

The Value of Participation in Development - Relevance to Soil and Water Conservation -

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Abstract

Participation of stakeholders in the design, operation, and maintenance of infrastructure projects is now, more or less, accepted in international development circles. However, this is a fairly recent phenomenon. Experience of the Asian Development Bank (ADB) has shown that active participation and involvement of farmers and other stakeholders, including local government officials and nongovernment organizations, has been critical to the success, cost-effectiveness, and sustainability of projects, often to the benefit of the rural poor. Projects employing participatory approaches have higher rates of success. This paper presents evidence that active participation by stakeholders is infinitely preferable to implementing projects without people's participation. Numerous examples are provided from irrigated and rainfed agriculture in Asia using post-evaluation reports from ADB and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) that demonstrate the benefits of active participation.

Participation tends to function more effectively when there is a strong and clear partnership between stakeholders and the government. The benefits of participation include increased productivity and income, reduced costs of infrastructure maintenance, reduced conflicts, and increased involvement and employment of the poor. The costs of participation include time and money, particularly to the governments and the user-beneficiaries. Typically, more time must be allocated for project identification, preparation and design, so that the participatory processes can be understood and accepted at the community level. Community organizations may need to be established or strengthened.

In the rainfed areas of Asia, characterized by low rainfall, low production soils, and poor infrastructure, implementation of an ambitious participatory land and water management approach in India, PRC, Thailand and Viet Nam by ADB and ICRISAT has led to productivity increases, poverty reduction, reduced soil erosion, and improved soil and water conservation and quality.

Introduction

Participation of stakeholders in the design, operation, and maintenance of infrastructure projects is now, more or less, accepted in international development circles. However, this is a fairly recent phenomenon. Even as recent as ten years ago, many, if not most, engineers and civil servants viewed participation and the involvement of stakeholders as a nuisance and unneeded. My own experience in working for the past 20 years or so on development projects in Asia, including the water and irrigation sectors in Pakistan, Indonesia, and Thailand, has led me to believe that active participation and involvement of farmers and other stakeholders, including local government officials and nongovernment organizations (ngos), has been critical to the success, cost-effectiveness, and sustainability of projects, often to the benefit of the rural poor.

Unfortunately, participation strategies have not always been actively pursued. Examples can be drawn from the agriculture, water and irrigation sectors in Asia. In several Asian countries, we have seen that in order to meet food self-sufficiency goals, governments have invested tremendous resources into irrigation infrastructure. In the rush to improve irrigation efficiencies and delivery, consultation with local water user associations (wuas) and

local experts was largely ignored and local institutions bypassed. Civil works construction and operation and maintenance (O&M) were the responsibilities of the government. However, after food autarky, and as the infrastructure became older and O&M costs increased, governments sought to increase user fees from farmers. This was often met with opposition and there have been instances of 'tax revolt', as users resisted paying more for water, especially when the control over the sources of water remained with government. At the same time, many irrigation departments faced declining budgets for O&M and the demands for on the limited government budget from the non-agricultural sectors increased. To help overcome this dilemma, governments and international donors increasingly pursued policies to 'turn over' irrigation infrastructure to farmers and rural households, transferring ownership and control to wuas and other local institutions. These programs have met with mixed results. In some cases, farmers have embraced the reforms and with the continued support of government, have largely taken over the control and O&M of the irrigation structures. In other cases, farmers have resisted turnover schemes mainly because of the high costs of O&M involved.

From this example from the irrigation sector, it can be seen that participation tends to function more effectively when there is a strong and clear partnership between stakeholders and the government. In this context, we can distinguish between six general types of partnership, ranging from less participatory to most participatory:

- Passive partnership: institutions are told unilaterally what will happen
- Partnership for material rewards: institutions join with government to receive funds
- Partnership by contribution: institutions contribute human resources, capital, etc.
- Functional partnership: institutions form to meet predetermined objectives but not usually involved in major decisions
- Interactive partnership: like a joint venture for analysis, planning, implementation, and capacity building
- Self motivated partnership: institutions take the initiative on their own and they are in full control

Some Findings from ADB

Based on the ex-post evaluations of numerous projects throughout Asia, the Asian Development Bank (ADB) consensus is that participation is a vital ingredient for development success. Projects employing participatory approaches have higher rates of success. The benefits include (a) improved effectiveness, with increased likelihood of appropriate project design and commitment to achieving objectives, (b) improved sustainability, with the commitment of stakeholders to sustain the project after completion, (c) strengthened local ownership, with fewer issues of whom is responsible for improvements and O&M and (d) reduced risk of failure.

