

# **Harnessing People’s Potential: Experiences and Lessons from Pakistan**

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## **INTRODUCTION**

Highlighting the experiences of the National Rural Support Program (NRSP), this resource paper will concentrate on the efforts of NRSP in surmounting the perceived barriers of “Harnessing People’s Potential” to help themselves. Whereas the prime focus of this paper is on the practical issues encountered and catered for within the context of NRSP’s Programme Area (PA), the author makes an attempt to highlight other RSPs, more noticeably the Aga Khan Rural Support Programme (AKRSP)—working in the Northern Areas, and Sarhad Rural Support Cooperation (SRSC)—working in seven districts of the North Western Frontier Province (NWFP).

Firstly, we define the meaning of “Harnessing People’s Potential” as we perceive it in the context of NRSP’s approach. Followed by this, is a brief introduction to NRSP’s background, and the Programme Components (PC). The last two sections mainly deal with the impact of Programme Interventions, both short and long -term, the lessons learned from NRSP’s (and other RSPs) experience, and the future direction the Programme intends to take.

## **NRSP’s interpretation of “Harnessing People’s Potential”**

Because NRSP works with the rural households, we define “Harnessing People’s Potential” with an assumption that there is a tremendous willingness on the part of the rural poor to undertake many developmental activities that can enable them to come out of poverty. The role of a support organization like NRSP is to identify this potential and harness it for their collective benefit.

Hence “Harnessing People’s Potential” entails organization of the rural populace into a network of community level institutions, at the grassroots level, which enable them to plan, manage and implement their own development agendas.

It is these institutions that NRSP has been fostering and working with since its inception in 1991. Like any other rural support organization engaged in similar sort of activities, NRSP realises that meaningful improvements in the quality of standards of living of the rural population can only be brought about if there are institutions at the grassroots committed to sustainable development. Fulfilment of this notion requires integrated efforts both on the support institution, NRSP, as well as its primary partner in development— the grassroots level institutions; more on the latter than the former. The idea of involving communities, and more specifically these NRSP fostered institutions, as equitable partners in development

is not new by any means and takes its roots from the belief that there exists a tremendous potential in the rural people to undertake development initiatives to improve their quality of life.

### **Experiences of AKRSP and OPP**

In Pakistan, cognizant of the immense potential that the people possess and using this approach to harness this latent potential, the Orangi Pilot Project (OPP), which works in the urban slums of Orangi, Karachi, and AKRSP are two famous projects that have succeeded in yielding communities' interest in undertaking their own development, once they were organised into the community level institutions through the process of social mobilisation. The experiences of these projects also show that an investment in these institutions is required to supplement and consolidate the process of social mobilisation; in AKRSP, this was done through investment in the Physical Productive Infrastructure schemes (PPIs) through sharing of communities' and AKRSP resources, whereas in OPP it took the form of a technical advise through research and demonstration in establishing a sanitation system, firstly subsidised by OPP and later only through credit. These projects in Pakistan showed successfully that through a series of interactions with the communities it can be demonstrated to them that when they are organised, by pooling their resources, both human and capital, for any objective—there are not many things which cannot be achieved. This process is called social guidance, which, once shown by AKRSP and OPP to work, prompted the growth of many other support programmes, noticeable ones of which are the SRSC, which started its operations in 1989 in NWFP and later NRSP which was formed in 1991.

## **NATIONAL RURAL SUPPORT PROGRAMME**

### **Background to NRSP: Salient features of the Programme**

Having been convinced of the effectiveness of the approach of social guidance the then Prime Minister of Pakistan in 1991 requested Mr. Shoaib Sultan Khan (SSK), the first General Manager of AKRSP to initiate a programme which would cater to the needs of the rural masses on a nation-wide scale. Proposed by SSK was a non-governmental set-up, which would serve the purpose of apprising and involving people as effective players in their own development needs, for he believed that a programme under the government's control would lack the desired flexibility needed in accomplishment of this task. The government agreed to the proposed set-up, and awarded a sum of, as a first time grant to be followed by another instalment every six months for the next five years, Rs. 500 million for the creation of the National Rural Support Programme (NRSP), a nongovernment organisation, which was entrusted with the responsibility of fostering a country-wide network of community

organisations at the grassroots level, in the 16 proposed districts all over Pakistan, including Azad Jammu Kashmir (AJK). This highlighted the first salient feature of NRSP, wherein the Government of Pakistan, as a part of its own development strategy has entrusted a NGO to undertake development initiatives with the rural communities, using seed capital from Government funds, while maintaining full autonomy in its operations.

