



PART IV:

The China
Watershed
Management
Project (CWMP)
– a participatory
approach to
watershed
management

Introduction

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by NICOLE KENTON

This section reflects on a pilot community-led monitoring and evaluation project – the China Watershed Management Project (CWMP).¹ This project used participatory approaches to evaluate the impact on poverty reduction of the second phase of the Loess Plateau Watershed Rehabilitation Project, which was funded by the World Bank.

The first phase of this large-scale watershed project looked at environmental solutions to rehabilitate the plateau. This mountainous area covers six provinces in northern and western China and has suffered environmental degradation over thousands of years through the over-utilisation of natural resources, causing soil and water erosion and subsequent loss of fertile farming land in the upper reaches of the Yellow River (see Map 1). The CWMP was part of the second phase of the rehabilitation project, known as *Loess II* and was located in Gansu Province. Gansu Province is one of the poorest regions in China, where

lack of water is a major contributing factor. The province has been given high priority in China's 2011 Plan for National, Economic and Social Development.

Recognition of the role and aptitude that poor communities have in using environmental resources sustainably has made donors increasingly assess how they can work with communities not only to regenerate the environment, but also to alleviate poverty (Taylor, 2005).

The CWMP used a people-centred approach to look at the impact on livelihood opportunities of the watershed rehabilitation, focusing on effective delivery of project benefits to poor households through participatory planning. It aimed to improve systems for participatory monitoring and evaluation and to establish best practice models which could be disseminated to other relevant Chinese and donor programmes.

At the CWMP completion workshop, held in Beijing in 2008, participants,

¹ The CWMP ran from 2003 to 2008 and was funded by DfID. For more information see www.cwmp.org

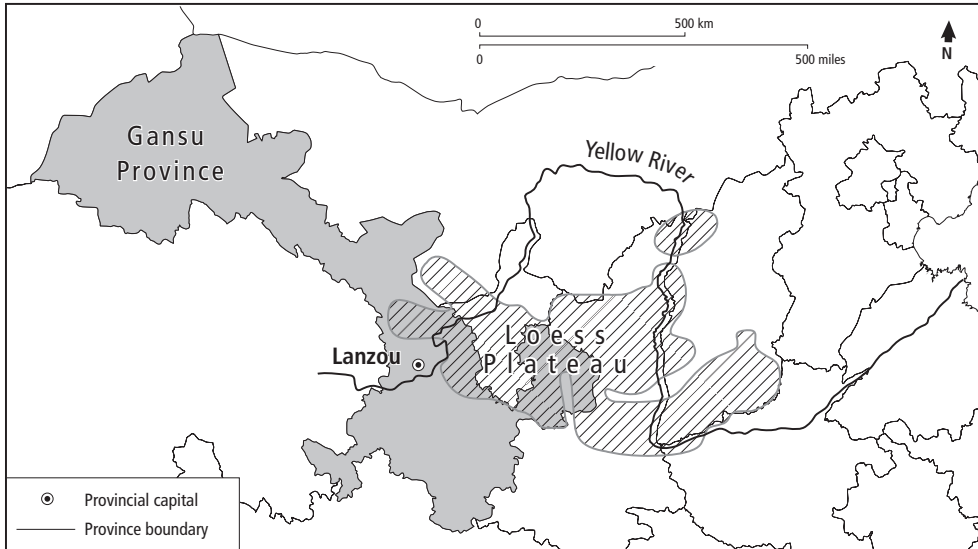


Illustration: Cath D'Alton

Map 1: The location of the Loess Plateau.

including farmer representatives as well as project administrators, reach a consensus that 'due to the effective management of administrative sections and the positive participation of stakeholders, CWMP had reached its anticipated goal with emphasis on capacity building and dissemination, and its results were of high value of being sustainable and being popularised.'

So what were the methods used to ensure the success of the approach and how can the model be replicated in other projects in China and elsewhere?

I am now giving the voice to those directly involved in working with communities on this project. This section reflects on the various stages of the project and contains five articles – two are written by Wang Yue from the Ministry of Water Resources, who

first presents an overview of how the CMWP was designed and in the third article in the section, she gives an insight into the Ministry's perspective on the effectiveness of the community approach.