It should be noted that there are major costs involved in the participatory process in terms of time and money. From the users' point of view, there will be increased costs in the form of user fees (cost-recovery). Active participation means time spent away from work and the costs of meetings and training in the new methodologies (in the form of transportation, lodging, and food), and monitoring and evaluation as the responsibilities of local groups and institutions increase over time. There can also be some social costs and destabilizing forces involved if, for example, it is found that women are reluctant to speak in front of men, if the uneducated feel cowed by the presence of educated people, or if the poor are reluctant to openly criticize local authorities. From the governments' point of view, there will be a slowdown in work. Strict timetables will have to be adjusted. More time and money must be spent in learning the new processes, involving both contractors and the civil society as facilitators to involve all stakeholders in the project, and the capacity building of local

institutions and leaders. There can also be losses in income that were previously derived from rent-seeking activities.

In Pakistan, large and powerful landlords captured the benefits of a rainfed agricultural project¹. Smallholders and the landless poor were bypassed by the project that focused on technology improvement. In the Philippines, a similar type of project² was designed without beneficiary participation and the results have been disappointing in terms of impact and sustainability.

In a Special Evaluation Study³, ADB found that improved ownership and responsibility by the relevant stakeholders and beneficiaries resulted in higher productivity and reduced O&M, reduced conflicts, and increased participation of the poor. To help ensure these benefits, more supportive policy and legal environments are pre-conditions for effective participation. Also, stakeholder analysis needs to be more rigorous, and more time must be allocated for project identification, preparation and design, so that the participatory processes can be understood and accepted at the community level. Community organizations may need to be established or strengthened.

In another Special Evaluation Study⁴, no strong evidence was found that the participatory approach has empowered end users in resource control or decision-making, or has improved ownership of project facilities. Given the value of local knowledge, a more rigorous participatory approach at the design stage is needed. In the few cases where beneficiaries were engaged to help monitor construction, there was no empowerment to stop or change civil works or contractors. There were major problems of poor maintenance of project facilities due to (a) local government budget constraints and (b) reluctance of beneficiaries to pay. This evaluation study points out the serious pitfalls that can hinder project success, despite initial efforts to involve beneficiaries.

ADB has been financing a participatory irrigation project in the Philippines since 2000 that involves farmers in the management and transfer of irrigation infrastructure⁵. Preliminary results indicate that the greater the levels of participation in the transfer and management process, the greater the benefits as perceived by the group members and government organizations involved. Strengthened water user groups have helped ensure (a) more equal access to irrigation water, (b) increased crop yields and farm incomes, (c) enhanced community spirit and cooperation among farmers and (d) increased farm employment.

Rainfed Watersheds in Asia

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) successfully implemented the ADB-financed regional technical assistance project 6067⁶.

1 Second Barani Area Development Project, for \$25 million, approved in March 1990

2 Second Palawan Integrated Area Development Project - \$58 Million, December 1990

3 Participatory Approaches in Forest and Water Resource Operations: Lao PDR-Community Managed Irrigation

Sector Project, for \$14.7 million, approved November 1996; Lao PDR-Decentralized Irrigation Development and Management Project, for \$15.5 million, approved November 2000; Sri Lanka-Participatory Forestry Project, for \$10.5 million, approved November 1992; Sri Lanka-Forest Resources Management Sector Project, for \$27 million, approved June 2000; Viet Nam-Irrigation and Flood Protection Rehabilitation Project, for \$76.5 million, approved October 1993; and Viet Nam-Forestry Sector project, for \$33 million, approved March 1997

4 New Approaches in Rural Development Projects: Philippines- Agrarian Reform Community Project, for \$93.2 million, approved December 1998, Philippines-Cordillera Highland Agricultural Resource Management Project, for \$19 million, approved January 1996, PRC-Fujian Soil Conservation and Rural Development Project, for \$65 million, approved September 1995, Bangladesh-Small-Scale Water Resource Development Sector Project, for \$32 million, approved September 1995, Nepal-Third Livestock Development Project, for \$18.3 million, approved September 1996, and Kyrgyz-Rural Financial Institutions Project, for \$12.5 million, approved August 1997

5 Loan no. 1668-PHI: Southern Philippines Irrigation Sector Project, 2000-2006, for \$102 million

6 Regional Technical Assistance (RETA) 6067: Participatory Watershed Management for Reducing Poverty and Land Degradation in the Semi-Arid Tropics, 1999-2002, for \$1.25 million

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RETA 6067 involved the development of 25 nucleus rainfed watersheds in four Asian countries: India, Thailand, PRC and Viet Nam. Of total arable lands worldwide, 80% are rainfed, contributing 60% of the world's cereal output. About 70% of the developing countries' population is dependent to some extent on agriculture and 560 million people live in the semi-arid tropics. These areas are characterized by low rainfall, low production soils, and poor infrastructure. In India, 67% of the total cropped area is rainfed without assured and continuous irrigation.