However, after the first instalment of Rs. 500 million which helped initiate operations in the eight districts of the proposed sixteen, future donations to NRSP were discontinued by the Government, due to political instability and resource constraints at the national level. As a result NRSP had to respond to this financial constraint and had to amend its strategy to remain operational. NRSP management decided to convert the grant money into an endowment and invested it in the government securities. Income generated by the endowment fund, thus, has become the primary source of NRSP's operating expenditure and has also responded to programme expansion needs in the past seven years. This strategic move has also relieved NRSP of any potential funding pressure which other RSPs of NRSP stature face and thus, defines the second salient feature of NRSP, the financial sustainability.

## **Program Philosophy and Objectives**

### *Program Philosophy*

The core assumption of NRSP's philosophy is that there exists a tremendous willingness amongst the people to help themselves. However, in order to harness people's potential mobilisation through a support organisation is required. The process through which this potential is realised is through the process of social guidance popularly known as social mobilisation, in which both NRSP and the community members are represented through a democratically elected representative—the community activist.

The idea behind social guidance is to find out what people really want to do themselves and also to assess whether whatever they want to do is possible to do in view of resource constraints. If the mutually identified activity is practicable then the support organization should assist the community in arranging desired resources and overcoming the constraints. Therefore, the guiding tenets of NRSP, following the principles of Social Guidance, as a support organisation are to:

- Organize communities into community organizations for social cohesion
- Develop a capital base at a local level through savings and credit,
- Upgrade human skills, and,
- Link communities with the government service delivery departments, donors, NGOs and the private sector.

The generic principles of NRSP's philosophy, unlike other RSPs, prevent it from following a preconceived package approach. The whole quest is to identify and support the community activities. The only reliable indicator to assess the community's willingness to achieve a particular end is the intensity of its previous endeavours to accomplish that desire.

### *Objective*

“To foster a countrywide network of community organizations at the grassroots level to enable them to plan manage and implement their own development plans.”

The methodology that NRSP employs to achieve this objective is covered in the next section.

### **NRSP's Programme Area**

NRSP is currently working in 23 districts of all of the four provinces of Pakistan, including AJK. Twelve Regional offices, having 45 field Units (FU), governed by the core management at the Head Office in Islamabad, form the operational set-up of the program.

## **PROGRAM COMPONENTS AND INPUTS**

### **Social Organization**

To build institutions representative of rural communities, NRSP employs the services of the cadre of skilled social organizers who have the ability to relate to people and communicate the message of development in the holistic perspective. These Social Organizers are the main frontline workers in NRSP with an objective of introducing NRSP to all the villages in the targeted regions as comprehensively as possible. The time needed to form COs depends entirely upon the responsiveness of the community to improve its quality of life. If the community is not willing to make efforts to improve its quality of life, no amount of motivation will lead the community to respond to NRSP's message.

### *Steps in CO Formation*

NRSP provides coverage on a union council-wise scale in the districts it plans to establish its operations. Only after the coverage is fully extended on a 100 percent scale in the first union council, will NRSP move to provide coverage to the next union council. Before NRSP SOs take the message to the communities i.e., before the program introduction, the baseline information regarding the selected locality is compiled and consolidated to provide an overview of the context of the targeted area. In this regard two exercises are undertaken—

development of a community development profile (CDP) and identification of the communities' prominent actors of development, the activists.

## **Community Development Profile (CDP)**

CDP requires the compilation of the following two documents.

### *Village profile*

Village Profile is a document prepared primarily in consultation with the community. With an objective of establishing benchmark data for subsequent evaluations and assessments, it also serves as the basis for identification of a community's needs and priorities both on a group and village scale. It encompasses information on: the prevalent socioeconomic and demographic trends, levels of education, health, infrastructure, natural resources; imports and exports of the village; and the communities' perception on the problems of utmost importance confronting them, and past efforts to overcome them. The preparation of village profile is a constant process, and is constantly updated during the CO meeting as a part of regular monitoring and evaluation exercise.