In the second article, Wang Baojun from the Bureau of Water in Gansu Province outlines this innovative approach to watershed management and describes the methods used and the process of community monitoring and evaluation during the planning and implementation stages. He also gives some examples of the benefits of the CWMP, particularly to poor households.

Finally, Liu Yonggong from the Centre for Integrated Agricultural Development (CIAD) gives a research perspective and looks at the challenges and the lessons learnt for scaling up this approach.

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Background and approach

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by **WANG YUE**

WANG YUE is section director of the International Exchange Centre at the Ministry of Water Resources. She was coordinator of the CWMP at the Central Project Office. Here she gives some background to the project and its design.

The China Watershed Management Project (CWMP) was designed as a follow-up to the Loess Plateau Watershed Rehabilitation Project, to build on its experiences and address some of its challenges. The Loess Project was heavily focused on physical rehabilitation of the degraded watershed, in particular through terracing and afforestation.¹ The CWMP placed people at the centre of watershed rehabilitation and applied a livelihoods approach.

The objective of CWMP was to pilot innovative participatory practices in four districts in Gansu Province (Kongtong, Jingning, Huachi and Huanxian). These included participatory micro-watershed rehabilitation planning and alternative livelihood and environmental rehabilitation. The project also explored and constructed a model of ‘participatory

micro-watershed planning and community-driven micro-watershed rehabilitation and management’. It combined poverty reduction with rehabilitating soil erosion, farmer participation and integrating county-level resources. The approach has resulted in a comprehensive and sustainable rehabilitation of the micro-watershed.

Participatory micro-watershed planning

Participatory micro-watershed planning took micro-watershed as the unit, the communities as the subjects, improving the ecological environment and farmer livelihoods as the objective, and departmental cooperation and integrating resources as the platform. It stressed the active participation of the government, relevant organisations and business

¹ Afforestation is the establishment of a forest or stand of trees in an area where the preceding vegetation or land use was not forest. Source: *Wikipedia*.

Figure 1: Participatory micro-watershed planning flow



departments – and especially the communities and beneficiary farmers where the project was located. It analysed the problems and their causes inherent in the micro-watershed, the development potential and advantages, sought solutions to the problems, determined the priority projects for improving the ecological environment and means of livelihood, and established effective mechanisms to manage, monitor and evaluate project implementation.

Design of the project

The steps for the design of participatory micro watershed planning included:

- publicity and mobilisation;
- establishing a participatory planning group at county and village level;

- formulating a participatory micro-watershed planning manual;
- a field visit to the watershed and conducting planning by communities – including focus group interviews, identifying and analysing the problems, preliminary planning, integrating resources and finalising the planning;
- proposing a preliminary plan;
- integrating resources; and
- determining the final plan.

By applying a participatory approach, the project developed a participatory micro-watershed planning flow and framework (see Figures 1 and 2) and established a community-driven micro-watershed management model.

The project targeted poor households, attempting to establish alternative liveli-

