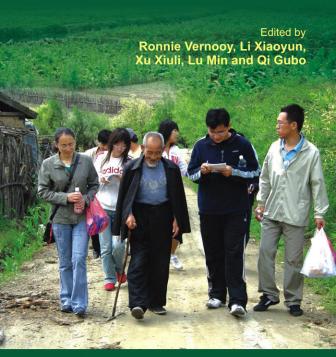
Learning from the Field

Innovating China's Higher Education System







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Edited by

Ronnie Vernooy, Li Xiaoyun, Xu Xiuli, Lu Min, and Qi Gubo

International Development Research Centre Ottawa • Cairo • Dakar • Montevideo • Nairobi • New Delhi • Singapore



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Foreword

This book documents with detail and insight an initiative to reorient the teaching and research of Chinese universities so that their faculty and students could make more direct and significant contributions to what has come to be known as 'Community Based Resource Management' (CBNRM).

There have been some previous initiatives in the domain of economic and social development to achieve what has been referred to as 'bureaucratic reorientation' (Korten and Uphoff, 1981), or BRO in brief. Not many efforts have been made explicitly to achieve 'university reorientation,' which is the focus of this book – curriculum reform, changing staff responsibilities, moving research and learning activities to field locations, introducing new criteria for achievement.

One of the lessons from other experience with BRO is that institutional reorientation needs to be part of some goal-oriented, substantive undertaking, embarking upon reorientation for its own sake is not likely to be successful. People are generally resistant to being 'reoriented' unless they regard the changes being proposed in organisational structure, mission, staffing, incentives, accountability, etc., as serving some compelling or transcendent purpose (Uphoff et al., 1991). The forces of collective inertia and individual rationalisation and defensiveness reinforce and raise the costs of making institutional changes.

The admonition of Italian political theorist Niccolo Machiavelli in his classic treatise *The Prince* may sound extreme, but the essence of his message has seldom been contested – 'It must be considered that there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things.' Efforts for reform and reorientation are likely to be resisted or simply defeated by unresponsiveness.

This realisation should not deter all attempts to reform or reorient institutions, however, since Machiavelli's conclusion was referring to the

odds against complete success, to the achievement of objectives in a mutually exclusive way, where there is either success or failure. In the cutthroat politics of medieval Italy, this was how initiatives usually needed to be assessed. In the contemporary world, however, such processes should be considered more in terms of degrees of success or failure.

Initiatives for reform or reorientation that are not a complete success are not therefore necessarily a failure. We understand that processes of institutional change are intrinsically complex and often slow, and thus likely to succeed only in part, or to some extent. This does not mean that they are not worth attempting. While initiating 'a new order of things' may be difficult, it need not be dangerous. We appreciate that the tasks of reform or reorientation will not be easy, and that there can nevertheless be some meritorious improvements. Most important, we know that some degree of success is more likely to the extent that plans, tactics and strategies are informed by previous experience.

In the case examined in this book, faculty and administrative leadership at China Agricultural University (CAU) and Jilin Agricultural University (JLAU), who undertook to engage the knowledge and human resources of their institutions in promoting community based natural resource management, knew that they were entering into a complicated and often ambiguous process. Quite possibly their engagement was prompted and facilitated by what Albert Hirschman has written about as 'the hiding hand' (Hirschman, 1995).

This is not the same as 'the hidden hand' which Adam Smith wrote about in *The Wealth of Nations*. The 'hiding hand' obscures from development project initiators the full scope of difficulty and resistance they would likely encounter when undertaking any ambitious social and/or technical change. A lack of full knowledge emboldens initiators to embark on tasks that might appear too daunting and discouraging if there were complete foreknowledge. Lacking this, they tackle problems that are obstructing developmental progress. Once engaged, they find that they have more problem solving capacity than they previously knew they had, and they learn in the process of engagement how to make their efforts successful.

In Hirschman's sagacious view, based on many years of practical experience, problem solving ability is the key to – and indeed the very essence off – development. 'The hiding hand' is thus a fortuitous phenomenon because once there is an obvious need for innovation and ingenuity, these admirable human qualities are summoned forth by the demand for them. In such instances, demand is likely to create its own supply because the human mind (especially pooled minds working together in finding solutions) can create new connections and arrangements that expand the parameters of productivity.

Community based natural resource management is one of the more complex undertakings that institutions and professionals concerned with development can become engaged in. This is something different from community NRM, because it takes into account that decisions and incentives applying just at the community level may not be adequate or appropriate for long run optimisation of natural resource systems, ones that can meet human needs while sustaining productive ecosystems at all their nested levels – household, community, landscape, regional, national and even international (Uphoff, 1998).

Decisions made at community level without regard to their impacts elsewhere can lead to negative consequences in the realm of natural resource management more than other realms, because of the interdependence of natural resources, biotic and abiotic. The health and sustainability of soil systems, the biodiversity and balance among flora and fauna above-ground, the quality and circulation of water, soil and air resources, the vitality of forests and other vegetative cover, the factors affecting climate (wind, temperature, precipitation), all interact in ways that make NRM both immensely challenging in the present and supremely important for the future.

René Dubos' suggestion to 'think globally and act locally' is wise advice for many domains, but particularly for natural resource management, and it provides both impetus and inspiration for CBNRM. It underscores the need for multi-level systems of decision making and action that are nested, with upward and downward communication. It emphasises that success ultimately depends on institutional arrangements that respect and support natural resource users' decisions and actions.

Decisions and actions need to be facilitated and coordinated toward management outcomes that are compatible across space and over time, reconciling the interests of 'upstream' and 'downstream users, and assuring future generations of a similar and sufficient natural resource base.

Along with an emerging appreciation of the complexity and urgency of effective CBNRM networks has come a realisation that top-down command-oriented management systems are unlikely to be effective and are certainly less cost-effective than systems that are basically participatory. It is important that diverse stakeholders accept and embrace a vision of natural resource management that is equitable in its outcomes, over space and across generations, and that is respectful of the physical-biological dynamics and limits of natural resource systems.

Communities have often been able to work out reasonably sustainable and equitable systems of NRM in the past. But a number of conditions need to be met for tenable local resource management: communities need to have their own coherent governance structures which have been reasonably stable, so that there is both identity and capacity at local levels; natural resources need to be fairly unambiguously delimited, with clear delegations of ownership rights and management responsibilities; population growth needs to be relatively slow and in balance with the natural resource base; communities are able to control or even exclude outsiders who want to extract natural resources in unsustainable ways; local aspirations are compatible with the standard of living that the natural resource base can support. Such conditions may have prevailed in previous generations and yet be increasingly impinged upon in the present era.

This understanding makes clear that CBNRM involves much more than devolving responsibility and control to communities. This may not be understood and accepted by communities; indeed, there may not be enough coherence of communities for responsibility and control to be exercised even if there is a will on the part of some community members to do this. The pressures being put on communities from outside often cannot be coped with by purely local action, or growing aspirations locally for greater wealth and mobility may strain whatever limited local capacity there is for resource-sustaining management.

These pressures and limitations mean that many 'outsiders' need to be involved with communities in the larger mission of CBNRM, assisting with information, training, legal support, financial investments and incentives, personal encouragement, and so forth. These external actors can be based in government agencies, non-governmental organisations, private sector (that is concerned with long-term sustainability of resource systems rather than short-term exploitation), or research institutions and universities.

This encompassing and strategic vision of CBNRM is a relatively new and demanding one. There is need for personnel in these various institutions to have a profound understanding of the many facets and interrelationships of CBNRM, as well as for them to have a practical and sophisticated knowledge base for decision making that can be shared with communities for making better, more efficient and equitable decisions to plan and manage resource utilisation.

Leadership first at China Agricultural University and then at Jilin Agricultural University saw the need for enlarging the pool of informed and motivated personnel who could work with communities in the more participatory, collaborative mode that CBNRM requires. There is need for a fund of knowledge that can inform the actions of decision makers and practitioners at any and all levels of the CBNRM system, from household, village and locality (groups of villages) up to regional and national institutions (Uphoff, 1998).

This book documents and disseminates the learning experience that faculty, staff and students of the two universities went through in their engagement with communities facing natural resource management challenges in Jilin and Guizhou Provinces as well as in Ningxia and Guangxi Autonomous Regions and Inner Mongolia. For the two universities to be able to engage effectively with communities, there was need for internal reorientation of the universities themselves – curriculum reform, reorientation of faculty, changes in professional expectations, etc. How the participants in this process went about such institutional innovation has not been systematically reported and assessed before, as far as I know. The CAU and JLAU participants were breaking new

ground institutionally and intellectually at the same time they were trying to 'conserve ground' in the selected rural areas by working with local communities and officials.

Not all of the things undertaken or attempted were successful, and most efforts could have been done more effectively or expeditiously if there had been more foreknowledge about how such institutional processes unfold. But that is to be expected. This experience has been written up not because it was effective in all respects, but because it is a rich collection of observations and internal assessments that make this kind of ambitious institutional innovation more accessible, less unknown and worrisome, for anyone who would embark on such a mission of institutional change.

It is not easy, still fairly early in the process, to identify ground level impacts from this effort. Most of the impact has been on the institutions that undertook this innovation and on the individuals who took leadership roles or who got drawn into this process. There is much testimony throughout the book about the changes, indeed transformations, that were induced by the interdisciplinary, multi-institutional, field oriented program which emerged. The universities involved reoriented themselves from a mostly self-referential position, where the peer group to be impressed and satisfied was either other university professionals or administrative superiors, to an outward looking posture, where residents of rural communities were more looked to for information and for approval.

The ways in which university faculty and students use their time and resources had to be altered, even wrenched, from old, comfortable and familiar patterns of use. This process of bringing universities and communities closer together is one that is increasingly proposed. But not many efforts have persisted in this direction, learning from the obstacles, feedback and delays. This book shares such learning for others interested in making such transformations.

What were the benefits and impacts of this effort? There are various indications reported that communities which worked with university

personnel became more confident, motivated and coherent for exercising local decision making and management capabilities. But the most evident impacts so far have been on the university personnel involved, an investment in building up the cadre of persons who can in years to come give guidance and motivation to strengthen management capacities at local and ascending levels.

Persons looking for direct, attributable causation in the midst of such institutional interactions will probably be disappointed because of the multiplicity of influences. One of the observations that applies here, as it does to many other situations, is that good things do not occur in a vaccum. For complex transformations to be achieved, not just with incentives and structural changes are involved, but also a less concrete but no less real permeation of society with ideas and normative reorientations, where some values become more salient and others less.

What can be seen from this account of CAD and JLAU involvement in community based natural resource management is how latent ideals and aspirations have been elevated, within the university community, within government circles, and within communities. At the same time, competence is gained individually and collectively in decision making, resource mobilisation and management, communication and coordination, and also conflict resolution, pertaining to natural resource management (and other aspects of developmental action).

Building up such capabilities and the disposition to utilise and further strengthen them is a broad process, more than a matter of training and mastering specific skills. The leaderships of CAU and JLAU, and of IDRC as a supporting agency, deserve commendation for appreciating that this process is a diffuse, pervasive one, and for being willing to enter into such an open-ended venture in social change.

This foreword, addressing issues that are broad and somewhat abstract, is a counterpoint to the specificity and detail of the book which follows. I have tried to sketch out a framework for understanding the significance and thrust of the experience reported. It is too early to make any 'bottom line' assessments of this process. We can see already how engagement in CBNRM from a university institutional base has affected

the academic institutions involved and the people who were acting as their agents. We cannot see confidently yet what is the effect of such an initiative on the communities and regions affected and on the natural resource systems that these communities and regions depend on.

This kind of engagement is unusual for universities around the world, and particularly for universities in China, where there is a long tradition separating institutions of higher learning from the daily life of most fellow citizens. That this experience in participatory action research has been undertaken and documented in China makes it particularly instructive. It is to be hoped that faculty, administrators and students in Chinese institutions, but also in others elsewhere, will find encouragement in this experience and will be emboldened to undertake similar initiatives that link universities with communities as well as with government and non-governmental institutions that share responsibility and concern for sustainable and equitable development.

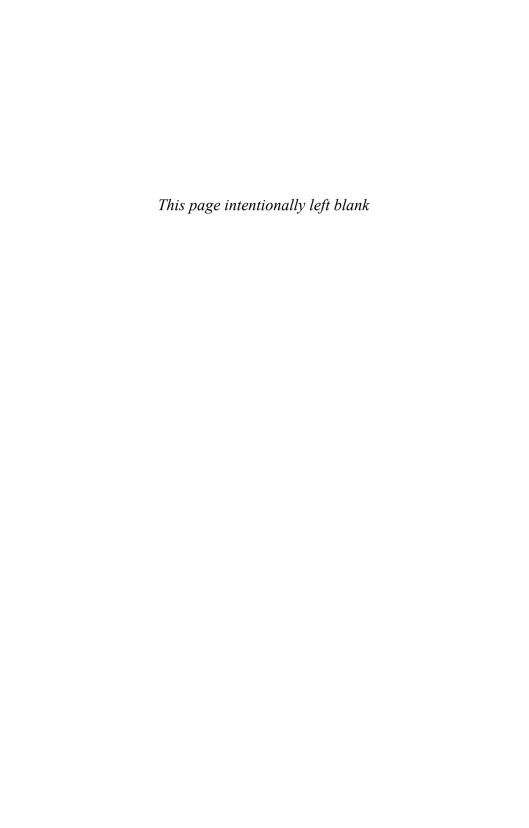
Participatory action research (Whyte, 1991; Whyte et al., 1989) has potential that is increasingly recognised to transform the relationship between universities and the societies in which they function and are expected to serve (Greenwood and Levin, 2000, 2001). This case study focuses on community based natural resource management as a connective concern between universities and rural populations and with the various institutions that assist them.

If multi-institutional, many level CBNRM collaboration can achieve the reorientation and learning required for success, both communities and universities will gain capacities that will serve well their society as a whole. Sustainable natural environments are only one of the domains where more effective collective action and the application of knowledge to solving practical problems are needed.

> Norman Uphoff Cornell University December 1, 2007

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Preface

March 19, 2006: Sunday morning in Ma Shan county, Guangxi province. The students are preparing for their feedback presentation to the local research team and the farmers. We are having a very good field visit! Our Guangxi team represents a different kind of 'family' and has had different kinds of experiences as compared to last year; but just as joyful and interesting.

On Friday morning we received one of the most extraordinary welcomes we ever received from farmers, with singing and so much joy... Students refrained from starting interviews with farmers right away, but instead joined the singing. The local performance group prepared a special song – an ode to the researchers, who come to the village to work together with the farmers instead of lecturing to them.

The students also learned how to use threshing sticks... to make music together! Extraordinary! This was followed by lunch, followed by the first interviews, in two smaller groups. At the end of the afternoon, the local performance group danced, sang and presented a theatre play (they sang the special song again). It was wonderful.

This fragment of an e-mail message provides a glimpse of the experience documented in this book. Sent to a colleague at the other end of China, accompanying another group of M.Sc. and Ph.D. students visiting a rural community in the northern province of Ningxia, it illustrates the spirit of the educational innovation process highlighted in the following pages. This process, initiated at two of China's main agricultural universities, is now spreading to several others, and even into neighbouring Mongolia.

To give the readers an even better sense of our enriching experiences and the impact they generated, we present the song composed by the farmers of Ma Shan county to welcome us, referred to above. The song, artfully translated by Yang Huang, conveys the kindness of the local farmers who received us (coming from far away with many questions) with open arms. The song also points to the farmers' acute awareness of

their own lives and of the many rapid changes occurring in rural China. With a healthy dose of humour, farmers teach us that they are not conservative or backward, but ready to try out new things, if new initiatives are based on sincerity, mutual respect, and a true spirit of cooperation which will lead to concrete improvements in their lives.

Agricultural specialists coming to the village of the Yao

Men: ... let us sing songs to the world with a golden throat

Every folk song is about the village of the Yao

Hearing our songs, fish and shrimp in the water smile

Hearing our songs, all the flowers in the mountains smell aromatically

Women: ... the scenery of the village of the Yao is beautiful now

A picturesque scene with new houses

Poor life has improved

Every household eats meat, drinks wine

Men: ... honeysuckles bloom, the potpourri spreading a thousand miles away

Attracting the specialists to come to the village of the Yao

Making Mashan become more famous

The golden phoenix flying out from the mountain area

Women: ... specialists coming to the village of the Yao

Busy with inquiry and research

Traditional agriculture needs to be improved

Please remember every person

Men: ... agricultural technology develops so rapidly

Traditional cultivation needs to be improved

Let us experiment with the maize varieties

Let us do something new

Women: ... all villagers discuss together

Specialists give good suggestions

We come together to change the situation

Men: ... thanks to the specialists for coming to village of the Yao

Investigating without being afraid of hard work

Visiting hundreds of households

Paying attention to the details of our life

Women: ... it's good to adjust the agricultural structure

Adjust our agriculture to the market

Filling the barn full of grain, filing the pocket full of money Everyone is happy to become richer

Together: Good policy of the central government The three pillars of rural development will show the way¹ New technology will improve our agriculture

The villagers of Yao will soon have an easy life

We hope that this book, about bringing new life to rural development teaching and research in China's higher education system, will inspire more innovative ways of working together at universities and other organisations involved in rural development, in China, and elsewhere in the world.

The Editors

¹ As promoted by the current Chinese government, known as *san nong* or three nongs: *nongye, nongcun, and nongmin*: (the development of) agriculture, rural areas, and farmers.

Acknowledgements

At the beginning of our journey, we were a small group of people sharing a dream – a dream of changing the content and dynamics of postgraduate teaching and research programs at the College of Humanities and Development (COHD) at the China Agricultural University and at Jilin Agricultural University (JLAU). Over time, our group of innovators grew rapidly, bringing aboard other teachers and students, as well as researchers, extension agents, NGO staff and farmers. We all shared a desire to make rural development studies more interesting and relevant. If we have done this to any degree, it is because of the collective action of all the fearless, open-minded, joyous friends who joined us on our journey.

We owe a thousand *xie xie* (thank you) to colleagues at the Centre for Chinese Agricultural Policy, the Guizhou Academy of Agricultural Sciences, and the NGO HOPE in Ningxia. From day one, they were on board, allowing us to accomplish what we set out to do: bridge the gap between higher education and rural realities across China. They opened their minds and hearts – as core members of the working groups and as co-facilitators in the courses – and connected us with researchers, extensionists, government staff, and farmers in Guangxi, Guizhou, and Ningxia, year after year. In Jilin province, we thank our key contact people from townships in the west, centre, and east, who played similar roles.

Colleagues from the State Forestry Bureau, Beijing University, and ActionAid helped us in the early stages of our journey by sharing their diverse professional experiences in the field of community based natural resource management. They also contributed to identifying the core capacities required by today's rural development professionals, in government, academic, and nongovernment sectors.

Staff and students at COHD and JLAU, and later at Yunnan University, Guangxi University, Hebei Agricultural University, the College

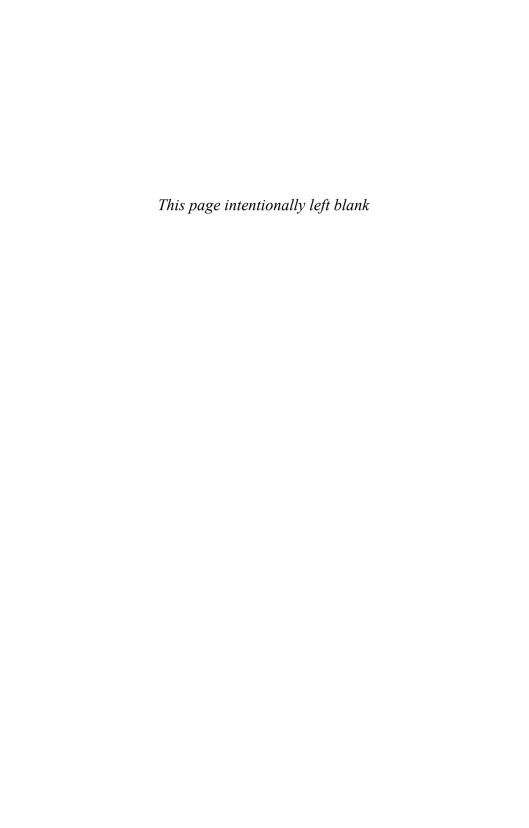
of Finance and Administration of Guizhou, joined us for various lengths of time, bringing new perspectives and ideas from a diversity of locations and institutions. Colleagues (staff, and in the case of Mongolia, also students) from the Philippines, Thailand, Laos, Vietnam, and Mongolia also joined at various points of time to learn from our cases, provide feedback, and share plans for curriculum development and related activities.

Colleagues at the International Development Research Centre have been supportive all along, giving advice and moral support and sharing our achievements and lessons with others, across the world. We would like to say *merci beaucoup* to Guy Bessette, who, among many other things, codesigned the roadmap for our efforts, which we called 'toward centres of excellence for CBNRM' (more about this in Chapter 1).

Sandra Garland had the courage to jump on the bandwagon and edit the full text, making our stories and reflections more concise and harmonious. Bill Carman masterfully managed the publication process, which, as happens so often, went through some unexpected ups and downs. We are also grateful to the editorial team of the Cambridge University Press India Pvt. Ltd. for publishing this book.

We owe gratitude to our families, who endured the many long hours discussing ideas (often at any time of the day), drafting and revising plans, putting exercises into practice, and monitoring activities in a never ending effort to ensure that we are still on track. They also allowed us to travel to and across China and beyond, on roads still uncharted and with destinations not well known. They have kept us going forward.

The Editors



A New Journey

Li Xiaoyun, Qi Gubo, Lu Min, Xu Xiuli, Ronnie Vernooy

'I am very glad to go on this journey to Ningxia. It's good experience for me. Kutuan village is the hardest place I have ever been.

A week ago, we prepared for the field research. There was much discussion, and our opinions were incorporated into the framework we designed. Now I understand why the course facilitators emphasised the need to ask farmers for their ideas.

During the days in the field, we got to know the farmers. They have their own ideas, interests, and wishes, but they also have problems. Their lives depend on the weather, the sheep, the water, and so on. Most of these factors are hard to control. I don't know what I can do to help them change their lives. They have dreams and are fighting to make them come true. I admire the spirit of the farmers whom we visited. They are unpretending, loyal, and warm-hearted. Even though we were working with them only a few days, I was greatly moved. This experience is a rich treasure in my life.

Communication is very important, not only among our partners, but also between farmers and us. On this journey, I communicated a lot. It helps our work and it helps me understand participatory rural development. Collaboration is a good way to work. Even though a minor conflict arose in our small group, we were able to solve it and finish our work together. We need to do self-examination. This is also a good opportunity for us to practise expressing our

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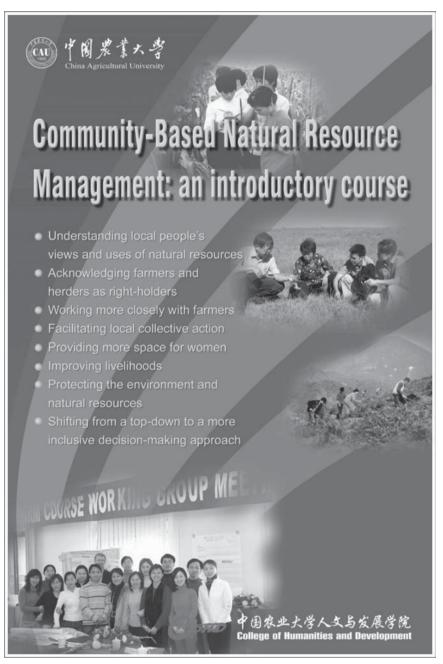
own ideas. Everyone needs courage and people to pay attention, no matter what their speaking ability. Support from others is the best help when you are making a presentation. I received this kind of support from my friends – from everyone in the Ningxia group – when I was nervous, standing in front of many people. I thank them all very much.

During this time, I also discovered my weaknesses. Sometimes I am not considerate. My ability to summarise and analyse is not very good, and I am not a good speaker. I hope I will improve these skills by studying community based natural resource management. Thank you for giving me the opportunity to join this journey and take this course. I will try to do my best.'

M.Sc. student, College of Humanities and Development, China Agricultural University, Beijing, March 2006

A spring wind blowing

In spring 2005, after many months of preparation by a group of teachers, researchers, and students, a novel, introductory Community Based Natural Resource Management (CBNRM) course was delivered at the College of Humanities and Development (COHD), China Agricultural University (CAU), Beijing (see poster on page three). A group of twenty four Master's and Ph.D. students took part in this first postgraduate-level CBNRM course in China. Ten teachers and researchers with a background in both natural and social sciences contributed to this pioneering event as course facilitators. The students were following one of the three main programs at COHD: rural development and management, sociology, or regional economics. The course was organised using a participatory curriculum development method guided by insights from adult teaching and learning theory and practice. Participatory curriculum development is still a novel method in China, as elsewhere (Li Xiaoyun and Li Ou 2003; Taylor and Fransman 2003, 2004; Qi Gubo et al. 2008). Introducing, experimenting with, and assessing this method in Beijing and, later, in Changchun (the capital of Jilin province) turned out to be an enriching experience, as one of the students in the course recounts at the beginning of this chapter.



Poster announcing the first CBNRM course

This book presents the experiences and lessons learned during this innovative development initiative in China, which is part of a larger effort to mainstream an action learning approach to rural development studies, teaching, and research. We believe that this approach can significantly increase the relevance and effectiveness of natural resource management and rural development studies in China and help put China's higher education policy reforms into practice. The course and the related activities have set the stage for more profound changes in teaching, research, and learning at COHD. Yang Huan, one of the M.Sc. students in the 2006 course, speaks for many:

Lack of awareness of conditions, especially in rural areas, is a common disadvantage of our generation. We were trained as study machines. We have no chance to get to know society by experiencing it. And before we came to university and learned about the field of rural development management, most of us knew nothing about rural life. So there is a big gap between principles and reality for the students. It is hard for us to fill the gap if we lack the experience of living the life of farmers. This course gives us the chance to go to the field and allows us to 'see' the life of farmers. For me, the facilitators' enthusiasm, experience, and achievements were illuminating. They provided examples and the direction of thinking. The rest we did ourselves.

This chapter describes the larger effort and the policy context in detail. Chapter 2 describes the lengthy, intense, but crucial preparatory process, which was instrumental in obtaining broad support (including financial support) for bringing together the first working group to take on course development and management and for sketching out the first part of a more comprehensive learning road map. Chapters 3 and 4, presents the design and describes the delivery and assessment of the first two test runs of the course, Community Based Natural Resource Management: An Introduction. Chapter 5, describes a further course developed at Jilin Agricultural University (JLAU), Changchun, in northeast China. Adapted from the CBNRM course, this one is entitled Participatory Rural Development (PRD): An Introduction.

In 2006, following the first course at JLAU and the second at CAU, a support component was added in the form of a student fellowship. The aim was to encourage M.Sc. and Ph.D. students (and some B.Sc. students at JLAU) to carry out fieldwork for theses oriented toward CBNRM and PRD and to practise what they learned in the courses. For students who are motivated and who have the support of their thesis advisors, these fellowships allow them to gain more in-depth experience, mainly in the field but also partly in the classroom. They also provide an opportunity to explore longer-term commitment to a rural development 'project,' e.g., links to a long-term research or development effort carried out by CAU, JLAU, or one of their partners. We discuss these student fellowships and related activities in chapter 6.

This publication is intended to show how ideas about curriculum reform and related activities were born. This book describes how they were refined and put into practice through a collaborative, experiential learning by doing approach that involves many different, but like-minded people. Throughout, this book highlights participants' motives, perspectives, and experiences. It draws attention to the new relations being developed and speculates on the changes these relations and the participants' experiences might make in their studies and lives. Remarkable changes were seen in personal identities, as the opening 'story,' and many others, illustrate. It is believed that these are expressions of transformative learning. This book also describes the challenges and stress the importance of the recounted experiences as both meaningful and analytically useful reflections on practice. The stories also suggest that there is more to capacity development than narrowly defined improvements in skills or performance.

Attention is paid to the wider organisational and institutional (including policy) context in which our efforts are embedded. In the particular context in which we work, creating space for change from 'within' organisations seems to have a greater chance of success if support can be mobilised from key 'outsiders.' Building bridges – which is central to how we do things – has been critical to the effectiveness of our efforts. Evolving practice provides the fertile ground for the identification of main insights in the change process, more so than abstract theory or rigid operational frameworks with predefined parameters or indicators.

The experiences and the lessons learnt are directly relevant to and useful in the higher education policy reform process that is underway (Zhou Ji 2006). They are proof of the ability of the main stakeholders to engage in this process and to adapt and implement key policy elements.

The concluding chapter summarises our learning to date, in terms of both practice and theory, and reflects on the next steps.

The big picture (part 1): challenges in China's higher education

'After the field visit to Shuangyang (in the centre of Jilin province), we have come to know the rural situation better and also have a better understanding of action research, which is not only a way of studying, but also a way of helping the farmers. Our goal is to help the farmers improve themselves. They need materials, but this is not enough. We also should help them to be aware of the problems they are facing and help them to get together to become more powerful. We have a long way to go to achieve this.'

M.Sc. student, JLAU, Changchun, June 2006

The course development experience is part of a larger COHD-led action research and capacity development initiative (COHD 2004) to promote CBNRM approaches in rural China. The design and delivery of a CBNRM curriculum, which will be expanded to the Master's and Ph.D. levels, will train a new generation of rural development professionals who have more comprehensive knowledge and skills and who are more connected to rural realities, i.e., persistent poverty, a rapidly widening gap between poor and rich regions, increasing natural resource degradation, and widespread pollution (Hanson and Martin 2006).

Core elements of CBNRM research

CBNRM research is characterised by attention to complex natural and social systems (requiring an interdisciplinary approach and teamwork), a longer time perspective, a diversity of social actors, a scale of analysis and intervention beyond the farm unit, collective action, and a focus on common resources, a participatory action

and social learning style, and strong emphasis on empowerment and capacity building. Conventional research often focuses on one particular resource (water, land, or forest) with little thought about the social factors that influence access and use. In contrast, CBNRM focuses on the interactions of ecological, socioeconomic, and political elements. Conventional research usually continues for 1 or 2 years, but CBNRM cannot often deal with the complex questions it addresses in such a short period. It requires a longer-term development strategy. In conventional research, the main participants are usually researchers and government. In CBNRM, they are the users of the resources, community members, local farmer/fisher/ herder associations, researchers, and staff of nongovernmental organisations (NGOs) and government. Other social actors, such as traders, may also be involved. Social and gender analysis are key to understanding differences and addressing inequities. In conventional research, the learning style is mostly top down, with little thinking about empowerment or capacity building. CBNRM favours a multidirectional learning process, especially using informal methods such as peer-to-peer learning; it aims to empower people and it supports capacity building and the organisation of farmers, fishers, or herders. Collective action and the management of common resources are central to CBNRM. But the 'community' in CBNRM should not be taken as homogeneous and static. Rather, it refers to the perspective - from the local 'out' and 'upwards' to encompass processes and structures beyond space-time restricted localities.

Adapted from Vernooy et al. 2005 (see also Tyler 2006)

However, it is not easy to bring about change in China's large, very hierarchical and very bureaucratic higher education system. Although there is much talk about 'reform', in practice change comes about slowly.

Reform in higher education

On 3 March 2004, the State Council approved the Ministry of Education's 2003–2007 'Action Plan for Invigorating Education.' This is the fundamental blueprint for all those involved in education to

further implement the strategies of 'Rejuvenating China Through Science and Education' and 'Reinvigorating China through Human Resource Development' and to speed up educational reform and development in the years to come. The new policy directions set out in the action plan are based on observation that China's society is changing rapidly and that the traditional way of organising and managing the higher education system is no longer adequate. There is a clear recognition that an education system based on a rigid top-down planned approach will no longer provide the country with the necessary human resources 'to achieve modernisation' (Zhou Ji 2006: xiii).

From these fundamental insights, a number of challenges follow. The major ones are training a variety of specialised professionals to meet the demands of socioeconomic development; instilling students with practical, innovative, creative, and entrepreneurial skills; and sharing resources (or inputs) more effectively and efficiently (Zhou Ji 2006: 85). The minister of education, Zhou Ji descibes these challenges as:

First, we should think seriously about the relationship between the educational development and the goal of establishing a well-to-do society by 2020. China is a developing country with a huge population of over 1.3 billion. The most difficult problem for us to tackle during the process of establishing a well-to-do society is the mass population... As education plays a fundamental and directing role with overall importance in the establishment of a well-to-do society, it must be prioritised strategically for further development.

Secondly, we should think seriously about the relationship between educational development and the overall development of human beings... With the economic and social progress and the development of a market economy, the need for employees to be comprehensively developed will be more demanding.

Thirdly, we should think seriously about the relationship between the reform of education system and the perfection of a socialist market economy... To develop education is one of the practical embodiments of public service for modern government and therefore should be placed at the top of the agenda in the public administration system and public fiscal system. 'Old' disciplines are due for review. The guiding principle for establishing new academic specialities is China's socioeconomic development needs. According to the minister of education, clear job opportunities and a steady demand for professions (two sides of the same coin) are pivotal (Zhou Ji 2006: 86–87). To create new specialities, a number of elements are needed: a clear description of the content matter (general level as well as course level), a feasible education plan, a sufficient number of qualified teachers, adequate materials and equipment, and funds. The minister provides the following guidelines for curriculum change – increase general knowledge; increase the number of elective courses; emphasize practical, experimental, and social interaction in courses; adopt a cross-disciplinary perspective; use creativity, and stimulate research as part of teaching and training (Zhou Ji 2006: 100–101). He also outlines a curriculum development process consisting of six interrelated steps:

- 1. build a contingent of teachers
- 2. develop teaching content
- 3. develop advanced pedagogy and teaching methods
- 4. compile textbooks
- 5. reform experimental courses
- 6. define new motivation and evaluation mechanisms.