### *Micro plan, poverty profile or the portfolio of opportunities*

In addition to the Village Profile, the community is encouraged to prepare a development profile of each member household. This includes information on the resources, aspirations, gaps in utilization of resources and the type of support each member requires to increase her/his resource base. An assessment of this information provides the basis of creating an income-generation plan of each member. The level of micro-planning exercise is not restricted to individuals but also to groups and cluster-level priorities and needs. The group and cluster-level micro plans are developed to mobilize the collective resources of the entire village to emerge with practical solutions to the identified problems. Focus on both the individuals and the group level ensures that both subsets of community are incorporated in the wider frame of the development agenda and ensures both the interest among the community members to improve their well-being and stimulates them into thinking along the lines of long-term sustainable development for the ultimate objective to improve their quality of life.

### ***Identification of Activists***

NRSP believes that within the communities that it works with, there exists a driving force, in the form of an activist, which can define and guide the development vision of the community. Identification of this activist therefore, is a complex and a challenging issue for the field staff, for this activist is the key to shaping the development priorities and the needs of the community. Obviously this identification of this key player is not a one-time event and is subjected to attestation on a continuous basis. In most of the cases the social organisers either seek this activist at the time of development of the CDP or are approached

by the activists themselves to initiate the process of CO formation in their respective communities.

### *Programme Introduction*

It is here that the NRSP Social Organiser holds an event of Programme Introduction or the first dialogue, in which the community members are apprised of the objectives, approach and the principles of development which motivate NRSP. This dialogue leads to the surfacing of a set of community needs and concerns regarding its own development. A set of needs, on individual, group as well as on village levels, that the villagers believe should be addressed, clearly surfaces as a result of the dialogue. The NRSP team explains that under normal circumstances, the last two levels are dependent on the first— individual level, of which the main inhibiting problem is lack of resources, income being the foremost one.

The take-off point for support from NRSP is the threshold of community's capacity and willingness to organize and listen to the NRSP's message. The prerequisite for harnessing this willingness is to organize and start a savings programme to form the basis of capital formation at the local level. The gathering is advised to decide among themselves whether they want to organize and benefit from the NRSP support. In the event of a decision in favour of the organization, the community is told to contact NRSP field staff at the local office to formally initiate the process of forming a Community Organization (CO).

### *CO Formation*

The contact that the community makes with the field office staff through its activist after the first dialogue, serves as an attestation of community's willingness to organise. At a fixed date and time, NRSP staff revisits the specified location to reintroduce its program and to seek a mutual consent for NRSP. When all the gathered members agree upon organization, a formal Terms of Partnership (ToP) is signed between the community and NRSP, to clarify the role of each party in this institution building process.

At this point in time community members are asked to mutually identify and select their President and Manager among themselves who serve as key actors of the partnership between the CO.

### *Savings and Credit*

As stated earlier, that the experiences of OPP and AKRSP show that communities will only gather and organize themselves around economic (tangible) assets such as the Productive Physical Infrastructure (PPIs) in the case of AKRSP and provision of better sanitation facilities within the case of OPP's. This philosophy is completely understandable within the context of both of these programs— one working in an area where the pressing need was to create PPIs in the arid and ecologically challenged zone, and the other where the priority was on development of sanitation facilities. The major source of NRSP's finances is the income it receives from the investment in the endowment capital, which prevents the NRSP from making large-scale investments in creating tangible physical assets. However, what

NRSP has successfully been able to test and then implement is the provision of micro-credit, for income enhancement purposes, which has served the role of an economic asset for the Community Organisation. Another objective of the Savings and Credit Program is on building the local capital base of the communities. As mentioned earlier, NRSP is able to do this in the shape of savings that community members pool together, which is one of the primary tasks that grassroots institutions are encouraged to undertake.