Figure 2: Participatory micro-watershed planning flow chart

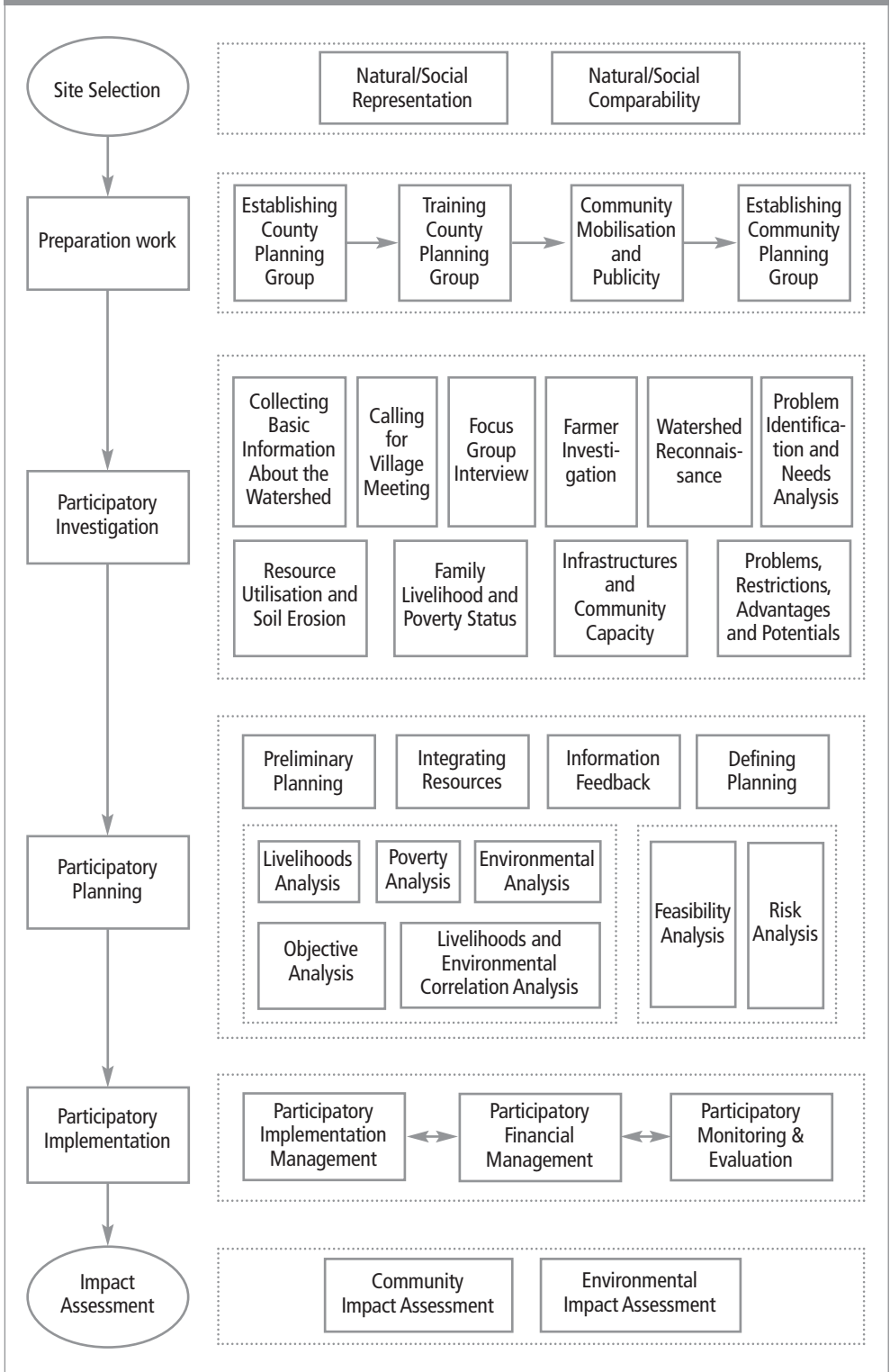




Photo: Wang Baojun

Terracing is an important way to conserve land and water resources in the Loess Plateau (Gansu Province).

hood project activities. For example, raising cattle in warm pens and constructing biogas ponds, helping to avoid further environmental destruction caused by animals and vegetation, and contributing to restoring forest and grass cover. Terracing was used to reduce soil erosion in order to improve grain output. Collecting water in water pits reduced surface runoff which in turn improved the drinking water for the farmers.

As a result of the project, the soil erosion status of the project area and forest and grass cover has improved. This solved the difficulties of access to clean drinking water for 62% of households. Income *per capita* increased from 925 RMB to 1,365 RMB. In this way the project established an 'organic' connection between 'poverty and water' and 'poverty and capacity building'.

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Innovative, community-led practices

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by **WANG BAOJUN**

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Innovative participatory watershed management practices

The China Watershed Management Project (CWMP) was implemented by the Ministry of Water. Not only did it introduce a number of important innovations – it changed conventional watersheds management in China.