In parallel with the redefinition of priorities, student training methods require changes. Narrowly planned and executed training is no longer appropriate. The trend is toward greater emphasis on basic knowledge and comprehensive abilities, the development of practical skills at the undergraduate level, combining science and arts (called 'interdisciplinarity'), the integration of theoretical and practical training, and more freedom for students to select courses of their own interest. The minister seems eager to point out that some universities have made a start with this:

Universities also lay greater stress on integration of theoretical and practical teaching. Some large, research-oriented universities have gradually implemented a mode of advisory teaching, where an advisor provides academic guidance to a number of undergraduate students.

For students, it is an explorative or inspirational learning mode, different from the traditional receptive learning mode. Teachers are better prepared to teach in the form of discussion and elicitation so as to inspire initiative and enthusiasm in their students. [Zhou Ji 2006: 88–89]

Of special interest are a number of measures to improve graduate education – subsidies for outstanding Ph.D. students, publication of outstanding theses, and better criteria and information systems to ensure credible evaluation of graduates (Zhou Ji 2006: 93–94). The development of new courses, teaching methods and delivery mechanisms are all part of today's teaching management practices. In addition, the minister identifies three other elements of high quality education: the adoption of up-to-date textbooks and courseware, the use of modern educational methods based on interaction with students and elicitation of their ideas, and offering advice to students (Zhou Ji 2006: 90). Teachers, students, and senior management staff are all responsible for quality control.

The reform policy contains many valuable elements. However, unfortunately, changes have been slow. Theoretical knowledge continues to be seen as the most valuable expression of science. There is little or no interest in addressing the practical problems that rural people face. Direct links and meaningful interactions between rural communities and staff and students remain rare (Li Xiaoyun and Li Ou 2003). People-centred approaches and systematic attention to the social dynamics of rural development are still not common in the agricultural and environmental sciences. 'Hard' science approaches prevail. Conventional lecturing remains the dominant method for instructing students. Students look up to the teachers, maintain considerable distance – literally and figuratively. In classrooms, there is little room for critical reflection on the meaning of, reasons for, and methods of learning itself.

Some efforts are being made to change the situation. In 1999, a small group of Chinese agricultural and rural development professionals initiated the Farmer Centred Research Network (FCRN) to promote a farmer focused research and development approach at the national level

by introducing participatory and CBRNM based action research and teaching. The FCRN brings together staff from about twenty organisations, including agricultural academies (Institute of Plant Nutrient and Analysis, Inner Mongolia Academy of Agricultural Sciences; Integrated Rural Development Research Centre, Guizhou Academy of Agricultural Sciences), universities (CAU, JLAU, and the South west Agricultural University), research centres (Centre for Chinese Agricultural Policy based in Beijing), and NGOs (the Ningxia Centre for Poverty Alleviation and Environmental Rehabilitation [HOPE] and the Centre for Biodiversity and Indigenous Knowledge, based in Kunming, Yunnan).

With support from COHD staff, the FCRN has gone through a first phase of capacity building and learning about this new approach. The second phase, which started in 2004, is strengthening and expanding on these achievements. The ultimate goal is to move the agricultural research and education system toward participatory and farmer centred learning and action (Qi Gubo et al. 2005). In addition to carrying out participatory field research supported by targeted training activities, the network members are now realising that it is essential to find ways to institutionalise these methods in China's higher education system. Unfortunately it appears to be more difficult to integrate participatory learning and action into the university curriculum than into some development agencies, perhaps because of the still very hierarchical nature of the higher education system and the strong resistance to change. Increasingly, this is creating a discontinuity between knowledge generation (in the classroom) and utilisation (in the field), as higher education fails to keep pace with the increasingly serious problems of natural resource degradation and widespread rural poverty.

Innovative curriculum development is one key means to deal with this bottleneck, as it allows the introduction of a new, more relevant approach to learning to the new generation of development professionals. If new curricula and programs could be introduced into the over 100 agricultural and related higher education institutions in China, more appropriate knowledge and skills could be generated and used. As one of the leading institutions for rural development study and learning in the higher education system in China, COHD has the responsibility of

advising other universities about curriculum and program development. This provides an opportunity for change and for a potentially large-scale application of the new approach that we aim to develop and try out in the coming years.

Within COHD, our work is housed in the Rural Development Management (RDM) program. Currently, this program includes undergraduate, graduate, and Ph.D. levels. Several development themes are addressed in the key courses and related research undertaken across China. For example, research interests include poverty alleviation, development policies, community based resource management, community/village governance, rural technology innovation, technology policies, development communication, participatory community development planning, gender and development, rural extension, human resource management, and children's participation in development. In 2006, twenty eight teachers and faculty members were involved in research and teaching. They were responsible for about 250 undergraduates, fifty graduates (under RDM, regional economics, and sociology) and forty Ph.D. candidates, who were supervised together with professors from six other departments. All staff members have pursued development studies abroad; many of them are also consultants on rural development issues in China.

The big picture (part 2): toward more integrated approaches to capacity development

'The 5 days in Ningxia reminded me of a proverb that says, "A special place gives birth to special people." The reality of rural life varies from place to place. When we saw the sand dunes and the soil walls of Kutuan village for the first time, some of us had an absurd thought: "Why don't they all move into Yanchi County? Maybe it's a solution for their living." But when we saw the enthusiastic peasants of Kutuan village, we changed our minds, because they had a common wish of developing their own village. The harmony between villagers impressed me deeply.

During the five days, we used participatory research tools to work with the peasants, and their warmness and real feelings touched me

deeply. In the fieldwork that we did, I tried to play different roles, such as an interviewer, an anchor, a member of the PM & E group, and so on. Every role gave me different feelings. I think I will treasure these experiences, because it will help me a lot in the future. To us who are involved in the CBNRM course, we should consider the things that peasants pay attention to. In addition, we'd better guide peasants to use their own power and wisdom to overcome the development problems they face.'

Zhang Ziqin, M.Sc. student, COHD, Beijing, March 2006

Natural resource management and rural development problems are complex, diverse, and in constant flux. Experiences from across China provide strong evidence of this. To analyse these problems, various researchers are arguing that dynamic learning processes and methods are required to carry out interventions, and assess alternatives (Vernooy et al. 2005) The challenge, then, is to do research that results in both a better understanding of the complexities of social life and a sounder base for action.

At the heart of such an approach is an effort to engage social actors and, together with those interested:

- 1. set research priorities and identify key problems, issues, and opportunities
- 2. analyse the causes that underlie these problems and issues
- 3. take action to find both short and long-term solutions to the identified problems or take advantage of opportunities
- 4. learn from these actions and make changes as needed.

Today's major natural resource management questions invariably concern situations in which various social actors operate, interact, and often debate and compete over resources, interests, and points of view.

Many researchers and practitioners in the field of natural resource management are coming from the field of biophysics and do not have the social science skills and knowledge needed to work within a participatory research framework. The same can be said about many people involved in decision making and policy-making. Those working within a participatory research or development framework quickly realise

that they must foster multi- and interdisciplinary ways of working. For many social scientists, this means gaining a better understanding of the natural sciences – histories, rationales, research questions, methods. It also requires working together with partners from rural communities, as well as associated social actors or stakeholders, and to speak the same language about participatory action research in terms of approaches, tools, and practices.

Development and research organisations, including those associated with the FCRN in China, have been trying to address the issues and challenges outlined above, usually with limited resources and support. Both researchers and practitioners (such as extensionists) have called for more and ongoing support. They are searching for clearer frameworks and sets of tools that enable them to improve their work with rural communities and other stakeholders in terms of effectiveness, scientific quality or rigour, and results. Organisational obstacles and shortcomings – the lack of incentives, little or no recognition from peers, often hamper their work.

Elements of such frameworks as well as tools and techniques, already exist, but they are scattered around organisations and countries. Many research and development organisations have experimented with different participatory research and training strategies, such as participatory monitoring and evaluation (PM & E) (Vernooy et al. 2003), social and gender analysis (Vernooy 2006), participatory development communication (Bessette 2004), use of the sustainable livelihoods framework, etc. However, most of these initiatives have focused on individual research capacity building (some have also addressed team building). The major issue now is to translate this into more effective organisational capacity building.

Knowledge about good practices for organisational research capacity building in CBNRM is still scarce. A few CBNRM oriented organisations are interested in this, but face challenges (Horton et al. 2003). Institutionalisation is not something that happens as result of a single research project or 'policy brief,' or even a series of publications, but only through a long-term consistent program of support to partners for

building capacity and gaining field experience. The experience at COHD, which is described in chapters 3 and 4, is a good example.

Reflecting on this issue, staff at Canada's International Development Research Centre (IDRC) saw an opportunity to bring past and ongoing capacity development efforts and results together to institutionalise CBNRM in national or regional centres of excellence – places where future generations of CBNRM scholars, researchers, and practitioners could learn about, practise, improve, and disseminate CBNRM concepts, methods, and achievements. These ideas were documented in a concept paper entitled "Towards CBNRM centres of excellence," presenting what was designed as a series of clear and coherent ideas that could inspire our own work as well as that of partners (Bessette and Vernooy 2005). Subsequently, when we became more confident of the usefulness of these ideas, we asked an IDRC intern to elaborate on the underlying thoughts more systematically and thoroughly (Large 2006).

'Centres' do not necessarily refer to physical units, such a university department. A centre could take the form of a network or a community of practice (Wenger 1998). The notion of moving toward centres of excellence emphasises the institutional efforts required to ensure the promotion of CBNRM approaches, concepts, methods, and tools. As Wenger notes, this notion of 'toward' implies action as the outcome of cooperation (mutual engagement) and commitment to a common agenda. Action as well is informed by reflection, sometimes called praxis. We hypothesized that these three elements – willingness to cooperate, shared goals, and continuous, collective reflection – are key to putting the concept of centres of excellence into practice.

In 2004, IDRC staff teamed up with Chinese colleagues to combine their ideas about mainstreaming CBNRM in higher education and our concept of centres of excellence, and put them into practice. Together, we walked the road described in this book.

The mainstreaming strategy

'The PRD course is a new style of teaching and learning. It is a new idea that is changing and will change us. So I hope it will be spread

around us. In the classroom, we take part in all kinds of activities, actively, and then we go out to do field investigation. Learning is acting. Of course, acting is learning. It is the activities that not only make our study a happy thing, but also give us lots of knowledge inside and outside the class. We can express ourselves freely. Each member is equal. To find a better way to settle a problem, we must work together and help each other, which makes our minds broader and also quicker. In the class, we can learn how to give and share. Free communication, working together, and equality are very important. We like this kind of class because it takes place in a happy, free, and flexible atmosphere. What is more, we can find the knowledge, the way to the knowledge, happiness, confidence, and friendship.

As students, we care about our study. However, we pay more attention to the people, especially the people living in the rural areas. So I hope our work or suggestions can do some good to them. When our work is more useful, it is a success to us.'

M.Sc. student, JLAU, Changchun, June 2006

At the crossroads of the big pictures sketched above, a plan to introduce and mainstream ideas was developed. The plan consists of six interrelated components. At the core is development of 'good practice' cases using participatory curriculum development for innovation in higher education and introducing CBNRM and PRD. This includes continuing experimentation with the courses in Beijing and Changchun and support to other similar initiatives at other universities. It also includes the use of participatory curriculum development to prepare one or more other, related courses at COHD and JLAU, possibly in cooperation with other departments in the universities.

The second component is the sharing of experiences, results, and lessons. This will be realised through teacher-teacher and student-student exchanges of experience and guidance (similar to the farmer-to-farmer approach). The aim is to organise regular exchange events, within China, and support others interested in following our example.

The third component is supporting CBNRM and PRD fieldwork, for students and staff, to link theory with practice, to reflect and learn on these activities, and to use the results of the field research as inputs for course development and refinement. This means strengthening

collaboration with the pioneers of CBNRM in China, such as Guizhou Academy of Agricultural Sciences, Centre for Chinese Agricultural Policy, Centre for Biodiversity and Indigenous Knowledge, and others. This component will be implemented through small grant support for CBNRM and PRD thesis fieldwork, supervision of CBNRM and PRD students by COHD and JLAU staff jointly with partners, seminar series with students and interested staff, including those outside COHD and JLAU, and a publication series (see chapter 6).

The fourth element is the identification and support of 'champions' – young and promising students and staff who show initiative and leadership. Several appear in this book, as co-authors and in the stories presented throughout.

Fifth, and turning to the external context, is the creation of an enabling environment. This means access to longer-term financial and political support from Chinese sources, such as CAU and JLAU leaders, the Ministry of Education, the Ministry of Agriculture, and perhaps complementary funding from donor agencies. This component will be operationalised through policy research and analysis and advocacy efforts.

Last, but not least, is sound and ongoing monitoring. This implies strengthening our project monitoring and evaluation skills through targeted training and practice and the development and implementation of sound assessment plans.

Getting started: applying participatory curriculum development, learning theory, and participatory monitoring and evaluation

'I managed to make sense of the participatory teaching methods and curriculum process. I further understand what participation is and what action research is. The deepest feeling concerns the teachers and students of China Agricultural University and the facilitators' pragmatic and enthusiastic spirit. I think I will adopt this study and the methods of teaching and research. It is a very important inspiration.'

A visiting teacher from JLAU, taking part in the 2006 CBNRM course in Beijing, April 2006

In 2004, the journey of building on our own and others' work in the fields of participatory research and teaching was started. The CBNRM and PRD courses were designed using a participatory curriculum development method (Taylor 2003), with an important role for participatory monitoring and evaluation (Guijt et al. 1998; Estrella et al. 2000; Vernooy et al. 2003). This method is informed by core elements of an experiential learning approach (Kolb 1984) and by insights from adult learning theory (Knowles et al. 1998). Conceptual pillars were discussed briefly and efforts were made to translate them to the Chinese context.

Participatory curriculum development

Participatory curriculum development (PCD) is a method in which a number of – or all – main social actors involved in the curriculum topic are invited to take part in design, planning, delivery, and assessment. Similar to participatory action research, PCD aims to make the envisioned learning more relevant and effective (Taylor 2003). PCD follows a cycle of five main steps: situational analysis or training needs assessments, framework design, detailed planning, delivery, and assessment and possible refinement. At the heart of the approach is teamwork – throughout the cycle.

PCD was introduced and discussed during an exploratory workshop held in Beijing (September 2004) in which representatives from government, NGOs, and academic organisations from China (including members of the FCRN) and the wider Asian region participated. The workshop method followed the five steps of PCD, both as a means to introduce the approach (still very new to China) and to put the method into practice in a workshop setting. The workshop included a presentation on curriculum development, case studies from across the region, presentations by Chinese stakeholders - government, NGOs, and academia - on their work and interest in CBNRM, plenary questionand-answer sessions, and small group work. It allowed the various stakeholders to become more familiar with the PCD approach, assess its potential usefulness in China, and start building a group of interested partners willing to give PCD a try (Xiuli and West 2004). Familiarity with participatory research cycles gave the confidence to experiment with the approach.

Insights from adult teaching and learning theory

PCD is based on an experiential learning cycle that has four basic steps: experience, critical reflection on the experience, consideration of general principles, and action or experimentation (Kolb 1984). During this cycle, cognitive, emotional, attitudinal, and behavioural changes can take place. Learning can take a variety of forms and these often overlap. Van der Veen (2000) summarises three principal learning theory approaches that are relevant to CBNRM and rural development. The first, reproductive learning, assumes that there is a body of objectively verifiable knowledge and that this can be taught by breaking down content into its essential elements. This kind of learning, focused on absorbing content, is predominant in traditional education in China and elsewhere. Reproductive learning most closely mirrors the logical positivist (or empiricist) research paradigm, in which research seeks the accumulation of objective knowledge through the production of empirically testable hypotheses. Others have called this approach 'instrumental' (Mezirow 1991; see also Cranton 1994).

The second approach is constructivist learning (similar to communicative learning [Mezirow 1991]). It assumes that important features of the external world are uncertain and disputed and that people actively construct their understanding of it. It is about the process of changing or transforming perceptions, i.e., about the nature of learning processes (Cranton 1994: 50-51; Moon 2004: 17). Discovery and innovation, not repetition, are essential parts of this construction process. COHD (and to a minor degree, JLAU) has introduced this kind of learning into some of its courses, programs, and research activities, and the CBNRM course is building on these first steps. It focused on offering an alternative to absorbing information from textbooks or lectures, envisioned more direct interaction with rural realities (even if of short duration) through direct observation, interactions in the field, and in the classroom (with researchers directly involved in participatory research in various sites of the country), and through collaboration on a concrete, action-oriented research proposal.

The third approach is transformative learning. Through critical self-reflection, learners revise old or develop new assumptions and beliefs in terms of seeing the world. They ask questions about why it is useful to know. Learners together build a more open, integrated, or inclusive perspective of the world, and they act on these new insights (Cranton 1994: 27–28; Percy 2005: 130–134; Wenger 1998: chapter 12). Such transformation is often stimulated by communicative learning, but goes beyond it in terms of internalisation and transformation of understanding. This approach to learning has links to people-centred, emancipatory research approaches, such as participatory action research. Mezirow (1991) calls this emancipatory learning.

Applying the insights from learning theories

A combination of these three learning approaches, with particular emphasis on the introduction of and experimentation with transformative learning elements was used. Concerning the curriculum development process itself, question on why, what, who, for whom, and how of curriculum development were asked. Participants asked themselves what their roles as teachers, as facilitators of learning, should be and how this experience could be integrated with COHD's and JLAU's larger programs and activities. In terms of course content, the practice of learning by doing, encouraging students to discover the meaning of CBNRM/PRD above all in practice, by mutual engagement through field visits and related fieldwork, multiple group work activities, and a number of other participatory learning techniques, such as role playing and case study analysis was introduced. At the end of the course, participants were asked to produce, through group work, a draft CBNRM/PRD oriented action research proposal.

From adult learning theory, a number of insights were applied in an interrelated way. First, learning through experience, also known as learning by doing was stressed upon. Much was built on previous research assignments and work done by the students and teachers. Students were invited into the field to observe, feel, sense, think about, discuss, and reflect critically on a concrete CBNRM/PRD experience. In other words,

they were encouraged to engage with everyday realities and rural practices, ask questions, discuss findings and experiences, and report back to the whole course group. Ongoing research and development projects were introduced, visited, and used as case studies throughout the course.

In addition, teaching was carried out through a variety of practical exercises, mostly in small groups combined with plenary sessions. A central element was the field visit, organised as a research activity. Another central element was an exercise in action research proposal writing, which allowed participants to apply learning from the course to thesis field research. A number of the exercises and the proposal writing were assessed through a peer review process with little intervention from the teachers.

Learning through reflection was encouraged. During the course development stage prospective students were asked, Why a CBNRM/PRD course? During the course delivery process, students were asked to explain why they selected the course in terms of expectations. These expectations were juxtaposed with the plan of action defined by the teachers. Later, during the course evaluation, students were asked to review their original motives and identify emerging interests in CBNRM/PRD, participatory curriculum development, or other related topics of interest. One of the course topics dealt with formulating action questions based on the field-visit experience. PM & E was proposed to be used as a means to reflect on process, methods, and the learning process underway. A PM & E team of facilitators and students, developed a detailed plan, carried it out, and assessed its usefulness.

Learning from each other, among students, among facilitators, between students and teachers, with field project staff and collaborators was encouraged. The course exercises were done jointly. Group work was facilitated. Tensions and conflicts were resolved. Joint efforts were made in designing and facilitating PM & E.

Participatory monitoring and evaluation

PM & E encourages the active and meaningful involvement of one or more stakeholders in the design, implementation, analysis, and critical review of monitoring and evaluation activities. As such, PM & E moves 22

beyond roles traditionally assigned to researchers or to external evaluators contracted by donors to look at project or program achievements. Based on positive previous experiences in integrating PM & E into our work (Qi Gubo et al. 2005; Vernooy et al. 2003), volunteers among the course participants were asked to form a PM & E team. Small teams of students and teachers accepted the challenge and started working on PM & E plans for the whole course development process, both in Beijing and Changchun. They developed some preliminary ideas, shared them with the larger course working group, and in successive rounds of feedback and refinement turned them into a plan.

Common goals were to supervise the course delivery process and make adjustments if required; determine the merits and shortcomings of our learning and of our teaching; assess the course's general goal and five learning objectives; make suggestions for the following year's course; and asses the PM & E capacity building of the participants, especially of the students (Lu Min et al. 2005; Li Jingsong et al. 2006). During course delivery, the PM & E groups facilitated the various exercises, documented findings, and made suggestions to the course working group. During the field visits, student groups developed a PM & E plan according to local context. The students took charge of facilitation and reporting. At the end of the courses, the PM & E team analysed the results from assessment questionnaires and drafted a series of recommendations. Later, we also developed a PM & E plan for the fellowship support component (Yang Huan et al. 2006).

A good start

'After the introduction of the module, there was role playing. Three groups presented different situations for identifying problems, managing conflict, and problem solving in very visible ways. The Guangxi group's scenario was improving farmers' maize technology, comparing a top-down method with a joint-action learning process. The Guizhou team acted out conflict management in the Sloping Arable Land project, showing the roles of different stakeholders. The Ningxia team's scenario of problem identification in village

development showed the interactions between the HOPE team and the farmers, and the students and the farmers.

For me, the most impressive part was the comments of the course facilitators on the groups' performances. They pointed out effective and ineffective ways of joint action learning with specific suggestions, e.g., respecting farmers' needs and time, collaborative discussion, different roles of the stakeholders, etc. on the positive side, and researcher-led, one-way decision making, without feedback, without negotiation, etc., on the negative side.

During the plenary discussion, we re-emphasised some factors, such as at the cognitive level of the participants, sustainability with a long-term perspective, collaborative spirit, teamwork, partnership building, respecting each other, and transparency; at the practical level, we stressed the importance of consensus in terms of interests and objectives, participation in the whole process (including diagnosing problem, formulating research questions, action, monitoring, and evaluation), reflection and adjustments during the action, and pro-poor development considerations.'

Qi Gubo, CBNRM course facilitator, following Module 4 of the CBNRM course, Beijing, March 2006

So far, the CBNRM/PRD mainstreaming process has been an enriching experience for all involved. It certainly has been labour and time intensive, but now that the initial steps have been taken, we expect the intensity to be somewhat reduced. Careful preparations and ongoing monitoring, involving students as much as possible, and a continuous focus on learning by doing have been important to keep things going and on track. The course working groups and the fellowship support team have been instrumental in getting the work done to date. Bringing colleagues from various organisations together and involving a number of students have been very positive factors.

Time wise, the planning and delivery of the courses have not been without problems, although these have not been major. Better integration of the course with COHD's and JLAU's teaching and research will go a long way toward overcoming these problems. Better integration will also address the question of sustainability, but other issues — such as

finances and longer-term institutional support from CAU, JLAU, and the Ministry of Education – will require further attention. Dissemination and advocacy currently underway and planned for the near future will be important mechanisms for obtaining institutional and political support in the long-term – one of the challenges ahead. Future course working groups will have a key role to play in these activities.

Insights based on theory will continue to serve as guideposts, but practice reveals what works, what does not work, and where improvement can best be made. Optimistically, it can be said that a good beginning has been made, but as in any change process, the road can be expected to be bumpy at times. The experimental process of learning by doing and seeking advise from key partners at the field level and at 'higher' levels will always have to be sought.

Preparations: Every Long Journey Begins with a First Step

Qi Gubo, Xu Xiuli, Lu Min, Ronnie Vernooy

'The sunshine on my balcony is warm and beautiful, but the collective efforts on the course development lighten my heart even more... Promotion and appreciation of the learning process, involving different stakeholders as "best" we can, was and will be always kept in our minds. With the enlightenment of Gubo and Ronnie, I have understood the process of course development and course delivery is not simply a normal activity, but also a research initiative, which makes the whole story pretty interesting and fantastic, because now everybody is both a participant and a researcher at the same time. We observe the whole process, and at the same time are observed as a part of the process. The dual nature will encourage all the actors to contribute to the whole process with ownership, because all of us are now in the same boat with the same goal.'

Xu Xiuli, CBNRM course facilitator; reflections on the CBNRM course design workshop, 2 February 2005

First steps in a long journey

The early steps leading to delivery of the first CBNRM course in Beijing in the spring of 2005 were guided by a strong desire to work and learn



Course working group
Photo: COHD

together, by ideas about and insights into participatory curriculum development (PCD), and by our own experience with participatory approaches to research and capacity development. There was no blueprint to show how to turn ideas into reality in the Chinese context. Instead, it was agreed to embark on a learning-by-doing journey, hoping that collective wisdom and expertise would help reach the goal. Several questions guided the initiative:

- 1. How to develop the new curriculum using a participatory process involving various stakeholders? How can the curriculum development group get support from the university? How to build an alliance with the university's graduate schools and Vice President's office?
- 2. What timeline fits the participatory learning process to be introduced? Schedules are usually strict at the university. Can rural learning sites near the campus for example, a community development research project in Yixian County be used to overcome time constraints?
- 3. How do the costs of this new approach compare with the benefits? How do the costs associated with teaching CBNRM/PRD in a

- participatory way compare with those of a conventional teaching program? How to work toward the necessary sustainability of the curriculum?
- 4. CBNRM/PRD curriculum development is not only a matter of technical expertise (how to change a curriculum), but also touches on the issue of changing the conventional education system. How to change the culture of the university and its system in a way that will avoid conflicts that could interfere with implementation of the curriculum?
- 5. How to assess what has actually been changed for those involved in the curriculum development process and in the larger change process including members of the FCRN in terms of knowledge, attitudes, and skills? Do changes differ among different types of universities? What organisational changes have taken place, and how do individuals relate to them? What useful and measurable indicators can be used to assess capacity changes in the Chinese context? What kinds of capacities are crucial for mainstreaming participatory and farmer centred research in the formal research and education system in China?

With these questions in mind, the process started. In total, more than six months were spent preparing for the first CBNRM course. These were intense months characterised by a number of joint, face-to-face activities and a continuous stream of e-mail correspondence among the members of the group that put the learning process into motion. Interactions involved many people – in China, and beyond. This allowed for presentation of ideas, hear about other experiences, obtain feedback, revise ideas, obtain more feedback, and further refine ideas.

The face-to-face encounters were important for building and strengthening relationships – for becoming 'a family' as one of the working group members described it. However, without the use of e-mail to span the distances between working group members in various cities of China and Ottawa, Canada, it would have been very difficult if not impossible to get the work done. On the following pages are

excerpts illustrating both the dynamics and results of the face-to-face encounters and the e-mail correspondence. This material has not been edited, other than to correct minor grammatical errors.

During the journey, the importance of the creation and 'nurturing' of an enabling environment – in the classroom, in the field, and beyond was realised. Central to this enabling environment has been the space to freely express oneself and to be given a chance to speak out (thoughts, but also feelings), to be listened to with attention and respect, and to have the opportunity to ask questions – traditionally the prerogative of the teacher. Just as important has been the chance to interact equally, irrespective of social status defined by position, age, and sex, and to participate and contribute to the extent of one's abilities, irrespective of level of expertise. In the context of still very strong Chinese cultural values and norms of authority, power, and respect for teachers, this has been a major breakthrough.

The support of key decision makers has been instrumental in the creation of such an enabling environment. They not only gave the green signal to keep the exercise going, but also provided space to experiment, make mistakes, and learn from mistakes. COHD senior management, in particular, supported the activity from the very beginning, allowing introduction of new ideas at CAU and providing backups when necessary. IDRC senior management showed great confidence as well by providing long-term technical and financial support for the scaling out and scaling up part of the agenda. This also allowed extending the experience to JLAU, where, after a slow start, a good support was received.

Another key element in the creation of an enabling environment was the integration of participatory monitoring and evaluation (PM & E) into the initiative right from the start. This provided opportunities to deal with problems and worries and to keep the process on track. Learning-by-doing approach was applied to PM & E – after an introduction of the basics by some of the more experienced participants, there was more practise, practise, practise!

Teamwork in action: a chronology

First regional workshop, Beijing 2004

To start the process of working toward curriculum development, it was thought it would be useful to find out what was being done in this area in the wider Asian region. Based on a rapid desk assessment, it was decided to organise a small exploratory workshop with known partners from the region to discuss CBNRM curriculum design for COHD in China and perhaps elsewhere. Co-organised by COHD and IDRC staff, the workshop, held at CAU, 23-25 September 2004, brought together selected staff from institutions in China, Nepal, the Philippines, Thailand, and Canada: ActionAid China, Beijing University, the Centre for Chinese Agricultural Policy at the Chinese Academy of Sciences, Guizhou Academy of Agricultural Sciences, International Institute of Rural Reconstruction, International Potato Center/Users' Perspectives with Agricultural Research and Development, JLAU, Local Initiatives for Biodiversity, Research and Development, Nepal Participatory Action Network, the Regional Community Forestry Training Centre for Asia and the Pacific, China's State Forestry Administration, the University of the Philippines at Los Baños and IDRC. It was a good opportunity to share knowledge, experience, and ideas about ongoing and future initiatives in the region and to encourage regional exchange and cooperation (see Xu Xiuli and West 2004 for a report of the workshop).

At this workshop, a design process for PCD, which includes identification of training needs and the framework, plan, delivery, and refinement of the curriculum was introduced. Five steps developed by Peter Taylor (2003) was used, both to introduce the approach, which is still very new to China, and to put the method into practice in a workshop setting (Fig. 1). Case studies in curriculum development from across the region were presented, and stakeholder 'representatives' – of government, NGOs, and academia – described their work and interest in CBNRM and CBNRM curriculum development. Plenary and question-and-answer sessions were included, as well as small work groups.

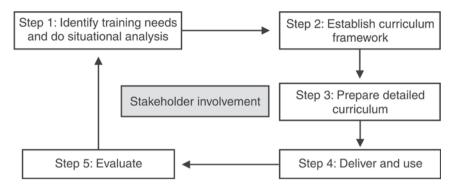


Fig. 1. The participatory curriculum development cycle. Source: Taylor (2003)

During the workshop, participants worked together to draft a generic CBNRM course framework, including rationale (defined briefly as 'to underscore the social and cultural dimension of community based resource management'), principles (experiential, practice oriented, question based), and key capabilities of students to be strengthened in terms of attitudes, knowledge, skills, and practices. A point emphasised in the development of the framework was that fieldwork should be central in promoting deeper understanding of Chinese rural realities by the students. Later, this became one of the key elements of our mainstreaming strategy.

The workshop gave a number of the Chinese participants the courage to form a first working group of teachers, students, and researchers. This group defined a series of next steps: a needs – interest assessment exercise would be carried out at the end of September and they would hold a course design meeting in January 2005. Given that CBNRM is about bridging a diversity of viewpoints and interests, it was decided that the working group should reflect this principle. It included COHD students, at both master's and Ph.D. levels, a number of teachers and facilitators from COHD and other organisations in China with a variety of knowledge and experience, and Ronnie Vernooy from IDRC. The group also wanted to seek advice from farmers, civil society organisations (NGOs), and government. Involving farmers and government officials was a radical idea. This was a completely new way to do course development at CAU, and perhaps in China, and the group set itself a real challenge!

Assessing students' interests

In October 2004, the working group organised a meeting with COHD graduates to assess more systematically their interest in a CBNRM course. The twenty students that came to the meeting representing COHD's three programs provided many suggestions, e.g., the inclusion of new theory, a broader perspective on rural development, combining fieldwork with classwork, and an extension of the thirty two hours tentatively set aside for the course (agreed on by COHD senior management). Although examples and reviews of CBNRM or CBNRM like courses in China and abroad at the postgraduate level were searched, many examples were not found

This was the first time students had been asked to be involved in a course development process and they were very interested. They also wanted to learn more about the course preparation and implementation process. Some volunteered to join the working group. They wanted the course to be innovative, but have a solid theoretical basis. They also had two worries. One was that the teachers would be inconsistent in their interpretation and presentation of the various parts of the course. They suggested that discussions and joint preparation by the teaching group would go a long way toward overcoming this problem. Another worry was that the course would repeat relevant theories that were already taught during undergraduate studies, e.g., participatory methods, stakeholder analysis. They argued that CBNRM should not concentrate only on resource management, but should also provide broader and deeper guidance on rural development. In other words, it should be more than just an introduction to a development project process.

A summary of the results of the meeting was posted on the COHD web site, along with an invitation to students to take part in a course design workshop. Encouraged by the positive feedback and excellent input from the students, we set out to put together some more concrete ideas – mostly by e-mail – leading to a draft course outline by the end of November.

Course design workshop

The feedback from the students helped advance the thinking about the next step: working toward a course plan! In January 2005, a course design and preparations workshop was a major step forward. Eleven COHD master's and Ph.D. students, several COHD staff, staff from FCRN member organisations, and one IDRC staff member took part in the workshop. Four objectives were identified: draft a CBNRM course plan; learn about participatory course design; learn about CBNRM; and build a working group. Although perhaps a little too short (one or two more days would have been useful), this workshop set in motion the course design process.

One of the most important results was the collective identification of CBNRM core elements:

- 1. people-centred
- 2. participatory
- 3. empowerment as a goal
- 4. agro-ecologic systems based (landscapes, seascapes, etc.)
- 5. livelihood-diversity oriented
- 6. multistakeholder approach (farmers, governors, NGOs, etc.)
- 7. joint learning
- 8. comanagement of natural resources.

Answers to the question: why CBNRM was agreed upon. The responses may be summarised as:

- 1. understanding local people's views and uses of natural resources
- 2. acknowledging farmers and herders as holders of rights
- 3. working more closely with farmers
- 4. facilitating local collective action
- 5. supporting local groups
- 6. involving women more
- 7. empowering local people
- 8. improving livelihoods
- 9. addressing poverty
- 10. protecting the environment and natural resources
- 11. shifting from a top-down to a more inclusive decision making approach.

The workshop led to the formation of a working group made up of teachers and students to develop the course. Looking back, it may be said that this workshop was a very important event in the whole process, as it not only developed the course outline to a large extent, but also established a way of working together. It strengthened mutual engagement and commitment to or passion for a common undertaking with clear and jointly agreed on goals (a common course indeed).