The provision of credit plays an important role in the capital-starved economy of the rural households, especially in NRSP's Program Area. By catering to the needs of communities as per their micro-plan, both on an individual and on a group scale, credit has been able to provide small farmers with the ability to purchase new and improved inputs to increase their agricultural income, provide small entrepreneurs with the working capital they need to start or expand their businesses, promote female entrepreneurs through livestock credit, and enhance the productivity of agricultural land through small- scale infrastructure loans.

Through the savings program, CO are encouraged by the start internal lending for the purpose of

- Relieves them of NRSP credit
- Enhancement of capital base
- Discipline among themselves
- Reliance on their own resource hence leads to sustainable development

## **Human Resource Development (HRD)**

Through this intervention, NRSP aims to enhance the skills of the community members to enable them to utilize their human capital more effectively. A host of training programs ranging from management training of community based development initiatives to vocational and technical trainings in specific fields form the current portfolio of the HRD's interventions. In addition to this, a day or two long subject- specific workshops and the activist conferences—a forum where the community activists have a chance to meet fellow activists in addition to the local body representatives, are also offered to the community under HRD.

Cognizant of the fact that in order to build capacity at the community level, NRSP must make a parallel effort to train its staff for better implementation of the program activities, NRSP also has an active component of subject-specific staff training built into its current portfolio of training events.

## **Physical Infrastructure and Technology Development (PITD)**

The purpose of the PITD section in NRSP is to assist the communities to build and manage physical infrastructure such as the drinking water supply schemes, link roads, bridges, lining

of channels etc. To inculcate an element of ownership, the community is asked to contribute its human, physical and material resources towards the implementation cost of the project it identifies through its community and village level micro-plans. Once the identified infrastructure scheme is completed, the sole responsibility of its operations and maintenance rests with the community.

### **Natural Resource Management (NRM)**

To enhance their agricultural productivity and apprising community members about the sustainable use of natural resources, NRSP regularly holds trainings and arranges demonstration plots for community members. Other activities undertaken in the NRM sector include linking the communities with appropriate departments and bodies for obtaining better and improved varieties of seed, fruits, forest plants and better breed of livestock. To reduce losses, both of crops and livestock, attention is also paid towards imparting training to community members on improved crop, pest and plant management practices and curative and preventive measures for livestock treatment. Resources not permitting, most of these activities are undertaken by linking the communities directly with the government line department.

### **Social Sector Services (SSS)**

NRSP is a firm believer of the notion that investment in human development, especially in the sectors of education, primary health care and population planning are vital to a more effective, equitable and sustainable development at the grassroots level. In this regard the SSS tries to assist the CO members to establish and manage non-formal primary schools. Community members along with NRSP share the cost of implementation. However, NRSP provides teachers' training.

In the primary health sector, NRSP trains the CO members as health workers and fosters linkages between the CO members and the service delivery bodies of the government, private sector and the NGOs for primary health care and reproductive camps.

NRSP believes that all the social and economic interventions that the community members undertake as individuals or as a part of the CO will lead them towards realizing their untapped potential, which lies inert due to the lack of social guidance. The CO platform, serving as a basic unit for governance, enables them to realize this potential and a participatory, equitable, transparent and effective manner by involving them in planning, management and implementation of their own development initiatives. This once achieved qualifies a community to undertake development compliant with the standards of good governance with the assistance of a support mechanism, the NRSP.



## **CONCLUSION**

Institutional development at the grassroots through a demand responsive approach focussed on the household, group and village level activities yet drawing a clear line of roles and responsibilities is the success of NRSP's program. This model is replicable and expandable provided the approach and the message is very clear. The message is simple and talks about the fact that the program can only create partnerships in things people can do themselves but are unable to do because of constraints; both human and capital. It is this simple but very specific message which distinguishes NRSP's program from other rural development program which talk about inputs and targets rather than looking for the potential of the people.

# REPORT ON WORKSHOP DISCUSSIONS

## INAUGURAL AND TECHNICAL SESSION

A national workshop on the proposed study “ Pro-Poor Intervention Strategies in Irrigated Agriculture in Asia: Pakistan” was held at IWMI’s regional office for Pakistan and Central Asia, Lahore on 12 march 2001. The workshop was organized by IWMI. It was participated by about 30 professionals, representing a variety of organizations and institutions— including participants from University of Agriculture Faisalabad (UAF), Pakistan Agricultural Research Council (PARC), National Agricultural Research Council (NARC), Pakistan Institute of Development Economics (PIDE), Human development Center (HDC), National Rural Support Program (NRSP) and other government and nongovernment organizations. A list of participants is provided in the Appendix.

