

Responsibility in processes. Stakeholders mobilize for Integrated Water Resources Management in Red River Basin, Vietnam

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SUMMARY

This study is based on the Second Red River Basin Sector Project. It has concerned Integrated Water Resources Management (IWRM) in Red River Basin, northern Vietnam and involved crosscutting issues of institutional capacity building, public awareness, poverty alleviation, gender and stakeholder participation.

The stakeholder involvement is highlighted in the study with two processes combined; province levels upwards initially and then province level downwards into local community involvement. Firstly stakeholder involvement process successfully set up a procedure for consensus building in 25 provincial workshops then clustering into five sub-basin workshops and finally stakeholder interaction with national level administration in order to identify priorities and possible solutions of IWRM in the whole basin. The concluded findings on priority issues were irrigation agriculture, water supply & sanitation, flood control and environment/biodiversity. Secondly stakeholders have been deeply involved in a process of water sector planning in the priority water sub-sectors from the first stakeholder process. This process developed and successfully

implemented was beyond expectation by most, given the scale. But the fact is that the facilitation process allowed stakeholders and their respective experience to interact in a transparent way, by building capacity and awareness, and by setting up a rigid interaction process with decisions taken stepwise. This method proved very instrumental to participants since it allowed even reaching consensus also in highly resource competitive situations on strict logical basis. Workshops, seminars, SWOT analyses, and deep interviews were prime elements in the facilitation methodology.

In this stakeholder process, the case studies were carried out stepwise within two selected provinces into smaller sub-basins until finally reaching commune and village levels. Throughout, active stakeholder involvement took place in three main streams aiming at informed decision-making over IWRM priorities. The stakeholder categories were the (1) local authorities and (2) stakeholders at province, district and commune/village levels being the decision-makers and utilizing (3) technical experts providing specialized assessments. The decision-makers, formed by (1) and (2), have succeeded in combining these perspectives on water resource management, thus taking responsibility for an IWRM toward poverty reduction. Local authorities and water users thereby set up two informed decision-making processes, drawing on technical experts' specialized assessments. The facilitation process in the case study project has lessons on institutional and local community involvement and learning through carefully structured stakeholder interaction: (i) Stakeholder interaction processes on IWRM are essential for achievements in terms of shifting responsibility for project formulation and implementation towards the water users; (ii) The developed and tested participatory invest-

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² The project is financed over a loan from the Asian Development Bank (ADB), with parallel co-financing from the Agence Française de Développement (AFD) and a grant from the Netherlands' Government (GON). Executing Agency (EA) for the project are the Ministry of Agriculture and Rural Development (MARD) and the Ministry of Natural Resources and Environment (MoNRE)

ment planning process has the potential of scaling up into broad applications; (iii) Subprojects can be formulated in this way at pre-feasibility level in two selected sub-basins; (iv) Prioritized lists of potential sub-projects relevant to technical feasibility and poverty reduction priority can be set up; and (v) The selection process must involve awareness raising and capacity building.

Key words: IWRM, stakeholder participation, responsibility, informed decision-making, poverty

Introduction

This study is based on two phases of the Second Red River Basin Sector Project (2RRBSP)². The project has concerned Integrated Water Resources Management (IWRM) in Red River Basin, northern Vietnam and involved crosscutting issues of institutional capacity building, public awareness, poverty alleviation, gender and stakeholder participation. The project design with its participatory IWRM emphasizes a combined participatory process and the collection and analysis of technical information in order to establish an integrated knowledge base for stakeholders' informed decisions.

The total area of Red river basin is about 170,000 km², of which almost 50% is located in China. Administratively the basin comprised 25 provinces (till the end of 2003). The Red river delta region consists of 11 provinces and covers 17% (15,000 km²) of the basin in Vietnam. The Upper basin covers 70% of the Northern Highland region including 8 complete provinces and parts of 7 more (Figure 1). The total population of the basin was about 25 million of which about 10 million (40%) were poor compared with the national average of 37%. The basin has a monsoon climate with wet and dry seasons. In general rainfall is abundant in most of river however in some of the sub-basin serious water shortage have been experienced in the dry season and stress on the water system will be increasing in future due to higher agricultural, domestic and industrial water demands.