Reflections on the workshop

From one of the students

As a student, I wanted to make some suggestions for the new course:

- 1. The course should be innovative and not repeat the knowledge we already learned during undergraduate studies.
- The teachers should exchange and coordinate with each other before the course. This will avoid repetition among the teacher's lectures and ensure consistency.
- 3. It is indispensable to provide teaching materials.
- 4. The field visit is very important. It can help us understand the knowledge, which would be learned in the course, more clearly.
- 5. We should know the aim and the objectives of the course before its beginning, as well as the expected outcomes in terms of learning. We should learn how to use the new knowledge that we will gain.



My ideas and feelings during and following the workshop:

I discovered that learning by doing is very important. Structured discussion groups are a good idea. The members of one group can share among themselves and discuss the experience they gained from the field visit. The modules that we designed are also excellent. But I think we should pay attention to the following:

- l. We should nail down the objective of the field visit before Module 2, because we only have one chance to go to the field.
- 2. The methods and contents of monitoring and evaluation are very important. Effective methods and accurate contents can help us to express our feelings more clearly.

- Communication between teachers and students is also very important. It is indispensable to find a common time for teachers and students to communicate with each other after class.
- The time of the course is limited, so I wish that the schedule could be executed strictly.
- 5. Links between the modules should be clear and logical.



Thoughts of workshop facilitator Ronnie Vernooy (30 January 2005):

The workshop was a challenge, in particular because this was the first time that COHD staff and students would be interacting and working on equal terms toward a common goal, from the very beginning of an initiative. I think that the workshop went very well, both in terms of results and process (i.e., participation, working together on equal terms).

I am very pleased with the draft course design. It is innovative, coherent, and feasible, and represents what I think is a unique approach to postgraduate learning. I wish that I had taken courses like this when I was a postgraduate student!

Workshop participants identified an objective that from the organisers' point of view was not explicitly formulated, but which made good sense: to learn about CBNRM. We tried to respond to this objective as well as we could (e.g., inviting Yuan Juanwen to give a presentation about CBNRM research in Guizhou), but it is very likely that participants wanted more. However, a detailed treatment of CBNRM would have pre-empted the purpose of the course, which was to introduce CBNRM. This looks like an example of the classic chicken and egg problem - which comes first?

Another objective formulated by the workshop participants was to learn about PCD. We tried to respond to this objective as well by elaborating on a number of key elements of PCD. But this could only be done in very brief interventions, hardly enough to introduce PCD. It would have required an additional day to discuss PCD in more depth.

The ambiance during the workshop was very good and stimulating, and we made good progress in building friendships (another objective defined). I think our efforts to respect everyone and to provide space for more or less equal and fair participation had a lot to do with this. This is perhaps one of the major outcomes: the building of an 'action' group committed to introduce a new way of learning at COHD.

We could have tried harder to share time and responsibilities among the group of facilitators/teachers. Unfortunately, we did not meet before the workshop to discuss dynamics and tasks. This is something to improve next time.

All in all, I thought it was an extraordinary workshop, which I enjoyed very much, and which took place in a very up beat atmosphere. Results were outstanding and included a sound basis for further preparations and the actual delivery of the course.



Reflections from COHD staff member Qi Gubo (1 February 2005):

A PCD approach was not applied in my previous experiences and our education programs. It is an attractive practice of teaching for me, which will allow improving my skills in course development and delivery. I will also gain more insight into CBNRM.

I was deeply impressed by the graduates' positive participation and active thinking about the CBNRM course from the first feedback discussion meeting last October. Ronnie's and other proposed teachers' inputs in the preparation of the course outline, overall program, and reader made a good frame for the course. In general, I was hopeful that the workshop would be a success based on such good preparation. However, I was not so sure of the students' full contribution to the course overview and modules without knowing a lot about CBNRM. I was also not so confident about the collaboration between different proposed teachers, who are always busy and have their own focuses. During each step of the workshop we accumulated understanding of each other and confidence in the course, which showed the mutual interests of the participants. Ronnie's overall facilitation and diligent input led to a good atmosphere at the meeting. Li Xiaoyun's welcome remarks made a good introduction to the background and learning approach of the meeting and the course: participatory learning with

breaking up the traditional relationship between the teacher and the students, the scientists and the farmers, etc. The exercise about participants' expectations set up a clear frame concerning the outputs of the meeting, and the contributions from everybody produced happy results. Juanwen's experiences of CBNRM research, Lu Min's experiences of working on a research proposal in a team, Zuo Ting's understanding of CBNRM and course structure helped a lot in the facilitation. The PM & E group did a good job and displayed the process of learning by doing, which helped to adjust the workshop program and methods.

The working group meeting achieved its objectives and improved my confidence in collaboration among teachers, students, and maybe other stakeholders. It also reminds me again that both enthusiasm and time are equally important. More freedom may imply more innovation and more achievements. On the other hand, sharing responsibilities and commitments is also very important.



Following the workshop, the draft course content (intent, audience, duration, approach, teaching team, learning objectives, and content of modules) was further developed, largely through an intense period of e-mail correspondence.

The progress was communicated to the participants of the September 2004 workshop, asking them for feedback on the draft course outline. The text of the communication is reproduced below:

Dear Colleagues,

It is my pleasure to share with you some primary results from the CBNRM course development process in the College of Rural Development in China Agricultural University (COHD/CAU). Since last September's CBNRM Curriculum Development Workshop, we have received a lot of help from all of you and I would like to take this opportunity to say thanks to you. Our participatory learning approach went through the whole course development process and its delivery in April–June in 2005 will also be a combination of learning by doing and CBNRM oriented research proposal design, particularly for students who are studying Rural Development and Management. The hard work you have done and the research results you have produced will continue contributing to the first round course delivery in April–June, 2005. Thank you once again.

We just held a CBNRM course working group meeting involving several colleagues from COHD, several researchers from Guizhou Academy of Agricultural Sciences, Jilin Agricultural University, the Centre for Chinese Agricultural Policy, and some graduate students from COHD, 17-19 January 2005. Attached, please find the CBNRM course overview and course modules, which are the results generated from last year's preparations and this working group meeting. Hopefully, this course will be a fruitful 'experiment' for our Graduate Education program in CAU and for China's higher education system, from which we could get valuable results for improving both our education and research work

We would like to get more support from all of you. Updates will be sent to you in time. Your comments and suggestions are welcome and appreciated.

Looking forward to hearing from you soon.

Best regards, Gubo (CBNRM course coordinator)



The results of the working group meeting was presented to prospective students and organised a meeting to obtain feedback (February 2005). At this meeting, which was facilitated by one of the students, Gao Xiaowei, the group reviewed the course timetable, planned field sites, course requirements (for students), and the composition of the teaching team (requirements). On behalf of the working group, Xiaowei also extended an invitation to the students to join the proposed course PM & E team. Students' expectations expressed at the meeting were:

- learn about CBNRM from international and national perspectives through documents, presentations, and discussion
- 2. learn how to do CBNRM research through a case study
- 3. form friendships, both between teachers and students and among students, and learn through discussion
- 4. develop good teamwork and acquire the ability to prepare a development study research proposal
- 5. make full use of each facilitator's capabilities and benefit from them

- 6. document the results of discussion and fieldwork and disseminate them among the students
- 7. overcome the language barrier (English-Chinese), especially concerning key concepts
- 8. acquire good-quality background reading material
- 9. learn about the proposed fieldwork before going into the field and emphasize practice.

The draft was then sent to several IDRC colleagues with experience and an interest in the topic, asking them for feedback as well. By the end of February, an impressive number of comments and suggestions were received. After review by the coordinating members of the working group, they were synthesised into one document, and sent to the whole group. Below are the main parts, with feedback in italics.

Summary of feedback on the CBNRM course plan

The following comments are from Course Working Group members; the responses from the coordinators are in italics (28 February 2005):

- 1. Select a conflict coordinator to facilitate different perspectives. We are not 100% sure that we understand the meaning of this suggestion. We think that presenting and discussing different perspectives is not a problem actually, it very much represents everyday CBNRM life. We think that it is important that the facilitators/ teachers are aware of possible different views, and that they deal with these adequately. Facilitators/teachers should not enter into a debate among themselves, or get into a 'fight'.
- 2. Make the modules clearer.

 Yes, further refinement will take place, and concrete exercises will be defined.
- 3. A suggestion for the participants: They should have sufficient preparation in terms of CBNRM.

 This is a tricky issue. We think motivation, dedication and

participation are key. Participants will have various levels of preparation and it is the task of the facilitators to 'level the field'. It will be good to find out what the various interests of students are in taking the course.

- 4. The course should be innovative. It means that it won't repeat the knowledge we learned during undergraduate studies. Agreed. Repetition is not so good in many situations. However, learning concepts and theories by heart is not the same as applying them in practice. Therefore, participants will be asked to reflect on the links between concepts/theories and practice. This will imply thinking deeper about some familiar terms.
- 5. Nail down the objective of the field visit before module two (learning CBNRM in practice through a field assignment), because we only have one chance to go to the field-visit site. Agreed and a very good point. There will be a special session on field preparation, and also one following the field trip.
- 6. More participants with practical experience will be better. With the involvement of field practitioners from Guizhou, Ningxia, Jilin, and Guangxi, plus some other experiences from across China, we think we have quite a good group. Ronnie Vernooy also brings substantive experience from other countries.

The following comments are from other stakeholders; the responses from the coordinators are in italics (28 February 2005):

- 1. What are the requirements for students to take part in the course? Required are a medium level of background knowledge and skills in the social sciences including development theories and participatory ideas and knowledge.
- 2. Will this be or become an international course? If so, how will students be selected? Who will pay for them? It is COHD's intention to become an international centre, but for now this course will be for Chinese students only. We do not yet know about financial resources in the long run.
- 3. The course seems to be designed with breadth in mind, that is, covering many topics. Another way would be a design based on depth, for example, dealing only with comanagement theories and practice. What is the reasoning for your choice?

 This course is an introductory course to CBNRM. Each of the five modules could be a course in itself. COHD has started to review and

revise its programs and hopefully the CBNRM course could be expanded, and address key topics in depth.

- 4. CBNRM or Community Based Resource Management?

 Both are fine as long as it is understood that the focus is on how rural people try to use and manage their natural resources. In other words, this is not about land, water, and trees from a pure natural science perspective.
- 5. Fieldwork preparations, and fieldwork feedback sessions need more attention: these should be separate topics in Module two. A suggestion is to introduce one or more of the topics from Module four (teamwork, participatory monitoring and evaluation, comanagement) prior to the fieldwork, and to design one fieldwork assignment for each team of students that addresses this topic, for example, participatory development communications (an assignment could be to observe and document how the researchers in the project communicate with farmers? Or how government officers communicate with farmers?). Agreed. Module coordinators and facilitators will follow up.

At the same time, work began on details, such as the exercises (each of the facilitators took on one or more modules to draft initial exercises), the course textbook, and additional resources. An e-mail message on 2 February refers to the composition of the course book; the text of which is reproduced below:

Ni hao Gubo,

I am sending you a first draft of the reader; it is perhaps a bit difficult for you to review without having all the articles at hand, but perhaps you could look at the number of articles in total and by module, keeping in mind that each module could have one or more additional core readings. Perhaps there are also too many articles co/authored by me, and we should have more diversity. No rush with this.

Best, Ronnie

In response to a key comment, a more in-depth discussion of the aims of the field visit was held, followed by preparations for the actual visits to the three sites. An e-mail message on 4 February explains the above. The same is given below:

Hello Gubo,

Preparing well for the field visit is important, and this should be highlighted better in the course modules. I think we could try to combine two things during preparation for the field visit and the actual field visit: (1) Try to answer one research question (concerning the topics of livelihoods and governance); and (2) Try to observe one particular 'joint learning by doing' element (for example: How do government officials communicate with farmers?). Upon return, the findings could be presented and reflections formulated, and this will form the bridge to Modules four (Reflections on joint learning by doing), and five (Drafting of an action research proposal).

Module four is very important in my mind, and actually would deserve a full credit time-wise. Even after twenty years of reading, doing, and reflections on joint learning by doing, one needs to learn more... Next week, I will prepare a draft feedback to the comments made by the working group (as summarised by Xiaowei). We should respond to the group and propose what we will do (differently) based on their feedback...

Ronnie



Detailed worksheets, a course facilitator's profile, specific assignments for each of the facilitators, information on how to put together a PM & E team and a draft PM & E plan; selected students and student assistants; and debates about language(s) were done. A key element in participatory course development process was deciding how to monitor and evaluate the whole effort from the very beginning. This was useful for several reasons: we could assess progress very quickly, adjust along the road if needed, feel more involved, and avoid wasting time and resources. This e-mail message on 8 April addresses PM & E planning:

Dear Ronnie and the PM & E group:

The PM & E plan seems very good to me. Many efforts have been contributed. I have one question: 'Who'? Shall we also involve someone in the field to participate in the PM & E for the part of

the field trip? Since it could make us to better understand the local people's ideas on the planning and the field trip. We can integrate their suggestions or comments if any to improve the next course preparation and delivering.

But I am not sure if it is necessary. What is your idea?

Xiuli



On 28 February, a new course outline was produced: Hello colleagues (course facilitators),

In attachment one, you will find the combined feedback on the course overview and modules. Attached please also find the revised course overview (two pages) and the five modules, based on the feedback and our collective responses. You may also find the facilitator sheets and learners' sheets that we will use and work on specific topics/exercises in attachment four. In attachment five, please, find the tasks table where some specific tasks are assigned to all of us. Ronnie emphasised and reminded me that in the modules, modules one, two and four still require the identification of the tools to assess the learning. In other words, the text of the module document is not yet complete. It is in the hands of the module coordinators and facilitators to propose concrete tools. Once these tools have been identified, this document could also go on the web. The overview page could go on the web now.

Let us work on specific topics/exercises using the facilitators' and learners' sheets now.

What do you think about the updates? If anything is not clear or you have more comments and suggestions, please tell me.

Regards, Gubo



Exercises went through numerous refinements right up to the start of the course. Unforeseen events contributed in unexpected ways, such as when the dynamics of module one had to be adjusted due to the cancellation of a special guest. This led to the idea of introducing a role play, which ended up being a very successful tool. Here is an e-mail message sent on 4 April:

Hello Colleagues,

I hope that all is well. We are rapidly approaching the start of the CBNRM course. This week we are hoping to be able to finalise all the modules and exercises. Several preparations are ongoing and we will be busy to make sure that the course can start smoothly.

Please, circulate soonest the draft exercises that have been prepared for those not yet circulated. I invite you to send around worries, comments, questions, and suggestions you have.

Around midweek, Gubo and I will circulate a full update on where we are. Please check your e-mail timely. Thanks!

Given that our special guest cannot come to our first module (in particular for the session on Topic two) and that Zuo Ting is in the field right now, I am attaching another draft idea for Module one, Topic two. My thinking about this session is that we would like to stress two main things:

- Get the participants in the course actively involved (both students and ourselves) to reflect the participatory approach of CBNRM.
- That a CBNRM approach requires understanding different points of views and interests.

That is why I am suggesting a small ROLE PLAY for the exercise. Following a plenary brainstorming to identify a number of key issues, I propose that we listen to farmers; to extension agents; and to government staff, and what they have to say about natural resource management issues. I suggest we take one issue, from among the three broad issues that I see: natural resource degradation; poverty; marginalization. We could decide ourselves which one to select (it does not matter so much: the whole idea is to highlight differences). What about natural resource degradation (things like soil erosion, deforestation, lack or pollution of irrigation and drinking water, loss of agricultural biodiversity)?

Apart from the two lead facilitators, this would require the others TO PLAY the three groups. What about the following actors:

- 1. Farmers: Juanwen, Gubo, Xiuli, Long Zhipu
- 2. Extension agents: Jingsong, Lu Min
- 3. Ministry of Agriculture/government: Li Xiaoyun, Zuo Ting

Each of you would have ten minutes to make your point. You are encouraged present your point STRONGLY! I recommend that you write up your point (half a page maximum).

Let me know your thoughts.

Ronnie



Although in the end it seems a sound course program was developed, in retrospect, it seems, it would have been more effective and efficient if the exercises were done face to face and perhaps directly after the design workshop. Certainly, it would have been much easier to discuss, review, and fine-tune the internal logic of the five modules including the sequence of exercises.

Working toward a course at JLAU

While work on the course in Beijing was in progress, first steps were also made toward developing a new course at JLAU. The force behind this initiative was Lu Min, a teacher and researcher in the agronomy department who was interested in initiating some changes at her university. Lu Min was a member of the CBNRM course working group from the very beginning. She contributed to it and used this experience to develop a process at JLAU. Given below is a piece of her writing:

A course at JLAU had been included in the original proposal (COHD 2004):

JLAU is an integrated agricultural university. It has around 10,000 undergraduate students and 1700 graduate and postgraduate students. Based on its macrodevelopment plan, JLAU will pay more attention to graduate training in the next ten years, and try to close the gap between graduate training and the requirement of the market; the value of thesis-based education will be one important indicator to be assessed in the future.

But JLAU faces one major problem: the master's training is still based on a disciplinary oriented program and delivered through a conventional top-down teaching model by disciplinary trained faculty staff. Graduates can easily acquire credits if they follow a teacher's class without much (critical) thinking about the integration of their thesis work and cooperation capacity.

The president and the dean of educational administration of JLAU have realised this problem and are trying their best to innovate teaching methods and ideas. Recently, JLAU has obtained funding for a teaching innovation project from the government of Jilin province. The name of the project is 'Theory and method study on "Team Work" capacity building in higher education.' This is encouraging. However, until now no suitable course has been developed to promote these innovations. We think that the design and delivery of a new course on Community Based Natural Resource Management (or Rural Development) offer such an opportunity. It will be a challenge for JLAU to practice such a course; but it is also a good opportunity. This will also allow us to build on the experience of Dr Lu Min. She took part in the training course from the International Centre for Research in Agriculture in the Netherlands in 2003 and will also be involved in the CBNRM course development process in COHD of CAU (currently underway).

We propose this action-oriented project to support the introduction of a CBNRM oriented course in our university and show colleagues and students a good example of teaching innovation.

A cross visit

Once the preparations underway at COHD were taken care of, efforts began to sketch a roadmap for efforts at JLAU. Lu Min asked the COHD course coordinators to visit ILAU to make a first presentation and to assess the interest of staff and students. On 5 April, plans began to take shape for such a visit (see the e-mail exchange below).

Hello Ronnie, Gubo,

I think it is good suggestion (a cross-visit to JLAU), and it is also my first suggestion to my university. If Gubo could be involved in the process it will push Jilin CBNRM forward in a smooth way. And also my colleagues can learn from the current experience at COHD. Gubo, I think that you have the system's thinking about the course. Is it possible for you to go together with Ronnie to visit JLAU and contribute your energy? Right now, I face some problem and need team support to make it happen. Thanks.

In Jilin, from my point of view, we could develop the course in a practical way based on the current efforts underway at COHD. But what we should think about are the teaching resources (who can be involved in the process, such as Ronnie, Gubo, Xiuli, Juanwen and so on), how to select the practice sites, and also the costs: how to balance it? My colleagues have no experience in this field and also we need a few volunteers to be involved in the process.

I will communicate some issues with my university and prepare some content in advance.

Best wishes, Lu Min



Hello Lu Min,

Thanks for your invitation and thanks to Ronnie for his support for our collaboration. To be honest, I am not so confident in the "system's thinking" of this course and anticipate feeling better after the course delivery. Thank you and Ronnie for your encouragement. If you do think my going to Jilin is necessary, I would like to go with Ronnie. Li Xiaoyun agrees and supports this. We could discuss it when you come to Beijing.

Regards, Gubo



Later that month (halfway through the Beijing course), the visit to JLAU actually took place. It was much appreciated by staff and students. At the core of the visit was a one day mini-workshop; about forty people attended the introductory CBNRM session in the morning, and sixteen participated in the introductory curriculum development session in the afternoon. On the second day, a visit to Qi Jai township was organised to learn more about the local situation in northeast China and the research that was being carried out by Lu Min and her colleagues (as part of the FCRN's small grants research program described in chapter 1) on community based irrigation management, agricultural diversification, and farmer organisation.

The Beijing course provided some experience and initial insights to share. At the mini-workshop at JLAU, CBNRM was introduced as an alternative approach to development research and the elements, principles, methods, and outcomes of CBNRM using concrete examples from ongoing projects in Guizhou, Yunnan, and Guangxi were discussed. This was the first time most participants had heard of CBNRM, and many were able to connect CBNRM elements with the situation in Iilin province - both the rural reality and the structure, operations, and challenges in the education and research environment at JLAU. Participants were especially interested in the integrated and participatory nature of CBNRM.

In the afternoon session, the three facilitators presented an overview of the course development process to date and described field visit experiences and the 'toward centres of excellence' initiative more broadly. A variety of participatory techniques, including small group work, a group exercise to reflect on the role and operational aspects of teamwork (using a jigsaw puzzle as a metaphor), and plenary brainstorming was used. The workshop ended with a focus on next steps: how to apply PCD at JLAU and to develop a CBNRM oriented course, perhaps more broadly dealing with rural development and participatory research approaches. Several staff members and students responded enthusiastically by forming a working group to develop Lu Min's idea further.

Although positive feedback was received on the visit both in terms of content and methods, a number of important challenges became clear. In an e-mail sent after the visit, Lu Min pointed out a key one:

The other issue I should mention here relates to the course content of JLAU, as JLAU students did not have the background knowledge on 'how to use the tools and methods to collect information in the field.'... This means JLAU needs a skilled facilitator who can guide the students in how to use tools and methods to communicate with farmers and the other stakeholders, and how to collect useful information.

This point is referred to in chapter 4.

Formation of a working group

The visit provided the impetus to develop ideas for a course at JLAU. Aiming for a first run in spring 2006, Lu Min brought together a small group of staff and students to decide on the next steps. Their agenda included how best to adapt the CBNRM course to the local specificities of JLAU, how to solidify support from JLAU's senior management, and how to put together a team to prepare and deliver the course. In the months that followed, the team met regularly and, slowly, ideas took shape resulting in the scheduling of a course planning workshop for January 2006.

The planning workshop took place as envisioned. The average temperature at the time was -30°C and the students wore their coats during the workshop. Participants included two undergraduate students, twelve at the master's level, course coordinator Lu Min, the dean of the agronomy department, and the Vice-Dean of the sociology department. Although the Chinese new year holiday had already started and the university campus was deserted (with the heating in most buildings turned down or off), the students and staff volunteered to work on the course and did so with incredible enthusiasm and dedication.

The three days were remarkable in terms of dynamics and results. Describing the experience of the students and staff as transformative is not an exaggeration. The group called the PCD method 'a true revelation' and 'a fresh wind blowing at JLAU.' Students changed from passive listeners to active contributors, from sitting in the second row to sitting around the table together with teachers, from looking up to teachers to sharing their thoughts with them. By day two, they were eating together with staff (instead of separate), and by day three, they were facilitating small group discussions and conducting the workshop evaluation session.

The collective hard work resulted in a redesign of the course and adaptation of its core elements to the local context, both in terms of conditions in the rural areas of Jilin province – there are three major agro-ecoregions with several particular features, as well as some common characteristics – and the teaching/research/management culture and material conditions at JLAU. A stronger course working group was formed, and its members agreed to prepare course modules, exercises, field visits,

and materials. In their assessment of the workshop, participants listed what they appreciated most:

- understanding the importance of cooperation, taking care of 1. each other, a harmonious ambiance, and learning from experience
- active learning
- 3. great teamwork, learning, and sharing
- 4. enlarge our thinking and understanding problems from different perspectives
- 5. making new friends; a big new family
- 6. improving the capacity for active participation and thinking about problems
- 7. more participants can be involved in the learning process
- 8. having the chance to feel the pleasure of being involved and participating
- 9. changing learning attitudes from negative to active
- 10. learning new concepts, theory, methods.

The workshop solidified our efforts in JLAU, especially in terms of student support and input. However, it became apparent that staff had some diverging views on the initiative, perhaps mostly in terms of management. In the following months, several attempts were made to discuss these different viewpoints and come to an agreement. At the same time, the working group intensified its work on course design, preparing for a timely start.

As in Beijing, it was concluded that sound preparations were half the work. It was now time for the delivery of the courses, which is described in detail in the following three chapters.

The First CBNRM Course in Beijing: An Itinerary of Remarkable Experiences

Xu Xiuli, Qi Gubo, Zuo Ting, Lu Min, Li Jingsong, Song Yiching, Yuan Juanwen, Long Zhipu, Mao Miankui, Ji Miao, Gao Xiaowei, Chen Keke, Liu Lin, Ronnie Vernooy

'During module one, which covered CBNRM concepts, I felt a little lost, but now, after the field visit, I have a better understanding of rural life. In the field, it was easy to make connections among the various elements of CBNRM. I was able to link concepts with reality.'

Master's student, COHD, 2005

'The field visit brought me closer to the reality of the poor farmers in China. I was moved by the hospitality and friendship of farmers and local extension staff. I learned a lot in a short time. This will be very valuable for my future career.'

Master's student, COHD, 2005

'The students understand us quite well. Our question to them is, what you are going to do now? Will you help us get access to credit?'

Woman farmer during the mini-workshop at the end of the 2005 field visit to Guangxi

After many months of preparation, the CBNRM course was ready in Beijing. As the opening quotes illustrate, the course was a remarkable



Guizhou family Photo: Dai Yonghuan

experience for all involved – students, staff, and farmers. Valuable experience was gained working together in the classroom and in the field with local partners, developing a curriculum and making course content relevant, and learning about the learning process itself. In the following sections, the course is described in more detail making use of first-hand descriptions, post-event reflections, photos and other images, parts of the course evaluation questionnaire, and e-mail exchanges.

Course objectives

Based on input from students, partners, and staff, an overall goal for the course was established, as well as a series of concrete learning objectives. This introductory course would help train the coming generations of rural development professionals in China by introducing and reviewing participatory learning and action concepts, methods, and CBNRM cases. The course aimed to bridge the gap between higher education (teaching and research) and rural development in China, while also contributing to the development of students' professional identities, i.e., how they see themselves evolving as rural development professionals. As such, the course and the linked thesis research support (described in chapter 6) were more than just ways to develop CBNRM oriented skills.

The overall goal was to enable students to use the concepts, principles, and methods of CBNRM to design action projects relevant to development in rural China. The emphasis was on practice rather than theory and on the production of concrete results: a draft research proposal. In this proposal, students would have the opportunity to bring together the various course components from both classroom and field experience.

Basic elements of a CBNRM approach include paying attention to complex natural and social systems (requiring an interdisciplinary approach), the use of a relatively long time frame, the recognition of the diversity of social actors (often at odds with each other), and the application of a scale of analysis and intervention that goes beyond the 'farm' unit and extends to a landscape level. The approach also focuses on collective action and the management of common resources, uses a participatory action and social learning style, and emphasises empowerment and capacity building (see chapter 1).

At the heart of the approach is an effort to engage local social actors and, together, set research priorities and identify key problems, issues, and opportunities; analyse the causes that underlie these problems and issues; take action to find both short and long-term solutions or take advantage of opportunities; and learn from these actions and make changes as needed (Vernooy et al. 2005; Tyler 2006).

All these elements were integrated into the course design. Through learning-by-discovery, students were able to identify them and integrate them into a novel way of looking at rural development. Given the emphasis on practice, background material was limited to a short overview of the main features of CBNRM during module one.

For more information, students were asked to consult additional reading materials and to ask questions about particular areas of interest, such as the theoretical perspectives outlined below.

Theoretical perspectives (for module one)

There are several ways to define and think about the three core concepts of CBNRM: community based, natural resource, and management. These ways or conceptual frameworks (or even theories) share commonalities with those current in development studies,

e.g., structural-functionalist perspectives including political economy and (common property) institutional economics oriented perspectives, post-modernist perspectives, and social actor oriented perspectives. This introductory CBNRM course is not about delving into these different perspectives, but a quick reference to them is useful, because the practical implications of using any type of perspective can be considerable.

Political ecology perspectives build on neo-Marxist thinking and on radical development geography. They pay attention to the diversity of local environmental - ecological contexts, the role of the wider economy and the state in shaping environmental change, the centrality of poverty as a cause of ecological deterioration, and the diverse responses of decision makers.

Post-structural political ecology perspectives build on political ecology, but pay much more attention to issues of access and control of resources. Discourse analysis and discourse deconstruction are central features. A common feature is also the focus on resistance (movements) to development discourse and policies.

Social-actor-oriented approaches, many of them inspired by the work of Norman Long and colleagues (Long 2001; Vernooy 2001), provide another perspective, although still relatively few CBNRM studies have fully embraced them. Here, the emphasis is on people's life-worlds, their strategies for shaping the world around them (their intent to do so), their own views and reflections on this process, and on how these strategies both shape and are shaped by larger socioeconomic and political dynamics and structures.

All these perspectives have in common the notion that, although natural resources (and environment) have clearly physical attributes, management and related notions of use, abuse, degradation, and conservation are socially constructed concepts and hence influenced by power dynamics including contestation and conflict. An analysis of power is, therefore, important (and thus, for example, one needs to look critically at the meaning of 'community'), as well as the need to pay attention to different reactions to change and patterns of social differentiation.

Useful references

Jones, S., and G. Carswell (ed.), *The Earthscan Reader in Environment, Development and Rural Livelihoods*, London: Earthscan, 2004.

Tyler. S. (ed.). *Communities, Livelihoods and Natural Resources: Action Research and Policy Change in Asia*, Bourton on Dunsmore, Intermediate Technology Publications, Ottawa: International Development Research Centre, 2006.

Learning objectives

For the 2005 course, five distinct but interrelated learning objectives were to be achieved through five connected modules. Each of these objectives was defined in terms of leading to an achievable result, i.e., they were action-oriented.

Module one: Defining key CBNRM elements

At the end of module one, participants will understand the key concepts, principles, and methods of CBNRM, based on a review of selected international literature (theoretical and case studies) under the guidance of the course facilitators.

Module two: Linking CBNRM with rural realities in China

At the end of module two, participants will be able to link the CBNRM approach to actual rural situations in China, based on their own experiences, course field visits, and selected literature, resulting in a comprehensive case analysis.

Module three: Formulating CBNRM action research questions

At the end of module three, participants will be able to formulate at least three clear, relevant, and feasible action research questions, through course teamwork and the guidance of course facilitators.

Module four: Enabling joint action research learning

At the end of module four, participants will be able to differentiate between effective and ineffective joint action learning methods - supported by selected literature, course teamwork and facilitators' guidance applicable to the action issues and questions identified in modules two and three.

Module five: Designing a CBNRM action research proposal

At the end of module five, participants will be able to draft an outline of a CBNRM action research proposal, based on the results of modules two, three and four, with guidance from course facilitators and following the principles of clarity, coherence, relevance, and feasibility.

The 2005 course was intended for first and second year COHD master's and Ph.D. students. A maximum of thirty students would participate in the first run to allow us to provide high quality support and also because financial resources were limited. As a minimum requirement for enrolment, we stipulated 'a medium level' (admittedly not a very precise criterion) of background knowledge and skills in the social sciences, including development theories and participatory research and development concepts. Twenty four students from three COHD programs – Regional Economics, Sociology, and Rural Development and Management – took part. This turned out to be a good number in terms of facilitation, group dynamics, and logistics, especially during the fieldwork.

Subsequent courses were announced for postgraduate students in other Chinese organisations; in 2006, two students from outside Beijing joined. Credit would be given for thirty two hours work, but a caveat that said 'given the inclusion of a field visit, actual hours might amount to up to fifty', was added. Initially, several students were a bit concerned about this, given their busy schedules. Afterward, they all acknowledged that fifty hours was indeed an accurate estimate, possibly still too low, but that the extra hours were a more than worthwhile investment.

Course content and schedule

The course content and timetable for the year 2005 is given in the following page. This schedule was adhered to a large extent.

Each module consisted of a series of exercises. For each of these, learners' and facilitators' sheets, with a brief description of the purpose and dynamics of each exercise was developed. The sheets were put together in binders, one for students, one for facilitators.

Table 1. Content and schedule for the 2005 CBNRM course.

Content		Date and time				
Module 1: D	efining key CBNRM elements					
	Introducing ourselves and key course elements	20 April, 0800-0830 hrs.				
	Identifying expectations of the participants	20 April, 0830-0915 hrs.				
	and providing course organisers' response	•				
Exercise 1.3:	Summarising course content and dynamics	20 April, 0915-0950 hrs.				
	Identifying current challenges in natural	20 April, 1000-1200 hrs.				
	resources management					
Exercise 1.5:	Defining key components, principles, and	20 April, 1400-1600 hrs.				
	methods of CBNRM					
Module 2: Li	nking CBNRM with rural realities in China					
	Reviewing three concrete examples of	21 April, 0800-0850 hrs.				
	CBNRM in China	1 ,				
Exercise 2.2:	Reflecting on the examples and understanding	21 April, 0850-0950 hrs.				
	CBNRM in practice	1				
Exercise 2.3:	Exploring governance in natural resources	21 April, 1000-1100 hrs.				
	management and livelihood strategies from a	-				
	CBNRM perspective in the three examples;					
	examining examples in terms of commonalities					
	and differences					
Exercise 2.4:	Preparing for the field trip	21 April, 1100-1200, hrs.				
		1400-1600 hrs.				
	Field visit	22–25 April				
Module 3: Fo	ormulating CBNRM action research questions					
Exercise 3.1:	Sharing experiences and insights from the	12 May, 0800-0905 hrs.				
	field visits					
Exercise 3.2:	Comparing a number of key theoretical	12 May, 0905-0950 hrs.				
	CBNRM concepts with CBNRM practice					
Exercise 3.3:	Identifying action issues	12 May, 1000-1200 hrs.				
Exercise 3.4:	Formulating action questions	13 May, 1000-1200 hrs.				
Module 4: E	nabling joint action research learning					
	Effective teamwork	19 May, 0900-1030 hrs.				
Exercise 4.2:	Effective comanagement agreements	19 May, 1030-1200 hrs.				
	Practical joint action methods	20 May, 0900-1200 hrs.				
Module 5: D	esigning a CBNRM action research proposal					
	Drafting a CBNRM action research proposal	6 June, 1400–1700 hrs.				
	outline	- je, 1100 1,00 1110.				
Evenuine 5 2.	Presenting and reviewing the CBNRM action	9 June, 1400–1700 hrs.				
Exercise).Z:		. ,				
Exercise 5.2:	research proposal					
Exercise).2:	research proposal Review meeting	10 June				

Course facilitation team

CBNRM course facilitators' profile

Given the complexities of CBNRM, it is probably more useful to outline a profile for the facilitators as a group, rather than for individuals as given below:

- 1. The facilitators/teachers should be diverse in terms of disciplinary and professional, research, or teaching backgrounds.
- 2. Preferably, all facilitators/teachers should have some field experience preferably CBNRM oriented in China or elsewhere.
- 3. They should be dynamic and supportive of an experiential learning approach. They do not necessarily all have to be experienced in such an approach, but they should be motivated to learn more about it by doing.
- They should be well prepared, individually and collectively, and avoid repetition among the five modules, as well as of material covered in other courses.
- 5. They do not all have to share the same viewpoint. However, if they have different points of view, they should be clear about them and explain why these differences exist (where relevant to the course content).
- 6. They should be ready to work as a team and reflect, critically and continuously, on their work. They should not be afraid to make mistakes and learn from errors.

