

Plan for Session 4.20: Capacity Development Strategies and Social Learning among Stakeholders for Sustainable Irrigation and Drainage Sector

Date: March 20, 2006

Duration: 16:45-18:45 So0Eurs)06

SESSION REPORT (4.20)

TITLE OF THE SESSION

Capacity Development Strategies and Social Learning among Stakeholders for Sustainable Irrigation and Drainage Sector

SESSION CONVENORS

1. UNESCO-IHE, Institute for Water Education, Delft, The Netherlands
2. International Programme for Technology and Research on Irrigation and Drainage (IPTRID), Rome
3. International Committee on Irrigation and Drainage (ICID), India
4. Water Research Commission (WRC), South Africa

CONVENERS GENERAL REMARKS ABOUT THE SESSION

This was a very pertinent and useful session to explore and highlight the importance of local knowledge and capacity in sustainable development of irrigation and drainage sector and beyond.

SYNOPSIS

All presenters in the session, maintaining a high respect for the poor local actors in the field, elaborated on several advantages of building up on their local knowledge, skills, and capabilities. The notion that people without an academic degree are incapable was repeatedly challenged. It was also clarified that it is not easy to work with people who have been neglected by the Governments in the past and have often lost faith in governmental institutions and plans. A metaphor of a broken bottle was used, where the bottle has to be repaired first, before it can contain something again. In the meantime, it was emphasized that one can cut his or her hands while working with the broken bottle.

All presenters gave a detailed account of what is needed to respectfully and effectively engage with local actors which gives rise to the issue of replicability:

- Which part of the intervention can be replicated without having to reinvent every time.
- Live with the people (L); Overlook weaknesses (O); Voice a message of hope (V); and Extend a helping hand (E); altogether stand for LOVE.

Perhaps taking LOVE seriously implies that it takes more (for instance in terms of time and funding) than an average politician would like to hear. However, examples can be

found where leaders have readily supplied funding for “packages” that would benefit hundreds of villages at the same time.

Regarding the water-rights, it was clarified that working at local level alone is often useless if the problems are not considered from a larger perspective. Many issues at local level need decisions at regional or national level to ever become effective.

Pertinent to the chain management, it was noted that it is useless to work on one single issue from the chain only. There will be parts of the chain that also need to be taken into account for the single-issue work ever to become successful. This has been realized by the major development NGOs such as CARE, Red Cross, Plan International, etc. and that explains why they are represented at the World Water Fora. Water is crucial to development and this is an element dearly missed in the MDGs, which is a task and challenge for all of us.

LOCAL ACTIONS PRESENTED DURING THE SESSION

1. Educational Program for School Children about Sustainable Management of water resources in Chile

- By Eng. Adrian LILLO, Water Center for Arid Zones of Latin America and the Caribbean (CAZALAC, Chile) and Chilean Directorate of Waters

2. Capacity Development for Food Security in Nicaragua

- By Sylvanie JARDINET, Accion Contra el Hambre, Managua, Nicaragua (NGO)

3. Revitalization of Smallholder Rainfed and Irrigated Agriculture in South Africa

- By Mr. Marius BOTHA, Water Research Commission, South Africa

LESSONS LEARNED

1. Enhancing knowledge and capacity development remains one of the most critical challenges in water resource management. More so, at local level, where capacity development and social learning strategies are required to advance a collaborative framework towards finding appropriate solutions to address livelihood issues.
2. Several local actions, as demonstrated by the case studies, can be very valuable to address sustainability issues.
3. Capacity development actions need not to be small components of larger projects; they can and should be projects by themselves.
4. All capacity development projects should have implicit or explicit five stages of a cycle: baseline survey to determine where we are; capacity needs assessment which determines “gap”; formulation of strategy to solve problem or bridge gap; project implementation as such, monitoring and evaluation which feeds back into needs; and restarting the cycle.

5. The challenge in capacity development projects is the “scaling up” and “reaching out”. The process should be participatory in all 5 stages above, from “bottom up”.
6. Capacity development actions represent short, medium and long-term investments. There is a need to document “impacts” so that beneficiaries are aware and willing to continue their participation.