Linking livelihoods with environmental protection

In the past, the conventional watershed rehabilitation approach was to uniformly plan and focus on comprehensively rehabilitating mountains, waterways, fields, forests and roads. However, there were negative consequences. There was little consideration of farmer livelihoods. Farmers were repeatedly forced to herd animals, chop firewood and open up wasteland for farming, producing a vicious circle. The process of rehabilitation was also

destroying the local environment.

During the project planning for the CWMP, there was an explicit focus on improving farmer livelihoods and realising the harmonious development of people and nature. The project introduced a new rehabilitation model: environmental + infrastructure + livelihood + capacity building.

A community-led approach to watershed management

Conventional watershed management was usually government-driven. The government handled the entire process of project planning, implementation, tendering, monitoring and evaluation. The communities were only passive participants. As a result, some project activities were unrealistic. People were very unhappy, making project implementation difficult. The CWMP project introduced a community-led approach to watershed management, in

which project planning, implementation and monitoring and evaluation were driven and managed by the communities. The government's responsibility was to guide, supervise, coordinate and service.

Participatory planning methods

Watershed planning in the past consisted mostly of environmental rehabilitation measures, which were finished by a rough investigation by the project technicians. These plans rarely inquired into people's views. The CWMP project applied participatory approaches to project planning. This empowered the communities and farmers, and the farmers participated in all aspects of the entire process. The planning was carried out from bottom-to-top, was directly specific to individual households being open and transparent, fully respected the will of the farmers and addressed farmers' needs. By participating in the project planning, the people learnt methods for analysing their problems and improved their ability to solve them. It helped to change mentalities and strengthened their confidence and awareness.

Transparent financial management

With previous financial project management approaches, project funds were appropriated downwards level by level, with many intermediary links, and so the operation speed was slow. Only a few project managers knew how much funding was reimbursed, and how much was put in place. The funds of the CWMP were directly appropriated from the Project Implementation Office to County Project Management Offices (PMOs) or contractors, then from County PMOs directly to the farmers or contractors, with limited links, and the operation speed was fast. Simultaneously, the entire process of financial management was open by displaying all financial information on the walls of community meeting rooms and shared with communities regularly, so that both the project managers and farmers knew

how much was reimbursed and how much was put in place, and the community members also could monitor the costs with the related implementation process. This meant that the financial management was supervised and any violation of financial management rules was prevented. The transparency process satisfied the community with not only the output and outcome, but also by giving them ownership of the project process.

Community monitoring and evaluation

The CWMP had a focus on community-based participatory monitoring and evaluation (PM&E), to ensure that local needs were well identified and the quality of implementation was well controlled.

Monitoring and evaluation during project planning

From the outset, the County Project Management Offices (PMO) conducted extensive and in-depth project mobilisation activity, which helped to raise public awareness and understanding of the importance of participation for the comprehensive rehabilitation of micro watersheds. The PMO conducted a project feasibility study, to review the project approach and whether the project ideas and methods were understood and accepted. Based on the feedback from communities, the project plans were revised. Subsequently, the villagers were also be informed that the monitoring team will be selected by villagers directly, as well as the process and tolls for PM&E so that most of villagers had been encouraged to monitor the project, especially the implementation of the project.

Tools used during this phase included:

1. Brainstorming and feedback to list all the topics that need to be discussed. We used various interactive tools – such as self-introduction, playing games, hurrying to answer questions before others, handing out prizes, and providing cigarettes and sweets – that helped to create an equal,



Conducting assessment of the farmers' needs (Gansu Province).

Photo: Wang Baojun

lively and relaxed environment for everybody to talk freely and cordially; the villagers were encouraged to put forward all kinds of problems that they felt restricted local development. Some people said: 'for a long time, we have just been listeners at the meetings, without the opportunity to say anything. Our voices were either neglected, or criticised if we were wrong. But you are different in that you handed out cigarettes and sweets to us, and treated us as friends. We feel warm, and we are willing to tell you what we think.'