This study presents the process and the results of stakeholder involvement in two phases with a lead question to them; What are the priorities if the project shall optimize poverty reduction effects? This issue of targeting the Poor is a complicated one generally in development policy (Sen 1981, Narayan 2001). The Poor do not appear as a group of people but form a category

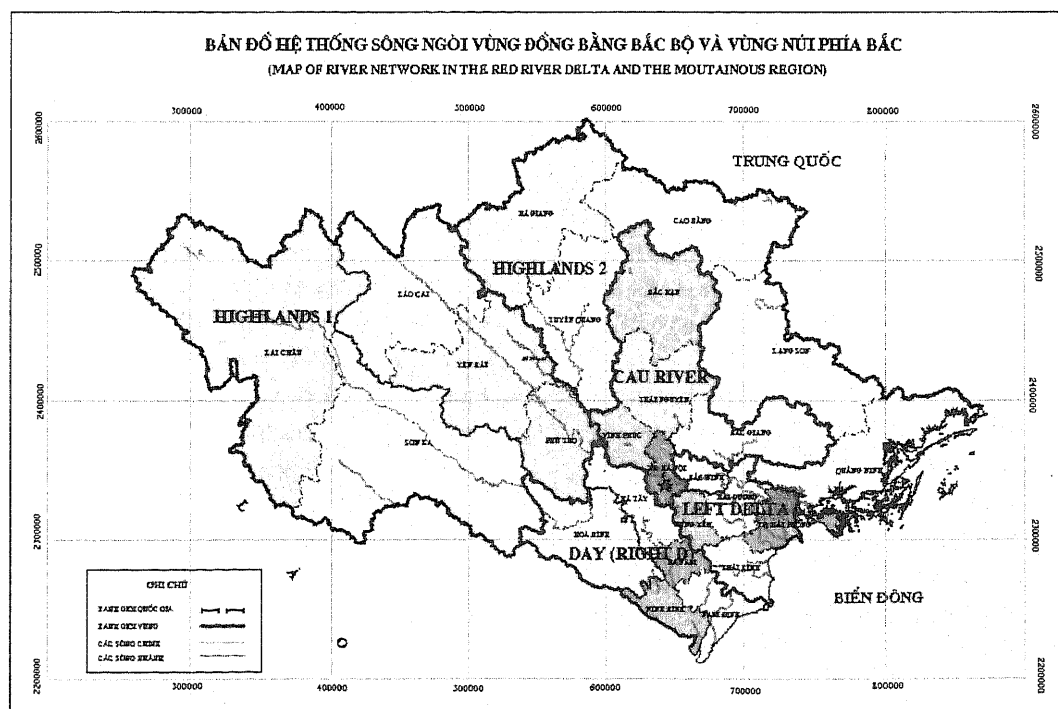


Figure 1. Map of Red River Basin with grouped 5 regional/sub-basins

where individuals have some features like small personal networks (Vietnam, Government of 2000). In the mountainous areas of Vietnam they make up a good proportion of all inhabitants, while in absolute numbers most live in the lowlands of the project area.

The Poor households have most problems with water supply and sanitation (one of the project's findings). We suggest that recent attempts (Sullivan 2001, Soussan 2004) to develop a water poverty index do not lead to "reaching the Poor" for the current project. The approach in the 2RRBSP, to interact with stakeholders on an experience base instead of designing descriptive indicators, would be operational for specifying suitable sub-projects for investment. In such an approach the identification of stakeholders, what they represent (cf. WCD (2000), their capacity and motivation, are all central concerns. As the study shows, the IWRM notion may mean different things to a farmer, a woman, or a technical person. Even if policy is clear enough over the letter I in IWRM, the implementation is far from straight. On the contrary, the integrative side of IWRM is contextual, and may mean different things to different categories of stakeholders.