KEY MESSAGES

1. *Capacity development actions in the water sector need to be scaled up* (key message No.5 which emerged from the regional meetings and the analysis for this cross-cutting perspective) - Many novel and innovative approaches to water resource management have been developed (including the development of learning material). Numerous case studies have been implemented or demonstrated. Frequently lacking is the “scaling-up” and replication of these innovative approaches, especially the uptake of such approaches into water governance systems of countries. Policy actions are required to replicate the developed tools and methods into common practice.

2. *Continued operation and implementation of proposed strategies (and follow-up in general)* - Most implementation programmes are time-bound that limit the continued involvement of the implementing agency beyond a certain period. Limited support is normally available after the “implementation” phase. Resources are required to support effective transfer of capacity and expertise required for sustained performance of the resource systems to communities or government agencies at local level.

3. Social learning is an integral component of capacity development. Related activities need to be holistic, integrated, and bottom-up rather than top-down. They should encompass technical, social-economical, and institutional issues.

4. Capacity development activities need to provide clear “incentives” that would motivate stakeholders to participate, with due consideration to the individual, institutions and the surrounding (enabling) environment

ORIENTATION FOR ACTIONS

1. It is necessary to establish broad partnerships among stakeholders to reach out and involve as many people as possible in the capacity development process.
2. The process should be repetitive, iterative, and monitored continually to provide feedback for future planning.
3. Capacity development activities should not be a “free good”. In contrast, there should be some investments from participants’ side as well.

LOCAL ACTION REPORT

TITLE OF LOCAL ACTION

Community Participation in Water Resources management in Endhorreic Basins, ID LA0026.

Framework theme: Water Management for Food and Environment

Cross/cutting perspective: Capacity-building and Social Learning: Targeting, Monitoring and Implementation Assessment

SESSION

Capacity development strategies and social learning among stakeholders for a sustainable irrigation and drainage sector. Session 4.20

Convener: UNESCO – IHE / IPTRID/ ICID / WRC

Facilitator/Chairperson: Dr. Krishna Prasad (UNESCO – IHE)

SYNOPSIS:

The northern Chile is highly arid zone. Inside this area, there are many indigenous communities with water and poverty problems. The water is very important for subsistence of these people.

This paper describes a participative plan for indigenous communities in the groundwater management in this zone to address the above problems.

Under this initiative, the following were considered:

- Development and application of a groundwater management model within the boundary of salar wetlands to ensure environmental and social sustenance of the wetlands (particularly for the interest of the indigenous communities).
- Management, monitoring and control plan for the groundwater resources in these areas; and
- Workshops on capacity building activities for monitoring of controlled ground water use and related measurements (involving leaders of indigenous communities)

LESSON LEARNED

1. The indigenous communities from northern Chile have capacity to participate in management, monitoring and control plan for the groundwater resources in these areas.
2. The inclusion of local communities in Integrated Water Resources Management requires from public and private organizations: capacitating and support, information sharing, and dissemination of project contents related to indigenous areas.
3. For the communities in the arid zones, the water resources, often developed by local people themselves, are indispensable for the subsistence agriculture and for domestic use.
4. Poor people are reliant on natural resources for their livelihoods as they have less access to economic, social or physical resources.
5. Evidence shows that involving both men and women in the management of water not only makes the water distribution more equitable, but also makes the activity more efficient and effective in terms of costs and impact.

KEY MESSAGES

1. Water is source of life and development, and is deeply related with different issues pertinent to economic, social, cultural and environmental themes. In addition, it also involves the issue of inter-sectoral coordination of the governmental agencies. Consequently, the process of **Integrated Water Resources Management** involves multiplicity of social and technical activities which are complementary, cross-sectoral, and linked to various other tasks of a community, a country and/or a region of the world.
2. There is ever increasing pressure on water resources throughout the world, which also encompasses climatic and anthropogenic changes. This demands a multidisciplinary approach, which can address various scientific and social problems arising in the water resources in integrated and dynamic manner. For that reason, emphasis must be given on the interactions between constituent elements in order to enable the communities, specialists, and water professionals to better understand the challenge at hand.
3. With respect to the social approach of the water management, it must be realized that there cannot be a general and blanket approach as societies are diverse. It is exactly through the recognition of that diversity; social, cultural, environmental and economic sustainability of the **Water Resources Management** can be achievable.