The workshop began with the recitation of the Holy Quran, and a brief welcome address by Dr. Hammond Murray-Rust, acting Director of the IWMI’s regional office. Dr Murray-rust explained the purpose of the workshop, and invited all the participants to contribute to the workshop. Dr. Waqar A. Jehangir of IWMI made a presentation on the proposed project, its objectives and scope of the activities. Dr Jehangir highlighted the issues to be considered during the discussion session. He elaborated on the different research questions, research hypothesis which gave a flavor to the participants in order to focus their discussion during the discussion session. He asked the participants to focus their discussions at the macro level, meso and micro levels (Farm level) issues, research questions and research hypothesis to focus on irrigation-related interventions that could be developed to help the poor in the project area.

Following the two opening presentations, the technical session began with presentations on a range of topics related to irrigation and poverty issues in Pakistan. Altogether 7 presentations were given in the morning session.

Dr. Rashid Bajwa of NRSP gave a presentation on NRSP’s approaches and activities for reducing poverty in Pakistan. He highlighted that poverty in Pakistan is increasing and that it can be witnessed in each of the village and town. He presented the NRSP strategies regarding formation of community beneficiary groups. He suggested that the best strategy to identify poor households in a community is to go in the community and ask the people to define poverty, and with situation analysis the community could be divided into five categories (well-to-do farms, better off farms, poor farms, very poor farm and destitute). He further suggested that poverty reduction efforts should be focused towards the last three categories. He emphasized on the role of policy and institutional interventions to reduce poverty in rural areas of Pakistan.

The next presentation was made by Dr. G. M. Arif from PIDE, a specialist on poverty issues in Pakistan. Dr. Arif began his presentation by explaining the poverty differences across ecological zones in the rural Pakistan. He elaborated on various methods of poverty measurement, and presented a review of past studies comparing results from five major

studies (by Amjad and Kamal, Ali and Tahir, Jafri, World Bank and Arif et al.) analyzing poverty trends for the periods: 1987-88, 1990-91, 1992-93, 1996-97 and 1998-99. According to four of the five studies, except the World Bank's poverty study, the poverty in Pakistan increased during 1987-88 to 1998-99. The World Bank study reveals the opposite trend in poverty, according to Dr Arif. Afterwards he shared the results of his study from 9 ecological zones of Pakistan. According to his study, the poverty incidence was greater in the cotton/wheat zone (in Punjab and Sindh) and low intensity (Thal)zone as compared to the rice/wheat Zone in the Punjab and rice-other zone in Sindh. He showed the relevance of this study with the regional/zonal availability and access to water. He indicated that as one moves from R-W to C-W zone or the low intensity zone the availability of irrigation water decreases, and that this is also reflected in terms of higher incidence of poverty. During the discussion session, participants raised questions and concerns on indicators used for measuring poverty. Dr. Arif raised an issue of incorporating irrigation into poverty indices, given that incidence of poverty is not only on farm households but also on non-farm households. Some of the poverty indices also take into consideration the education among the farm and non-farm household and if the farm households do not send their children to school due to more work on the farm resulting from high cultivation intensity in the irrigated areas, how to tackle such situations while measuring poverty through the use of poverty indices? The participants discussed this issue in detail and a consensus was reached that only those indicators should be used to measure poverty, which are water-sensitive, and it was also suggested to avoid those measures, which are water neutral.

In the third presentation Dr. Asghar Cheema highlighted the role of "Social Mobilization for Poverty Alleviation in the Irrigated Areas." He shared the results of his study in the small dams areas (Shahkot Dam and Mirwal Dam). Dr. Cheema suggested that by adopting the participatory approach and making the water user groups in both the areas it was possible to resolve disputes among the communities which in turn helped the communities to increase the command area on their farms. Dr. Cheema informed the workshop that ABAD and Small Dams organization also played an important role to improve the infrastructure and helped the farmer organizations in these small dam areas.