This is one argument why stakeholder analysis before interaction at all levels is so important. This goes for data formation, the use of this data for understanding a development process, and the interpretation of this process into regional development (Allan 2003; Vietnam Development Report 2004). But stakeholding must not only be transparent in its representation; there must also be a clear purpose (ADB 2004), such as in the current project; lifting priority water sub-sectors towards project implementation in technical terms. This process is also the means; for awareness raising, for introducing long-term thinking (Millennium Goal 2000). The current study shows how intensive facilitation has brought a range of stakeholders, of varying relevance depending on situation, together around the key issue; how to integrate their water sectors for a specific purpose.

Approach and methodology

Stakeholder involvement has been crucial in the study through the whole process for connect-

ing IWRM with human well-being and poverty reduction. The whole design is to combine two stakeholder processes using provincial level as a pivotal point for stakeholder participation. The process in Phase 1 was carried out upward initially at province then sub-basin and finally at the whole basin. The direction in Phase 2 is reversed; from province level downwards into district, commune and village levels with in-deep involvement of stakeholders in a process of water sector planning (Figure 2).

The participatory process has started with an extensive analysis of potential stakeholders in 25 provinces. Development of the Participatory Plan was initiated early in the project when a schedule of stakeholder workshops was agreed. The World Commission on Dams criteria and framework for decision-making has been applied in the design. The process then successfully set up a series of 25 provincial workshops in order to achieve broad stakeholder consensus regarding the priority IWRM issues, sectors and challenges in the basin; to identify the range of management options to address the priority issues, and to make a detailed design of the project focusing on these priority issues and their potential solutions. Broad participation was achieved via provincial departments related to various water sectors, together with woman and farmers unions (25 provincial workshops, and 25 participants each representing 25 million people in the basin). The conclusions in the series of provincial workshops from the stakeholder's point of view were validated in next step through five sub-basin synthesis workshops (approximations by combining provinces into groups of five, Table 1). The experts provided technical assessments in order to support the process of informed consensus building by stakeholders. Finally, a basin workshop provided refinement of findings from five synthesis workshops in order to make a detailed design of next phase of the project focusing on these priority issues and potential solutions.

The approach and activities in Phase 1 of the project consisted of two major blocks: The so-called People's side was shaped by the series of participatory workshops at provincial, sub-basin and basin levels to identify the perception of the people living and working in the basin regarding water resources related problems. The Expert's

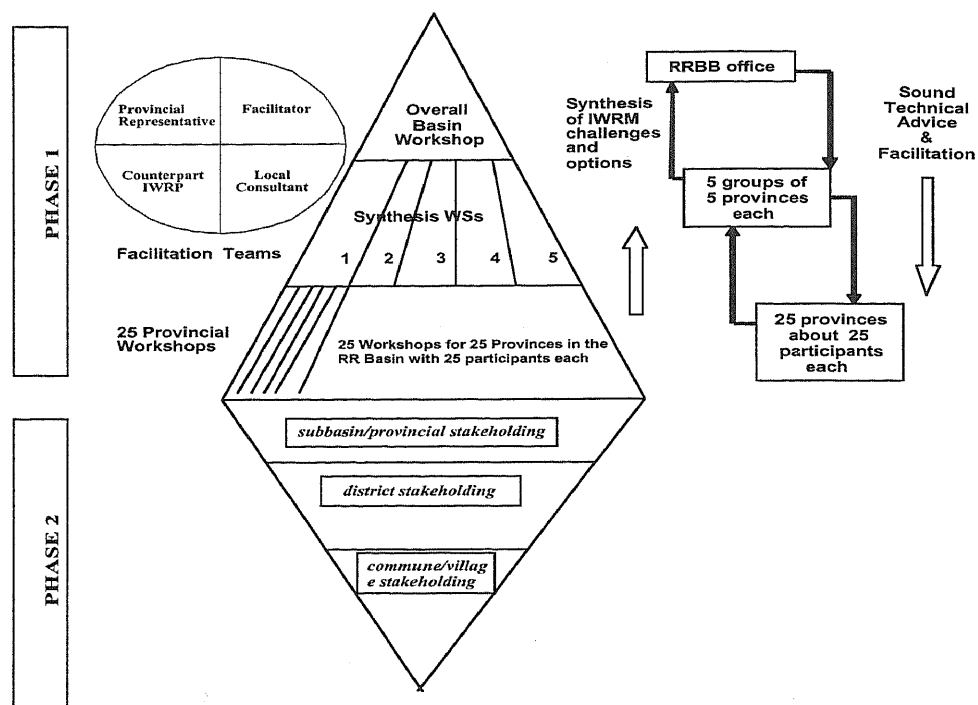


Figure 2. The processes in Phases 1 and 2

Table 1: 25 provinces, grouped five sub-river basin/regions in the Red River basin