As a result of this profile, prepared by the working group using input from students and facilitators, the 2005 course was in the hands of a diverse team. Members had different educational backgrounds, professional and organisational affiliations, research expertise, and interests. All had a desire to contribute to the course and learn more about CBNRM. Over time, we got to know each better. Through repeated interactions (although seldom with all members present), a strong, shared understanding of our efforts was developed. All in all, the group responded quite well to the exigencies defined in the profile.

Members of the team

Li Jingsong earned her B.Sc. degree in Sociology from CAU and her Master's degree in Environmental Management from Wageningen Agricultural University in the Netherlands. She began work as a Senior Research Assistant at the Centre for Chinese Agricultural Policy and has a special interest in rural development and environmental management.

Li Xiaoyun pursued undergraduate, postgraduate and post-academic studies in China, Germany, and the Netherlands in the areas of agricultural science, rural sociology, and development studies. He worked as a Senior Research Officer at the State Council for National Rural Development Policy. In 1989, he became the Director of the Centre for Integrated Agricultural Development (CIAD), and later, Dean of the College of Rural Development (now COHD) at CAU.

Long Zhipu is a research fellow and the head of HOPE (the Center for Poverty Reduction and Environmental Protection of Ningxia). He graduated from the Agriculture College of Ningxia University in 1984 with specialisations in agriculture, animal extension work, and desertification control. Since 1997, he has participated in a number of internationally supported projects with a focus on agricultural development, poverty reduction, women's development, micro-credit, and community natural resources management.

Lu Min is an associate professor and tutor of graduate students at the College of Agronomy, JLAU. She specialises in agronomy and rural technology development. After acquiring her Ph.D. from COHD in 2001, she participated in the International Centre for Development Oriented Research in Agriculture training course on the theory and methodology of rural development.

Qi Gubo graduated from the College of Economics and Management at Beijing Agricultural University. After obtaining her Ph.D. degree, she joined the staff of the College of Economics and Management in 1996. In 1998, she started to work for the College of Rural Development (now COHD). At COHD, she is working as full professor and rural development researcher and as the coordinator of the FCRN.

Song Yiching is a social scientist with a special interest in rural development (especially working with women), farmer organisations,

and agricultural extension. She received her Ph.D. in communication and innovations studies from Wageningen Agricultural University. Currently, she is a senior research scientist at the Centre for Chinese Agricultural Policy in Beijing, leading a long-term research effort to create synergies between the seed systems of farmers and the Chinese government.

Ronnie Vernooy is a Senior Program Specialist at the International Development Research Centre, Ottawa, Canada. He received his Ph.D. in the Sociology of Rural Development from Wageningen Agricultural University. He has conducted and directed a number of rural development research projects in Nicaragua and currently contributes actively to CBNRM research efforts in a number of countries in Asia including China, Vietnam, and Mongolia.

Xu Xiuli graduated from the College of Economics and Management at CAU in 1999. She earned her Ph.D. and became a staff member of COHD in 2004. Her main research interests include CBNRM and policies on rural development and management, especially concerning agricultural technology and forestry.

Yuan Juanwen is a Senior Researcher at the Integrated Rural Development Center, Guizhou Academy of Agricultural Sciences. Until recently, she was also the Guizhou coordinator of the project 'Women's capacity building and rural development in China' implemented by the Winrock International Institute for Agricultural Development. She received her Master's degree in Forestry from the University of the Philippines at Los Baños in January 2002. Currently, she is pursuing Ph.D. studies in the Netherlands.

Zuo Ting received his B.Sc. in Mathematics from Nanjiang Normal University in 1984 and earned his Master's degree in Applied Mathematics and Statistics from Donghua University (Shanghai) in 1989. In 1992, he received a Postgraduate Diploma in Environmental Economics and Natural Resource Management from the University of the Philippines at Los Baños. He is currently a Ph.D. candidate in Environmental Economics/Conservation Biology at the CAS. Zuo Ting is Deputy Dean and Professor in Development Studies at COHD.

Three talented COHD students joined the working group as student course assistants – Gao Xiaowei, Ji Miao, and Mao Miankui.

Developing a participatory monitoring and evaluation plan

Participatory monitoring and evaluation (PM & E) encourages the active and meaningful involvement of one or more social actors in the design, implementation, analysis, and critical review of research monitoring and evaluation activities (when social actors have a stake in the research, they are often called 'stakeholders'). As such, PM & E moves beyond roles traditionally assigned to researchers or external evaluators contracted by donors to look at project or program achievements. Based on positive previous experience in integrating PM & E into our work (Vernooy et al. 2003; Qi Gubo et al. 2005), facilitators and students were asked to volunteer for taking the course to form a PM & E team. In due course, two brave students and three facilitators accepted the challenge and immediately started working on a PM & E plan (see e-mail correspondence below). Their preliminary ideas were shared with the larger course working group and, in five successive rounds of feedback and refinement, were turned into a plan (Table 2).

Your suggestions are very good. In my opinion, this course is not only a course, but also a test for courses in future years and other places. So at the end of the course, we can summarize the experience and lessons. I think with the steps of PM & E, it is better that everybody can participate with the assistance of the monitors, such as Keke, me, and other facilitators.

I think we can use various tools in each module's PM & E, e.g., bull's eye. However, maybe we need to develop other suitable tools in practice. In our discussion, we think that we could use e-mail to request feedback, and analysis of the feedback could be done by the PM & E group before the course. What do you think about this? Then, in accordance with the analysis of the results, we can adjust the course if necessary. After the final monitoring exercise, we can also get final results.

About the review meeting's dynamic tools, can we use some ordinary monitoring tools? Or should we use some new tools? The meaning of this question to you is to say that I am not sure I have more additional energy, if it requires lots of time. Can we discuss again, and then e-mail the result to you?

Table 2. Final PM & E plan for the 2005 course.

Why?

- To supervise the course delivery process and make adjustments if required
- To determine the merits and shortcomings of our learning
- To determine the merits and shortcomings of our teaching
- To assess the general goal and five learning objectives
- To make suggestions for the 2006 course
- To asses the PM & E capacity of the participants, especially the students

For whom?

- Initially, for all course participants - students and facilitators
- Students who would like to take this course in the following years may also be interested
- Staff at CAU and perhaps at other universities and organisations interested in starting a CBNRM course
- IDRC, as the donor agency, as well as the agency providing technical support

Who?

All students and facilitators are expected to take part. During field visits to Ningxia, Guizhou, and Guangxi, feedback will be solicited from the local research partners (farmers, extensionists, and government staff) concerning the field assignments. Each team will be responsible for organizing a PM & E to provide feedback on the course. session during their field visit.

What? The five modules including the field visits. Specifically:

- Course objectives
- Teaching methods and exercises
- Resources
- Time allocation
- Role of the facilitators
- Role of the students
- Size of the course group
- The course as part of the COHD master's and Ph.D. programs
- The preparation process (up to 20 April 2005)

It is also useful to assess training needs and expectations before the course to make sure the course responds to these within the boundaries of what is feasible. Two meetings with students in 2004 and the January 2005 workshop were organised to achieve this. In module one, expectations will be addressed one more time.

PM & E activities will be coordinated by a small team that includes both students and facilitators. During the review workshop that will follow the course, outsiders will be invited How? ●

- Before the course, two focus group discussions with students were organised.
- A participatory planning workshop was organized, including students and facilitators/teachers.
- After every module, an individual scorecard will be prepared.
- After every module, a mood meter will be used.
- A 'community wall' will be put up for the duration of the course period.
- At the end of the course, we have a questionnaire asking: what have you gained from the course? What are the main merits and shortcomings? What are your suggestions for how to improve it?
- For the review meeting, a number of tools will be used (to be defined).

When? Before, during, and after the course.

Reports are available.

This can be done in 10-15 minutes at the end of each module. The PM & E team will collect and analyse the results and discuss them with the course coordinators.

This could be done by e-mail or hard copy. Feedback should be submitted within 1 week.

The PM & E team should keep track of all the feedback provided and report back to the group organisers and to the whole group.

Source: Lu Min et al. 2005

Reproduced below is an e-mail in appreciation of the efforts of the volunteers.

Thanks very much for drafting the first course PM & E plan. You remember our approach: learning by doing. I think this first draft is very good!

I have used your ideas to prepare a second draft, both of the plan and of the module scorecard. I have also asked Lu Min and Juanwen to provide inputs. Lu Min, Juanwen, and I will be part of the PM & E team, if you agree of course. What about the other three students? If they do not have time, I suggest that the five of us continue to work on the plan; no problem.

I have made my suggestions in red, and my questions in red/italics. I suggest we focus on the period during the course; and the review meeting on June 10.

One of the very important issues that we need to deal with (as in every evaluation) is WHO will use the results, WHEN, and HOW.

This will be important during the course process. And also after the course, when we start to plan for the 2006 course, and perhaps for CBNRM courses in other places in China.

The issue of use of monitoring and evaluation results, points to the need to also collect qualitative information. The use of a scorecard is a good idea, but we should ask for very clear comments and suggestions as well, otherwise it will be difficult to make any adjustments. This also means being as precise as possible about the items on the scorecard (I have made some first suggestions, in red, but this will require some more work, I think). For example, what exactly do we want to monitor in terms of the facilitators, students, references, methods?

Shall we also think about one or two other tools? What about a 'community wall' where everyone could post comments, complaints, ideas, poems, photos? What about taking and using photos according to a 'plan' (not just taking photos for fun but to capture key moments)? Shall we use video for one or more sessions? Or is this too much trouble? Looking forward to more ideas from you,

Ronnie Vernooy



During delivery of the course, the PM & E group facilitated the various exercises, documented findings, and made suggestions to the course working group. These contributions were appreciated, but ongoing reflections revealed shortcomings in the PM & E process itself. Time always seemed too short to make meaningful, detailed interventions possible.

During the field visits, each of the three student groups developed a PM & E plan according to the local context. The students took charge of facilitation and reporting, which proved very important and contributed to the richness of the experience.

At the end of the course, the PM & E team also analysed the answers to the questionnaires and drafted a series of recommendations. A synthesis of this work appears under course evaluation, below. After the course, in September 2005, the PM & E team together with the course coordinators also held a one-day review meeting with a number of other interested organizations. The aim of this meeting was to share



Students on the Guangxi team facilitate a field PM & E exercise Photo: Ronnie Vernooy

experiences and obtain feedback and suggestions for the next year and for a new course at JLAU. Participants validated many of the findings and suggestions that emerged during the PM & E process also added some new thoughts and suggestions.

Course delivery

Putting together the pieces of CBNRM (module one)

On April 20 the working group gathered early in the classroom on COHD's lower floor to prepare and go over the day's program one final time. Much care was taken while setting up the room: a small group seating arrangement with chairs evenly spread; an open space for pinboards; a small table for other course material and another for tea, coffee, and snacks. Twenty-four students were waiting in anticipation. Here is a brief look at the course in action.

Solving the CBNRM puzzle

After a brief word of welcome from the course coordinators, the lead facilitator invited the group to take part in an activity by handing out – to students and facilitators alike – a piece of cardboard. As this was

going on, the facilitator suggested that the participants 'do something with their piece' and greet anyone they meet while doing that 'something.' The irregularly cut pieces of cardboard made up the new course poster, but participants did not immediately realise this.

The lead facilitator then stepped back and waited. After some hesitation and flip-flopping of pieces ('What's this?'), some students started to move around their own table and asked to see other pieces, then attempted to match them. When this did not produce results, another moment of hesitation followed. Then someone found a matching piece and called out. Quickly, another pair of matching pieces was constructed at the other side of the classroom. A small cluster formed around one table, with several matching pieces. Another small, but rapidly growing cluster formed in the open space where one of the students had put her piece down on the floor. The larger cluster called on the smaller ones (a few more were formed in the meantime) to come together and see the poster that emerged as the jigsaw puzzle was assembled!

The facilitator then stepped back, congratulated the group on the successful assembly of the puzzle. There was applause and laughter! The poster was put on one of the boards. Everyone then sat down.



Puzzling dynamics!
Photo: Ronnie Vernoov

The facilitator asked the group what the activity was all about and why things happened as they did. After some thought, several people raised their hands. 'First, we were surprised and did not know what to do.' 'Then someone stood up and started trying to find a matching piece.' 'I think this exercise tells us something about working together. Everyone needs to contribute to make the poster complete.' 'It is interesting because we do not know what we are trying to put together. Some of us just stand together, but we need to go and see others as well. It is like a process.'

The facilitator used these reflections to make the link to CBNRM in practice as well as to the key principles informing the course itself. In CBNRM, there was no such thing as a blueprint. It was an approach based on joint action and reflection that started with a commitment to do something together. It was also an approach in which everyone's contribution was valuable. In terms of pedagogic principles, the CBNRM approach was informed by commitment, learning by doing, teamwork, and respect for everyone's contribution.

Much later, students would continue to refer to the puzzle game with amusement. It was included in the course design as an experimental exercise, although in 2006 it was changed to a puzzle.

Reviewing course and learning expectations

The puzzle exercise was followed by another very important exercise – identifying and reviewing the expectations and learning goals of the participants. Two facilitators asked everyone to write two or three of their main expectations on cards. Here are the ones mentioned most often:

- 1. Learn/accept a new approach and method, including defining and analysing CBNRM and action research issues, linking CBNRM with rural areas in China, and solving CBNRM issues in a village.
- 2. Improve English.
- 3. Learn teamwork/cooperate with others (with various backgrounds).
- 4. Learn new methods and tools.

- 5. Learn to write a proposal.
- 6. Get some professional practice.
- 7. Enhance friendships.

The facilitators grouped these and reviewed them critically in terms of how responsive the course would be. They observed that expectations were very much in line with the objectives and the content of the course – a good sign! They mentioned that sometimes expectations change over time and that this is one of the reasons for integrating PM & E into each stage – to keep track of the process and adjust delivery if necessary. This exercise was important for two main reasons: first, to make sure that there is a common and agreed on understanding of what the course will be about; and second, the formulation of the individual expectations and learning goals will serve later on as reference points for evaluation of the course. This point is discussed again in the section on course evaluation.

The first part of the module ended with a brief summary of the course content, logistics, and materials. The mood in the classroom was upbeat. The ice was broken, and it was time to dig into CBNRM matters. During the tea break, facilitators felt more relaxed. Several students approached them to talk about the puzzle game or ask about the schedule.

Exploring CBNRM in practice and theory

The second part of the module began with a broad picture of what CBNRM was all about. Students worked in groups to identify key rural development problems in China based on their own knowledge and experience. In a plenary session, their findings were grouped by one of the facilitators according to the 'lenses' of natural resource degradation, poverty, and marginalisation. Considering that this was the first group exercise, the results were quite good, and a general, but comprehensive, picture of issues emerged. The exercise was also a way to elicit and validate students' existing knowledge and experience. This was another example of learning through discovery approach used throughout the course.



Introducing role play as a pedagogical tool Photo: Ronnie Vernooy

The exercise was followed by a short but vivid role play written and 'produced' by members of the working group. As it was difficult to bring actual rural people into the classroom, participants were asked to imagine being in a rural region somewhere in China. At the same time, was introduced role playing as an example of a useful pedagogic tool to examine real-life situations. This was the first time students and most facilitators had engaged in role playing for this purpose; for some, it was the first time they had participated in role playing at all.

The core theme of the play was conflict about access to natural resources among various stakeholders. Water was chosen as the resource, because of its increasing importance in China. Following the play, facilitators asked students to provide feedback and relate their observations to the earlier exercise on natural resource management issues.

From the role play, participants moved to 'construction' of the CBNRM framework. This was done in plenary. Facilitators asked students to think about the three key parts of CBNRM – community based, natural resources, and management – and to present ideas or actual experiences of CBNRM in practice. Contributions were synthesised on cards and organised into a CBNRM framework or tree. They were then matched with the key elements identified by the facilitators

(see 'Theoretical perspectives'). Facilitators asked additional questions to guide the group toward identifying missing elements. They added the longer time perspective; the focus on levels beyond the farm; and building trust as a key principle of CBNRM.

The time taken for these two exercises was relatively short (Table 1) – each would merit several hours of attention – but the aim was to introduce the core elements of a CBNRM approach. In the following modules, these elements are discussed further.

The PM & E team closed the module with a short exercise to assess both the content and dynamics of the various exercises.

To the field (module two)

After an introduction to CBNRM oriented research efforts in three provinces (Guizhou, Guangxi, and Ningxia), students worked in groups of 7–9 to prepare detailed field research assignments (Fig. 2). The three sites were selected to represent a variety of rural development situations and participatory action-oriented initiatives in terms of social actors, agroecology, objectives, methods, organisational setting, research and development history, and results. Students were free to choose the site in which they were most interested, and we were able to accommodate first preferences for the most part. The case studies and site visits are summarised in the following paragraphs.

Ningxia, situated in north central China, is arid and among China's poorest areas. The research site is located in Yanchi county, which is representative of the typical mixed cropping – grazing systems in the area that extend to the three neighbouring provinces of Shaanxi, Gansu and Inner Mongolia. The research area covers about 141 thousand hectares of arable land and 557 thousand hectares of grassland. Annual rainfall averages only 272 mm. It is usually very windy, and the wind almost always carries a load of sand. On average, there are about forty major sand storms each year. Desertification is one of the most serious problems that local people face and water is scare. A few villages in Yanchi are connected to the national irrigation system, which brings water from the Yellow River and gives them better yields of maize than non-irrigated



Fig. 2. Map of China showing approximate sites of field visits in Ningxia, Guizhou, and Guangxi (north to south)

Source: The Perry-Castañeda Library Map Collection at the University of Texas villages. Some villages have access to underground water, which allows them to grow vegetables, for example, for home consumption and sale.

In all villages, the main income of local farmers comes from raising sheep. Each household has access to 10–120 mu of pastureland (0.7–8 hectares). Some households with larger pastures have signed user rights contracts with the state on an individual basis, but most households with smaller areas have signed contracts collectively (in small groups). Since 2004, the government has banned grazing on all pastures in Yanchi county; sheep can only be raised in sheds. In everyday practice, however, there are many problems related to this policy. Various conflicts have emerged.

Local people work collectively to take care of their pastures, raise sheep (despite the grazing ban), maintain their irrigation systems, set up community development funds and manage them adequately, and keep local culture alive. Women and older people play important roles in the villages, as more and more young men find off farm work or move to areas with better living conditions.

Guizhou, further south, is another of China's poorest provinces. Research here started in Kaizuo township, in the north of Changshun county, sixty kilometres from Guiyang, the provincial capital. About half the province's population belong to ethnic minority groups, who mostly inhabit the mountainous rural areas where they manage complex production systems consisting of irrigated and rainfed rice fields, less productive uplands and grasslands, forested areas, and so called 'wastelands' (degraded fields).

The staple foods are rice and corn. Diets are poor and health problems abound. Nowadays, many younger villagers (men in particular) work in the city, causing a serious labour shortage during busy seasons. The villagers are used to working together, rotating from one holding to another and engaging in other village activities. The level of formal education is not high; children commonly leave school early. The average per capita land holding is 23.7 mu (1.6 hectares), but the level of land use is very low. Water resources are scarce and difficult to access because the region is underlaid with limestone. The villagers, mostly the women, have to fetch water from great distances. They wait for rain to water their fields. Irrigated fields, where they exist, bring high returns.

Guangxi, in the south, is prone to frequent heavy rains leading to landslides, and flooding in valleys, mostly mountainous. Among the various ethnic groups, the Zhuang form the largest. Although most farmers hold land-use rights, holdings are small (less than 0.2 hectares) and, in most cases, of such low quality that it is not possible to achieve even subsistence levels of crop production. Consequently, most people live on grain and other subsistence foods beyond their own production means and are negatively affected by the price increases that came with reforms. Migration of men to cities is now widespread, leaving many villages with a year round population of up to ninety percent women.

In Guangxi, two contrasting systems of maize farming exist. In the poorest remote mountainous communities, farmers plant maize in minute pockets of soil on steep mountain slopes and between rocks in flat fields. Access to water is difficult because of the calcareous rocks, while rains often flood the land and wash away crops. There are no roads, and access to markets is limited. Maize is produced for consumption only, although it is a traditional staple crop and a diversity of landraces are grown in the area. For example, waxy maize is believed to have originated here.

In the relatively better-off communities of the valleys and flat areas, people tend to be somewhat better educated and are more integrated into the market economy. Although maize used to be a staple food, now it is mainly used as pig feed. Pigs are the main source of income for most villagers.

The four day field visits, which were organised by three groups of students and facilitators, helped to ground concepts in reality and practice – one of the pillars of a CBNRM approach. In the field, students were confronted (some for the first time) with the hardships of living and working in remote and poor rural areas. This opened eyes, minds, and hearts, as some of the quotes at the beginning of this chapter illustrate. Excerpts from the correspondence of facilitators show this.

I hope all is well, and that the visit to Ningxia goes smoothly. We are having a very good visit; after the slow start in Beijing, the group has come together remarkably well, thanks to many efforts, and the good caretaking of and group facilitation by Xiaowei, Jingsong, and Yiching. I think the students will remember this visit for a long time. They are opening up their eyes and hearts to the rural reality, asking many, many questions of the extensionists and farmers. They are developing strong team spirit and working very well together so far. They are starting to make connections between the various elements of rural life (and of CBNRM). And some like to do more fieldwork in Guangxi.

Ronnie Vernooy



In general, (the Guangxi trip) was wonderful, even beyond my expectation. The facilitation work was fully prepared, for both the

local project team and the student group. From the local team, they gave us very kind and patient support. On the students' side, there were warm discussions with farmers and extensionists. They have shown a great interest in the field, related to CBNRM. In the extension group, they divided the tasks into four levels (province, county, township, and village), which, in my opinion, was very efficient for interviewing. For the livelihoods group, probably they needed more time and opportunity for field observations and talking with farmers. The atmosphere during the field visit was quite fresh and cheerful. I really enjoyed it. I like such a big family, with father, mother, uncle, sisters, and brothers. Hopefully, we will sit together in June.

Jingsong





Interviewing farmers during the field visit to Guangxi Photo: Ronnie Vernooy

From action to reflection (module three)

Modules three and four took the students back to the classroom in Beijing to build on their field experiences. Module three, which concentrated on defining action research issues and research questions, proved difficult for many students, most whom had little or no previous experience in this area. It began with plenary presentations on the field visits.

Exercises 3.3 and 3.4 aimed to refer back on the original questions defined before going out into the field, on the fieldwork itself, and on what the field experience meant in terms of identifying questions. A one page support document provided some suggestions for dealing with issues and questions.

Identifying CBNRM action issues and defining CBNRM questions

There are two general ways to formulate research issues and questions. Both are valid. However, in CBNRM, sound action questions are grounded in the concrete.

- 1. Deductive: From the general or theoretical level
- 2. Inductive: From the concrete or empirical level

Two perspectives can be used. Both are valid.

- 1. A problem solving approach
- 2. An opportunity identification approach. One method for this is called appreciative inquiry.

Three broad types of issues and questions can be distinguished. All three are useful.

- 1. Descriptive: What? How?
- 2. Explorative: How?
- 3. Explanatory: Why?

Within these categories, a useful distinction can be made between

- 1. Questions about meaning (ideas, knowledge, values, interests, etc.)
- 2. Questions about behaviour (actions, practice, etc.)

The key is to create coherence among: issues and questions, methods, and theory (approach).

Five guiding questions help define issues and questions:

- 1. What is the practical and theoretical relevance? Note that in CBNRM we focus on practical relevance.
- 2. Is the topic amenable to scientific inquiry?
- 3. Are adequate resources available?
- 4. Will ethical rules be respected when doing the research?
- 5. Does this topic really interest me/us? Note that in CBNRM we usually do research in a team.

Reproduced in the following pages are two e-mail messages from one of the students on the Guangxi team which acts as a short 'report' on the module.

Module three had just finished. We did good sharing with the other groups. And Wang Zhongping gave a good presentation of our (Guangxi) group too. We also got many questions, like, what kind of natural resource the farmers have in Guangxi? And, how do they manage all these resources? And how does the extension system impact on the farmers' livelihoods? etc. We had a discussion about these questions, but the time was so limited. We left the questions for after class. We put some photos of the field in our report; it is interesting. Good mood!

Xiaowei



We had the last part of module three yesterday. We were divided into three groups (according to the wishes of the students), the same as the field visit groups. We talked about the action questions. In our group, foremost, we formulated many questions based on our field visit, but we went about it rather mindlessly. Then Jingsong guided us to make sure that we follow a logical way to find the questions. And everyone wrote down something he or she found in the field. In this way, we identified many questions. At last, we selected three questions: How does the extension system influence the farmers' livelihoods? How do we connect the extension system to the market? How can we resolve the dual reporting requirement of the extension system at the township level? We will communicate with the other groups next week before module four, because last class we took too much time to discuss.

Xiaowei



Learning to work together (module four)

The topics covered in module four are central to a CBNRM approach, both in terms of managing the research process and implementing CBNRM collaborative or partnership practices in the field - teamwork, management, and collaborative action and learning methods. This module would merit a course on its own, but given time (and credit) constraints,

we opted for an introductory approach to these three key topics. The basis for the module was again the field experience of the three teams. Students were encouraged to be creative in presenting their thoughts by using visual arts or other means. Following are reports on the session by Xu Xiuli and Lu Min.

Two topics in module four were partnership building and process management. But before we started, twenty five minutes were set aside for group presentations of the action questions polished during module three. Great progress could be observed. The Ningxia group carefully assessed their action questions with the checklist of criteria, and innovatively linked them to the core elements of CBNRM, which won warm applause from other members.

After the group presentation, Lu Min introduced the purpose and the expected output of module four. Then, the three groups, according to the field visits, began to reflect on their teamwork. Effective and ineffective factors were critically examined and shared. The role of PM & E in an effective CBNRM action learning process was also identified and reflected upon. We could see that the students gradually fell into the past memories in their reflections with the facilitation of their peers. The Ningxia group followed more the guiding questions in the worksheet, and reflected on different questions by writing cards individually, although group discussion was carried out from time to time.

The Guizhou group's style was quite different. They designed their own questions, and followed their own way. The members of the group led the reflection. Time, place, events, problems, and adjustments were traced step by step. More details were covered in their discussion, but it took much longer. So, less time was left for reflection on the role of PM & E. The Guangxi group combined the two reflections together, using a more holistic perspective. The role of PM & E was also included when they discussed the effective and ineffective elements of their teamwork. They shared more of their skills in effective participatory communication with the other two groups, such as the face-to-face pairwise introductions between the research team and the local partners, the family building, as well as expansion with more and more stakeholders involved. By the way, they also mentioned Ronnie's comment on their teamwork – playing too much – though with very nice results.

Today, the role play concerning topic two of the module were excellent. Several rehearsals were carried out (before the course), before they finally stepped into the arena. The stories were very appropriate in the CBNRM context. The Guangxi group focused on the conflicts in the introduction of a new maize variety. The researchers applied participatory rural assessment tools in their play to solve conflicts between farmers and extensionists, with the use of a round table and pinboard. The Guizhou group selected a training program and introduction of commercial trees as their topic. The government supplied free saplings and ordered farmers to plant them in their lands, which were already planted with other crops. The necessary follow-up training and purchasing services were still up in the air. Different worlds of different stakeholders were revealed in the play, although, according to the evaluation done later by the others, the role of research seemed a bit weaker.

The Ningxia group got the audience's attention with their opening introductions of the different actors. A grazing ban was implemented without negotiation or consultation with local farmers. What would the farmers do to meet their livelihood demands? Steal grass! When darkness fell, one group of farmers, some with experience in stealing grass and some still with 'green hands,' began to grope into the range land. With a bright light coming closer and closer, what happened? We leave this pending question to you.

Lu Min facilitated the plenary reflections on the principles and core elements of the effective joint action learning process after the peer review and evaluation of the role play.

I thought the whole process was very fruitful, and I believe many students agreed with me. However, we still noticed some confusion. But it is normal, I believe, because it is the first class without lectures and that avoids imposing teachers' ideas on the students.

Xu Xiuli



When I arrived at COHD at 8:30 a.m. on May 19, the Guangxi group was already in the classroom, preparing their presentation. We can see that the field visit group members work together very closely, and most students enjoy their learning process. I think it must be one outcome of teamwork.

Each feedback session on the research questions exercise had a different perspective, but they all showed deep reflection on the action questions that were polished during module three. I was surprised by the results! It was only a few days since we came back from the field, but they kept up the pace and showed a deep understanding of defining action research questions in a CBNRM context.

When we give everyone the same chance to participate in the learning process, people contribute more – it is the basis of teamwork. But it is not easy to increase participation while also dealing with competition, which is what students are used to. The gradual process of becoming a team during the field visit, the 'puzzle game,' and other chances to practice teamwork, are all important.

Before starting module four, we suggested that, 'if students are interested in doing a role play, please let us know first.' We only got a reply from two students. So, we decided to ask each field visit group to formulate one story and enact it for the other groups – and everyone got so excited!

It might be better to reduce the number of exercises and have more time for each one.

If 'confusion is the father of learning,' I think that good reflection is the mother of leaning. I am satisfied with the results of module four. But until the last moment there were some confused faces. Maybe we need to improve the learning objective and make it easier to understand. Anyway, I enjoyed the learning process very much, and also I am very happy to have got the chance to participate in the course delivery process.

Lu Min



Toward synthesis (module five)

During the second week of June 2005, we delivered the last module on writing a CBNRM action research proposal. In small groups, students produced draft proposals based on the field visits in module two and on the insights acquired throughout the course. Notwithstanding the short time allocated to writing, the proposals were of very good quality. The

students presented their proposals and received feedback from their peers. They appreciated the dynamics of the course and gratefully listened as both strengths and shortcomings of their proposals were discussed. Some speculated about building on the proposals for their theses. Students found it difficult to judge each other's work coherently and fairly, but hoped that, with more practice, they would do better. They deplored the fact that the facilitators did not provide any feedback on their proposals – a deliberate decision to keep the focus on the peer review process, but one that was subsequently reassessed during the course evaluation. All in all, a very useful and successful module!

The direct outputs of the module were the following eight action research proposals:

Ningxia

- 1. The impacts of the grazing ban on farmer households livelihood development strategies
- 2. The model of grassland management in Yanchi
- 3. Community-herder-household-based animal husbandry and grassland management

Guangxi

- 1. Impacts of the community development fund project on the farmers organisational level
- 2. Agricultural technology extension with participatory methods

Guizhou

- 1. The model of development fund management in Juchang group of Hezi village
- 2. Farmer needs oriented methods in economic fruit tree technology training
- 3. The impacts of incentive mechanisms on community forest resource management

Course evaluation

The course ended with a review meeting in which the PM & E team facilitated a number of exercises and presentations based on an analysis of the evaluation questionnaires submitted by students and the facilitators'

self assessment form. The questionnaire and form, produced by the PM & E team, covered important aspects of course delivery and results, such as learning achievements, skills development, relevance of the course for the postgraduate program and thesis fieldwork, and suggestions for improvement of all the major course elements. Overall, feedback was very positive, in terms of achievements (learning objectives, skills development, course outputs) as well as the participatory curriculum development approach (Tables 3 and 4).

Table 3. Assessment of the new learning method.

Characteristics of the learning method	Good	Average	Below average	Main observations
Learning by doing: active student participation	23	1	0	More introduction to methods so students can master them faster.
Experiential learning: discovering instead of being lectured to	20	4	0	More case studies and discussion, including field experiences. Introduction
Linking theory to practice: integrating a field visit and developing an action proposal	13	10	1	to more theoretical thinking.
Using a variety of learning tools (class and field exercises)	20	4	0	
Teamwork instead of individual learning*	21	2	0	
Team facilitation and teaching instead of individual teaching	15	9	0	Need more skilled facilitators.

^{* 23} replies for this question instead of 24

The following quotes from students highlight some of the learning that took place during the course.

I learned how to practise what we learned in our studies, for example, how to communicate effectively with government officers and agricultural extensionists. I also learned how to draft a development oriented research proposal. The friendship that was built in the class with other students and with teachers, and in the field with farmers and others, is the most unexpected fortune that I will cherish.

I did not expect to have such good teamwork. I got a lot of inspiration from other team members. Now I can see the power of it. It will be an important idea.

Table 4. Assessment of skill development.

Learning objective	I envision OFTEN using what I have learned	I envision MAYBE using what I have learned	I do NOT envision using what I have learned	I do not feel I have achieved this objective
Ability to define the key concepts, principles and methods of CBNRM	13	10	1	0
Ability to link the CBNR approach to actual rural situations in China	M 15	8	1	0
Ability to formulate at least three clear, relevant and feasible CBNRM action questions	10	9	4	1
Ability to differentiate between effective and ineffective joint action learning methods	9	12	3	0
Ability to design/draft a CBNRM action research proposal outline	8	14	1	1



Students also provided useful feedback and made suggestions for change. About the course exercises, they observed that teachers should pay attention by actively engaging more students; clearer guidance about approaches and theories was needed; more explanation of CBNRM would be useful; more exercises and less group discussion would be better. About the field visit, they said that information about previous research results would increase efficiency. They also pointed out that teachers could make more effort to motivate students and that, overall, their skills could be strengthened.