4. The experience has shown for long that stakeholder participation enables local people with enormous local and site-specific knowledge to get productively engaged into various projects, programs and actions of the IWRM, improving the levels of desirable impacts, effectiveness and sustainability. The gains are further fostered by continuous refinement of the participatory water management process based on experiences gained over time.
5. Capacity building of communities on hydraulic and legal matters is crucial for preparing effective IWRM plans that are based on participation of local communities.
6. The communities in rural areas need continued support, monitoring, and evaluation from the government and private organizations, and such activities must be included in every stage of water resources projects.
7. The design of a participative plan for the monitoring and control of groundwater resources in zones of local communities involved extensive legal, technical, and social analyses and exercises. Communities also participated in several of the related workshops including on hydrological aspects, in about each and every stage, right from the study stage. Also the final plan was validated by the communities themselves. Such efforts enable the communities to influence the proposed undertakings in a way that is best beneficial for them.
8. Without the collective participation of the local communities it is not possible to establish an action of this type, because it essentially determines activities of the technicians and government officials as much as the level of obtained results. Participation of local communities, despite being instigated by the local communities, needs to be supported by line agencies to ensure sustainability of the benefit stream.

LOCAL ACTION REPORT

TITLE OF LOCAL ACTION

Capacity Development for Food Security in Nicaragua, ID LA1309.

Framework theme: Water Management for Food and Environment

Cross/cutting perspective: Capacity-building and Social Learning: Targeting, Monitoring and Implementation Assessment

SESSION

Capacity development strategies and social learning among stakeholders for a sustainable irrigation and drainage sector. Session 4.20

Convener: UNESCO – IHE / IPTRID/ ICID / WRC

Facilitator/Chairperson: Dr. Krishna Prasad (UNESCO – IHE)

SYNOPSIS:

"In Nicaragua, the 2001 Livelihoods Survey estimates that 45.8% of the population lives below the poverty line and that 15.1% is extremely poor. Madriz, with a population of approximately 134,000 inhabitants, is a province with a climate that is adverse to agriculture, with scarce rainfall, and prone to suffering prolonged droughts. Its topography is craggy, marked by steep slopes, and only some 7% of the land is covered by forest. The majority of the population living in the province relies on agriculture as its main source of income; more than 89% of the usable land in Madriz territory is dedicated to agriculture. The drop in international prices for agricultural products, especially coffee, has only made matters worse. Based on this context, the following structural elements can be listed that add to the crisis in Madriz province:

- An unequal access for farmers to the assets necessary for production
- Vulnerable production systems with an undiversified capitalization base that rests on virtually single-crop farming of basic grains and depends on cash for the sale of surplus production once the basic subsistence level has been obtained.
- Development policies badly directed, the majority of small and medium scale producers are excluded from the national policies.
- The deterioration of international prices of food and with it the prices to the producers: As a result of the reduction of the agricultural prices, the low monetary income is insufficient to completely maintain and to renew the equipment and inputs and the productive capacity of the farmer is much more affected.

Since 2002, Action Against Hunger (ACH Spanish acronym) has been implementing a strategy of intervention with to reduce poverty. The project is based on agropecuarian diversification and alternative solutions to improve poor farmer's incomes and to reduce food insecurity. The majority of producers cultivate a main production of coffee and basic grains such as maize and beans; introducing the cultivation of vegetables allows a diet diversification and consequently the reduction of food insecurity. Some difficulties were encountered at the technical and design of the irrigation system level, which have had direct repercussions on the sustainability of the irrigation system. At the technical level, difficulties reside in the availability of a water source in the village and the ownership of that source. Designs of irrigation system have been adapted consequently in each context and especially organization between beneficiaries and the owner of the water source.

LESSON LEARNED

The interventions made mainly contained training in irrigation systems & market gardening. However, farmers didn't see organizational support as a capacity building need within their community. Agricultural diversification and increase the productivity through better access to water was the main thrust. Though the case is not innovative, it allows reviewing the errors made in the small irrigation projects, especially regarding capacity building. Some main issues were:

- Unequal access for farmers to the assets and water
- Vulnerable production systems
- Development policies badly directed; small scale producers excluded from the national policies

Main constraints included:

- Deterioration of international prices of food
- Unavailability of a water source within the village
- Weakness in the organization of the groups
- Low academic level of farmers

In addition, the diversification activities with irrigation systems were effective but still limited in terms of food security.

KEY MESSAGES

Actions are often based on technical aspects or interventions. The actions should be based on a system approach, integrating all the production systems with historical and socio economic aspects, going from the production to marketing.