Highlands 1	Highlands 2	Day river sub-basin	Red river delta	Cau river sub-basin
Lao Cai	Ha Giang	Ha Tay	Thai Binh	Bac Can
Lai Chau	Tuyen Quang	Ninh Binh	Hai Phong	Thai Nguyen
Yen Bai	Cao Bang	Ha Nam	Hung Yen	Bac Giang
Son La	Lang Son	Nam Dinh	Hai Duong	Vinh Phuc
Phu Tho	Quang Ninh	Hoa Binh	Bac Ninh	Ha Noi

side entered through analyses of water demand and availability, irrigation and drainage issues, flooding and flood protection, environment, water quality and pollution, the relation between water poverty and health/diseases, and poverty/gender issues as significant inputs to support informed decision making and consensus building. Apart from the these blocks, there is the RRRO's side to integrated the people's side and the expert's side, i.e. to connect the participatory and the technical IWRM process, to facilitate informed inclusive decision making, and to guide and coordinate between stakeholders and administrative authorities.

Following participatory approach and ranking methodology based on three priority criteria; economic, poverty and environment, participatory

IWRM process in the project has provided a primary mechanism for building consensus around priority issues related to water and after technical expert inputs, informed consensus building about priority interventions to solve these issues. The transparent manner for open interaction/dialogue between stakeholder and experts became the key to both identify and address conflicting resolutions. In this way the approach supported informed decision-making process in that relevant stakeholders could argue the benefits and drawbacks with each proposal, and then come up with a logical consensus. The ambition has also been resolving disputes with the benefit is that with the participatory IRWM conflicts become transformed from latent to manifest.