Shortcomings included lack of sufficient time to prepare for the field visit and not enough time for the field visit itself. (A proposal submitted by the course management team to the university to increase the time credits had already been given an informal 'green light.') Another shortcoming mentioned was the lack of guidance in using the reading materials.

Facilitators' self-assessment

Nine teachers completed a self-assessment form to evaluate their achievements in terms of expertise brought to the course, levels of empathy and enthusiasm shown, and clarity of contributions. The results are shown in Table 5.

Table 5. Facilitators' self-assessment.

Characteristic	Agree	Not sure	Disagree	Main observations
		suic		
Expertise				
I had useful knowledge and experience	4	5	0	I could be more effective if I could go through an action research process myself. My knowledge and experience could be enriched through more practice. I need more capacity building. Continuous learning is necessary to be a good 'professor.' I need a chance to learn more systematically.
I effectively shared this knowledge and experience	4	5	0	Yes, but it could be better through improved institutional collaboration. My time was limited.
Empathy				
I understood the needs and expectations of the learners	3	6	0	Closer communication is needed. As a relative outsider, it is not easy to get to know students well. My time and attention were fragmented.
I adapted the instructions and needed	2	7	0	Not always. I was responsive but not always patient when intervened too much. I could do better if I myself had more expertise.

Characteristic	Agree	Not sure	Disagree	Main observations
I continuously considered the learners' views	3	6	0	Time and group size were related constraining factors, not allowing in-depth communications. I did not have enough time and energy.
Enthusiasm				
I cared about the various course topics	6	3	0	
I made energetic and animated contributions	4	5	0	I have done well, but could improve if not so busy. I was both a facilitator and a learner; therefore, the contribution I made was not enough.
I shared my sentiments and reflections with the co-facilitators	3	5	1	More time would be good – twice as much. We had very good reflections among facilitators while in the field. We need more communication. The communication was not frequent enough.
Clarity				
I was easily understood by the learners	2	7	0	Sometimes learners repeated questions so I am not so sure. We need to explain more. I am not sure by how many learners.
I was easily understood by the co-facilitators	1	8	0	More direct communication is needed.
I took time to explain things again when learners were unclear or confused	8		1	

We concluded that we had done a reasonably good job, but that several elements could be improved, in particular increasing time for face-to-face interaction among the whole group of facilitators. In addition, we thought the assessment itself could be improved and have started thinking about options (for a useful discussion of the evaluation of teaching, see Knapper and Cranton 2001). The assessment was shared with students who commented positively on both the exercise and on the critical self-reflections. Reproduced in the following pages are examples of how the facilitators discussed their efforts among themselves.

It seems all three field visits went very well. We managed to do a lot in a short time, and give the students a very intense learning experience. I think this is very valuable. The PM & E effort helps a lot, I have no doubt about it. Gubo got the Ningxia group to reflect every evening as well — until very late! In Guangxi, Xiaowei and Han Lu did a great job. On the last day, the two of them facilitated the PM & E exercise all by themselves.

I think we selected good topics for the field visit (livelihoods and governance); students did not find it too difficult to relate to these topics, although Gubo told me that in Ningxia the livelihoods team had a bit of a difficult time. We may want to reflect some more about why this was the case.

I am not too worried about having no time for the reading materials. In many ways, it is much better: it reinforces what we are aiming for with the course: CBNRM is about learning from and in reality, and about practice. Concepts are needed of course, to guide our thinking and our actions, but they are not centre stage. But we should review the reading materials at the end of the course, and see how best to integrate them; which ones are central, which are secondary; and select those that we will translate for the Chinese version of the course reader for future courses and additional use, for training in the field, for example, by project teams or for other courses.

The local people have been extraordinary. This is wonderful and I am very happy that this has worked out so well. I think one of the main reasons is that there are very strong relationships between the local research teams and the local people. Second, we managed to get the students to exchange ideas and feelings, not just go to the field and extract information, although at the very beginning they started just doing that — at least in the Guangxi case — but they changed that attitude and behavior very quickly.

Dealing with confusion, such as the difference between CBNRM and participatory rural development, to my thinking is quite simple – CBNRM focuses on natural resource management, while participatory rural development is broader and includes things such as rural health, education, and finance, transportation, roads, and electricity. Of course, they all relate; so, it is more a matter of entry points. In many places, we now also need to look at migration

(and urban development), and the impact on the resource base. During our visit to Guangxi we looked into these issues, although superficially given time constraints.

So far, the course experience has been wonderful! I sense we are a good team. We were not so sure how this would work out, but so far, so good.

Ronnie Vernooy



This is an initiative for further action research that is not so clear for the students yet, so more field experiences, readings and thinking are important for the students, and us of course. I think that this course will also contribute a lot to our research program of Rural Development and Management. It is so good to have a wonderful team for exchanging the thinking and reflections through the CBNRM course.

We, as the facilitators, could share our thinking in more detail, which should be very useful for both the course and our own research, just as you and Juanwen exchange your ideas on CBNRM and rural development. Long Zhipu and I discussed a lot about the relationship between the need to build up public goods and the need for collective action on the current situation. The CBNRM research itself and the purpose of doing this kind of intervention face so many challenges. It is at a distance from the mainstream of current society, which is pursuing high efficiency and the highest internal rate of return as one of the most important criteria, although some economists have extended the concepts of returns and costs to a broader scope. What do you think about the role of CBNRM research or rural development research in rural development? What about their relationship with research of economics and sociology? What do you think about the differences of CBNRM research and participatory integrated agricultural development projects? Shall we write down our own views on such kind of issues? There are already some readings that mention those, but we could do it from our point of view. Do you agree? We could include more and more thinking induced by more questions.

Qi Gubo

In the footsteps of Fei Xiaotong

On Sunday 24 April 2005, the great Chinese sociologist Fei Xiaotong died, at the age of ninety five. Fei Xiaotong is perhaps the country's best known sociologist and anthropologist, respected for the rigour and passion he brought to the study of rural China. He also had a huge impact on rural studies when he insisted that students and staff do real fieldwork instead of purely theoretical studies. He led by example through fieldwork in Jiangsu, Guangxi and Yunnan, and other places.

One of his books, Xiangtu Zhongguo (first published in 1947), translated into English by Gary G. Hamilton with the title From the Soil: The Foundations of Chinese Society, has become a classic in China and internationally. In this book, the scholar compares the key organising principles of Chinese and Western societies, thus highlighting the distinct nature of Chinese society. Today, it remains an important book for anyone interested in the country, its people, and their history.

Coincidentally, we were in the field on 24 April. On our return to Beijing, when we heard of Fei Xiaotong's death (through a moving article by Li Xing and Jia Heping in the *China Daily*, 27 April 2005), the course facilitators made a brief homage to the scholar, suggesting that we continue to walk in his footsteps. In a small way, we felt that with the CBNRM course we are trying to keep the passion for rural development studies alive, strengthen its practice, and deepen our understanding of the processes of rural change and how rural people experience, deal with, and contribute to it.

Review workshop

As part of the ongoing cycle of action and reflection, we held a course review meeting with a number of key people to present results and obtain feedback on our efforts. The meeting took place in September 2005; a summary was prepared by Qi Gubo. The same is reproduced below –

Three staff members from the CAU graduate school attended the workshop and provided good feedback on the course overview (presented by Gubo and student Liu Lin) and PM & E results (presented by Chen Keke and Lu Min). They were clearly interested

in cooperating with us in implementing a project – supported by the Beijing Education Committee – to test this innovative teaching method. This is very encouraging. Unfortunately, representatives of the Centre of Degree and Graduate Education of the MoE were unable to attend the workshop because this is their 'busy season.' The vice-director of our undergraduate school also attended and she showed interest and asked questions about the usefulness of traditional teaching methods, for example, the 'teacher centred' desk arrangement (Xiaoyun clarified that in the CBNRM course we systematically use 'student centred' methods).

All those at the workshop participated enthusiastically. In the morning session, we had good discussions after each presentation. Some people who were not members of the course working group asked for more information about the students' reactions at the beginning of the course, because most thought that it would be difficult to change students' role from 'receiving information and knowledge passively' to 'thinking, communicating and finding questions and answers on their own initiative.' Some asked how we graded the students, which was not mentioned in our presentations. Some suggested that we should put more emphasis on how to do CBNRM because it is much more important than knowing how to apply participatory methods and simply understanding local communities and local society. Some questioned the funding of the course. Some asked if participatory curriculum development is the key aspect of the extension of CBNRM to the classroom.

Liu Lin (a student) and Keke answered some of these questions. Concerning the question of funds, one staff member from the graduate school said that they did not think funding was an obstacle, because good ideas and initiatives would attract support from various channels, e.g., education reform projects, rural development projects of local government, etc. Liu Lin (COHD teacher) added that we should look at the benefits at the same time, not only the benefits for the teachers and students involved, but also for the local participants, e.g., governors, extensionists, farmers, etc. We explained once again that this was only an introductory course and that we would try to connect it with our students' dissertation work. Participatory curriculum development is both a guiding theory and one of our expected results.

For the afternoon session, we divided the participants in two groups – one for JLAU and one for CAU. Animated discussions lasted almost two hours. In a plenary session that followed, course content, methods, inputs (funds, human resources, reading materials), institutional linkages (support and mainstreaming), and students' expectations were the main topics. There was some agreement on the need for integration of more action research theories and methods into the whole process, particularly through further and more intensive face-to-face and one-on-one analysis of the research and action questions and proposals produced by the students (feedback and analysis on fieldwork was very good already).

At each step, students need concrete and detailed evaluation from the teachers. We were in too much of a hurry, particularly in evaluating the research proposals. One student asked us for the feedback we had given him the previous month, as he could not find the hard copy and wanted to learn more. Involving all students in the course is very important in terms of using resources equitably. The three student assistants thought that they received more benefits than other students in terms of gaining a deeper understanding of the concepts, principles and methods of CBNRM and PM & E skills given that they had a chance to spend more time with the working group preparing, managing and reviewing the course.

The JLAU team had had more time for the preparation of the course, but all agreed that they would need to add some basic participatory ideas, concepts and methods before being able to deal adequately with CBNRM. The JLAU team also discussed the composition of the teaching team; they expected input from Yiching and Jingsong given their strong field experience. The JLAU team preferred the broader term, participatory rural development, as the focus of the course rather than CBNRM, which is still a very new concept in China. Some asked if we could think about community based resource management, rather than natural resource management, to broaden the scope. Representatives from the Guizhou College of Finance and Administration did not think funds will be a limitation for them, because the Rural Development program is getting a lot of support from their college.

Next steps

The review meeting helped in defining the next steps, which included editing the course materials; writing a course brochure and a related visual presentation to be used for sharing the experience with other universities; writing an article about the use of the participatory curriculum development approach; planning and preparing for the 2006 course at CAU; planning and preparing for a similar course at JLAU in spring 2006; and further developing a CBNRM oriented research program at COHD. Based on comments from students and observations from facilitators, the course delivery group formulated a series of recommendations. The recommendations included, for example, starting module three by discussing the nature of action research compared with conventional research, then formulating CBNRM action research questions. In addition, the course delivery group suggested changing the order of modules three and four, so that the formulation of action research questions would be more closely connected to proposal writing.

In terms of teaching methods, they made the following recommendations:

- 1. Pay more attention to the use and integration of conventional methods such as surveys, case studies, life stories and histories, and situational analysis.
- Teamwork, group work, and comanagement are central to CBNRM; these practices should be maintained, but their importance should be explained more clearly.
- 3. Facilitators should provide more in-depth feedback following group discussions.
- 4. Fine-tune the PM & E work by focusing on one or two key elements identified through a more inclusive process and monitored during the modules.
- 5. Strengthen links between course and dissertation work.
- 6. Carry out cost analysis as part of the larger COHD research project.
- 7. Integrate key reading materials into the course more effectively (e.g., point out theoretical elements).

- 8. Provide more guidance before the exercises (including case studies) and more feedback following them.
- 9. Increase time for preparing for field visit. Increase length of field visit by one day.

In June and July 2005, the core members of the working group debated these recommendations and planned a number of concrete follow-up activities. These are given below:

Our learning: looking back and looking ahead

In brief

Your report sparked many reflections on the course. One of them is to review the course overview again and again during the process of delivery. Yes, the intent, the goal and the objectives are already there on paper, black and white, but actually, at least in my case, they do not all make sense instantly. It takes time and effort for us to gradually understand what they mean. They, like a mysterious labyrinth, are gradually exposed to those who would like to make efforts to explore it. I believe that I am still underway until now, through course delivery, field visit, clarifying with you, Gubo, Juanwen, Lu Min, and Zuo Ting.

Xu Xiuli

In detail

We read Etienne Wenger's book about communities of practice, especially the chapter on 'Education' in which the quote below appears, only after we had completed the first three courses that we describe in this and the following chapters. Here is the remarkable quote –

As stated previously, it is more important for students to have experiences that allow them to take charge of their own learning than to cover a lot of material. A curriculum would then more look like an itinerary of transformative experiences of participation than a list of subject matter.

In hindsight, we can now say that we took his suggestions seriously! Throughout 2005, the course development process was an enriching experience for all involved. It certainly was very labour and time intensive, but, as course outputs such as the field visit reports, research proposals, and course assessments indicate, benefits have been numerous and of high quality. Careful preparations and ongoing monitoring, involving students as much as possible, and a continuous focus on learning-by-doing have been important to keep things going and on track.

Among the main achievements we identified were encouraging students to reflect critically on what good action (research) questions are. Most students grasped the idea that in participatory research, the best questions do not come from classroom (or office) thinking, but from field-based interactions with key stakeholders. Perhaps in the whole process of proposal writing, formulating good questions is the most difficult step.

Students gained more understanding about CBNRM. By building each module on the previous one, we facilitated a step-wise process of discovery. We reiterated that the course is not a course to (fully) practise CBNRM. The practice part, for those interested, could follow in the fieldwork. This is why it is so important to look at the course within the larger picture of COHD – the whole teaching and research program. More students have become interested in practising CBNRM, a positive sign.

The course working group has been instrumental in the work done to date. Bringing colleagues from various organisations together and involving a number of students are two of the factors that we think have led to its success. Planning and delivery of the course were not without problems – time constraints on some facilitators and students, irregular spacing of the five modules, and some modules too short – although these have not been major. Better integration of the course with COHD's teaching and research will go a long way toward overcoming these problems. Better integration will also partly answer the question of sustainability, although other aspects will require further attention, such as funding and institutional support from CAU and the Ministry of Education.

The more we progress, the more requirements emerge for the facilitators. In terms of introducing CBNRM, we need to

communicate with the students more openly. Those of us with field experience can compare this with other (conventional) experiences. We have to enhance our thinking by keeping up to date with publications and documentation. Particularly COHD colleagues need to put CBNRM into our research and education programs, keeping in mind the goals and expected outcomes of our three programs. We have to improve our skills in communicating with others, e.g., governments, villagers, other researchers, as facilitators for CBNRM action. At the same time, we have to think about documenting and reporting our results to policymakers to extend our impact. We reiterate the need to pay attention to different learning styles; among students and facilitators there are those who learn most by doing and those who learn best by observing. In this year's group, we had all kinds of learners, and this created a very good dynamic. However, some students asked for more individual attention —

something to consider for future runs.

The 2006 CBNRM Course: Masters of Our Destiny

Qi Gubo, Xu Xiuli, Li Jingsong, Long Zhipu, Sun Qiu, Wang Wanying, Zhang Li, Zhang Ziqin, Yang Huan, Ronnie Vernooy

'Before we arrived in the field, I had worried a lot about what we should do. But I found that all my worries were unnecessary once we communicated with farmers freely. I was touched by farmers' enthusiastic welcome and their positive attitude toward improving their conditions. I was struck by the capabilities and potential of rural women, too. Many of them had dropped out of elementary school after only two years. But when they were given permission, they learned quickly. I was inspired by their spirit. We have more chances than them; we should treasure what we have. I will never forget those days when we worked together in Yanchi county (in Ningxia). I was touched by everybody's hard work.'

Master's student, College of Humanities and Development, Beijing, March 2006

Although the 2005 course had been a very positive experience, it was not without challenges. The challenges were to review the whole process and consider improvements – changes in course content (from objectives to some of the details concerning the exercises), as well as



Guangxi farmers and students
Photo: Ronnie Vernooy

administrative issues. Follow-up activities included editing the course materials; preparing a brochure and presentation to promote the course at other universities; writing an article about the use of a participatory curriculum development approach in the context of China; planning and preparing for the 2006 course at CAU; planning and preparing the course at JLAU; and further developing a CBNRM oriented research program at COHD.

In this chapter, is discussed adaptive management process, highlighting the main changes and new features of the 2006 course. As in chapter 3, a variety of methods, including first-hand descriptions, reflections, photographs and other images, parts of the course evaluation questionnaire, and e-mail exchanges are given. As more attention was paid to process documentation, more in-depth material, in particular that produced by students is reproduced in this chapter.

Rationale for CBNRM research

As an important first step, the rationale for doing CBNRM research and for developing a course on CBNRM was sharpened. This involved input from the new working group, which first met during the course planning workshop in January 2006.

Why CBNRM?

- understand local people's views and uses of natural resources
- acknowledge the rights of farmers and herders
- 3. work more closely with farmers
- 4. respond to farmers' questions
- 5. experience a new way of learning together with farmers
- 6. facilitate local collective action
- 7. support local groups
- 8. involve women more
- 9. empower local people
- 10. improve livelihoods
- 11. address poverty
- 12. protect the environment and natural resources
- 13. use limited resources more effectively
- 14. make the government more responsive to farmers' participation in natural resource management
- 15. shift from a top-down to a more inclusive decision making approach

Why a CBNRM course?

- 1. Start a change process in higher education
- 2. Establish a new way of learning students together with teachers, together with farmers and other local partners
- 3. Introduce and practise an inclusive decision making approach

Following up on a suggestion from the 2005 students, a glossary was developed, in English and Chinese, of the key terms used in the course (pp. 210). The more detailed rationale and the glossary both bring greater clarity to our efforts, and students have been appreciative.

Learning objectives

For the 2006 course, the number of credits earned by Ph.D. students was increased from two to three, allowing for some adjustment in the

course design and related learning objectives. However, for both Master's and Ph.D. students, the overall objective remained unchanged – 'At the end of the course, participants will be able to use CBNRM concepts, principles, and methods for the design of participatory action research proposals relevant to Chinese rural development realities.'

The learning objective for module one remained the same as for the 2005 course (see chapter 3). However, for module two, more emphasis was placed on experimentation and action – instead of just linking the CBNRM approach to actual rural situations, students would 'be able to try out a CBNRM approach in actual rural situations in China.'

The objective of module three from the 2005 course (formulating research questions) was integrated into module four. The new module three was reserved for reflecting on the field visit.

'At the end of module three, participants will be able to differentiate between effective and ineffective joint action learning processes and methods, supported by selected literature, a comparative assessment of the field research assignments carried out in module two, and the guidance of facilitators'.

In module four, the Ph.D. students would review the international CBNRM literature to identify elements useful to research in the Chinese context, through critical individual reading combined with group discussion.

In module five, both Master's and Ph.D. students would go on to draft a CBNRM action research proposal, based on the results of modules one, two, three and four, with the guidance from facilitators.

The 2006 facilitation team

The 2006 facilitation team was made up of members of the core 2005 team: Qi Gubo, Zuo Ting, Xu Xiuli, Long Zhipu, Li Jingsong, and Ronnie Vernooy, plus two new members: Sun Qiu from GAAS in Guiyang and Wang Wanying from the Regional Development Research Centre in Kunming. Lu Min and Song Yiching decided to focus on the JLAU course (see the following chapter), but provided important moral support throughout. Dindo Campilan from the International Potato Center/

Users' Perspective with Agricultural Research and Development (CIP-UPWARD), who was on a short-term assignment in Beijing in the spring, joined the group for a number of activities.

Sun Qiu has a Master's degree in social development from Ateneo de Manila University in the Philippines. She is a senior researcher and director of the Integrated Rural Development Centre at GAAS in Guiyang. Sun Qiu has extensive experience in community based natural resource management and in rural development research. Currently, she is pursuing a Ph.D. at Wageningen University in Holland.

Wang Wanying obtained her B.Sc. in agronomy from Beijing Forestry University in 1982 and an M.Sc. in development management from the Asian Institute of Management (the Philippines) in 1996. From 1982 to 1992, she worked in the Sichuan Institute of Forest Inventory and Planning. From 1993 to 2002, she worked for the Yunnan Institute of Geography. When the institute became part of Yunnan University (2002), she followed the move. She has extensive research and teaching experience in forest management, CBNRM, participatory rural technology development, and poverty alleviation in Sichuan, Yunnan, and Guizhou.

Dindo Campilan is social scientist at CIP. He coordinates an Asia wide program on participatory research and development called Users' Perspectives With Agricultural Research and Development (UPWARD). His work has covered participatory research, monitoring and evaluation, and sustainable livelihoods. He has also led collaborative projects to design, implement, and evaluate capacity development for participatory research and development. He obtained his Ph.D. in communication and innovation studies from Wageningen University, the Netherlands. Currently, he is a visiting scientist at the Centre for Integrated Agricultural Development, CAU. He is also adjunct associate professor at the Institute of Community Education, University of the Philippines, Los Baños.

To allow facilitators to share their experiences, three JLAU staff members came to Beijing for the beginning of the course. All three participated in module one, and two stayed on for module two and the field visit. This proved to be a very valuable experience. Given in the following pages are comments received from two of them —

'First: I managed to make sense of the participatory teaching methods and curriculum process. Second: I further understand what participation is and what action research is. Third: the deepest feeling concerns the teachers and students of CAU and the facilitators' pragmatic and enthusiastic spirit. Fourth: I think I will adopt this study and the methods of teaching and research. It is a very important inspiration.'

JLAU visiting course facilitator, April 2006

'I learned a lot about the participatory curriculum development process – from knowing nothing to grasping the principle of participatory curriculum development by learning during the course. It is an unforgettable experience to visit Guizhou. I feel deeply that the farmers there also need a lot of support... I will remember the lesson – "Tell me, I will forget. Show me, I will remember. Participate, I will understand." I will go forward with this kind of course, and put all of my interests and efforts in it.'

JLAU visiting course facilitator, April 2006

This year, three students – Gao Xiaowei, Ji Miao, and Mao Miankui – were invited to join the CBNRM course working group as apprentice facilitators. The core group was looking for dynamic and entrepreneurial students, who could support the working group in its efforts to deliver the 2006 course more effectively and efficiently and contribute to the development of the future generation of CBNRM course facilitators. The need for additional help had been suggested by the 2005 working group and the local project coordinators.

As basic requirements, these apprentices had to have successfully completed the 2005 CBNRM course, show a strong interest in CBNRM research, be willing to share the 2005 course experiences with students under the guidance of the 2006 senior facilitators, have an interest in learning how to help students under the guidance of the senior facilitators, and be willing to accompany a group on one of the field visits. The tasks of the apprentice facilitators included assisting during modules one and two by responding to questions from students in the classroom and in the field, and providing support and guidance during the field research visits to Ningxia, Guizhou, and Guangxi. Gao Xiaowei, Ji Miao, and Mao Miankui proved to be dynamic and enthusiastic apprentices and did a fantastic job!

As in 2005, three of the current students, Zhang Li, Yang Huan, and Zhang Ziqin, took on the job of assistant, providing logistical, administrative, and technical support. Here are some of their comments on the experience.

'We felt comfortable when we found that every student carefully read the materials we prepared. We felt very happy when we saw everybody's smile during Ronnie's birthday party, which we designed. We felt successful when the whole CBNRM course went smoothly. You know, all of us made our contributions to the course... The CBNRM course encourages everybody's participation, and doing some logistic work is also a kind of participation. To some extent, I think, such kind of work will strengthen students' awareness of their position as main stakeholders in the course.'

Zhang Li, April 2006

'I have two roles in the CBNRM course – I'm a student, but also an assistant. Before the course begins, I only have to think about the role of being an assistant. We do some preparatory work, such as printing material for students, arranging the classroom, and informing students. In that preparation phase, I think we do more work than the other students, in addition to reading the course materials, but maybe that is an advantage. First, we know the course arrangement earlier than students, so it's an opportunity for us to do more reading or thinking about the course. Second, we have more opportunity to meet all the facilitators. We may have more chances to talk with them to learn about the research they do or the problems they meet in their research. I think it's very helpful for us to understanding CBNRM or action research.'

Zhang Ziqin, April 2006

Course content and schedule

Based on the suggestions resulting from evaluation of the 2005 course, we made some critical adjustments to the course content and the sequencing of exercises. The result was a more streamlined program. Students and facilitators alike gave the revised program very good marks. In scheduling, however, we still encountered problems, in particular in terms of the spacing of the modules following the field visit (Table 6).

Table 6. Content and schedule for the 2006 CBNRM course.

Content		Date and time				
Module 1: Defining CBNRM						
	Introducing ourselves and the key course ground rules	13 March, 1400-1430 hrs.				
Exercise 1.2:	Identifying expectations and learning objectives of the participants and providing course organizers' response	13 March, 1430–1515 hrs.				
Exercise 1.3:		13 March, 1515-1630 hrs.				
Exercise 1.4:	-	14 March, 1400-1600 hrs.				
Exercise 1.5:	Identifying key components, principles, and methods of CBNRM	14 March, 1600-1800 hrs.				
Module 2: Jo	int action learning in rural China					
	Reviewing and reflecting on three concrete examples in China, and understanding CBNRM and action research in practice	15 March, 0800-1100 hrs.				
Exercise 2.2:	Comparing conventional research with action research	15 March, 1100-1200 hrs.				
Exercise 2.3:	Preparing for the field visits and joint learning with local people in the field	15 March, 1400-1700 hrs.				
Field visit	8	16-20 March				
	comparative analysis of field experiences Sharing experiences and insights from the field visits	1400–1530 hrs. 27 March,				
Exercise 3.2:	Comparative analysis of key findings in terms of livelihoods and governance: the theoretical side of CBNRM	27 March, 1530–1700 hrs.				
Exercise 3.3:	Comparative analysis of key findings in terms of joint learning: the method side of CBNRM	28 March, 1400–1700 hrs.				
Module 4: (fe	or Ph.D. students only)					
	Selection and critical reading of CBNRM articles	4 April, 1400–1600 hrs.				
Exercise 4.2:	Presenting and discussing the literature review	10 April, 1400–1700 hrs.				
Module 5						
	Drafting a CBNRM action research proposal	17 April, 1400-1600 hrs.				
Exercise 5.2:	Presenting and reviewing the CBNRM action research draft proposals	21 April, 1400–1700 hrs.				
Review meeting		22 April, 1400–1700 hrs.				

There were twenty nine students in the 2006 course, five more than in the previous year. For the first time, we had two students from outside Beijing. In addition, three staff members from JLAU took part in modules one and two to learn from our experience and help them prepare for the participatory rural development course in Changchun (described in chapter 5). As mentioned, we also had three apprentice facilitators. In all, the group consisted of over forty people. Although the facilitators had a full classroom for modules one and two, they managed well with no major problems.



A CBNRM class in action Photo: Ronnie Vernooy

Course delivery

Module one: Defining CBNRM

Module one was the same as that of 2005, with the same five exercises to introduce CBNRM concepts. The puzzle exercise was again much appreciated. In subsequent weeks, students repeatedly reflected on their experience as one part of the puzzle among many. Students' expectations were similar to those of the previous year.

Module 2: Joint action learning in rural China

For module two, a number of improvements in the exercises were made. For exercise 2.1, more structured introductions were made and those presenting the case studies were asked to link them more clearly with the key elements of the CBNRM framework developed in module one. This proved helpful for both presenters and the students, as it allowed for more coherent comparison of the three cases and direct links with what they had already learned.

Exercise 2.2, was based on the comparison of conventional and action research on the three case studies presented in exercise 2.1 (from Ningxia, Guizhou, and Guangxi regions) with a focus on the nature of the research questions and research methods. This went very well.

For exercise 2.3, an outcome was added – 'Participants formulate specific action-research questions and initial ideas for problem-solving together with local people.' In terms of preparation for the fieldwork, the following suggestions, which proved to be useful were made:

- 1. Identify more concrete and specific research topics under the general topics 'livelihoods' and 'local governance.'
- 2. Go to only one village.
- 3. For problem identification, start with farmers, then move to the township and county levels.
- 4. Increase interactions and discussion with local people in terms of the main issues, reasons for the problems, and possible solutions
- 5. Take four full days for the fieldwork.

As in the previous year, the group was divided into three smaller groups for the intensive field assignments in Ningxia, Guizhou, and Guangxi. In terms of livelihoods, the Guizhou team focused on how to improve the efficiency of forest management by strengthening the farmers' five capital – asset bases. Under governance, they looked at the roles of stakeholders in forest management. The Guangxi team explored improving economic benefits to farmers who practise participatory plant breeding, the sustainability of farmers' organisational efforts, and community development and governance. The Ningxia team asked questions about animal husbandry, focusing on the animal husbandry association, and about the role of micro-credit in improving the situation of farmers.

It is difficult to capture the learning experience in a few words, but some comments from students and facilitators that represent what many others expressed during and after the visits. *Guizhou:* In Guizhou, the group visited a CBNRM research site of the Guizhou Academy of Agricultural Sciences. Here, researchers have been working for almost ten years with local farmers and government officials to improve natural resource management practices (water, agricultural lands, 'wastelands,' forests), while also paying attention to human and animal health. The group was immediately captivated by the mountains, cropping systems, and the farmers who received them warmly.



Fieldwork: interviewing farmers in Guizhou Photo: Dai Yonghuan

Given below is a first hand account of the same:

Days in Guizhou were really wonderful... we were captivated by the beautiful landscape. Yellow cole (canola or rapeseed) flowers were everywhere, and green plants were dancing in the breeze. Occasionally, peach trees with pink or white flowers made a pleasant surprise. First, we identified a research question through group discussion, then divided in two subgroups, one focusing on livelihoods, and the other on governance. In the following days, we did household visits, held group discussions, did key informant interviews, and also used some participatory methods. At the end of each day, we shared our experience and did a PM & E exercise.

We all learned a lot, not only about CBNRM, but also about participatory techniques. For example, I tried to use SWOT (strengths, weaknesses, opportunities, threats) analysis in a farmers' group discussion, but I don't think I did a very good job. I found it hard

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to collect the information that I was looking for. One of the facilitators told me, 'Don't worry. SWOT analysis is usually used in business circles. If you use it in a community discussion, you will certainly meet some problems. But this is called learning.'

On the last day in Guizhou, we were all moved by the local people, especially the women. They had made each of us a suit of their ethnic clothes. One of the local officers told us in a low voice that this was the first time this had happened. 'They like you!' In my opinion, this was due to the past hard work of the GAAS team with local farmers. They helped the local farmers to improve their livelihoods, and the farmers wanted to express their thanks. By the way, our Guizhou group also built up a friendship with local farmers, and I am sure they really like us.

Zhang Li, March 2006

Ningxia: A brave group traveled to the north, where it was still quite cold, to learn about the harsh living and working conditions of the Ningxia farmers. For several, this was a first encounter with severe resource degradation, which did not leave them untouched.



Meeting farmers in Ningxia Photo: Zhang Ziqin

Given below is an account of this condition:

The five days in Ningxia reminded me a proverb – 'A special place, special people.' The reality of rural areas varied from place to place.

When we saw sand dunes and soil walls for the first time, some of us had an absurd thought - 'Why don't they all move to Yanchi County? Maybe it is a solution for their living.' But when we saw the enthusiastic peasants of Kutuan village, we changed our minds. Because I felt that they had a common wish to develop their own village. The harmony between villagers impressed me deeply.

During the fieldwork, we interviewed farmers and also used PRA (participatory rural assessment) tools to work and hold a party with them. Their hospitality, warmth, and real feelings touched me deeply. In the meantime, in the course of interviewing, I tried to play different roles, such as interviewer, 'anchor,' member of the PM & E group, and so on. Every role gave me different feelings. I think I will treasure these experiences, because it will help me a lot in the future. But I had to play so many roles that I had no time to rest, except at night.

For those of us involved in the CBNRM course, we should consider the things that peasants pay attention to. In addition, we better guide peasants to use their own power and wisdom to overcome the development problems they face.

Zhang Ziqin, March 2006



It was the first time that I visited a place so different from my hometown and the first time that I worked with so many people I didn't know. But we cooperated wonderfully. Everyone impressed me deeply. I am a bit of an introvert, especially when facing people I do not know. But this time, through our teamwork, I became part of the big family quickly, and I loved it. At the beginning, due to the different topics we selected, we divided into three small groups. Maybe our work was a little too separated, but we were trying to communicate among the three groups to get more information and inspiration.

The farmers are so enthusiastic, united, and positive. I am a bit depressed, because I realise that I can do so little.

It is a pity that I could not take part in the feedback session and party, because of a stomach problem. From now on, I will be more careful about what I eat.

It was a precious experience for me. The understanding of the rural realities and team building will be a treasure for my future work. As I am not majoring in this specific area, I have little experience. I learned a lot from others. We built solid friendships and had a wonderful time together.

Master's student, COHD, March 2006



I am touched by the farmers' kindness and the students' kindness and seriousness about working with the farmers. We had more fun than last year, and had a party with the farmers after the feedback session. I made a video and will send it to the farmers on CD... The team building process impressed me. At first, three small groups worked somewhat in isolation. After the first day, they realised that collaboration among the whole team was not good and they tried to improve it in the following days. On the last day, they had come together as a group. The Ningxia farmers are strong and weak at the same time. They are struggling in a tough environment, and are able to remain optimistic. On the other hand, they have to inject more strength for making their life easier. The HOPE team showed us something that we could do for the farmers, while from the government's presence we learned that they are unable to deal with the problems arising out of the current resource allocation system. What role could we, as researchers, play in this process? This is a key question. Maybe we need several years to answer it. At the same time, our field experience could help us to review the principles and key elements of CBNRM action research. At least, we have to realise that one person cannot do anything for the farmers. That is why we organised teams to go to the field, the local organisations helped us, and the farmers were the centre. In the following (course) discussions, we have to keep this in mind, and we need collective action and more joint-action learning.