2. In-depth analysis of the problems that need to be addressed. The villagers conducted a complete, in-depth and meticulous analysis of the topics listed, found out the causes of the problems and the inter-relationships between different causes, and developed problem and objective trees. The point of monitoring and evaluation was that villagers learned to analyse problems, using tools such as the problem tree³, and

felt motivated to address those problems. Some of the villagers said: 'We did not know until now that our lives in the past were kind of 'muddling through'. Our conditions were poor and we had a hard life, but we only blamed our fate. Most people's attitude was to drift along, and we rarely had any ideas or plans. Through the facilitated analysis, they concluded that 'we not only understood why we were poor, but also learnt the methods for analysing the problems. We have changed our minds, and we believe that our lives will be better.'

Monitoring and evaluation during project implementation

The *Participatory Monitoring and Evaluation Operation Manual* defined the basic principles for monitoring and evaluation during project implementation which focused on cooperative monitoring and evaluation by the community and other stakeholders. The focus was on monitoring and evaluating the quality, progress and

¹ See Annex PRA tools of the PRCDP manual www.itad.com/PRCDP/



Photo: Wang Baojun

The farmers participating in field inspection and judging hay cutter quality (Gansu Province).

results of different project measures through M&E cards, tables and books, as well as standardised signing-off procedures. The PMO published the monitoring and evaluation results, payments and the supervision telephone numbers of the county, city, province, implementation office and WB Office in the communities. The farmers were encouraged to supervise each other; this helped to ensure the construction progress, quality and efficiency, and cut down on practices such as favouring friends and relatives, cheating in work, cutting down materials, withholding and diverting information, using poor quality materials etc.

Village M&E groups and beneficiary farmers had an important role in the monitoring and evaluation of road building, pumping stations and quality of young trees; their participation was important for improving construction quality and for the sense of community ownership and responsibility. For example, in the

construction of a pumping station, all the workers were the beneficiaries. When they excavated the dam foundation they dug out many weathered slates. According to the design, the foundation was filled with ground rubble. However, in order to save costs, the contractor used improper means to obtain consent from the supervisors and intended to use the weathered slates instead. The villagers were strongly against it. They reported the case to the County PMO by calling the supervision telephone number, and as a result the contractor had to buy rubble filling, thus ensuring construction quality. A similar case happened during the construction of the road component. When the contractor failed to meet the construction standards, the Village Monitoring and Evaluation Group and the beneficiaries' representatives refused to sign-off the check and certificate form. In this context, the quality of infrastructure had been well controlled.

The Village Monitoring and Evaluation

Photo: Wang Baojun



Accepting terraced-field quality together (Gansu Province).

Group and the beneficiaries' representatives also supervised the quality of young trees, hay cutters and equipment procured from the Technical Service Centre. The Village Implementation Group inquired into prices and the M&E group carried out the quality check. Procurement followed the principle of 'competitive bidding, based on the quality and lowest price'. For example, hay cutters were purchased through local price inquiry. Under the supervision of the County PMO, the community organised the Implementation Group, Monitoring and Evaluation Group and beneficiaries' representatives to form a Bid Evaluation Group, notified three bidders to arrange products and tender offers, and conducted field demonstrations. The Bid Evaluation Group conducted field evaluation, pricing and negotiation for supplies and after-sales service, and signed the contract.

Household-based components such as

terraced fields, cattle pens, water cisterns and flow collecting pools were implemented in a different way. Since farmers had to contribute funding out of their own pockets, there was a risk that they might want to sacrifice quality for quantity. Therefore, in addition to village monitoring and evaluation the County PMO had to undertake some cross-checking and verification. Normally, two ways been applied for cross-checking. One way is the project sites evaluated by PM&E group from outside project villages and all results of evaluation must be opened to all villagers and other stakeholders for feedback, while another one is the Sampling Check by PMO based on the way one, and all results must be opened to all stakeholders as well for confirmation of any complaints. The terraced field component used local competitive bidding for procurement. Once the contractor finished a plot, the

² 'Acceptance' refers to the final technical check of project quality and functionality by supervising bureaus.