All 31 stakeholder workshops at different

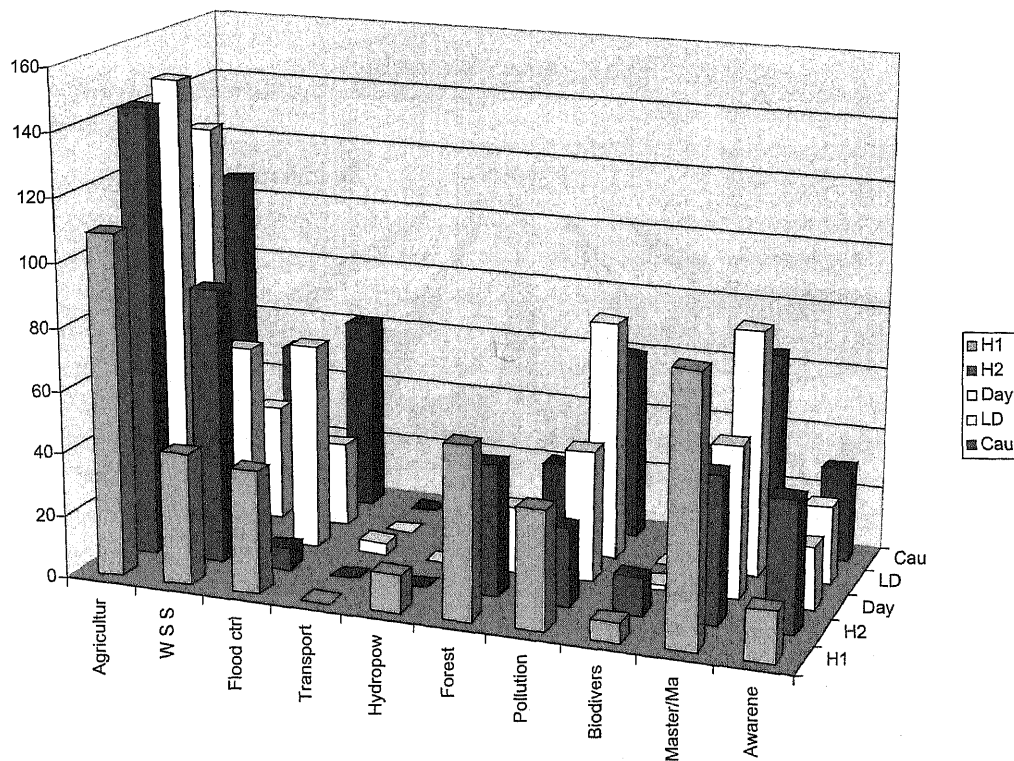


Figure 3. Problem profiles expressed by participants in 25 consensus building provincial workshops

levels at the end of Phase 1 had generated remarkable consensus due to this process approach that pays tribute by involving multi-stakeholder in a flexible consensus building. Four key water sub-sectors were prioritized from stakeholders points of view; Irrigated agriculture and Drainage; Water Supply & Sanitation; Environment/Biodiversity and Flood Control (Figure 3). This result followed on a unanimous vote for irrigation and drainage works in a sense extending beyond production into IWRM. Other dominating issues were management problems relating to the hydraulic infrastructure, pollution, watershed management and public awareness. As a result, these four priority water issues in the combination with technical assessments from the experts have been reflected in the four Components designed for Phase 2 of the project.

In reversed direction the participatory process in Phase 2 has been highlighted with stakeholder involvement deeply into a process of water sector planning in the priority water sub-sectors from the first stakeholder process. The case studies were carried out stepwise within two selected provinces into two small sub-basins in

the Upland of the basin until finally reaching commune and village levels. The process of water sector planning and selection of potential sub-projects has been developed and implemented with the interaction between three main streams; local authorities as the decision-maker, active stakeholders and expert assessments (Figure 4).

Throughout, active stakeholder involvement took place in these three main streams aiming at informed decision-making over priorities and water sector planning. The stakeholder categories were the local authorities and stakeholders at province, district, commune and village levels being the decision-makers and utilizing technical experts providing specialized assessments. The decision-makers have succeeded in combining the perspectives on water resource management, thus taking responsibility for an IWRM toward poverty reduction.

The facilitation process was implemented carefully aim at assisting the stakeholder to elaborate and refine their priority IWRM issues; define and assess a wide range of options, and select preferred IWRM option/s in a water sector planning process. This process was developed

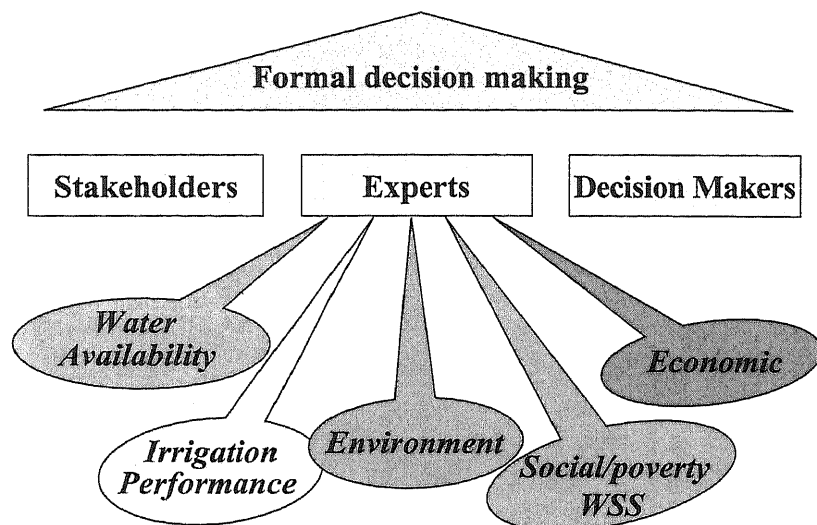


Figure 4. The design of participatory investment planning process

and successfully implemented in such a way that was beyond expectation by most, given the scale and the amount of resources involved. The fact is that the facilitation process allowed stakeholders and their respective experience to interact in a transparent way, by building capacity and awareness, and by setting up a rigid interaction process with decisions taken stepwise. This method proved very instrumental to participants since it allowed even reaching consensus also in highly resource competitive situations on strict logical basis. The contributions of each actor and their interaction have been described as follow.