Qi Gubo, facilitator, responding to the reflections of the student quoted above, March 2006

Guangxi: A third group of ten students went to Guangxi, where they visited a project led by the Centre for Chinese Agricultural Policy and the Guangxi Maize Research Institute, 'Improving rural livelihood security and changing rural development policies.' For this group, the field visit was unforgettable.



The Guangxi team performing a role play for farmers
Photo: Ronnie Vernooy

Given below is an account of one such experience -

In terms of the course and the field visit, they are quite different from ones that I experienced in the past. The course is very open, but also very strict with the students at the same time... I enjoyed the visit to Mashan county in Guangxi very much. Everyone in the team tried their best to make the visit meaningful. The interactions with the farmers were so special. They received us with open arms.

Yang Huan, April 2006



March 19: Sunday morning in Ma Shan county. The students are preparing for their feedback presentation to the local team and farmers... We are having a very good visit! With a different kind of 'family' and a different kind of experience than last year, but as joyful and interesting.

On Friday morning, we received one of the most extraordinary welcomes I have ever received from farmers; with singing and so much joy... Students refrained from starting to interview farmers right away and, instead, got to interact with the farmers by singing together. The local performance group prepared a special song – an ode to researchers, who come to the village to work together with the farmers (See the Preface).

This was followed by lunch; followed by the first interviews, in two smaller groups according to the two main topics identified -

improving livelihoods and local governance. At the end of the afternoon, the local performance group entertained everyone with dancing, theatre play, and singing. It was wonderful.

Yesterday, the students did interviews all day. Today, we go back to visit the local market, perhaps do some more interviews, and have the feedback meeting. We will return to Nanning tomorrow morning, have a brief meeting, lunch together, then we will see the group off at the airport.

March 21: Nanning city. The students held a good feedback session, using visual support materials to deal with language/translation problems. They also wrote and presented a role play that summarised their main findings and learning very nicely. All of them, including the director of the Ma Shan Country Extension Bureau who accompanied us during the visit, participated in the role play. The farmers enjoyed it so much. Then, we all sang the special song of the farmers. Departure was difficult – tears, also among the farmers. Yesterday, we returned to Nanning. Everyone was exhausted, but very happy.

Ronnie Vernooy, facilitator, March 2006

Module three: A comparative analysis of field experiences

In module three, some important changes were made. After sharing the field experiences – two related exercises were developed: one focusing on the elements of the CBNRM framework, the other on participatory action research methods. Stricter guidelines for sharing experiences and insights from the field (exercise 3.1) were also developed, to tighten up the case presentations and have the facilitators provide a summary after each presentation.

For exercise 3.2 – Findings in the areas of livelihood and governance were based on the following questions – what are the specific research questions formulated in each case? What initial action plan will address the issues with the local team? Advise on good facilitation of the group work to analyse and highlight some of the main findings and link them to key CBNRM elements were made.

For exercise 3.3 - a synthesis of findings relating to joint learning – the need to reflect on the how and why of teamwork, including both cooperation between students and facilitators, and cooperation of the group as a whole with the local people was stressed. Learning results

were modified – to recognise that building teamwork, a collaborative spirit, and co-management are key elements in CBNRM and sustainable rural development.

Back in the classroom, exchanges were numerous and vivid and concerned not only the field observations of farmers' livelihood activities and struggles, but also the process of working together as a team and interactions with the local people, including the farmers, but also other researchers, and government staff.

Each group presented its experience and insights in a particular way. The Ningxia team used posters, the Guizhou team produced a short video, and the Guangxi group gave an oral presentation. In addition, all three teams also performed a group role play to reflect the process of joint learning (the Guangxi team performed a play that they first staged for the farmers during their field visit, see photo on page 107). Analysis of the role plays focused on effective and ineffective methods of joint action learning. Students emphasised the importance of respecting farmers' needs and time, of collaborative discussion, and of awareness of the different roles of the stakeholders. They cautioned against decision making without feedback or negotiation and researchers having too strong a voice in the whole process.

The group then delved into the topic of formulating research questions. They reviewed the questions they developed before going into the field and reflected on what the fieldwork experience meant in terms of defining good questions – which led to many new questions! As one of the students remarked, 'I have learned much from this process, and some principles are becoming clearer. Today we had a hot discussion with the other groups about research questions. It is a good process that makes us think more deeply.'

Module four: A new module for Ph.D. students

Exercise 4.1: Selection and critical reading of CBNRM articles (facilitators' worksheet)

Date 4 April, 1400–1600 hrs.

Process Step 1: Introduce briefly the background for this module, highlighting that this will be the first presentation of the

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module to Ph.D. students. One credit has been allocated, or sixteen hours, roughly to be divided as follows:

- Reading: 8–10 hours hrs.
- Writing: 2-4 hours hrs.
- Class work: 4 hours hrs.

Step 2: Introduce/refer briefly to the readings selected for this module and invite each student to make a short list based on his or her own interests, suggesting that they choose articles that link to the results of the field visit. Ask each student to explain in one or two sentences the reasons for each choice.

Step 3: Briefly review each student's short list to ensure that the amount of material is appropriate.

Step 4: Explain the task: to read the selected materials carefully and identify useful CBNRM concepts, principles, and methods, according to the student's own judgement. Answer any questions that may arise about the task.

Step 5: Introduce the second exercise of the module: writing a short review paper (three pages) on the usefulness of the selected readings, presenting the main points of the paper in plenary, and comparing them with other students' main points. Suggested outline for the review paper:

- 1. short statement of personal reasons for selection of the articles
- 2. summary of the main argument(s) of the articles
- 3. useful key elements identified and reason(s) for identification
- 4. overall assessment of the quality of the article(s)
- 5. additional comments

Explain briefly the proposed dynamics of the presentation and discussion session: up to three mini-sessions of 20–30 minutes each will be scheduled, in which each student will present his or her main findings. Contributing to the ensuing

discussion in all three mini-session is encouraged. Announce the date of submission of the papers, two days in advance of the second classroom session of the module to allow enough time for the facilitator(s) to read the papers and group them into a number of small units. Close the session by mentioning that allocating sufficient reading and writing time is the responsibility of each student given the individual differences in carrying out these kinds of tasks (i.e., some people are slow readers, some are slow writers, some are both).

Duration 90 minutes

Expected Students have identified their individual readings and are clear about the second exercise.

Process See exercise 4.2

(continued, if required)

Evaluation Each student has identified readings of his or her personal interest.

Exercise 4.2: Presenting and discussing the literature review (facilitators' worksheet)

Date 10 April, 1400-1700 hrs.

Process Step 1: Start the session by asking students for general feedback on the reading and writing assignment. Suggested time twenty minutes. Explain that at the end of the session, students will be asked for additional assessment of exercises 4.1 and 4.2.

Step 2: Based on the written reviews, organize three presentation and discussion sessions, 20–30 minutes each. Identify clearly which students will present in which session. Presentations should be short and concise. Invite comments from others (for example, those who have read the same articles or those who have contrasting opinions).

Step 3: Run the three mini-sessions, keeping an eye on time.

Step 4: Close the session by summarising the main points/ results of the exercise, as well as providing feedback on the presentations themselves.

Duration 150 minutes

Expected Students have gained experience in preparing and presenting a (written) literature review and in comparing their own review with others.

Process Step 5: In collaboration with the PM & E team, review the (continued, module.

if required)

Evaluation Quality of written reviews, presentations, and contributions to the discussion.

Tuesday, 4 April 2006

Xiuli and I presented module four to the Ph.D. students. After introducing the objective and main arrangement of the module, the students started to read the Ph.D. readings guide. Before and during the reading, they raised a few questions: Is it better to read one article per person? If so, they could read in more detail and share to a greater extent. They noted that there are not many articles related to the field study results directly, and asked if it would be OK if they paid more attention to their personal interests. They wanted to know if the article about proposal writing is included among their choices. My response was that it is better to consider the time available for reading, but that two articles would be a minimum number. I also replied that personal interests are of course important for the review. I explained that how to write a proposal is not included in this assignment, but will be discussed in the next module.

Everybody selected two articles, considering time limitation. They hesitated to select Chinese ones, as they thought they would be more difficult to write about, although reading would be easier. They all agreed with the submission time and with the outline for the paper. I asked them to prepare for next Monday's presentation: ten minutes for each person followed by debate. I did not yet ask

them to group themselves into three mini-sessions. This could be done after their write-ups. Chen Yanchong asked how to evaluate their understanding of the articles, e.g., the depth of understanding. I responded that Ronnie and I would give some comments, in terms of how their reviews connect to their field experience and ideas for proposal writing.

They suggested using Chinese for the discussion next Monday. I think it is a good idea, as it could improve our ability to think and express ourselves more clearly. In the end, I think it will also be a kind of support for their proposal development assignment, not only in the course, but also for their theses.

During the course, I asked for their comments on the course so far. I also told them that we would like to hear from them by e-mail. Let us see what responses they will give.

Oi Gubo



Thanks for this detailed report on the session. Thanks to all three of you for facilitation and the whole group for these long, intense hours! A pity I could not be there, as you seem to have had a very interesting and fruitful discussion (once more). I think these Ph.D. students are careful readers, critical thinkers, and generate good questions! What more could we want? I am looking forward to learning more about their field-research plans and about their actual fieldwork.

I think the questions about 'community,' 'participation' and the roles of researchers (perhaps, more important: how we go about DOING our research) are all at the heart of CBNRM research, because it is in the doing that we come to see ourselves and how others, such as farmers, are seeing us - as 'outsiders' or 'insiders.' From a participatory action research perspective, the challenge is not for us to have the 'last word' in what they mean in practice. I think that this is an insight that nobody can acquire in a short time, and certainly not by just reading. It took me maybe fifteen years to start to understand this more clearly, and I am still struggling with this. The discussion about the role(s) of leaders (including research project leaders) points to the importance of paying attention to the microsocial and political dynamics, and how these are shaped by, but also (re)shape, larger (macro) structures and processes. I think Chen Yanchong's observation is very good. I would love to see many of the students doing research into these processes of social change – both to learn from local people's struggles and to find opportunities to contribute to these processes of opening up space, but without it becoming a matter of social engineering. This relates directly to the principle of commitment and, thus, to the role of the researcher! Thanks to all of you, the PM & E team and to Jingsong for continuing the assessment work. I am looking forward to learning about the results.

Ronnie Vernooy



Module five: Proposal writing and clarifying some issues and questions

Most of the facilitators took part in this module and were happy to see the 2006 course come to a successful conclusion. During the first session in this module, the students identified the links among the modules, the CBNRM framework, and the core elements of their research proposals. Following students' questions, the facilitators summarised the criteria of a good proposal. Students responded that they understood these criteria, but that they would like more examples of a good proposal. The day after exercise 5.1, the six teams started writing their proposals, which they then sent to the facilitators the day before exercise 5.2.

Facilitators and apprentice facilitators came together to read and review all final proposals. The facilitators then provided comments and advice face-to-face and by e-mail (Wang Wanying, Sun Qiu, and Ronnie Vernooy could not be present in the classroom). The feedback encouraged the students to improve their proposals further. In general, the facilitators felt that the proposals were good in terms of the topics and research questions. However, in some groups, the links between the problems identified and the research questions were not logical. In others, the objectives, outputs, and activities were not coherent. In some, the roles of the research team were not identified, particularly the involvement of local people (except for the Guizhou livelihood group who did an excellent job of specifying the involvement of local farmers and officials).

In terms of scores, 6 and 7 meant 'good,' 8 was 'very good,' and 9 was 'excellent.' The proposal 'Research on the sustainability of farmers' cultural organisation (Guangxi)' received a 7, due to the vague research questions, the absence of an analysis of the problems found in the field, and its more conventional research style (the group revised its proposal again after this assessment). 'Research on the roles of stakeholders in follow-up management of economic fruit forest project in Kaizuo Village of Kaizuo Township of Changshun County in Guizhou Province' and 'Research on improving farmers' household livelihoods in the Guangxi Participatory Plant Breeding Project' both received a 9. The other three scored 8: 'Research on the sustainable model of micro-credit in Kutuan Village in Ningxia,' 'Research on improving the benefits of economic fruit forest development in Guizhou,' and 'Research on an afforestation project in Kutuan Village of Yanchi County in Ningxia: environmental improvement and farmer households' self-organisation's management capacity building.'

During the final presentation and evaluation session, all groups did well. In fact, the presentations were more coherent than the proposals, suggesting that the students had thought seriously about the feedback they received. Peer review of the proposals was very fruitful, with each group giving detailed comments to one other group.

2006 course post script: defining research questions

Throughout the 2006 course, students kept discussing and asking about how to formulate a good research question, evidently one of the most challenging tasks they faced. Although improvements were clearly observed over time in students' capacity to develop good questions (the proposals presented during module five contained much better questions than those defined in module two), additional attention to this area, it was felt would be a good idea. Luckily, a new exercise on this topic for the course at JLAU was prepared and it was decided to try it in Beijing as well.

As background material, a 'one pager' with examples of relevant research areas was prepared. The exercise, which took place during a special seminar organised by the Fellowship Support Team, was a success and contributed considerably to clarifying what good (action) research questions are. Many of the students followed up by integrating at least one action research question into their M.Sc. or Ph.D. field-research proposal (see chapter 6 for more details).

Course review

As in 2005, an end-of-course review meeting to look back and obtain feedback was held. Given below is the text of the feedback:

In the morning, the working group set an agenda for the review session. Jingsong reported on the results of the questionnaire, and we planned to respond to some selected results and opinions. Dindo Campilan joined us as an observer, and suggested adding a question to the facilitators' self-assessment form on how to become a better facilitator and what support this would imply. He also suggested reviewing the questionnaires by program level (Master's and Ph.D.). The course review session started with a short 'highlights' exercise, in which participants broke up into three groups to share their experiences. Some told funny stories about team members, e.g., their misunderstanding and misuse of local words, their snoring and disturbance of the group's sleeping. Many told moving stories about their meetings with local people, their interactions with the facilitators, talking with farmers, Ronnie's sand birthday cake made by kids in Ma Shan, the Guizhou farmers' gifts, etc. Xiaowei concluded that, although we had not asked for highlights of the fieldwork, all the stories were from the field, indicating that the fieldwork experiences had made a deep impression.

Then the three PM & E groups discussed the PM & E process and results. The farmers' evaluation of the work of the Guangxi team left a deep impression on the participants, and the way the team did the evaluation with the farmers (one holding a big piece of paper and the others hiding behind it) made us all laugh. The Ningxia team demonstrated various PM & E tools, e.g., the H-diagram, scoring tools, and personal cards with everyday reflections. They also explained how they used PM & E to improve the teamwork, and even evaluated their use of PM & E itself! The Ningxia team's everyday reflections – what was most impressive? most moving?

most satisfactory? - and the Guizhou team's reflections on their struggle to identify research questions were very telling.

Zhipu facilitated the 'show and tell' part of the session, in which each team made a presentation to one other team. The Guangxi team's presentation was designed as a television news report, with two moderators. Between their news announcements, there were 'advertisements,' such as providing farmers with information on pig raising, and a sales pitch for maize liquid. The team's learning process in the field was presented in the form of small sketches by the other team members (great theatre playing!).

The Guizhou team's presentation, with many comments, beautiful music, and pictures, depicted the whole learning process from classroom to the field and back to the classroom.

The Ningxia team began with scenes of other areas (not of Ningxia) and the message that we tend to take nature for granted. This was followed with a map showing the flight from Beijing to Ningxia. They showed the party with the farmers at the end.

Both Guangxi and Ningxia teams had collected many video images, but this year's presentations included more voices and movements. Students provided comments after each show and, at the end everybody rated the three presentations: Guangxi team 70, Guizhou team 59, and Ningxia team 55 points. Zhipu invited me to award the prizes. I explained that the prizes were for teamwork and innovative outputs.



Feedback on the field visit by the Guangxi team Photo: Ronnie Vernooy

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Jingsong then reported on the results of the evaluation questionnaires. She went through the questionnaire step by step, highlighting the links between the course and fieldwork, and commenting on suggestions received from the students. I emphasised that we agreed on the need for more facilitation in the proposal writing exercise (especially for the M.Sc. students), that we were aware of the imbalanced presence of the facilitators in different modules (but time constraints are hard to overcome), and that we understood the request for more time to define research questions (although I stressed that some research questions put forward were already very good).

I also provided feedback on the request for more time to discuss methods and the CBNRM framework (I explained that the course is only an introductory course, but ideally, each module could be a full course in terms of subject matter), on the questions about the reading materials (we will provide more Chinese readings in 2007), on the possibility of having a literature review module for M.Sc. students as well (a good idea, but there will be no additional credits; I suggested that perhaps students who are interested could organize a literature review themselves). Last, but not least, I agreed with the suggestion to give the PM & E team more time to do their work and use the results of the exercises more effectively.

The session on 'next steps,' focused on the link between the course and thesis research (including the fellowship support) and the planned exchange visit with JLAU and other universities. The students asked about the fellowship support. Because we were considerably over schedule, Xiuli invited participants to the information session the following Wednesday to continue their exchanges.

Zhang Keyun expressed her appreciation for the course and the facilitators, I congratulated every student for their good performance, and we distributed the picture postcard prepared by Ronnie, using it as a 'certificate' along with an IDRC bag for each student containing 'Voices for Change' (Chinese version), 'Social and Gender Analysis in NRM,' and the IDRC 2005 CD-ROM. Finally, we took a group photo.

Qi Gubo

Selected results of the course evaluation

For the course evaluation, the same questionnaire was used as in the previous year, with some minor adjustments in one question, asking about unexpected results. Here are some of the main findings.

The CBNRM course aimed to introduce a novel way of learning, using a combination of elements. Assess each of these elements, as follows:

Characteristics of the learning method	Good	Average	Below average
Learning by <i>doing</i> : active student participation including in the course management	26	2	0
Experiential learning: <i>discovering</i> , instead of being lectured	17	11	0
Linking theory to practice: integrating a field visit and developing an action proposal	16	12	0
Using a <i>variety</i> of learning tools (in the class and during the field visit)	23	5	0
Teamwork, instead of individual learning	24	4	0
Team facilitation and teaching, instead of individual teaching	21	7	0

The answers indicated that more attention be paid to the research (field visit) and proposal writing parts of the course. From the detailed comments, it was learnt that many students considered the time allocated to these two key elements to be too short. Unfortunately, there is little that could be done about this for the moment, given the limitation on the number of formal credits given for the course.

The CBNRM course aimed to contribute to the new teaching and research programming of COHD. Assess the following aspects:

Characteristics to the COHD programming	Good	Average	Below average
The relevance of the course as part of your own study program (Master's or Ph.D.)	15	12	1
The relevance of the course in relation to your planned master's or Ph.D.s fieldwork research	17	10	1

From details provided by students concerning this question, it was realised that there are currently no clear study profiles in COHD, e.g., oriented to a research, teaching, or management career. Most students' programs are, therefore, a mix of different courses. The CBNRM course, with its holistic approach to rural development studies and focus on practice, is most clearly related to a research profile; however, links with other courses need to be developed. From the detailed feedback that was received, it was known that not all students who take the course are in a position to make their thesis CBNRM oriented.

The CBNRM course aimed to develop a number of skills. The degree of one's own skill building as a result of the course, can be measured as follows:

Putting CBNRM learning to work	I envision OFTEN using what I have learned	I envision MAY BE using what I have learned	U	I do not feel I have achieved this objective
Ability to define the key concepts, principles and methods of CBNRM	14	14	0	0
Ability to link the CBNRM approach to actual rural situations in China	17	11	0	0
Ability to formulate at least three clear, relevant and feasible CBNRM action research questions	11	16	0	1
Ability to differentiate between effective and ineffective joint action learning methods	12	16	0	0
Ability to design/draft a CBNRM action research proposal outline	20	8	0	0
Ability to review selected international CBNRM literature in relation to the CBNRM course	8	18	2	0

The answers to this question suggested that a good start had been made on students' ability to identify good action research questions and differentiate among methods, but more efforts are required. It is good to remember that the course was only an introductory course. Concerning the literature review, it was found that all students, including the master's students, wish to benefit from this module.

Unexpected results

Students were asked to report on unexpected results. This gave the core team some valuable feedback. Reproduced below are some such comments. The comments have been grouped under headings for convenience.

Behaviour and reflection

'The course gave me a new attitude, which can support and direct my future research.'

'In the course I began to show more enthusiasm and take more initiative. This happened because I realised that what I have said is listened to carefully by others and recorded. Both the students and teachers seemed to be interested in what I said and gave me some comments and suggestions.'

'I have improved my ability to express myself and speak in front of many people.'

'I learned more about self-reflection and others' merits through the fieldwork.'

'I learned how to do field visit, and how to communicate with local people. I have learned a lot in the village. Besides, I know PM & E is a good method.' (mentioned by two students)

Participatory action research

'I gained a deeper understanding of action research and action research proposal writing.' (mentioned five times)

'I became more aware of what the CBNRM researcher can do. How they can be helpful to rural development. I love this field more, and I will develop my own interest in it.'

'I did not think I would learn using some Participatory Rural Appraisal tools, but we did in the field.'

'I learned how to define a research question. In all, I improved my ability to do research.'

Teamwork and friendship building

'Teamwork is the biggest gift for me. We became good friends.' (mentioned by ten students)

'The interdisciplinary teamwork.'

Other comments

'I also improved my English by accident.'

'I read some valuable literature on CBNRM.' (mentioned twice)

'The active learning and teaching style – such as puzzle game and the role play – were beyond my expectations.'

This valuable feedback served as input for further improvement of the course. Overall, the 2006 course confirmed that the activities were on the right track in terms of content and process. The experience in 2005 created enthusiasm about the course and related activities among students and staff in the 2006 course. The 2007 course working group, which was formed in December 2006, got off to a very solid start because of the accumulated experience and insight gained earlier. Yang Huan's words summarises the entire exercise:

'The most important thing is to have a mechanism to improve the course according to the suggestions and advice from different stakeholders. Maybe the form is not the most important. How to make every teacher really respect the suggestions and advice from different stakeholders and make other stakeholders willing to participate is the most important. In the current system, course evaluation is just a form; no one really cares about students' needs. And evaluation forms are too rigid. But the CBNRM course gives us an example of how to solve this problem. We can do it! Everyone feels that they are the master of the course. Teachers are not afraid to look at the different needs of different students. So everyone feels very happy in the CBNRM course.'

The Participatory Rural Development Course in Changchun: Making the Road by Walking Together

Lu Min, Cheng Huawei, Song Yiching, Zhang Dayu, Cheng Zhiqiang, Liu Lili, Li Xinjie, Zhang Nailing, Huang Jingjing, Ronnie Vernooy

'During the May holiday (2006), I attended the participatory rural development course, which was supported by IDRC and coordinated by Dr. Lu Min. The course impressed me deeply. I now understand real participation, real cooperation, and real friendship. Because I was absent during the preparatory meeting, I did not know the principle of the course, so I kept silent sometimes. Maybe the other members thought that I was negative. Little by little, I familiarised myself with the course and the other members. We were divided into three groups. Each group went to different parts of Jilin province. I chose the group going to the east, to Huang Song Dian County, Jiao He City. After two days of theoretical study in the classroom, each group went to its own destination for the field visit. "Resource mapping," a method we planned to use in the field, was unfamiliar to me. I think it is a very useful and direct tool. Our group, we called it "family," had eleven members. Dr. Yiching Song is our "mother"; Mr. Cheng is our "elder brother." During the four days



Review of the JLAU course Photo: Ronnie Vernooy

of field visit, we met an important person, whom we would remember forever - the chairman of the Mushroom Association, Mr. Cui. During the four days, I learned a lot from Mr. Cui, such as his enthusiasm, his optimism, and his down-to earth style of work. Before we arrived at our destination, Mr. Cui had arranged everything for us: the restaurant, the hotel, and the village, which we visited. At the end of the field visit, I had a lot of feelings about the farmers. Farmers created the world, and they assured the survival of the people. But, with the development of the world, the farmer was changed. They fell behind. They needed a lot: information, technology, and finance. Recently, our country has made many efforts to support farmers, although they are limited in reality. In other words, what the government did is not what the farmers really need. After we came back to Changchun, we held a party to celebrate the success of our course. Reviewing the course, the biggest wealth I got, is a principle - participation. Only through participation can you know the real meaning of a concept, and by doing things you benefit.

JLAU M.Sc. student, June 2006

In May 2006, following as many months of preparation as in Beijing (perhaps more), the participatory rural development (PRD) course got underway in Changchun. Although based on the CBNRM course, this one had its own specific character, with both content and dynamics adapted

to the local situation at JLAU and Jilin province. To start the process, the university's administration office, the graduate school, the college of agronomy, the college of humanities, the college of resource management, and the college of economics and management were identified as key potential partners. It was agreed that the college of agronomy would take charge, with the other three colleges as partners. The administration office and the graduate school promised to provide support. Other help would come from the China Agricultural University's College of Humanities and Development (COHD), the Centre for Chinese Agricultural Policy, IDRC, and the International Potato Center/Users' Perspective with Agricultural Research and Development (CIP-UPWARD).

In this chapter, the PRD course experience, as a second case study in introducing and experimenting with participatory curriculum development and mainstreaming CBNRM/PRD approaches in China's higher education system is described. As in previous chapters, this chapter is based on first-hand observations and reflections. Starting with one person's dream a process to bring like-minded people together and acquire minimal resources to plan some activities together was put into motion. The group did not form overnight, nor did it come into being without major effort, including struggles to cope with setbacks. But the new road was made by walking together and it continues to be the same.

Motivation

The experience at COHD in Beijing showed that it is possible to introduce participatory curriculum development into China's higher education with good results. High quality innovation was the aim in Beijing and this was carried over to Changchun. The core group was aware that good results were required to gain more support, and attract more teachers and students. In Changchun, where very few staff and students knew about participatory approaches, this group became pioneers. Luckily, the JLAU working group proved to be the strength of the core group. There were lively discussions and, sometimes, divergent opinions, but in the end there was agreement. Central to the JLAU working group was shared decision making, based on inputs from all, and transparency in terms of process (in all tasks including administration of funds).

Lu Min, who was introduced in chapter 2, was the driving force behind the work in Changchun. She brought together colleagues and a few students to present her ideas and together they listed some reasons for developing a participatory course in JLAU:

- 1. To study in a happy mood. Studying should not be a boring and negative experience, but an experience of gaining new knowledge in a positive setting. Our study approach will improve our teaching methods.
- 2. To foster a new teaching method and improve teachers' teaching capacity.
- 3. To increase students' interest in studying in an atmosphere of participatory teaching, to practise and strengthen their abilities through positive interactions and by putting teachers and students at the same level.
- 4. To share resources more fairly and, thus, have a chance to improve our teaching and learning.
- 5. To change the traditional teaching notion of instructing and become agents of change.

Later, when more students joined, they added more reasons:

- 1. To introduce new ideas and new practices. Participatory teaching methods are completely new to both teachers and students.
- 2. To harmonise the whole course development process, leading to a more effective course.
- 3. To allow students to get closer to teachers through horizontal communication.
- 4. To provide more chances to engage with society. The research assignments that are part of the course will play an important role in this.
- 5. To improve self-reflection and thinking abilities and to remove restrictions imposed by textbooks.
- 6. Participatory teaching will be like a fresh spring wind blowing on the campus!

From Beijing to Changchun: adapting good ideas

A role play written by Yang Huan, September 2006

Background

One staff member (A) at JLAU wants to introduce the PRD (CBNRM) course to the agronomy department. The dean of the department (B) is very interested in the course, especially in the PM & E method. A invites staff of COHD (C and D) to help the dean understand the method. The dean has many questions related to the 'Magic Wheel of PM & E': why, what, who, for whom, how, when? The visitors introduce the situation at COHD. One of them (A) suggests a way to adapt the method to the agronomy department.

Scene 1 (A and B)

A (on the telephone): Hello, Mr. Wang. Miss Li and Miss Zhang who have come here to introduce their experience in developing CBNRM course will come tomorrow. Do you have time tomorrow?

B: Good news. I will be free tomorrow afternoon. How about two o'clock?

A: That's OK. I'll arrange for that.

Scene 2 (A, B, C, D):

A knocks on the door.

B: Come in, please!

A: Mr. Wang, this is Miss Li and Miss Zhang, who are the facilitators in developing the CBNRM course. I invited them here to give us some suggestions about the CBNRM course.

B: Thanks for coming! Sit down, please.

C: We are glad that you want to join our work team.

D: Yes, our team is enlarging.

B: To be frank, participatory research is new for our department. Introducing the CBNRM course here is a good way for us to learn about participatory research. But our department's major is in natural science. This is totally different from your situation at COHD. Is the CBNRM course also useful for us?

C: That's not the problem. The CBNRM course focuses on participatory learning and action research concepts and methods. The research of your department is also closely related to the rural area. These concepts and methods can help you understand the rural reality better and get along with the farmers very well.

B: That sounds good. The document of the course mentions PM & E many times. I'm not very clear about participatory monitoring and evaluation.

A: PM & E is a method of monitoring and evaluation. It involves all the stakeholders, including students, facilitators, and farmers. The objectives of PM & E cover every aspect of the course. Stakeholders can use many ways to collect and present the information.

B: Excuse me. What do facilitators do?

C: We call teachers facilitators in the course. We want to make the students more active and the teachers just play the role to help them learn.

D: Yes. There was a students' needs assessment meeting before the course. Facilitators collected expectations and suggestions from the students. Then, there was a work group workshop. All the facilitators sit together discussing the arrangement of the whole course. A report about the contents of each module was produced. In the course, there is a PM & E team constituted by students and facilitators. They have the responsibility to collect monitoring and evaluating information from students, facilitators and farmers.

C: In the field, each of the field visit teams chooses the tools they consider appropriate. At the end of the course, there is a review meeting to assess the whole process of the course. The course also encourages everyone to present his or her findings and feelings in many methods. The most impressive are the role play and the short movie. I brought a CD. You can enjoy one short movie.

B: It's very interesting. I think students will like this very much. But it's just a new method. Why do you give it in such an important position?

C: This method can collect more detailed and vivid information compared with other methods. CBNRM is also a novel course to

our department. PM & E can help us make adjustment in the implementation process. And we think CBNRM itself is worth extending to other universities, like your department. We can accumulate experiences and lessons through PM & E.

D: One of the main aims of this course is to promote the students' capacities in practice. PM & E gives us details of the improvements of the students. The use of PM & E also helps the students to practise participatory research methods.

A: Yes. The teachers also realise their own shortcomings in the process.

B: It seems very useful. But our students as well as our teachers lack the background, related concepts, and participatory tools.

A: It's not difficult to learn the tools. We can add a section to introduce the tools. If we can use them frequently in the course, most students can catch the point.

C: Learning by doing! It's the core concept of the course!

The course

The first course in Jilin had twenty six students from four colleges (agronomy, natural resource management, economics, and sociology), with one Ph.D., twenty two M.Sc., and three B.Sc. students. This is an important and interesting difference from the COHD course where most students were from the same college (humanities and development). The course working group included three staff members who took part in the first two modules of the 2006 course in Beijing, plus Lu Min (course coordinator), Professor Xu Kezhang (then the dean of the agronomy college), and three students. Although the JLAU course resembled the COHD course, a number of details were modified to respond to the local context: the focus was on rural development questions in Jilin province only; part of module two was devoted to introducing and using field research tools, such as interviewing, participant observation, and some participatory rural assessment tools; and field visits were exploratory, given that there were no existing CBNRM projects underway in the province. We also addressed a number of shortcomings that emerged from the 2005 CBNRM course and introduced adjustments (Table 7).

Table 7. Learning from the CBNRM course in Beijing.

Shortcoming	Suggested improvement
Research questions are unclear before going to the field.	Emphasise case study analysis in module one.
It is hard to grasp the difference between conventional research questions and action research questions.	Design a new exercise to identify good research questions and differentiate between action and conventional research questions.
The time between modules two and three is too long. This creates a gap in reflections on the field visits.	Decrease interval between modules two and three.
Three days is not long enough for the field visit.	Increase length of field visit from three to four days.

As JLAU staff and students were strangers to the concept of CBNRM, but familiar with rural development, we decided to change the name of the course to PRD. We thought it would be best to introduce participatory theory and methods into rural development studies. The course goal and learning objectives were very similar to those defined for the CBNRM course, but focused on Jilin province. Students would receive three credits (equivalent to seventy hours) – forty two hours for class learning and twenty eight hours for the field visit and reflection. The learning objectives would be achieved through four interrelated modules.

Module one: Defining a PRD approach - concepts, principles, methods

At the end of module one, participants will understand the key principles and methods of PRD, based on game playing, a short lecture, an interview with a resource person and a review of selected international literature (theoretical and case studies) with guidance from the course facilitators.

Module two: Joint action learning in Jilin province

At the end of module two, participants will be able to link the PRD approach to actual rural situations in Jilin province, based on their own experience, field visits, and selected literature, resulting in a comprehensive case analysis. The two core issues are governance and livelihood.

Module three: Reflecting on joint action learning

At the end of module three, participants will be able to differentiate between effective and ineffective joint action learning methods, supported by selected literature, teamwork, and facilitators' guidance, applicable to the action issues and questions identified in module two.

Module four: Designing a PRD action research proposal

At the end of module four, participants will be able to prepare a draft PRD action research proposal based on the results of modules one, two, and three, with guidance from facilitators and meeting the criteria clarity, coherence, and feasibility.

Course facilitation team

A diverse and multi-institutional team of facilitators was responsible for course delivery. Participating institutions included JLAU, COHD, CCAP, CAS, CIP/UPWARD in the Philippines, and IDRC in Canada. Team coordination was in the hands of Lu Min.

Dindo Campilan is a social scientist at CIP (see chapter 4 for details).