Next presentation was made by Mr. Faisal Shaheen of the Human Resource Development Center. Mr. Shaheen presented a paper, based on review of literature on irrigation and poverty. He divided his presentation into five parts (a) defining the poverty (b) causes of poverty (c) irrigation linkage with poverty, (d) human development and (e) policy considerations. While elaborating on the incidence of poverty in various regions of Pakistan, he classified the factors responsible for poverty into four categories (i) non-farm factors (ii) credit factors (iii) irrigation factors and (iv) gender factors. Among the irrigation factors he highlighted the farm vs. non-farm activities, livestock vs. agriculture, crop choices due to waterlogging and salinity conditions etc. He stressed that the representation of poor in the water user associations may help the poor communities to reduce the poverty in the rural areas. After discussing the pros and cons of irrigation he raised the question of identifying the areas for the project. What control measures should be used to differentiate between the intervention area and non-intervention areas? Regarding the policy considerations he suggested to look into the spill over effects of the irrigation and also how these spillovers have some impact on landless, nomads and tribesmen. He emphasized the need for incorporating the low technology methods in the interventions with respect to access to

irrigation water, which the poor can easily adopt. During the discussion session, the participants emphasized that poor farmers should be involved in farmer organizations in their day-to-day activities.

Dr. Sultan Ali Adil of UAF made a presentation on “Irrigation: A Weapon for Poverty Alleviation.” He elaborated on the role of various small-scale technologies (resource conservation tillage technology including zero tillage and bed and furrow methods) for poverty alleviation in irrigated agriculture. He talked about the scope of introducing the sprinkler and drip irrigation and augmenting irrigation supplies through individual/community tubewells in areas with scarce water supply. He raised questions on regarding determinants of productivity levels of the poor farmers at head, middle and tail reaches off irrigation systems. He also suggested to identify the issues related to the productivity variation among poor farms at various reaches of an irrigation system and identify the factors could be influenced by some irrigation-related interventions. He also pointed out that there are misconceptions about the provision of subsidies to farms in the irrigated areas. Finally, he suggested that the drainage-related interventions should also be given due consideration in this study.

Allah Baksh Sufi of IWASRI presented the paper on “Rural communities Development through Bio-Saline Agriculture.” He shared his experiences from the Bio-Saline Agriculture project, which IWASRI is implementing in Rechna Doab and Chaj Doab areas with financial assistance from UNDP and AUSAID. He mentioned that with community mobilization the project was able to form more than 40 Saline Land Users Groups (SLUGs) and about 44 Women Groups (WGs) among the poor households in the salt affected irrigated areas of the project. He informed the workshop that these groups are practicing the Bio-Saline Plantation, Compact and Agro-forestry and are also involved in raising the forest nursery for the project. He indicated that the project is emphasizing on raising of Eucalyptus trees on salt affected areas but farmers are facing problems in marketing Eucalyptus. He also mentioned that the project is providing training to the communities for bio-saline plantation.

Dr. Amjad Saqib made the final presentation on “Pro-Poor Interventions by PRSP.” He mentioned that PRSP is focusing on reducing poverty in rural areas. He indicated that incidence of poverty is higher among the landless than among the landholders. Describing PRSP’s strategy on poverty alleviation, he mentioned that PRSP’s strategy is a combination of social mobilization, capacity building, skill enhancement, through micro-finance services and through developing linkages between the poor and the line agencies. Among other pro-poor activities, he mentioned about one of their proposals about lining of the watercourses in the brackish zone of the Punjab.

## **BRAINSTORMING SESSIONS**

The brainstorming sessions began with general guidelines provided by IWMI. Participants were divided into three groups for discussions on issues at the irrigation system, distributary, watercourse/farm level levels. They were requested to discuss the major poverty related research issues in irrigated agriculture in Pakistan. The group discussions started before the

lunch break and continued until the afternoon tea break. Afterwards, the group representatives presented views of the groups.

## **GROUP 1**

### **Issues at Irrigation system level**

The group considered the irrigation system as at the canal command level (Area water board level). The following issues emerged from the group discussions.