Village M&E Group would measure the area and assess the quality. At certain stages, the County PMO would conduct an overall re-inspection and acceptance together with the members of the three community groups, draw sketch maps and fill in the M&E forms.⁴ The farmers would sign-off the project as a precondition for financial reimbursement; they would publish the results in the community and invite the public for inspection of the project. The County PMO would pay the project funds directly to the contractor according to the accepted quantity.

Data collected through PM&E have shown that 100% of households benefited from CWMP at different levels, such as 4 mu of terraced land for each household in average, the livestock project component for poor households only, 50 RMB as extra compensation for poor households for

constructing terraced land. At least 16.23% of the total CWMP fund was allocated for poor households.

Despite these successes, we still had some difficulties and challenges. One was the lack of counterpart funding; some top-down approaches had to be used to ensure availability of counterpart funding. Secondly, there was a lack of coordination between the different agencies working on CWMP which applied different standards and regulations in the project cycle, so that PM&E had to challenge it. Thirdly, the community-based PM&E was conducted well by the communities, but there were some clear limitations with regard to the capacity of the PM&E teams, such as the lack of techniques, the lack of some knowledge, and the fact that no subsidies were available for team members during project implementation.

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The perspective of the Ministry of Water Resources

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by **WANG YUE**

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Introduction

At present, China is carrying out a 'new socialist rural reconstruction', promoting the idea of 'people first' and 'constructing a harmonious society', connecting people's livelihood with environmental protection. In the past, combining rehabilitation of watersheds with development was mainly focused on the technical aspects of harnessing soil erosion, but paid little attention to the issue of poverty. The CWMP implemented a participatory micro-watershed rehabilitation planning and alternative livelihood and environmental rehabilitation in four counties of Gansu Province. It also explored and summarised the model of 'participatory micro watershed planning and community-driven micro watershed rehabilitation and management' by combining poverty reduction with rehabilitating soil erosion and farmer participation, leading to sustainable development

for the comprehensive rehabilitation of the micro-watershed.

Challenges

The two biggest challenges for implementing the project were:

- How to integrate watershed rehabilitation and local poverty reduction;
- How to apply the participatory approaches in the process with local project partners.

After five years of practice, we believe that we have overcome the challenges. The project was significant on a number of aspects:

1. It followed the principle of 'people first' and 'constructing a harmonious society'. It organically combined people's livelihoods with improving the ecological environment and the construction of a 'new socialist' rural area, laying a solid foundation for constructing a harmonious society.

2. It was an example of 'teaching people how to fish'. The project was community-driven, improving the autonomous management abilities of the communities and the self-development skills of the farmers, and it injected vitality into the sustainable development of the community.

3. It repositioned government service functions. It was designed to coordinate the departments and integrate resources with the relevant departments, changing from a do-it-all type of administration to service-oriented guidance and provision. The PMO provided technical guidance and an information service, guiding the farmers in improving the environment and increasing incomes, and creating the mechanism for the scientific and standardised implementation of the project.

Strengthening community self-management

The project used a participatory approach throughout the project cycle. It established three participatory mechanisms:

Firstly, a **democratic decision-making mechanism** was established, designed to promote the idea of decision-making as scientific. For some major issues which occurred in the course of project implementation – such as raising funds, input of labour, public undertakings – the Village Implementation Group first proposed ideas for the decision-making procedures and methods. After adequately inquiring about the opinions of the villagers by convening village assemblies, implementation was organised and all activities were publicised to the villagers.

Secondly, a **democratic management mechanism** was established, designed to promote the systematisation of management. The villagers' assembly elected three groups from the community and self-management association, established a performance incentive mechanism throughout the course of the work, carried out a democratic evaluation according to

the completion of tasks and realistic indicators, and offered corresponding remunerations based on performance. It formulated and improved the subsequent project management mechanism, and promoted the construction of a 'harmonious rural society'.

Thirdly, a **democratic supervision mechanism** was established, designed to promote a procedure for supervision. The county PMO, the villagers and the three groups from the community and self-management association worked together, reinforcing the demonstration of project management, and conducting a publicity approach before implementing each project based on monitoring and evaluation results. Throughout the entire project implementation process, the aim was to integrate project publicity with technical training, livelihood improvements and environmental rehabilitation, to effectuate great changes to the villagers and villages in the watershed, and thus achieve significant effects.