Cheng Huawei graduated from Jilin Normal College in 1996 majoring in education of thinking and politics. Meanwhile, she was assigned to work in JLAU's Humanity Institute, where she taught sociology (history of western sociology and sociology of modernization). She is currently dean of the sociology office. In 2003, she started Ph.D. studies at Jilin University, majoring in sociology. She is very interested in the problems of weaker groups and social insurance.

Cheng Zhiqiang graduated from JLAU in 2001 with a major in chemistry. Since then he has been a chemistry teacher at JLAU. His main interests are environmental assessment and the development of environmentally friendly materials. In April 2005, he attended a workshop on participatory curriculum development and became very interested in the practice.

Lu Min is an associate professor at the College of Agronomy, JLAU, and supervisor of graduate students (see chapter 3 for details).

Song Yiching is a senior research scientist at the Center for Chinese Agricultural Policy in Beijing (see chapter 3 for details).

Ronnie Vernooy is a senior program specialist at IDRC (see chapter 3 for details).

Xu Kezhang is a professor of agronomy and supervisor of postgraduate students. His major is in crop production and agrobiodiversity. He has been to Japan as a senior visiting scientist. He has done research on crop photosynthesis and crop yield components. Now he is also focusing on agriculture-ecology and gardening.

Zhang Dayu is a lecturer in agronomy at JLAU, specialising in crop science. He obtained his Bachelor's degree in 1997, then became a teacher in agro-ecology. In 2005, he obtained his PhD from CAU's College of Agronomy and Biotechnology. His main field of research is sustainable development of regional agricultural and agricultural ecology.

Course content and schedule

As mentioned, the PRD course was based on the CBNRM course, but with modifications to take into account local characteristics, especially the lack of expertise in using social science research methods and tools. Overall, we were satisfied with the course logic, although it is evident that additional efforts will be required in the coming years to strengthen field research skills in participatory action research and we have started to think about how best to do this.

Content		Time/date
Module 1:	Defining a PRD approach – concepts, principles, methods	
Exercise 1.1:	Introducing ourselves and familiarising all with the course ground rules	2 May, 1300–1330 hrs.
Exercise 1.2:	Identifying expectations of the participants and providing course organisers' response	2 May, 1330–1415 hrs.
Exercise 1.3:	Summarising course content and dynamics, including PM & E plan	2 May, 1415–1445 hrs.
Exercise 1.4:	Identifying current R & D challenges from students' experiences	2 May, 1500–1615 hrs.

(Contd	.)
Conta	٠,

Content		Time/date
Module 2:	Joint action learning in the rural reality of Jilin province	
Exercise 2.1:	Identifying current R & D challenges from a local perspective	2 May, 1615–1745 hrs.
Exercise 2.2:	Identifying key PR & D concepts, principles, and methods	3 May, 0800-0900 hrs.
Exercise 2.3:	Comparing participatory (action) research and conventional research approaches	3 May, 0900–1200 hrs.
Exercise 2.4:	Introducing some research tools	3 May, 1400–1700 hrs. 4 May, 0800–0930 hrs.
Exercise 2.5: Field visit	Preparing for the field visit	4 May, 1000–1130 hrs. 5–8 May
Module 3:	Reflecting on joint action learning in the rural reality of Jilin province	
Exercise 3.1:	Sharing experiences and insights from the field visits	20 May, 0800–1130 hrs.
Exercise 3.2:	Analysing key findings in terms of livelihoods and governance: the theoretical side of PRD	20 May, 1330–1600 hrs.
Exercise 3.3:	Analysing key findings in terms of joint learning: the methodological side of PRD	21 May, 1400–1700 hrs.
Module 4: I	Designing a PRD action research proposal	
Exercise 4.1:	Drafting a PRD action research proposal	17 June, 1400-1600 hrs.
	Presenting and reviewing the PRD action research draft proposals	20 June, 1400–1700 hrs.
Review meet	ring	21 June, 1400–1700 hrs.

In the classroom

Thanks for giving me this opportunity. I am proud being a member of the class. We should also thank the two respected doctors for bringing this new thing to us and giving us many aids. The PRD course is a new style of teaching and learning, a new idea, which, in my opinion, is changing our studies and will change us. In the class, we can take part in all kinds of exercises, actively, even including the field investigation. Learning is acting. Of course, acting is also learning. It is the exercises that not only make our study a happy thing but also give us lots of knowledge inside and outside the class. We can express ourselves freely. Each member is equal. To find a

better way to settle a problem, we must work together and help each other, which makes our minds broader and quicker. In the class, we learn how to give and share. Free communication, working together, and equality are very important. We like this kind of class, with its free and flexible atmosphere; what is more, we can find the knowledge, the way to the knowledge, happiness, confidence, and friendship. As a student, we care about our study. However, we pay more attention to the people, especially the people living in the rural areas. So I hope our work or suggestions can do some good to help them. If it is more useful or if it is a success, it means more to us.'

M.Sc. student in the PRD course, 2006

Modules 1 and 2

The first session – module one and the classroom part of module two – went very well. The students showed strong motivation and participated eagerly in the classroom and in the field. The class exercises proved to be relevant and coherent.

At the beginning of module one, some students were very shy and sat waiting for a lecture to begin. They were unaccustomed to the dynamic style of teaching and to interacting with the facilitators. When the puzzle game was started, most of them did not know what to do. However, in a very short time, they began to understand the idea and became very animated. And the energy level was maintained for most of the session.



Facilatator-student interaction in the classroom Photo: Ronnie Vernooy

The meaning of participation

In the discussion, students made use of drawings and short stories, during both the planning workshop and course delivery. For example, rural development is just like a hand with five fingers (Fig. 3). Each finger represents a governor, a businessman, a farmer, a researcher, or a planner. When different stakeholders actively participate in rural development, it is successful. No one finger is more important than the others.

In another example, a student explained, 'A blind man touches an elephant; a blind woman touches the same elephant. Each tells us a different result. We cannot judge who is right and who is wrong unless they touch the whole elephant at the same time and tell us which part he or she is touching. Each blind person is like one scientific discipline. Only multi-disciplinarity and interaction can lead to successful results' (Fig. 4).



hand with five fingers.



Fig. 3. Rural development is like a Fig. 4. In isolation, scientific disciplines are like blind people describing an elephant. Only cooperation can lead to successful results.

One major change that was introduced was a new exercise comparing conventional and participatory action research questions. Students paid a lot of attention to this issue and spent considerable time figuring out the differences. The exercise went so well that we would later introduce it in Beijing - an example of 'reverse' innovation (see chapter 4).

To the field

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The field visits, to three different agroecological areas (grasslands, plains, and mountain forest), were a major experience for all students, in terms of working together, learning about rural realities, using the research tools, and finding answers to a number of research questions.



Preparing for the fieldwork Photo: Ronnie Vernooy

The grasslands are very dry and soil fertility is poor, but groundwater is plentiful. The main problems are low crop yields, poor use of grassland resources, lack of appropriate agricultural technology, poor education services, and relative isolation.

In the plains, the main crops are maize, rice, and beans. This region receives abundant rain and benefits from higher temperatures. The main problems faced here are lack of groundwater, decreasing land resources (due to urbanisation and industrial development), few trees, industrial pollution, lack of a processing industry, weak farmer associations, and lack of appropriate technology.

In the mountain area, farmers plant mushrooms, collect medicinal plants, and cultivate ginseng. Wild plants and animals are abundant and important rural resources. Border trade with North Korea is very active. Tourism is also important, but undeveloped. The main problems in this region are population pressure, low education levels, lack of appropriate technology, conflicts over protection and development of resources,



Interviewing a farmer in Jilin's central plains
Photo: Ronnie Vernooy

resource degradation, social inequity, and lack of recognition of the key importance of biodiversity to sustainable development.

Although the students enjoyed the fieldwork, they also struggled because they lacked important communication and research skills, such as how to conduct an interview in a team. Some were unclear about their tasks or how best to go about defining these tasks, e.g., through consultation with classmates. However, it was a learning process for all of us; everyone contributed to and learned from the process, including the facilitators. Here are some of the reflections of the students:

Through action, we learned how to do a field visit and how to do group work, and understand action research better. There is a lot of work awaiting us, I think. I hope I can continue to help the farmers there improve themselves.

During the fours days in the field, I learned more than during my first three years of study in the classroom. Important capacities such as teamwork, communication, systemic thinking, problem solving oriented study, and so on, can be achieved during the PRD course delivery process.

At the grasslands area

When I touched the ground on which our ancestors lived for many years, I felt a special kindness deep inside. The blue sky, black soil, and trees are just a drawing of nature. They are so lovely that I recalled my childhood. Suddenly, I noted that a great deal of land looked white. When I asked Mrs. Lu Min about it, she answered, 'It's saline, because so much salt is pouring out from the land.... A lot of grass had been eaten by cows and sheep, but this land can't produce green grass forever.'

I saw many things during the trip and experienced many feelings. The second day, we were going to Ji Xiang town. Along the road, I saw a field with many farmers working, a canal which was made several years ago for the irrigation of fields and a dent to extract sand to build houses. I especially observed the trees, with only one root standing in the soil. When I questioned the guide, he said, 'It had been cut by the farmers for fuel use.' I was very angry about it. There were no green spaces left for us and our environment was destroyed so heavily. After a short introduction by the leader of Ji Xiang, we went to the homes of farmers. In the office of the village, we learned a lot from the farmers, about their livelihoods and local governance - such as how much money they earn each year, how many members are in their family, etc. At supper time, we went back to the hotel, where we had supper with the officials. It was already 11 o'clock at night, but our work was just beginning. When we finished, I was so tired - but I felt very happy.

The third day, we arrived at Qing Long village. After a short introduction by the leader, we had an interview with the farmers. We got plenty of information about their economic conditions, their diseases, and their feelings about the nation's policy. Our first reaction was that the life of farmers is too hard, and we should do something for them.

After the feedback meeting, we started our return trip to Changchun. With many feelings in my mind I wrote this article. The situation is just like this nowadays, there will be many things we should do. Our investigation is over, but this road to rural development is endless. In the future, the load will be on our shoulder. I trust that the future of China's rural area will be better and better!

At the plains area

I feel very shy about expressing my opinion – watching other people's faces or eyes. I want to keep the others far away, so that I can spend a quiet life. But the PRD course defeats me.

During the first two days in the field, I keep up, but I suffer a lot. I am a member, I own my knowledge, but I cannot contribute... I

want to speak out, I want to talk with the others. I can sing a song in a different way, I can write and recite a poem orally. I can summarise the team outputs and make the presentation. I want to help the working group, I want to join in the happy atmosphere and make a contribution to it.

Now, after the visit, I feel I am not lonely anymore. It is the first time in my life. I will say goodbye to the first twenty five years of my life.

At the mountain forest area

I am so exited since I came back from Jiahe township... It is worth doing this kind of research and this is my first, but most important thing to experience. I got a lot of information about rural development by visiting the field to deepen what I learned in the class.

We not only grasped some basic principles of PRD, but also mastered what the reality is. The participatory method is new to our way of studying. It is like a soft wind that makes our way of learning and doing research more varied and interesting. We may have another avenue to solve problems. I cherish the choice and feel lucky to take part in the course. Also, this is a course for practising everyone's ability. We all have the same opportunity, and everyone wants to participate. At the same time, to finish the work, everyone must work together, like a harmonious family where each member plays an important role. This is teamwork. If allowed, I hope I can have more chance to attend this kind of course and feel the special warmth of this family.

Modules 3: Return to the classroom

As in Beijing, the return to the classroom led to vivid interactions and exchanges of thoughts and feelings. Time seemed too short for everyone to say what they wanted to communicate. Even the quieter students wanted to express themselves and share their stories with classmates and facilitators. The comments of Dindo Campilan, who joined the course for module three, captures the essence of this session:

I would like to share the following reflections from the PRD module three in Jilin:

1. The impact of the fieldwork on the students was most evident during module three, especially their enthusiasm in sharing field

- experiences. No doubt, the fieldwork was the turning point for most students in as far as PRD learning is concerned.
- 2. Among the three groups, the one that visited the plains area had a clearer/easier mode of reflecting on the questions in exercise one. As discussed after the presentations, this was because at this the site there is a more or less well-defined PRD intervention. In contrast, the other groups had more difficulty in focusing on the questions. Students were not sure if the reflection questions were about a 'PRD project,' or simply about the action learning activities of the local community.
- 3. During exercise two, Lu Min and I were a bit worried that students were only able to identify a few PRD elements based on their fieldwork. Thanks to Lu Min's suggestion, we revisited this after the role playing exercise. I think that the latter helped deepen students' understanding, because this time the discussion on PRD elements was much richer (with more elements easily identified by them).
- 4. The students' limited research background proved to be a main constraint when we did the exercise to refine action research questions, based on the fieldwork outcomes. The exercise was supposed to lead to a refined set of questions, but instead, what the groups presented was a list of answers to their earlier questions (and some seemed target results/outcomes). With timely intervention (thanks to Lu Min), the grasslands group ended up with a fairly good set of revised questions. I think that module four should revisit this part of the course's learning content. We also thought that a concrete example would help, so I shared a brief UPWARD case on how an initial set of questions guided fieldwork, and how fieldwork subsequently informed the next step of reformulating the research questions and designing an action research phase of a project.
- 5. Based on the above, Lu Min and I thought it would be premature to expect students to prepare a full proposal during module four. Instead, we agreed with students that they would start working (between modules three and four) on problem/ justification/questions and research objectives. During module four, students could share these and then further progress with

the support of the facilitators. Only then would students move to the next step, i.e., methodology.

Finally, I noted that members of the JLAU facilitation team were visibly active in module three (also an impact of fieldwork?). Congratulations to Lu Min and the team for these achievements, despite all the difficulties.

Dindo Campilan

Module 4: Trying to integrate learning into an action-research proposal

The reflections in module three and the proposed modifications to module four had a strong impact on the group and helped us to move along more effectively. The students organized themselves to work on their proposals. They worked very hard, until late at night, to keep the deadline for the presentations and discussions in plenary. Here is an account of this big jump to the next stage in the process by Liu Lili, one of the students, in an e-mail message to Lu Min:

After learning about the links between the four modules, I think that I now have a preliminary understanding of the curriculum, although maybe we still have a long way to go if we consider our learning expectations.

At the beginning of the course, I was unclear about the content, although I attended the planning workshop in January (2006). Before going to the field, we did not have a good understanding of the five basic elements of action research, so we did not have an in-depth view of the problem. Only after we finished module three, did we became aware of the error. We are very grateful to Dindo for his brilliant contribution. In general, after our learning during the entire course, I think there is a certain degree of improvement.

When we now reflect on the course, we find a very important truth: our work is inseparable from the efforts of the group members. This should be the best embodiment of teamwork. It is like our team, you, Xinjie, Jingjing, and me. We should work together to make our work easier, don't you think so?

All students put a lot of heart into writing and presenting their proposals and the ensuing debate. It was evident that they tried very hard to apply the knowledge accumulated during modules 1–3. They drafted six proposals based on the topics governance and livelihoods. Each team described how the field visit had improved their understanding of the research problem and allowed them to make their proposal more specific. Defining relevant action research questions had proved difficult, but in some cases the attempt is more valuable than the result. We could clearly see how the learning process had reduced the gap between the students' education experience and rural development realities. That students were closing this gap by themselves is perhaps one of the most important outcomes of the course.



Presentation of the action research proposals
Photo: Ronnie Vernooy

The research proposal topics were:

Livelihoods

- 1. An analysis of mushroom bran recycling through innovative process technology Huang Songdan township, Xiaohe, Jilin province.
- 2. Adjusting the cropping system by developing water saving agriculture Jinxiang township, Baicheng, Jilin province.
- 3. A study on the limiting factors that affect 'farmer centred' technology diffusion Zhangjia county, Shuangyang, Jilin province.

Governance

- A participatory study on the development process of a special rural technology association – Huang Songdan Township, Xiaohe, Jilin province.
- 2. A feasibility study on the promotion of a groundnut special technology association Jinxiang Township, Baicheng, Jilin province.
- 3. A study of the dilemmas faced by the Pig Special Technology Association Zhangjia county, Shuangyang, Jilin province.

Course evaluation

'I am very lucky to have the chance to attend the PRD course organised by doctor Lu Min. In the traditional way of teaching, a course is taught only by the teacher; the student is passive and, as such, he cannot grasp the spirit of knowledge. So, the knowledge cannot become his ability. Participatory teaching can make students become active, and this helps them improve their ability to learn and apply knowledge. After they graduate from university, they are able to serve society and the countryside better. The traditional way of teaching is like a single soldier fighting; however, the intelligence of one person is limited. I think the core of participatory teaching is team cooperation; the teacher and the students work together and the collective power is infinite. Traditionally, teaching and practice are not connected. Although the students learn a lot, they don't apply much. In contrast, participatory teaching starts from the problem and moves around to how to solve it. This is more significant. In traditional teaching, there is not enough communication between teacher and students. There is a psychological distance between them. Participatory teaching emphasises that the students and the teacher are equals. Therefore, they can communicate better, and this is very important for both the teacher and the students.'

JLAU teacher, June 2006

As in Beijing, a questionnaire was used to evaluate the course. Below are some of the main results.

The PRD course aimed to introduce a novel way of learning, using a combination of elements. Assess each of these elements, as follows:

Elements	Excellent	Average	Below average
Learning by doing: active student participation	25	0	0
Experiential learning: discovering instead of being	22	3	0
lectured to			
Linking theory to practice: integrating a field visit	20	5	0
and developing an action proposal			
Using a variety of learning tools (class and field exercises)	20	5	0
Teamwork instead of individual learning	20	5	0
Team facilitation and teaching instead of individual teaching	g 23	2	0
Interdisciplinary approach to research and learning	6	19	0

N.B. One student was unable to return the questionnaire.

Overall, feedback on the new way of learning was positive, with the exception of the use of an interdisciplinary approach. Based on the comments made by the students and the deliberations of the facilitators, some reasons for this weakness were identified.

- 1. The twenty six participants came from four different colleges where there is very little interaction among staff and students. During the course, it proved to be difficult to find common time for such interactions on weekdays. We had to arrange time for this on weekends, which put an additional strain on everyone's time.
- 2. The JLAU facilities did not have classrooms that facilitate interactive learning. The average JLAU classroom is very large with more than 100 desks and seats arranged in rows. This is not conducive to teamwork. During the course, assistant students spent a lot of time rearranging desks and seats.
- 3. Staff lacked experience in participatory research concepts and using participatory tools in the classroom and the field. At a time when we are only beginning to introduce these new ideas and ways of doing things, improvisation is inevitable. While this is well intended, it is not always well designed. Students were also unfamiliar with participatory action research concepts, methods, and tools and needed time to find ways to use them in their own research projects, which tend to be biophysically

- oriented, with little or no interaction with people (farmers, government staff, extension staff).
- Conflicting learning paradigms. Most participants expected lectures in their own field of expertise; this is their familiar learning model. Learning by doing and interacting with others who have a different background and interests is not easy. The past way of doing things is no longer a point of reference.

The PRD course aimed to contribute to new teaching and research programs at ILAU. Assess the following aspects:

	High	Moderate	Low
The relevance of the PRD course to the other courses you have taken or will be taking	13	12	0
The relevance of the course as part of your own study program (undergraduate or Master's or Ph.D.)	14	10	1
The relevance of the course in relation to your planned Master's or Ph.D. fieldwork research	14	10	1
The feasibility of doing follow up research in the field with fellowship support	15	10	0

The scores in these areas were also quite good, which is promising given that there were hardly any courses at JLAU that resemble the PRD course, and given that the fellowship support component was still in its early design stages.

The PRD course aimed to develop a number of capacities. Please assess the degree of your own skill building as a result of the course, as follows:

Skills	Major change	Some change	No change
Defining the key concepts, principles, and methods of PRD	19	6	0
Linking the PRD approach to actual rural situations in Jilin province	16	9	0
Formulating clear, relevant, feasible, and ethically appropriate PRD action research questions	: 14	11	0
Differentiating between effective and ineffective joint action learning methods	15	10	0
Designing (drafting) a PRD action research proposal outline	12	13	0

Similar to the results in Beijing, the most difficult skill to master was drafting an action research proposal with solid action research questions. We will need to invest more time and effort in this component of our initiative.

To what degree did the course meet your expectations? Please write down your expectations as formulated during the first module and review them one by one. Please provide clarifying comments.

Expectations at the beginning of the course	Exceeded	Met	Not met	Comments
About participation	7	6	0	
Team work	6	1	0	
Understanding PRD	4	1	0	Understanding rural problems, finding solutions, teamwork, learning a new teaching method together
Methods of PRD	6	3	0	
Learning English	3	1	0	
About rural development	0	4	1	
Making friends	3	1	0	
Field visit	3	1	0	

Note: Students defined their expectations during module 1; most listed more than one.

The short field visit could only provide a glimpse of some of the rural development issues that are affecting Jilin province. It is, therefore, not surprising that this expectation received the lowest score overall. More exposure, through field research and other assignments, is required to gain more knowledge and understanding of rural development questions. This is why we consider the link between the course and fellowship support to be so important.

Reflections

During the process in Jilin, participants became aware of the meaning of participatory curriculum development. What is taught is no longer determined only by teachers, but is developed by both teachers and students. Teachers guide the process and everyone involved must work as a team to draw up the action plan. In this process, each participant

has knowledge that he or she can contribute from a different perspective. During the course, we know what we learned at each step (module) and what we will learn in the next. This allows us to develop new learning objectives and find a way to achieve them. We discover what kind of roles learners play.

However, not everything went well. Although the working group did a good job in terms of organisation and management, a strong team was not formed. This is partly because the whole group did not meet face to face before the course and also because during the course it was difficult to find time for getting together. A better job in terms of shared leadership and decision making and creating a more congenial atmosphere for working together could have been done.

As was learned during the courses in Beijing, the facilitators' most important task was to respect all students, grasp their backgrounds and experiences, and acknowledge their differences. For some students, being in a group with peers and facilitators whom they did not know was a major, new undertaking. It was sensed that some students were quite lonely at first. However, over the next three or four days, they began to discover that they could make friends and that encouraged even the most introverted student. Over time, course conductors would be more adept at identifying individual learning styles, interests, and behaviours. Eagerness to learn more about students revealed that they had good analytical skills.

In the field, the students struggled. They (and maybe the facilitators) tended to forget the following:

- 1. to introduce themselves and explain the purpose of their visit to the people they encountered
- 2. to conclude or wrap up a visit or exercise (e.g., interview)
- 3. to ask whether the person interviewed or visited had any questions
- 4. to remember that it is effective and efficient to divide up tasks; for example, have one or two students conduct interviews while others record the information
- 5. to sit close enough to people to allow more natural conversation and create a bond.

Facilitators could benefit from some basic training, for example, in recognising and resolving conflicts within the teams.

The main challenge during the field visits was to determine what a PRD research project would look like in a specific site, what key elements from the PRD framework should be used, and why those elements would be important. In the plains area of Jilin, where some work has been done already, the main question was – how can we build on the work done so far and move to a stronger PRD agenda? In general, the students' interactions with farmers point to the need to deepen the understanding of what participatory action research is and what roles students and farmers could play. These questions are of direct relevance for the field research that the students themselves (for their theses) have to carry out. Facilitators could guide students to differentiate the various forms of participatory research, from consultative to collaborative, and to distinguish setting up demonstration sites from doing participatory research.

Although the PM & E group had no time to develop and present a detailed plan, they managed to do a good job, even though they had never done a participatory assessment before.

Next steps: linking the course with thesis field research

Thanks again for inviting us to be part of this year's PRD course. It was a wonderful experience. The students are intelligent, funny, well-organized, and very, very committed.

For the fellowship component, I would like to recommend that we set up a small management group, with similar functions as the one in Beijing. Yiching and I suggest that we select two or three students to be full members of this team; one from the team interested in doing fieldwork in the east; one from the team with an interest in the centre of the province, and maybe a third. Yiching and I would be happy to join this team, at least at the beginning. The team should be in charge of supporting the development of the fieldwork team proposals, along the lines as we discussed yesterday. The ideas presented by the students are very good; they are realistic and feasible. Central to this is the collaboration with the local partners – again,

this is at the heart of good PRD research. The team could also consider supporting individual students interested in doing PRD fieldwork (if any this year). We think that there is a very good opportunity now to build a basis for PRD work in the east; and strengthen the PRD work in the centre of the province.

Your leadership will be key; but we both think that several of the students are ready to take on major management tasks, in collaboration with local partners, supported by you and the other facilitators. We ought to give the students a chance and the space to show their talents! I see no reason to wait with this, and I would like to ask you, therefore, to suggest which students could be part of the fellowship team. Looking forward to hearing from you,

Ronnie Vernooy



As in Beijing, the intention in Jilin was to complement the PRD course with a fellowship support program. The next chapter explains how a fellowship program was established at COHD. In Jilin, this has been more difficult for a number of reasons. First, linking course work with research has been hampered by a certain inflexibility on the part of thesis supervisors, who insisted on keeping students 'for themselves' and their own research interests, which are rather remote from PRD related topics. Second, there was a considerable time gap between the course and the designated period for fieldwork, due to the particularities of the JLAU course set-up. Third, PRD experience among staff as well as meaningful sites for learning about PDR were lacking. This situation was addressed by starting at least one new, long-term PRD research effort - in the east area of Jilin, where local partners had shown strong interest in collaborating. Effort was made to convince one or more of the supervisors to agree to a PRD component of their research.

Postscript: feedback from JLAU students, six months after the course

In November 2006, students from JLAU and CAU organised the first national participatory curriculum exchange workshop. Hosted by the JLAU team, it brought together selected students (and staff) from CAU, JLAU, Yunnan University, Hebei University, Guangxi University, and the Guizhou College of Finance and Administration. Here are the thoughts of a number of JLAU students – some who took the PRD course and others who were interested in taking it.

This exchange workshop has opened up my field of vision. Not only do I now realize the limits in our province, but I also have an understanding of other domestic local situations. Through this workshop I have feel enriched, and I have a better understanding of this area of knowledge. In addition, I made many friends – another big harvest for me.

Wang Liyan



I am very glad to attend the workshop. During the two-day meeting, I learned more about the PDR course, and I have made many friends from different places. I wish that the PRD course will be gaining ground.

Wang Zun



During the two days of study, I gained a better understanding of participatory curriculum development. I also now have a better understanding of the importance of cooperation. I was honoured to participate in this exchange seminar, and happy to meet Beijing, Yunnan and Guizhou's teachers and schoolmates. From their reports, I felt that I lacked practice and knowledge. This has inspired me. I hope that the teachers could carry out a similar activity, and provide many opportunities for the students to practise; let us do more exercises and practise on our own, and thus become qualified rural workers.

Han Lin



If study is for progress, then I believe that reflection can lay the foundation for climbing the stairs to progress. After I experienced the PRD curriculum process, I not only studied participation and

gained related knowledge about this process, I also enhanced my study method and enthusiasm. I was lucky to participate in the curriculum process. We learned from the experts and scholars, and from each other as well, because in the course, we felt equal to teachers. After I experienced the curriculum process and learned many things, in my heart raised one kind of sense of responsibility and a sense of mission: to disseminate the 'participation' method widely and move it into the mainstream. I know my own strength is limited, but I deeply believe that through our study endeavour, 'participation' can become a mainstream ideal in the near future.

Huang Jingjing



The exchange meeting gave me a feeling of achievement. I saw many old friends, and made many new ones. The sharing of experiences widened our field of vision. The new curriculum development experience has given us many valuable experiences and this exchange meeting was the next step in the process. It encouraged more and more schoolmates to participate. We study together, work together – such teamwork is a very good practice. We anticipate that later on, we will have another chance to exchange.

Li Xinjie



Through the exchange of experiences, we can discover the merits and shortcomings of the implementation process. This can help us to achieve our goals and enhance each other's work. By coming together we can make a good start in mainstreaming participatory curriculum development in China; experience sharing is an effective way to speed up this process. For the participants, this kind of short-distance exchange allows us to experience feelings from the heart. We heard so many feelings from the students from the two universities (CAU and JLAU), and although our disciplinary backgrounds are different, our feelings are the same. No matter we call it a CBNRM course in CAU or a PRD course in JLAU, this new method of teaching and learning did not exist in the traditional teaching process.

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The idea of 'the student as the centre' has greatly improved the student's study status, improved study activities and initiative, and has the potential to attract a very large following. Moreover, the teachers and the students (at the workshop), who did not participate in this kind of course, expressed strong interest. This kind of new study concept has also given them inspiration. Finally, for myself, I learned a lot from the exchange and I feel very lucky to have had the opportunity to participate in the course. Sharing one's own experience is a very joyful matter. Maybe before I was not clear about many things, but through the exchange, I start to see clearer. Both the curriculum and the experience were very useful for me.

Liu Lili



Before the workshop, I had two expectations. One was sharing viewpoints and experiences and exchanging ideas with each other, especially about PM & E. The other was sharing my feelings and those of concerned schoolmates with others. At the end of the workshop, my expectations were all satisfied.

Zhang Nailing



The Fellowship Support Programme: Learning in the Field

Xu Xiuli, Yang Huan, Mao Miankui, Lu Min, Qi Gubo, Ronnie Vernooy

'Now that I am doing my field research, I have come to understand how difficult it is to do good research. It is a continuous process of learning by doing. Three to four months may be the minimum time to stay in the field.

My classmate and I always work together. There are so many kind people around us, we never feel lonely. At the same time, I can understand other friends' feelings of loneliness in the field. I think I am lucky and I appreciate all of this.

Concerning the question of shortening the time in the field, I mainly considered the conflict between doing research and finding a job. Now I see that I need not worry about that at all. All of that is only wasting my time. I have confidence in dealing with the links between the two, and I will never give up my field research.'

Master's student, COHD, 13 November 2006

'I think fieldwork is very meaningful. The long period in the village made me understand more about the reality of rural life. And the situation in the village is quite different from what I thought it would be. At the beginning of the survey, I missed some important information, so I need to do a deeper case study next time. I will



Student interviewing farmers
Photo: Ronnie Vernooy

be able to write about my major findings after I have summarised them. I want to quantify the survey data next time. The local partners from the Guangxi Maize Research Institute in Nanning and from the extension bureau are very kind to us. For example, they gave us support in the survey, introducing us to the village leader.'

Yang Huan, 31 August 2006

Building on the CBNRM and PRD courses

The new courses were the key first steps on a road to innovation and mainstreaming of CBNRM and PRD in China. They represent a new approach not only to curriculum development, but also to defining rural development studies. These courses, with their specific learning objectives, sequencing of modules, and the learning by doing pedagogy, serve as the example of the broader agenda to integrate CBNRM into higher education. Large changes were aimed at as key features of the courses.

Fellowship support for Ph.D. and M.Sc. fieldwork, initiated in 2006 in Beijing and in 2007 in Jilin, aims to further the change process started with the courses. Over time, it is expected that this field research support component will play an increasingly central role.

Field research and field-based learning activities are central to CBNRM and PRD and to the development of the key capacities needed by

qualified rural development professionals (see below). In turn, it is expected that the results and emerging lessons from field-based activities will provide the necessary inputs for future evolution of the initiative, particularly in terms of curriculum development, i.e., improvement of the CBNRM and PDR courses, design of similar course at other universities, other new courses, or elements integrated into existing courses, including at the undergraduate level. With this in mind, and with additional financial resources provided by IDRC at the beginning of 2006, a more comprehensive field-research support system was designed. This chapter describes how the fellowship initiative came about, how it is managed, what the first results have been, and what has been learned so far. It includes first-hand accounts of experiences and the lessons learned.

Key capacities for rural development students:

- 1. Describe and interpret the complexity of rural realities and the rural development challenges faced by local people.
- 2. Apply participatory learning and action research concepts and CBNRM methods.
- 3. Show critical thinking about the contribution to local rural development efforts undertaken through joint action learning and research.
- 4. Use a participatory curriculum development approach to reform the current teaching programmes and related research activities.
- Apply PM & E concepts and methods to assess capacity development efforts and enhance individual and organisational learning.

Design of the fellowship support initiative

In developing a fellowship programme, a process similar to that used in planning the courses was followed. First, a small team to design the programme was formed. One staff member from COHD (Xu Xiuli) and one from JLAU (Lu Min) joined forces with two COHD students (Mao Miankui, Ph.D., and Yang Huan, M.Sc.), with the expectation that one or two JLAU students would join later after the first PRD course. Ronnie Vernooy complemented the team by providing suggestions based on

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other IDRC supported small grants projects. Recognising that this was the first time such a programme had been attempted at either CAU or JLAU (and likely in China), the team struggled to identify an appropriate method. A series of formal and informal meetings with students and staff to hear ideas and obtain feedback were organised. Some excerpts from these meetings follow; they provide an idea of the issues on the table and how the team proposed to deal with them.

Learning by doing! Several thoughts arose after informal communication with some students and colleagues about fellowship support. Those reflections became more detailed, especially when I started to spread the core document around our college (including through e-mail to those who took the CBNRM course in 2005 and 2006). Maybe I think too much, but I really need your help with some points, since we still have space to adjust the core document before sharing it tomorrow afternoon.

First, the double application process is fine (formal defense and application for the fellowship support). I reorganised it in the core document. I hope that it looks clearer now. One question might be raised (though not with high frequency): will students who passed their defense in December 2005, still have the opportunity to apply for the fellowship in September 2006, especially those (expected to be a small number) who have extended their research for one or two years?

Last time we met, we thought that we would stipulate the minimum time for work in the field later, and this was not indicated in the core document. However, after communication with students and colleagues, I think it is important to include it. It is also better for applicants to be aware of the compatibility between their research and the fellowship. In addition, we need to consider whether time in the field before the fellowship (say some students just came back from the field today, and they stayed there for their thesis for a week) can be accumulated in terms of the total duration?

Money issue – as usual, funds must be accounted for, and disbursed according to CAU's rules. Each expenditure should be reviewed before disbursement. I can prepare a notebook for each student, and will record amounts when students come to me for approval. After my review, Gubo will also need to approve disbursements

according to CAU rules, as she is the person responsible for the whole project. The notebooks can also be used as records of the progress of the various research projects carried out by the students – like an archive for each student.