An internal assessment has concluded that (a) the participatory land and water management approach led to productivity increases and poverty reduction, (b) integrated soil, water, nutrient, and pest management raised the water retention capacity of the soils in rainfed systems and increased crop yields and farmer incomes, (c) applied, on-farm research must complement station research and (d) capacity building of farmer groups and national agricultural research systems (NARS) is critical for sustainable watershed improvements. Average yields of rainfed crops (e.g., soybeans and legumes) increased by about 280%. Cropping intensity increased 13-25%. Ground cover improved 18-25%. Soil erosion was reduced by 33%. Rainwater use efficiency increased from 33% to 67%. Land management and nitrogen fixation technologies were widely adapted. Participatory strategy involved farmer groups, NARS, extension services, ngos, and the private sector.

As a result of this project, the Government of India approved the Andhra Pradesh Rural Livelihood Program to expand the benefits to 150 watersheds. Preliminary results⁷ indicate that the success of watershed management largely depends on community participation. The participatory approach for watershed development involves (a) government authorities involvement from the beginning, (b) formation and capacity building of institutions at all levels for research and implementation and (c) refinement of appropriate technologies by farmers. Farmers also are instrumental in collectively identifying and prioritizing problems, planning, and implementation with a consortium of international, national, and ngos. Cost sharing such that users pay is vital to ensure full participation and for sustainability of the institutions involved. Community-based interventions included storage check dams, gully control structures (gully plugs), gabion structures, field bunds, diversion bunds, water storage pits, and percolation pits for groundwater recharge. Farmer-based interventions included contour planting, broad bed and furrow planting, fertilizer applications, weeding operations, and field bunds.

Benefits included (a) reduction in water runoff, including 45% in the high rainfall year (2000) and 29% in the low rainfall year (2001), (b) reduction in soil loss, one-third loss in 2001, (c) improvement in groundwater recharge and well yields, up to 40%, particularly for wells located near check dams, (d) increase in vegetative cover of 55% between 1996 and 2000, (e) higher crop yields and production, including 200-250% in maize, 300% in sorghum, 400% for maize intercropped with pigeon pea, and 500% for sorghum intercropped with pigeon pea and (f) increased net income of 45% for cereals in totally rainfed conditions and 100% in rainfed with supplemental groundwater irrigation. As a result of the project, average per capita income increased 24% including both wages and non-farm activities. Poverty also decreased significantly. After four years of the project, there was a significant shift in the cropping patterns with cotton decreasing 60%, and maize and pigeon pea increasing 60%. Farmers that adopted broad bed and furrow planting obtained 100% higher yields per hectare in 1999-2001 despite variations in rainfall (30% higher and lower than normal).

7 Wani, S.P., H.P. Singh, T.K. Sreedevi, P. Pathak, T.J. Rego, B. Shiferaw, and S.R. Iyer, Case Study 7: Farmer Participatory Integrated Watershed Management, Adarsha Watershed, Kothapally, India, ICRISAT, January 2004.

People's participation in watershed management programs has reduced erosion and increased crop productivity⁸. Benefits were highest in those watersheds where people's participation was high. Conversely, the Government of India has found that lack of people's participation is often responsible for the failure of watershed development programs. Where community mobilization was inadequate, people were less willing to cooperate with each other and resolve conflicts. It was found that four conditions were instrumental in increasing participation: (a) awareness of the benefits of collective action to conserve and manage natural resources, (b) prioritizing high demand activities, (c) people's empowerment in planning, implementing, and managing programs and (d) sufficient economic benefits for individual participation.

Summary and Conclusions

This paper has argued that active participation by stakeholders is infinitely preferable to implementing projects without people's participation. Several examples have been provided from irrigated and rainfed agriculture in Asia from the experiences of the Asian Development Bank that demonstrate the benefits from active participation. However, efforts are needed to expand these benefits to more and more projects in Asia, and to sustain them in the longer term. ADB is taking steps to enhance the effectiveness of people's participation at all stages of the project cycle, from planning to implementation and evaluation, and in medium-term programming. Other international funding and government agencies need to also ensure that participation is given more preeminence in development planning and implementation.

References

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⁸ P.K. Joshi, V. Pangare, B. Shiferaw, S.P. Wani, J. Bouma and C. Scott. Socioeconomic and Policy Research on Watershed Management in India: Synthesis of Past Experiences and Needs for Future Research, ICRISAT, 2004