As a result, the project has strengthened the social management system within the community. It strengthened the democratic financing; it implemented democratic election, decision-making, management and supervision at grassroots level; it improved the management system for construction projects such as rural infrastructure; and finally village-level financial affairs became more transparent.

In this process, group discussion, community meetings, and scoring and ranking were applied as key participation tools. The group discussion provided all villagers with the opportunity for sharing their different ideas for implementation and post maintenance, and the community meeting for achieving the consensus, such as the selection of implementation team members, the rate of fundraising, and so on.

Change of mindsets

The project has changed people's mindsets at all levels: at provincial, city, county,

Photo: Wang Baojun



Carrying out a field survey (Gansu Province).

township, village and community level, and especially with the key members at the different levels. People now believe that participatory watershed rehabilitation management is essential for realising the overall coordinated and sustainable development of the watershed. It also promotes economic growth, liberating minds and changing mentalities, and demonstrates the pressing need to construct 'new socialist rural areas'.

Farmers' minds have been opened. They have seen changes in their clothes, diets, houses and means of transportation since the rehabilitation of the watershed. They now see harmony in the neighbourhood, and culture preserved in the village folk customs.

The villagers' democratic awareness improved. They actively participated in decision-making and the management of the project, and reversed the notion of the villagers not caring about or participating in village affairs. The villagers could now take into consideration overall public interests whilst handling affairs, turning from passive acceptance to active participation in decision-making.

The community learned new methods for solving problems. By introducing participatory ideas and implementing demonstrative components, more and more villagers are able to grasp the idea of 'making decisions for your own business', enabling the effective resolution of many difficult issues.

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Challenges and
lessons learnt

by LIU YONGGONG

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The China Watershed Management Project (CWMP) was implemented in two prefectures of Qingyang and Pingliang in Gansu Province. The project consisted of three components:

1. Development of a monitoring and evaluation system using participatory approaches;
2. Pilot participatory watershed management projects in selected pilot watersheds;
3. Extension and replication of the successful CWMP models.

I was involved in the CWMP project as a national consultant from 2004 to 2007. This article summarises the challenges and lessons learnt from the consultancy practice.

Challenges faced in watershed conservation practice

CWMP faced the following three challenges during its implementation in the pilot province, pilot counties and pilot watersheds:

- Firstly, the CWMP project pilot prefectures of Gansu were poverty stricken areas with very low *per capita* income. In order to sustain their livelihoods, farmers made use of the available land – including the sloping land – for producing grain and cash crops. Overuse of the sloping land caused vegetation degradation and consequently led to severe soil and water erosion. Integrating poverty reduction and improved livelihoods with ecological conservation

was a major challenge for the CWMP project.

- Secondly, besides the Water Conservation Bureau, there are many stakeholders and governmental line agencies involved in the watershed management, such as the agricultural bureau, the forestry bureau, the livestock bureau, the poverty alleviation office, etc. Different line agencies had their own objectives and agendas relating to the use and management of natural resources within the watershed. It is therefore an institutional challenge for the project to coordinate these line agencies and stakeholders who all have different development agendas. It is also difficult to develop a multi-stakeholder acceptable M&E system and a watershed management concept which fits the strategies of all relevant line agencies.

- Thirdly, there are many administrative levels related to catchment and watershed ecological conservation, i.e., the Ministry of Water Resources, Up and Middle Yellow River Bureau (UMYRB) in Xi'an, the provincial water conservation bureau, the prefecture water conservation bureau, the county water resource bureau, the watersheds, township, village, etc. It is a challenge to coordinate all these levels and achieve the same objective. It is also difficult to develop common M&E indicators for all levels.

Experiences and lessons learnt from the practice

To overcome the above challenges, the CWMP adopted innovative implementation procedures and methodologies. Principally, the project adopted participatory planning and implementation approaches throughout the whole life of the project.