Decision making in the process of sub-project selection

As just indicated, the decision making process has been carried out step by step. It has moved from the two-targeted provinces into a decision-making process of sub-basins selection and within two priority sub-basins onwards into the selection of the small catchments. First step has been done to select the priority sub-basins with the magnitude 100 km² among all possible options that had been identified by the experts. Then has followed identification of all possible options of small catchments of an agreed-upon magnitude around 10 km² in two sub-basins prioritized by the stakeholders. The priority small catchments have thereafter been visited. Deci-

sions towards the fixed goal of identification of a complete inventory, in the project called Long List of sub-projects within the selected catchments have been taken stepwise based on participatory interaction with local authorities at district and commune levels. This full list has been ranked for priority by both the local stakeholders (authorities and commune leadership) and by the technical experts in terms of water availability and technical feasibility. The inventory of sub basins has been made regardless of whether a proposal is economic or whether water is sufficiently available.

As a result, the priority-making has been carried out step by step with stakeholder involvement in the process and with a gradual feeding of technical and socio-political information into it. A convergence of views, also between stakeholders with potentially different expectations, has been established in a transparent manner, so that decision-making about final selection of potential priority sub-projects could have been made by the participants in the final workshop. The last stage of decision-making, together with an initially different view on province selection by the donor (Asian Development Bank) and the Client (Vietnam Ministry of Agriculture and Rural Development), have constrained the open decision-making process. Nevertheless, the similar process of shaping informed recommendations has been clear and appreciated by stakeholders, as

expressed and documented at the final workshop.

Local stakeholders' involvement in the planning process

The local stakeholders' involvement with bottom-up approach in the planning process is one of the three main streams in the design. A series of local meetings with in all 375 heads of households from selected 17 villages (out of a total of 28 villages) has been held, of which 33% are female-headed households. Investment development planning has been discussed and developed by local people at villages, communes and districts based on their specific priorities and proposed solutions for rural development and water sectors. Poverty reduction has become addressed from a Comprehensive Poverty Reduction and Growth Strategy (CPRGS) point of view. A list of sub-projects has been established in consensus with the local people. The experts especially contributed the awareness raising and capacity building activities. Detailed accounts have been made of the way these bottom-up activities have been carried out. These were Training of trainers program, 16 village meetings, 3 commune meetings, Interviews with key officials, Householder survey (375 questionnaires), Gender survey (123 women household heads), and Interviews with key officials. Parallel to the commune and district levels category of stakeholders, women heads from selected 17 villages also got involved into a special survey of water supply, sanitation and health focusing on gender issues.

PRA tools such as problem cause diagram (problem tree), priority issue ranking, possible solution ranking and action plan matrix, etc were applied during the meetings. The revised VDP/CDP method (Village/Commune Development Planning - GTZ) was applied in order to assist the local people to begin with the initial steps in investment planning process at village level. In the interaction process, the villagers initiated and got involved in the identification of main issues/difficulties in rural development and water sector, possible solutions to solve these issues aiming at poverty reduction as well as development of a detailed plan for the proposed solutions to answer the questions: what are the priorities sub-projects/solutions? when and where

do the local people implement? who can do these? what can local people contribute to the implementation? etc.

A water sector planning process in pilot sub-basins has thus been developed step by step in response to the villagers' viewpoints. Local authorities and experts became partners with the villagers and provided advice on specific technical and administrative issues. A joint knowledge build-up emerged over half a year through the continuous interaction among relevant stakeholders. The process that was facilitated built capacity also for future rights based governance. A community rights based involvement proved efficient when people saw that their contributions in the planning process. Administrations learnt about decentralization and the potential in local community interaction.

