subcommittee for Training and Communications.
Email: poojamurada@irrad.org

Navneet Narwal, Program Leader, Policy, Governance & Advocacy, is involved in policy trainings at the grass roots. He holds an LLB degree from Faculty of Law, Delhi University, with postgraduation in English from Punjab University, Chandigarh. He also holds a one-year post-graduate diploma in journalism from Bharti Vidya Bhawan, Chandigarh.
Email: n.narwal@irrad.org

B.R. Poonia, Program Leader, Community Mobilization, holds a master's degree in rural sociology from the University of Udaipur, and has over 30 years of experience in community development. Prior to joining the Foundation, he was employed at CARE-India for 14 years. He is an invited member of the Planning Commission's Working Group on Panchayati Raj Institutions and Rural Governance for the formulation of the 12th Five-Year Plan.
Email: br.poonia@irrad.org

Salahuddin Saiphy, Program Leader, Water Management, holds a master's degree in applied geology and postgraduate diploma in hydrogeology from Aligarh Muslim University, Aligarh, and a postgraduate diploma in environmental monitoring and impact assessment from Jamia Hamdard University, New Delhi. He carries a decade long experience in designing and implementing integrated water management projects and training.
Email: s.saiphy@irrad.org

Niti Saxena, Associate Scientist, Rural Research, has a master's in human development from Lady Irwin College, Delhi University. Her expertise is working with children with special needs, and she has contributed to the concept of ECCD (early childhood care and development) through her writings.
Email: niti.saxena@irrad.org

Jane E. Schukoske, CEO, holds a JD from Vanderbilt University and LLM from Georgetown University, USA. A Maryland lawyer, she has represented low-income clients, directed law school clinics, and taught on the faculty of the University of Baltimore School of Law. In South Asia, she conducted research at the University of Colombo as a Fulbright scholar and directed US Educational Foundation in India. She serves on the governing body of O.P. Jindal Global University in Sonipat, Haryana.
Email: j.schukoske@irrad.org

Lalit Mohan Sharma, Group Leader, Natural Resource Management, is a civil engineer who holds a master's degree from Indian Institute of Technology, Delhi, and a postgraduate diploma in construction management, and is a fellow of the Institution of Valuers. He is an invited member of the panel of experts for the War for Water and Water Technology initiatives under the Technology Mission of the Department of Science & Technology, Government of India.
Email: lalit.sharma@irrad.org

Crop Improvement (Hyderabad)

P. Vani Sekhar, Senior Scientist, holds a master's degree in genetics and plant breeding from ANGRAU, Hyderabad. She carries over 21 years of experience in the field of plant breeding. Prior to joining SMSF, she worked as a senior scientist with Hytech Seed India Pvt. Ltd. from 2007-2011 and as a breeder with Bayer CropScience Pvt. Ltd. (Formerly Proagro Seed Company Pvt. Ltd.) for 17 years (1989-2007).
Email: p.vanisekhar@irrad.org

N Mallikarjuna, Scientist, holds a PhD in plant pathology from the University of Agricultural Sciences (UAS), Bangalore. Prior to joining SMSF, he worked on maize pathology for six years at UAS, Agricultural Research Station, Nagenahalli, Mysore.
Email: na.mallikarjuna@irrad.org

S.P. Deshpande, Special Project Scientist, Biotechnology, holds a PhD in genetics and plant breeding from Marathwada Agricultural University, Parbhani. He has six years of experience in the field of molecular breeding and biotechnology.
Email: s.deshpande@cgiar.org

Support Team (Gurgaon)

Devika Batra - Research Associate
Sonia Chopra - Librarian
Pankaj Gaur - Accountant
Sam Kapoor - Manager, Training and e-Learning
Arti Manchanda - Communication Associate
Jagdish Prasad - Administration Manager
Tanya Rana - Assistant Program Leader - Policy, Governance and Advocacy
Manoj Sharma - Manager, Information Technology
C. Shekhar - Assistant Manager, Accounts

Logistics Support (Gurgaon)

Jitender Kumar, Shoorveer Singh - Building Maintenance

Arjun Singh, Kuldeep Chand, Ram Krishan, Surender Singh - Drivers
Mitra Lal Baral and Ram Bahadur - Attendants
Osaf Khan - Caretaker, Ghaghas Community Center