Understanding the institutional set up and existing practices for improving the M&E system and introducing an improved conservation model

As mentioned above, small watershed management is a multi-stakeholder and

multi-level related issue. In order to draw up a management strategy, the CWMP consultant team and key counterparts needed to systematically understand and figure out the institutional set up related to small watershed management in the Loess Plateau region – who are the stakeholders, what are their missions and agendas in watershed management and poverty reduction, what are their attitudes and interests in sustainable watershed management, what they have practiced in the past, etc. The institutional survey was also an opportunity for the consultant team to consult with relevant stakeholders on the CWMP concept and M&E system for ensuring the sustainability of the concept. Reviewing and understanding the existing institutional set up and practice also ensured that the improved M&E system and CWMP models would be developed based on the existing models and practices.

Participation and engagement of communities and resource users

Farmers' households and communities within the small watersheds are the resource users and beneficiaries of the watershed management and conservation projects, their active participation and engagement in the whole process of CWMP as well as in the M&E indicator development are therefore preconditions for ensuring the sustainable impacts of the project. It is also the key solution to mediating the potential conflict of interest between the watershed conservation and the livelihoods of resource users. Participatory approaches have been mainstreamed in the whole project implementation cycle: (i) **Community and resource users' participation in the development of M&E system.** The consultant team and the UMYRB jointly prepared the a list of watershed management impact measurement(M&E) indicators, including social, economic, poverty and livelihood indicators and resource and ecological indicators. The recommended indicators were then



Photo: Wang Baojun

Wang Baojun talking to villagers (Gansu Province).

consulted and validated with communities and resource users in the selected pilot watersheds, i.e. Fanzhuang in Huachi County and Hushangou in Kongtong County. At the same time, social and economic data were collected for poverty and livelihood indicators by using interactive and participatory methods.

(ii) **Community participation in watershed conservation and management planning and pilot of best practice.** Based on the developed M&E system for small watershed management interventions, the CWMP project further conducted participatory watershed management and conservation planning by engaging villagers, poor households and women of the pilot villages. Farmers' active participation in consultation and negotiation ensured the integrated objective of 'conserving the ecological system and improving the livelihoods of resource users'. Methodologically, community participation and engagement reduced the social risk of small watershed conservation programmes and enhanced 'community

ownership' of the project implementation. In addition, the community and resource users' participation also changed the traditional 'top-down' project planning and implementation approach.

(iii) **Institutional and staff capacity building and change of attitude of governmental line agencies for institutionalisation and replication of CWMP models.** During the project implementation, CWMP always focused on institutional and staff capacity building through multi-stakeholder workshops and training and by subcontracting relevant tasks to governmental and public organisations. For instance, the project subcontracted Gansu Provincial Statistic Bureau to conduct participatory 'quantitative poverty surveys' in two selected small watersheds, and commissioned Gansu Provincial Water Conservation Centre to develop ecological and resource related indicators. The ITAD and the Centre for Integrated Agricultural Development (CIAD) consultant team provided training to the subcontracted team to ensure their capacity and skills of applying the recom-

mended participatory survey methods. Technical staff of the county water conservation bureau and township water resource agents were involved in selecting pilot watersheds, conducting the survey and the participatory planning process.

The objective of the CWMP was 'to influence Chinese governmental agencies and international donors to implement improved watershed management approaches which will benefit the rural poor'. Since the government organisations are the major actors in developing and replicating the improved models, changing the governmental attitude to the innovated participatory watershed management procedures and approaches was the key institutional strategy of the CWMP. Through policy consultation with the Ministry of Water Resources and the

UMYRB, policy studies and policy conferences and workshops, the CWMP significantly influenced high level officials' attitudes toward participatory and pro-poor watershed management approaches.

Governmental attitude change to these innovative approaches is the institutional and policy precondition for long term replicating and institutionalising the best practices, further implementation of the CWMP M&E guidelines, community participatory planning procedures and the ecological compensation policy. Governmental attitude change through the CWMP has also established an institutional and policy framework for policy dialogue with international donors for multi-lateral collaboration for coping with the ecological and social economic impacts of global climate change.

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