Expert assessment and selection / ranking of sub-projects

The consensus building for priority investments was thus developed into a method that has as one of its main pillars technical assessments. The point is how these assessments were considered; used for informed stakeholder evaluations and ranking of possible sub-projects. Technical inputs assessed by the experts under the five technical activities: water availability, irrigation performance, economic, environmental and water supply and sanitation/social/poverty, have actively fed information into the participatory IWRM process and capacity building.

In first step based on a Long List of sub-projects identified through the interaction with decision makers at local levels, a Short List has been produced containing top-ranked options seen from a technical point of view (with highest, lowest, in-between potential) and screened both by stakeholders and by technical experts. Then the Short List of potential sub-projects has been ranked internally in order to identify the priority ones.

Based on the results of five technical assessments, the studies showed that there is no water shortage for any of the potential sub-projects, that they all qualify as technically feasible (though with variation). The environmental assessment of the potential sub-projects have been carried out

on three aspects; physical, ecological and social and showed that no potential sub-project has severe negative environmental consequences. The economic calculations in the form of Benefit-Cost Ratios suggested that only a few of the selected sub-projects would qualify. However, when grouping them a cluster of potential sub-projects can be accepted as being economically viable. The social/poverty assessment, linked with gender and water supply & sanitation, reinforced that all options are suitable, but within situations of great variation. Each of the five technical assessments set up a simple model for ranking through scoring. These scores combined also forms the combined technical assessment and being arranged in the form of a matrix for ranking and then decision-making. All in all, the analysis has been transparent and included examples to facilitate open debate. These aspects have been much appreciated by the stakeholder, as reported at the final workshop.

Results and Achievements

Stakeholder interaction process on participatory IWRM implemented in one and half year was essential for achievements in terms of shifting responsibility in water sector planning process and project formulation towards water users. The participatory investment planning of IWRM in the pilot sub-basins of Red river basin has been developed and tested with regards to potential for scaling up into broad applications. From stakeholder involvement process, the list of five potential sub-projects was prioritized for the investment in two studied sub-basins upon in the interaction among relevant stakeholders. These priority sub-projects formulated at pre-feasibility level are relevant to technical feasibility and poverty reduction priority. The ranking methodology based on three priority criteria; economic, poverty and environment has been applied in the selection process. It was a transparent method of assisting stakeholders to rank a wide range of options and to select their preferred interventions when addressing priority IWRM issues in consensus building process. The ranking methodology integrates technical analysis and interpretation of results with the participatory IWRM process. The methodology has considered appropriate poverty

indicators as well as economic and environmental impacts. These considerations are placed in a context of water availability and irrigation performance capacity. The selection process has also involved awareness raising and capacity building as a result of the informed decision-making process.

Conclusions

The content of the main text deals with experiences from methodology development where IWRM and poverty reduction are integrated through stakeholders' consensus building. This has been done as a process, where stakeholders at various scale have not only involved and informed, but also taken decisions towards water sector planning and a selection of priority in river basins. Through careful interaction the assessments by technical experts and by administrative authorities at different levels have become incorporated into the decision-making process by relevant stakeholders. This has been possible with a transparent decision-making process. The methodology for this has been developed into a formal decision-making model where options are ranked through a universally applicable technique. This fact makes the project particularly interesting since an identical process can be set up, especially in the uplands of the country, where circumstances may be a bit similar. So instead of appreciating consistency between different methods for analysis of IWRM / poverty reduction relations, the short-term reaction was to redirect resources in other directions. The stakeholder involvement process in the project has been noticed with appreciation by the Government (Ministry of Agriculture and Rural Development) and all stakeholders in the river basin.

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VIETNAM: DISCUSSION

Question: How can the experts reflect their technical judgment into this kind of complex problem?

Answer: The experts input their technical assessment in terms of water availability, water quality, irrigation performance, flooding etc. These are the 3 main blocks in the stakeholders' involvement process (people, experts and River Basin Organization). Technical assessments have been provided in the series of workshops and evaluated by the stakeholders. Therefore it has become meaningful and supported by the stakeholder in the informed consensus building and decision making process.