- Water allocation—equity of irrigation water distribution across canals; scope for reallocation of water across inter/intra canal; scope for reallocation of water across perennial and nonperennial canal;; and reliability of irrigation water.
- Operation and maintenance of irrigation canals; and water losses
- Institutional/management issues—public/private.
- Issues related to water rights—clarity, regulation and implementation.
- Issues related to water charging.

### **Research Questions**

- What is the poverty situation in irrigated areas and what are the factors contributing to poverty ?
- What is the performance level of irrigation system, and what measures could improve the system performance?
- What is the scope for inter/intra canal reallocation of irrigation water and how it should be done?
- What are the implications of alternative irrigation management practices at the canal command level for the poor?
- What are the alternative water charging policies that may help improve O&M cost recovery without negatively affecting the poor.

### **Research Hypothesis**

- Positive correlation exists between equitable distribution of water and poverty alleviation.

- Positive correlation exists between system performance improvement and poverty alleviation (specially at the tail end of the system).
- Positive correlation exists between improved system management, good governance and poverty alleviation.
- Improved inter/intra canal water reallocations may lead to higher productivity and reduce the incidence of poverty

## **GROUP II**

### **Issues at Distributary/Watercourse level/Farmers' Organization level**

- Effectiveness and efficiency of water distribution across head, middle and tail of the distributary (farmers located at head take more water, tail enders suffer).
- Losses from seepage and evaporation.
- What is the relationship between over irrigation and waterlogging at the head reaches?
- Socioeconomic differences at head, middle and tail reaches of distributary.
- Has management transfer been effective in terms of equity, efficiency and reliability of water supplies at the distributary level?
- Irrigation reforms and their implications for farmers/communities at head middle and tail reaches of distributary (Can warabandi start from the tail end?).

### **Research Questions**

- What is the income structure of farming and non-farming communities across head, middle and tail reaches of a distributary?
- How are poor people distributed across various parts of a distributary?
- What is the size of landholdings across various reaches of a distributary?
- What is the profitability of agriculture across various reaches of a distributary?
- Has organization of the farmers taken place in a proper way?
- Is re-evaluation of guidelines (for forming farmer organizations) needed?

- If the guidelines are tilted towards the large owners how to make them pro-poor?
- What is the possibility to involve the poor in the reform process?
- How to analyze reforms process to suggest the pro-poor interventions?
- What are the drainage problems in the area?

## **GROUP III**

### **Issues at the Micro/Farm level**

- Access to surface water at farm level (availability, adequacy and reliability).
- Quality of resources (land- salinity problems; groundwater—fit/unfit for irrigation)
- Assessment of knowledge and skills and abilities of the poor (knowledge of water management practices; knowledge about the resource conservation technologies and access to information about new innovations, etc.)
- Issues related to farm resource management (issues related to the water use pattern, cropping pattern).
- Delivery mechanism (issues related to the functioning of public + private agencies; issues related to the provision of information and technologies; issues related to the compatibility of solutions with the farm situation; and issues related to marketing of inputs and outputs).
- Issues related to organization (issues in mobilization of poor farmers; and issues in organization of poor farmers)

### **Research Questions**

- Can access to irrigation water and its efficient use help alleviate poverty in irrigated farms?
- How improved farm resource management and services delivery mechanism can help to alleviate poverty?
- Can institutional arrangements at the grass root level help to reduce poverty?
- Can farmers' access to improved technological package help to reduce poverty?

## Research Hypothesis

- Access to water and its efficient use has a positive correlation with poverty alleviation.
- Poor farm resources management leads to increase poverty.
- Quality of farm land has a direct negative relationship with poverty.
- Quality of groundwater has a direct negative relationship with poverty.
- Equitable distribution of water across farms increases area under crop and reduces incidence of poverty.

The issues emerging from group presentations were discussed at some length. Dr. Murray-Rust cautioned in his concluding remarks that in order to evaluate the role of irrigation in poverty alleviation we should not choose the issues/interventions, which are water neutral. He also warned that the current way of implementing reforms in the country are not pro-poor in true sense. He quoted few examples from IWMI's research in Sindh. The discussion was concluded with a vote of thanks by Dr. Murray-Rust and Dr. Jehangir.