Support Team (Hyderabad)

G.P. Shravan Kumar, C. Venkatesh, K. Venkatesh, K. Chandrasekhar, K. Pandu, and Syed Ghouse

Project Implementation Team

Mubarik Hussain, Assistant Program Leader - Community Mobilization
Salamuddin, Facilitator - Firozepur Jhirkha Block
Nasir Hussain, Facilitator - Nagina Block
Sunderlal, Facilitator -Taoru Block
Mahipal Singh, Assistant Program Leader - Water Management
Jafar Hussain, Assistant Program Leader - Special Projects
Kunti Gupta, Specialist - School Program
Urmila, Specialist - Life Skills Education
Mohammad Saddiq, Specialist- Water Management
Dharmendra, Specialist-Income Enhancement
Hari Bhagwan, Specialist - Income Enhancement
Jaan Mohammed, Specialist - Community Mobilisation
Shaheen, Specialist - Rural Health
Kamlesh, Field Coordinator - Policy, Governance and Advocacy
Susheela, Field Coordinator - Policy, Governance and Advocacy
Nagendra Gupta, Administration in Charge
Varsha, Master Trainer
Khushi Mohammad, Master Trainer
Village Champions and Field Assistants: Sayeed, Imran, Iqbal, Narendra Poonia, Sharafat Ali, Hakmudeen, Abdul Jabbar, Sanjiv, Pavan Kumar, Sanjay Kumar, Samaydeen, Geeta, Santosh Sanwaria, Ramdiya, Sajid Khan, Abdul Kadir, Arshad Hussein

Research Investigators: Shabeer Ahmed, Mohd. Sahil, Mohd. Jamshed, Jaan Mohd, Manju Sharma Mohd Asif, and Mohd Irfan

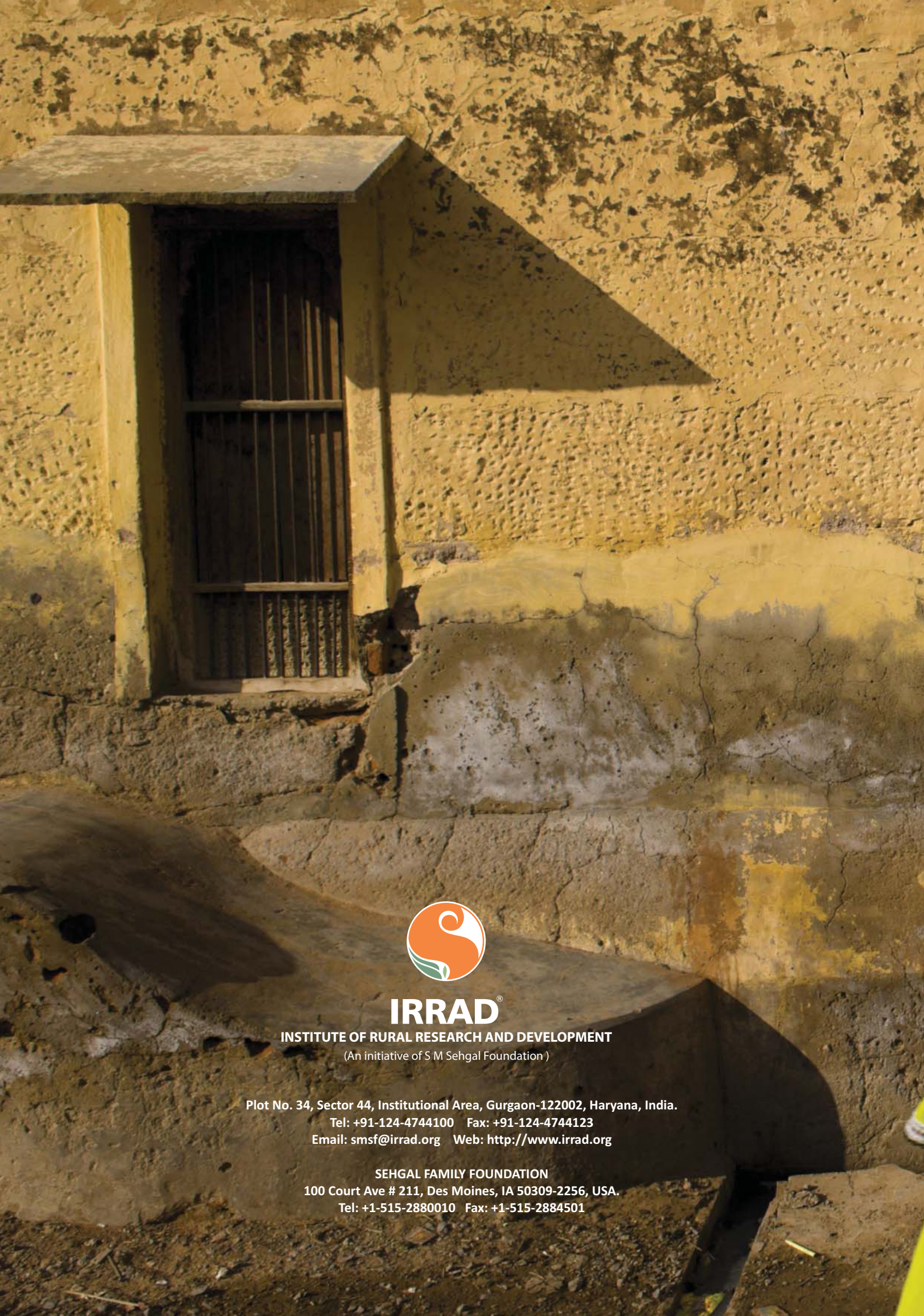
Governance Guides: Balram, Farooq, Jamaluddin, Mohd. Arif, Jakariya, Niyaz Mohd, Prem