LOCAL ACTION REPORT

TITLE OF LOCAL ACTION

Revitalisation of Smallholder Rainfed and Irrigated Agriculture in South Africa, ID LA1363.

Framework theme: Water Management for Food and Environment

Cross/cutting perspective: Capacity-building and Social Learning: Targeting, Monitoring and Implementation Assessment

SESSION

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Facilitator/Chairperson: Dr. Krishna Prasad (UNESCO – IHE)

SYNOPSIS:

The Limpopo Province is one of the nine provinces of the Republic of South Africa and is situated in the North Eastern corner of the country. Limpopo is the link between South Africa and countries further a-field in sub-Saharan Africa. On its Southern flank, the province is the most industrious metropolis on the continent. Thus, the province is placed at the centre of the vortex of developing regional, national and international markets.

Limpopo Province is one of the driest and poorest provinces in South Africa, with 70 percent of the population living below the poverty line. The province also has the lowest human development index of 0.43 compared to the national average of 0.69. The unemployment rate is estimated at 46 percent. The previous (apartheid) government established 171 smallholder irrigation schemes in the province with the objective of improving the livelihood of smallholder farmers and their families. The value of assets in the irrigation schemes is estimated at USD 571 million. These schemes were administered in a top-down manner with emphasis on food self-sufficiency. However, most of these irrigation schemes are not performing optimally. As a result, the original objective of generating employment and reducing rural poverty through the establishment of these schemes has not been achieved in many instances.

Through a Water Research Commission (WRC) research project, guidelines developed by the WRC were tested as a means of increasing the accessibility of meaningful

training and capacity building where small-scale irrigation forms part of integrated sustainable rural development initiatives.

The research included the development of training material and training of Farmer Trainers. Further it tested how training can be provided through the two Agricultural Colleges in the Limpopo Province. The Limpopo Province Department of Agriculture (LDA) now has several years' experience with the revitalization and rehabilitation of smallholder irrigation schemes. The LDA's assessment of the impact of their actions to date has convinced them of the value their training and capacity building activities have had on improving livelihoods. However, farmers requested that the training needs must be broadened from a basic agricultural production focus to also cover business and marketing skills and water management training to improve equitable sharing of water amongst users.

In view of this, LDA requested the International Water Management Institute (IWMI) South Africa to broaden smallholder irrigation farmers' access to training and capacity building. Training and capacity building have been ongoing in the province for the past few years and is now extended throughout the province within the current expanded programme for Revitalization of Smallholder Irrigation Schemes (RESIS). This process is viewed as a pilot exercise for national expansion, aligning to the development of the SA government's National Strategy for Education and Training for Agriculture and Rural Development.

This is action research - capacity building project, aimed at transferring practical skills to previously disadvantaged individuals, institutions and communities targeted resource-poor farmers, youth and women's groups for enhanced skills in agricultural production, water use and management, business and entrepreneurial skills.

LESSON LEARNED

Guidelines developed by the WRC has been a promising means for increasing the accessibility of meaningful training and capacity building where small-scale irrigation forms part of integrated sustainable rural development initiatives. The project achievements include:

- Establishment of provincial policy and strategies on farmer training
- Development of inventory of agricultural training providers
- Development of Farmer Trainer & qualifications, training & learning material
- Institutionalization of farmer training in Agricultural Colleges
- Support of existing & establishment of new training providers
- Training of smallholder farmers, whereas before they trained extension staff only

The training approach was based on the use of stories & anecdotes which farmers can relate to. Most of the farmer training in the Limpopo RESIS programme was offered on-

farm. The training not only benefited the farmers economically but improved their self-confidence

Smallholder farmers have limited access to training. Furthermore, formally available training is focused almost exclusively on scaled-down versions of high-cost, high-risk commercial production practices, which are especially inappropriate to food insecure households. Further, there is a lack of practical experience in many Trainers in South Africa due to the previous inequalities under the apartheid government.

KEY MESSAGES

1. It is important that there is a realization among all involved that there is a direct need within the “development” context for a much more people-oriented, humanistic focus. This is achieved by improving peoples self esteem and self confidence.
2. This research project could assist in the implementation of similar programmes, particularly in support of initiatives under the Integrated Sustainable Rural Development Programme.