INTERNS AND VOLUNTEERS

Participants	Duration	Project
From India		
Prateek Jain, Indraprastha University, Delhi	July 2010	Documentation of case studies on policy, governance and advocacy
Ambika Yadav, National Law University, Delhi	July 2010	Documentation of case studies on policy, governance and advocacy
Ranjana Prakash Menon, Central University of Hyderabad	Oct-Dec, 2010	Impact assessment of harvesting structures and water trade in Mewat
Joy Banerjee, Gujarat National Law University	Nov-Dec 2010	Defining the problems and villagers' awareness levels of government schemes
From Abroad		
Alison Palacios, Fulbright Scholar	Aug-Dec, 2010	Agriculture, gender, and food security in Mewat
Colton Marshall Kennedy, Iowa State University, USA	December 13-January 7, 2011	Development of IEC materials for the promotion of bio-sand filters
Jordyn Ardnt, St. Catherine University, Minnesota, USA	Jan 12-28, 2011	Analysis of IRRAD's life-skills intervention efforts
Michael Denklau, Iowa State University, USA	January 19-February 18, 2011	Expense processing and budget review of nonprofits
University of Iowa, USA, Winterim Course	December 27-January 15, 2011	Microfinance; agricultural diversification; rural development communications; solar street lights in villages
Kashmira and Sagar Chawla, Iowa State University, USA	May 31-July 9, 2010	An assessment of the nutritional status of children and knowledge of child nutrition among mothers in rural northern India.

EVENTS 2010-11

- International conference on “Good Rural Governance and Citizen Participation” held jointly with Jindal Global Law School, India, and University of Baltimore School of Law, USA.
- Roundtable discussion on “Issues of Governance and Corruption” held at IRRAD and featuring eminent panelists from the sector.
- Third “Good Governance Now” training initiated, with participation from 290 community members selected from 50 villages across all blocks of Mewat.
- Two phases of training of Panchayati Raj Institutions completed; a total of 1841 panchayat members and 231 sarpanches/gram sachivs trained.
- 324 members of village education committees and village health and sanitation committees in 13 villages trained.
- 56 newly elected Accredited Social Health Activist workers trained in collaboration with Health Department, Mewat.
- Phase-out training in Jyotisar and Bhore Saidan villages where Kriti Kendra, a registered society, was formed as an outcome of UNDP Endogenous Tourism Project in Kurukshetra. 15 members of Kriti Kendra society and panchayat trained to take complete ownership of assets created as part of the project.
- A joint training program on “Corporate Engagement with Community” organized with Global Compact Network, India. 17 participants from 11 different organizations participated.
- "Good Governance Now" model featured as part of two-day national conference organized by National Institute of Rural Development, Rajinder Nagar, Hyderabad.



IRRAD®

INSTITUTE OF RURAL RESEARCH AND DEVELOPMENT

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