In the Chinese version of the core document, I still find that terms are not clear, especially the 'mainstreaming' part. Because all our students and supervisors can read English, we decided to send them both English and Chinese versions. The English version should be the final one if any confusion arises. Is this okay? On the Website, the Chinese version will be more appropriate, since it is more for advertisement and information.

Attached, please also find the proposed budget sheet and evaluation table. I am not experienced in making a budget, so please check and refine it. Because participatory research is dynamic and entails much adjustment, it might not be necessary to provide details in the planning. I am not sure on this point. For the proposal review and evaluation, two steps are designed (is this necessary?). First is the primary checklist for review, which focuses more on the compulsory factors and principles. Only after 'passing' the checklist can the proposal move to the second step for technical evaluation. Passing the checklist indicates that the student is willing and committed to the participatory action research supported by the fellowship. But if the evaluation is unsatisfactory, we assume it is because their capability is still weak. It also indicates what efforts the supervisors and management team should make. The evaluation table is almost the same as the one used in the CBNRM course (last module), with some minor adjustment.

Last, but not least, I hesitate to raise an issue about the management team. Because Yang Huan and Miankui will also submit proposals this year, it might be inappropriate to involve them in the whole review process, although they can contribute during the checklist step. This would allow them to avoid the dilemma of being 'referee' and 'athlete.' (We already know they would not be involved in reviewing their own proposals.) To solve this issue, could we call them 'assistants.' I discussed this informally with Yang Huan, and she thinks it is better. We all believe that they both do and will provide strong support to the whole process.

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The interactions with the students were useful in terms of refining ideas and solving some of the problems that Xu Xiuli mentions. Miankui and Yang Huan played a key role in the whole process.

Tonight we had a meeting with the students who may be candidates for fellowship support at COHD. Although we invited all students to come, there were twenty four participants including me, Yang Huan, and Xiaowei; thirteen Ph.D. students and eleven Master's students. Among the master's students, four are in rural development and management, four in regional economics, and the others are in sociology.

The students asked a lot of questions about the details of the programme, and we received many suggestions. We did our best to answer all the questions.

Mao Miankui

At that meeting with potential fellowship candidates, many inquiries concerning budgets and money management were discussed. Students were eager (and some a bit anxious) to know what they could include in their budget – books, medicines, travel, contingency funds (emergency returns, for example to participate in the civil servant examination), and the salary of research assistants (sometimes their peers, sometimes local people). They also wanted to know how the management team would monitor disbursements once the money had been transferred to their supervisors (or to themselves). Students asked who would train them in bookkeeping. They remarked that such training would also be useful for their future careers.

One of the graduate students recommended that the management team be involved in deciding where the fieldwork would be done, especially for students wishing to go to the same site to carry out joint research and learning. This generated much discussion. Could they also choose several sites? If someone carries out a preliminary survey and problem diagnosis during the field selection period and some funds are spent, but later decides to move to another site for a longer period of study, could the money spent earlier be reimbursed?

Some of the Ph.D. students wondered whether six months in the field was too long. Given that the last study term is devoted to job

searching, thesis writing, and some course work, those who would be defending their thesis in the coming year were concerned about spending so long in the field. How would days in the field be counted? Would travel time count? One graduate also pointed out that they often have to finish tasks for their supervisors. If the time in the field is too long, their supervisors might not approve their application. Some students were eager to know what kind of monitoring and evaluation activities would take place during the whole process.

One student suggested building a thesis database within the framework of the fellowship to share their experience with coming generations of applicants and other colleagues. Another student, who had not taken the CBNRM course, asked if support would only be for the CBNRM students. This important question was handled by stipulating that students who take the course would have priority, but that other students would not be excluded and other requirements would apply, such as writing a 'CBNRM essay' to explain motivation and research interest. This question was taken as another indicator of success, as even some students who had not taken the course admired our efforts, acknowledging that attention was paid to the unintended negative 'externalities' generated for those not involved. Later on, some fellowships was awarded to students who did not take part in the CBNRM course, but who showed strong interest in and motivation for doing CBNRM like fieldwork.

Following the discussions, a programme statement was finalised and distributed to all students and staff.

The first round of applications

Not long after the formal announcement, expressions of interest started rolling in. A few typical examples are given; they indicate high motivation and strong desire to go into the field and learn more about rural conditions and about CBNRM and rural development in general. These reflect endorsement of the CBNRM course and encouragement to continue on the same road.

I am writing this letter of application for a research scholarship. My determination and motivation to proceed with my study in this field can hopefully be understood as originating from the following thoughts.

First, I learned a lot about CBNRM principles, and methods during the course this semester. My knowledge and perception of related theories has also been deepened by virtue of the field visit part of the course. The CBNRM course also gave me new insight into participatory research, such as identifying problems, establishing the concepts of participation and empowerment, considering participation from a gender perspective, building participation capacity in various strata of participants, integrating participation projects into communities, building trust and teamwork in implementation of participation development, etc. Through theoretical and practical study, I also gained an understanding of action research.

Second, compared with conventional courses, we became more involved in and affected by CBNRM studies. Teachers changed from their conventional role to become 'facilitators.' Instead of giving immediate answers, they used a variety of inspiring modules to help us think, explore, and draw conclusions, changing us from passive receptors to active participators.

I hope I will have an opportunity to proceed with further study in this field. As a law student during my undergraduate and postgraduate years, I became actively involved in community development and conducted in-depth investigation and research in rural areas. Although my efforts were relentless, I believed many findings were incomplete and not sound enough, which I believe stemmed from a limited academic perspective and methods. After systematic study of CBNRM, I am now armed with new content, principles, and methods, which I firmly believe will be a great help in my research in rural communities.

If I have the honour of receiving a scholarship, I would commit my utmost effort to the research with a view to contributing to mainstreaming CBNRM research methods and I would like to share my research results with fellow researchers. If I cannot have this honour, I will still use CBNRM in my own studies and expect more related knowledge from other research fellows.

The CBNRM course was inspiring and entertaining. Through it, I made friends, gained knowledge, and what is most important became ardently enthusiastic about this field, which I firmly believe will make up the better half of my research achievements in the future.

Ph.D. student, Rural Development and Management, 2005



I want to do some research on grassland management in Siziwang County in Inner Mongolia northern China for my Master's thesis. I went to Siziwang in February this year to implement a programme. I saw severe desertification, as farmers just wanted to keep more sheep to earn more money and had no consciousness of their environment. Siziwang is in the region that is the source of Beijing's sandstorms, and farmers living there are all Mongolian people. I am trying to find a more effective way to manage grasslands with local people, especially social and cultural aspects. I have not yet formulated an exact research question.

I successfully completed the CBNRM course this term. I was in the Guizhou group and learned much about CBNRM through the course. I would like to stay in the rural area for more than four months. The longer we stay there, the more we'll learn.

My supervisor supports me in applying for the fellowship. I believe I can do the research better with support.

COHD Master's student, Rural Development and Management, 2006



I study communication for development and knowledge management. I am interested in fieldwork and am applying for the fellowship to complete my thesis.

I completed the CBNRM course in 2006 and learned a lot about learning-by-doing and teamwork. I learned many participatory research methods and mastered farmer centred research methods during the field assignment. I know how to share research results and learning experiences with team members and how to promote cooperation through teamwork. I would like to continue along this path.

Before coming to CAU, I majored in journalism and communication. My interest is communication for rural development. I think this is an important field in rural development studies. But most of the

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studies about rural communication, as far as I know, are top down. The farmers' needs are often neglected by the researchers, who only do research through sample study. The results are based on theoretical analysis and lack practical action. Ultimately, the researches have little impact on rural communications and few farmers benefit from it. Farmers are seen as objects of study, not as actors. Based on the above analysis and reflection, I will try to introduce participatory action research into the communication for rural development field and improve rural development in China. This is one of the main objectives of my scholarship application.

In addition, my supervisor (I have discussed this issue with him) supports me in carrying out in-depth and prolonged field research in the field of CBNRM action research and learning.

These are only my preliminary thoughts because my Ph.D. proposal review will be at the end of the year. Please forgive inadequacies. I am looking forward to your guidance.

COHD Ph.D. student, Rural Development and Management, 2006

Following formal announcement of the programme, interactions with interested students continued. In May 2006, the management team organised a seminar for the graduate students on preparing and defending a proposal under the fellowship programme. Thirty graduate students participated; half of them were not applying for a fellowship, but were interested in the programme. Students appreciated this seminar as it helped them refine their proposals.

By 2 June, the deadline for the first fellowship support application, twelve proposals – nine from Master's students and three from Ph.D. level students were recieved. Information was also received that several others would be applying in the second round (planned for December). The applications were divided among the team, each member reviewing two or three. There was a lot of excitement in the air as the words reproduced below testify:

We received many good proposals submitted by the students after several rounds of refinement, even after their proposals had been reviewed by the CAU defense committee. We believe the process itself will help students focus on their research. It is a process of capacity building, which the fellowship programme contributes to.

Most of the comments of the two reviewers were quite similar, although there were a few differences concerning the research questions – one reviewer approving, while the other would like to see more effort. This might indicate that the principle of learning by doing is also occurring among the reviewers!

We are most concerned about the following issues:

- 1. Duration: According to their proposals, the length of time in the field for two students did not meet the requirement. I called both this morning. One said that he would be committed to four months in the field, but he is not very clear about the detailed activities in the field yet. In the other case, the student is beginning the last year of her Ph.D., and explained it would be hard to spend six months in the field; she could spend up to five months (from June to December in her proposal, but it is already the end of June, and she is still in Beijing). She explained that if the time she had already spent in the field was counted, the six month requirement would not be a problem. She also explained that if she had indicated that she would spend six months, then later could not fulfill the agreement, she would feel very sorry about it.
- 2. Action research questions: Most of the proposals have at least one action-research question. However, for some, the relevance of the research question to the methods and description is not clear. It seems that some students added an action research question without really realising its importance. Some students did realise its importance, but were not confident about answering it within their study period. For example, one student from the Department of Sociology clearly stated that the action to strengthen the 'good impacts of the migration on the community,' entailed a long-term effort that she would not be able to be involved in. Despite all these comments, most of the proposals are quite excellent on this point.
- 3. Because the regular CAU thesis proposals do not necessarily call for clarification of the involvement of the various stakeholders, the responsibilities of different actors, and how research outputs can be used by the local stakeholders, some of the proposals are still weak on these points.

- 4. Closely related to points 2 and 3, some of the proposals focus on a 'mechanism oriented topic,' which is excellent. However, how this exploration of mechanisms can be used to contribute to local development is often not clear. Students usually state that 'it would greatly contribute to the adjustment/revision/ updates of such and such programme or policy,' but without explaining how. Maybe we are expecting too much, and through learning by doing, the students will identify the details during their research process.
- Most of the proposals pay little attention to the risk or challenges analysis. As an alternative, they provide a feasibility analysis. Students are more used to this terminology.
- 6. Time frame and budget still need some clarification. But surely, this is all a process of capacity building, and we do not worry about it very much.

Regarding follow-up on the fellowship programme, because it is so important to our mainstreaming efforts, we think we should make it a more formal and serious event at our college, inviting students and their supervisors to come together to reach a preliminary consensus from the very beginning. Therefore, we decided to organize a meeting on 17 June. The agenda should include feedback on the proposals, announcement of the approved proposals with distribution of certificates and management regulations, signing of the terms of reference, and perhaps review of outstanding issues. These days, we are preparing this material, inviting all students and their supervisors to contribute to the process of drafting the regulations and terms of reference. We've received feedback already and are looking forward to your ideas on the coming meeting.

Xu Xiuli

On 18 June, the first fellowships were awarded. A short ceremony to celebrate this much anticipated event was organised. A complete list of the proposals that were awarded a fellowship in the first round is given. The list represents a diversity of research topics and a variety of locations. Notwithstanding the considerable diversity, organisation of farmers and what could be called local governance are recurring themes. They indicate that the students have a good grasp of key rural development issues in the country.



Signing the fellowship contract Photo: Ronnie Vernooy

Titles of research proposals awarded a fellowship in the first round (June 2006)

Master's level

- 1. A study of the dynamics of the management mechanisms of the Community Development Fund in a Northwest poor area the example of Kutuan village in Yanchi County, Ningxia Hui Autonomous Region.
- 2. The mechanism of informal cooperation between farmers in the farming system a case study from Wumin county, Guangxi.
- 3. Changing family structures and livelihood strategies.
- 4. A study of the influence of farmers' migration on the local Community Development examples from Gansu and Hebei Province.
- 5. A comparative study of the process of NGO government partnerships in a village level poverty alleviation programme.
- 6. The households' informal cooperation in agriculture.
- A study of elements that impact farmers who participate in the New Rural Medicine Cooperation in Zhungeer Qi, Inner Mongolia.
- 8. An impact study of the influence of the public domain on poor people's social capital.

- 9. Risk and insecurity the example of rural households affected by the avian flu outbreak.
- 10. Actors' discontinuities in grassland management a case study of a pastoral village in Inner Mongolia.

Ph.D. level

- 1. An impact study of the 'Two Exempts, One Subsidy' policy on farmers in poor rural areas.
- 2. A study on the process of livelihoods reconstruction by resettled herders in Qinghai Province.
- 3. Poor oriented rural governance in China.

Forging a common identity: the seminar series

The fellowship support team had more ideas up their sleeves. At the beginning of the first round of awards, the idea of a series of exchange seminars to promote communication among students and between students and supervisors was announced. At the same time, the series serving as a tool for reflection for students and as a source of information and inspiration for research reporting was envisioned. Miankui and Yang Huan took charge of organising these seminars, which, in general, were enthusiastically received by students, although less so by their supervisors (only a few came).

At the first seminar, students gave a brief introduction to their research activities and results. The topics and interests of students were quite diverse and this, together with the large number of students present, led to less communication than expected or desired. The students who participated in the seminar included those who received a fellowship and those who planned to apply for one. There were none who were already writing their thesis, which was a pity as they could have made useful contributions.

The PM & E plan

As in the CBNRM and PRD courses, a comprehensive PM & E process was integrated into our efforts. After several rounds of discussion and refinement, a plan was agreed upon (Table 8), which was both ambitious

and robust given that this was the first year of the fellowship support programme and that such a programme was also a first at COHD. It was felt that in subsequent years, the plan could be 'lighter.' As can be seen, there is a role for students, local partners, supervisors, the COHD management team, and the fellowship management team to experiment with different tools.

Table 8. Plan for participatory monitoring and evaluation of the fellowship support programme.

Participants	What to evaluate	How to evaluate
Students	Research capacity – proposal writing, fieldwork, reporting, thesis, and research management skills	Self-reflection Feedback from local partners. Thesis and paper research (published in a journal)
Supervisors	Communication with students Support of thesis research Contribution to fellowship support activities	Feedback from students as part of self-reflection (see awards criteria document, Appendix 4)
Research partners	Communication with students Support of thesis research Contribution to fellowship support activities Lessons learned from the research done by students	Feedback from students Case studies – Ningxia and Guangxi
Local communities	Interaction with students Lessons learned from the research Benefits of the research	Students' reflections Case studies – Ningxia and Guangxi
COHD team	Monitoring of quality of students' research Encouragement of supervisors to be active Integration with COHD's social capital development agenda	Staff group discussion
Fellowship management team	Teamwork Interaction with awardees, supervisors, and local partners Support of students Management skills Continuity of the team	Feedback from students (e-mails, face to face interactions, as part of self-reflections) Seminars Questionnaire

Field experiences - snapshots from across China

These are some of the students' impressions during their initial fieldwork.

When it comes to fieldwork, somebody always links it to travel, happiness, a free and relaxed time for playing. But the fact is that it is definitely not like this, especially not my fieldwork. My thesis focuses on how the outbreak of bird flu influenced households' livelihoods. But when I got there (a small town in Ningxia), I found it very hard to get useful information from the local government, because the local authority is so sensitive about the issue that they refused to say anything about it. Fortunately, however, I met many farmers who were affected by bird flu, and they are all very kind and told me many of their own stories. Without them, my fieldwork would not have been so smooth and I would not have got such detailed information. I appreciate their help very much. Nevertheless, another problem I face is pressure from the farmers. They told me their stories because they expect I may solve their problems. Although at the beginning I told them that all I can do is write my paper to attract people's attention, they still had great expectations. So I decided that I would try my best to complete my thesis to return something to those good-hearted farmers.

M.Sc. student, September 2006



I've been in the field for a whole month. Because of my initial impression during the CBNRM course, I knew my fieldwork would be a very hard work and that I would have many difficulties. However, I know I can face challenges. Before I left school, I prepared carefully. In the first days, I had difficulties understanding the local language. But I learned the local language from the villagers and gradually began to understand them as long as they speak slowly. Now I can communicate well with local people. The summer is a busy season, and there are often no people at home during the day. Because of this, we had to reduce the number of household visits. However, the field situation also provided pleasant surprises. The scenery in the summer is very beautiful and you can't find any trace of desert. Everywhere we go, the people give us an enthusiastic welcome. They

encourage me to do my research by providing me with serious answers. Meanwhile, they expect high standards from me and even expect me to change their living situation. I feel that I take on a heavy responsibility to help them. However, at present, all I can do is that I can try my best to do my research.

M.Sc. student, September 2006

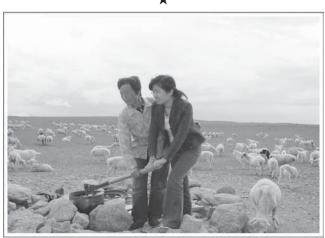


My fieldwork is going well. I have collected a lot of information that is very important for my paper. I interviewed different people in the field - the farmers, the village cadres, and local officials. I lived in a farmer's house with the family. I have learned a lot; for example, how to communicate with people you are not familiar with, how to get true information, how to live in a harsh environment.

I also face some difficulties in the field. First, people there, especially the local officers, didn't welcome me to do research. They were unwilling to provide some materials for me and it is very hard to get data from them. Second, I feel very lonely and helpless in the field. The investigator suffered a psychological torment, and I think this is common when living in a new environment as an outsider. But we can become much stronger with this experience.

M.Sc. student, September 2006





Learning by doing in Inner Mongolia Photo: Liu Juan

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Learning by doing in Guangxi Photo: Yang Huan

Feedback on the first seminar and the 'reports' received from the field, prompted some revisions for the second seminar. Students were divided into several small groups according to their topics of interest, as this would increase communication. It also decided to invite students who were doing research, but who did not apply for a fellowship. The fellowship support being a part of the mainstreaming programme, more people were included, although the main objective was to make the seminar more useful to the students. The improvements brought good results, as Qi Gubo's 'report' on the second seminar, below, indicates.

The seminar went very well. There were thirty five participants in the first two hours, and twenty seven stayed until the end; among them were two members from the team of COHD teachers. Almost all fellowship recipients presented their field research experience and reflections in various active ways. Some of them showed us methods of communicating with different farmers by means of a role play. Yang Huan and Xiufen explained their process of getting along with farmers by showing pictures of themselves working in the paddy fields during flooding time. Zongren's photos of farmers in Hainan were beautiful! Bai Yun showed a video of the farmers who were affected by the outbreak of avian flu. Liu Juan made a picture show, showing a collection of faces of the herders, with a Mongolian song playing in the background.

Yang Huan presented her primary findings by using social networking techniques. It was very interesting. She used a software programme that allowed her to put information together in a very logic order. She then answered Xiuli's question about the entry point to match her research with development. Liu Juan raised the question of 'whose reality counts' again. She suggested documenting and considering the different points of view that you discover during the fieldwork. Xiaowei also introduced her findings, then showed that her next steps will be really action-oriented, trying to make an innovative contribution to farmer organization in Guangxi.

The participants will provide feedback to the management team, according to the two M & E questions provided. They are trying hard to understand the community they are working with and struggling to find an appropriate researcher's role during the process. However, I think the students (particularly the Ph.D. students) and supervisors still have difficulty finding the right research questions, filling the gap between their research design and the actual local situation, and understanding the theoretical significance and innovative nature of the research.



As Qi Gubo's words so clearly show, these meetings met an urgent need of COHD students. Communication and mutual learning are important in building an enabling academic atmosphere. Within the Rural Development and Management programme, some seminars had been held previously, but discontinued because of everyone's tight schedule. Exchanges among students were also promoted, but without sufficient support, they never got off the ground. The fellowship programme seemed a good entry point for changing this situation.

It was heartening to see that much of what the students learned during the CBNRM course was put into practice in their presentations – games and audiovisual presentations. The students' communication and presentation skills, which will be useful in their future professional careers, were also further developed in these seminars.

As Qi Gubo noted, in their presentations, almost all the students mentioned an evident gap between the research plan and the actual situation in the field. Some are still struggling with their research questions; some are looking for an entry point to sharpen their research topics; some are adjusting their research design based on what they are finding in the field. The seminar discussions also covered questions related to research ethics and methods.

Based on the presentations and feedback, it was concluded that the research process is often a struggle with alternating 'bright days' and 'black nights.' But an optimistic spirit prevailed among the group.



The fall round of fellowship applications

For the seminars surrounding the fall fellowship awards, Yang Huan had the idea of organising a sort of marketplace, in which students could buy and sell ideas and suggestions. The seminar would be divided into three sessions. During the first two, students would work in groups according to their research topic; they would have a chance to join a different group during the second session. During the third session, each group would briefly present a summary of the discussions.

Mao Miankui reported the results -

This afternoon, we had the second round fellowship exchange meeting. Participation increased to twenty seven – three teachers, eight Ph.D. students, and sixteen Master's students. There was a question of gender balance, however, as only nine participants were male.

As facilitator, Xiuli did an excellent job, using humor and much encouragement. At the beginning, we divided in three groups according to common topics and participants' interest (following Yang Huan's suggestion).

The policy group focused on research logic and methods, as there have been many discussions and reflections on these questions since the students returned from the field. The farmers' activities and resource management group discussed the reasons for farmers' actions, mainly in terms of resource management and economic activities. The farmers' livelihood and organisation group focused on the thesis itself, discussing multidisciplinary research, how to better combine theory with fieldwork, how to deal with such complex and detailed material, and so on.

Another issue that all participants mentioned was how to find an appropriate theoretical framework for their thesis. In response to this question, the teachers provided many good suggestions and comments.

Three hours was too short. Although all participants gained a lot, many doubts and questions remained. This is hard work and a process. We need to do much more in the future.



November was a busy month. The fellowship support team was preparing for the second round of fellowship awards, scheduled for December, trying to improve on the first round. The team also organised the first national student exchange meeting in Changchun, where Miankui and Yang Huan would present their accumulated experiences running the support programme. The second round went very well, without any major problems. Evidently, through ongoing interactions with students, many suggestions for solving problems and improving the process were incorporated. As in the first round, the proposals reflected key current CBNRM and rural development questions.

Titles of the research proposals awarded a fellowship in the second round (December 2006)

M.Sc. level

1. A gender analysis of key ecological forestry projects.

Ph.D. level

- Collective action in the sustainable utilization of pastureland.
- 2. Social dynamics and power relationships among farmers accessing forestry benefits.
- Communication and development: research on community-based rural communication networks.
- 4. The changes in household's livelihood strategies and the impact of rural development policy.
- 5. The study of mainstreaming farmer centred participatory research.
- 6. Studies on pro-poor agricultural extension reform.
- 7. A study of farmers' financial flows and rural finance.

By January 2007, twenty two students in the field were supported by the fellowship programme. With preparations for the 2007 CBNRM course in full swing, it was expected that the number of fellowships awarded would increase from ten to fifteen for the third round in June 2007.



Focus group exercise in Guangxi Photo: Ronnie Vernooy



Focus group interview in Guangxi Photo: Ronnie Vernooy

Ending the first year

In March 2006, the management team discussed how best to finish up the first year of the fellowship activities. According to the PM & E plan,

students were required to submit several documents after finishing their field research – the final financial report, an article related to the research (the plan, main findings, main arguments, and conclusions) either published or unpublished, a reflective paper showing an understanding of CBNRM research (methods, activities, results), as well as an assessment of the work of the fellowship management team, the participation of the supervisors in the research process, and the support provided by the local partner organisation. The management team also asked for a letter from the local partner organisation, assessing the behaviour of the student and his or her research. Last but not least, the management team asked for a copy of the thesis.

All awardees met these requirements. Their theses, articles, and papers were very good quality. Without exception, they all expressed appreciation of the opportunity for long-term field research, which led them to see, hear, and feel the realities of rural living. In the words of one student, 'Doing this research, I realized that, only when we love the field with our heart, can we obtain the things that we are looking for.'

To celebrate the successful first year of fellowship support, the management team organised an awards ceremony to encourage the students who did such outstanding work. Two kinds of awards were given out: one for contributing to CBNRM research and one for contributing to local development. The awards were open to all COHD students who majored in rural development and management, regional economics, or sociology. After a thorough review of the applications, the management committee awarded three students for their contribution to local development and six for their contribution to CBNRM research. Among the winners were two students who did CBNRM fieldwork without a fellowship. All nine awardees were very pleased at the recognition of their efforts.

Reflections

To date, the fieldwork support programme has functioned very well. Skills like how to manage the programme adequately, as a team, and the value of longer-term fieldwork was learnt. The students' strong and often moving descriptions of their experience in the field and the role played

by the fellowship support speak for themselves. From their written and verbal feedback, it was found that the students who received a fellowship would not otherwise have been able to carry out fieldwork for a prolonged period. Through the seminars, they were able to share their field experience and achievements, as well as their doubts and challenges, such as the isolation of those who were working without a colleague or local partner. They frequently refer back to the CBNRM course in connection with their fieldwork. The course allowed them to learn about participatory action research in the field, and allowed them to make new friends among their peers and the staff.

The fellowship was a great help. Without it, my thesis would not be nearly as good, as I had no other financial support. I liked the fact that when we returned from the field, we communicated with each other about the investigation process. This forced me to study harder – that is a power of the collective.

M.Sc. student, COHD

Through the CBNRM course, I made a lot of friends. I found the investigation periods memorable.

M.Sc. student, COHD

Because of the CBNRM course, I discovered the research I am interested in. While communicating with local people in Guangxi province, where we went during module three, I found my thesis subject. The fellowship management group has also given us the opportunity to communicate with other students. When we have a discussion, we can find out what other students are doing, and this is helpful for our own research.

M.Sc. student, COHD

I feel very lucky to have received a fellowship. Although we had to submit several reports, which I found a bit bothersome, this process turned out to be very helpful for my thesis in the end. The fellowship requirement that we stay in the field for a long time is important in terms of collecting real information – a good approach to research. I think the CBNRM course was the most useful course I took during my graduate studies.

M.Sc. student, COHD

The fellowship supports my thesis research, which is a process of thinking, investigating, rethinking, reinvestigating.

M.Sc. student, COHD



It was realised that long and careful preparation is needed by students developing their research proposals. Those who spend time in the field before writing their proposal, obviously have an advantage. This is something that should be encouraged more in the future and try to support, directly or indirectly, perhaps through small grants, greater involvement of supervisors, or the exchange seminar series, e.g., inviting students who have been to a particular site to speak about their experiences.

It was believe that living a real field experience (understanding the local situation, working with the local people) is what should be enhanced in the context of the large gap between theory and practice or, more to the point, in a context in which theory still overrides practice. It is interesting, however, that despite the great emphasis on theory, it was also discovered, especially in the seminars, that many students find it difficult to select or construct a framework to analyse what they have found in the field, which would allow them to tell others what really matters and what can be omitted.

Many students said they lacked a solid theoretical basis. This is an issue that could not be completely resolved, but should receive more attention in the COHD study programme at large. The problem is perhaps not as much a lack of a theoretical basis, as how to relate theory to a practical experience.

Amount of time spent in the field continues to be hotly debated. Some students (including some awarded a fellowship) expressed concern about the length of time they must spend in the field. The management team discussed this issue on several occasions, and felt that strict control of the time in the field is not a goal in itself; rather, the aim is to enhance student's skills in development research through appropriate exposure to fieldwork. At the end of the first year, requirements were relaxed for M.Sc. students from four to three months, as many expressed

concern about not having enough time to find a job toward the end of their studies. For the Ph.D. students, the six month fieldwork requirement, which in June 2007 was adopted by COHD as a formal requirement for Ph.D. field research.

It was found that the value of the exchange seminars lies in the promotion of continuous informal follow up communication. The seminars themselves produced precious results as well, which were summarised in the 'reports' on them.

Communication is vital to good management. It was concluded that it would be good to send more e-mail and short messages to students about the detailed financial issues after their proposal is approved. Because money matters concern them greatly, more appropriate feedback seems warranted. The feedback in itself is more important than strict control and monitoring of expenditures, which is difficult and likely unnecessary.

In summary, what can be presented are points in terms of what to continue and what to strengthen.

What to continue

- 1. Exchange seminars preparation, facilitation, and reporting
- 2. 'Writing for excellence' workshop
- 3. Collective e-mail contact with students, supervisors, and local partners
- 4. Short messages on mobile telephones for more detailed issues and consulting when students are in the field
- 5. Face to face communication, especially when difficulties or unexpected issues arise
- 6. Student focused monitoring
- 7. Good teamwork among the management team, as well as strong support from the CBNRM mainstreaming support team

What to strengthen

- 1. More participation by supervisors
- 2. More appropriate coordination of financial issues with CAU financial authorities

- 3. More interaction between local partners and the management team
- 4. More orientation toward and promotion of similar field research topics during the proposal development period
- 5. More emphasis on the core of the fellowship programme: the value of doing field research in cooperation with local partners, and if feasible, together with one or more peers

Epilogue

This chapter can be brought to a close with three testimonies from students who wrote a strong reflective piece on their experience in the field. These pieces were originally submitted as a requirement for the first CBNRM research award competition in June 2007, another activity developed by the fellowship support team.

The influence of the fieldwork - on me and on local people

My long-term fieldwork had some influence on both me as a researcher and on the locals. First, what have I learned from the locals?

I know much more about the field, including the history of the community and how policies, the market, technology, and immigration, etc., affect local people's lives and the environment. It is very helpful for me to accomplish my thesis.

I learned a lot in the village. I found myself changed after I came back from the field. The fieldwork gave me a chance to understand people who live in a grassland area, which was unfamiliar to me, to find out which ethnic groups there are, how to live in a hostile environment, and who the people are in the lowest echelon of society. The huge differences I discovered, let me think about many problems, and my personal view of society has changed. People in the pastoral village in Inner Mongolia were honest and true. And I felt the charm of Mongolian culture.

What outcomes have I delivered to the locals?

The local farmers almost didn't have a normal way to express their opinions. I interviewed many farmers in the field and let them say their true thoughts. They were so happy to see that there was an outsider, especially one from Beijing, to listen to their opinions of themselves.

And talking is a valuable way to practice. I talked with farmers about the ecological problems, and the farmers chatted themselves too, especially in the group interview. They exchanged their own ideas and methods of farming work and about protecting the grassland. For example, many young people there didn't know that grass used to grow taller than a person about fifty years ago. They only learned about this when talking to the old people in the village in the group interview that I conducted. Farmers' consciousness of protecting the environment has been developed through the interview.

The local people tried to know us when we try to know them. It was an interaction between the investigators and the locals. Local people always wanted to know the outside world through the outsiders. And the outsiders brought key elements in every aspect, for example, just by the way they talk, the clothes they wear, their concepts and behavior and so on. The local people's attitudes to the outside world might change as a result of the interactions with us the investigators. But it is very hard to say if the impact has been positive or negative.

Liu Juan, June 2007

Self-reflection on my field research

This was the first time that I lived in a rural area for nearly three months, so close to the farmers, trying to understand their life. I learned a lot from the field research for my thesis.

In the field research period, I learned gradually how to communicate with the farmers and how to discover the information that I wanted to obtain.

At the beginning, only farmers in the Community Development Committee knew us when doing a group interview. At first, we tried to do interviews by ourselves, but it gave us a big shock. It took us a long time to persuade a farmer to accept our interview. And the farmer refused to answer many questions or just gave us very vague answers. At last, we gave up.

It seemed it is not so easy to walk into a community. Then we tried to find many chances to communicate with the villagers. We went to the grocery stores where villagers gathered, together with the host and hostess of the family where we stayed together. We helped the host family to plant rice and sow maize. When many villagers saw that we worked together with them, they became very interested in

us and tried to talk with us. We gradually got closer to many people. We also faced a language problem. Many villagers couldn't understand why we were so interested in their daily life. So we asked our hostess and her mother for help and they accompanied us in the interview. She explained what we were doing in the local language and translated our questions and villagers' answers when we needed. Then, our interviews went on smoothly.

In my interviews, much information was about cooperation in the past. So, sometimes, villagers couldn't give me a clear answer. I tried to do a cross check when asking the same question of other persons. For example, I asked how long did it take when you planted rice when there was no new planting tool yet? This was very useful to get relatively exact answers.

I learned how to better design a field research through the process itself.

First, I discovered how to obtain basic information about the research site and general information about the research topic through key person interviews, group discussion, or semi-structured interviews. That's very important, especially for those who are just beginning to do research on this topic or who are first timers to go to the research site. Otherwise, you always neglect something or you tend to assume that you already have key information, which will lead you the wrong way. Take myself for example, I tried to make a clear analysis of the benefits and costs of households in terms of mutual cooperation, but I found it's not so easy to do so, because the behaviour of farmers is more complex than I thought.

Second, I learned to design the interview outline or questionnaire according to information obtained from the first step. This way, we can design the outline or questionnaire in details to get more detailed information.

Third, I found out that it is important to regularly check the gap between my research objective and the information obtained. This allowed me to some supplementary survey.

I know that what I say above is common sense. But I think sometimes we neglect the first step. I had a deep feeling about this in my own research. So I want to share it with others.

I learned how to cooperate with the local partners.

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I introduced myself and my interest in the topic of farmer cooperation to the local partners. They are very kind and help us carry out our research. We also cooperated to do some things that are useful for the local communities.

This time we tried to do a small experiment with the Community Development Committee. We chose the topic 'How to improve the fertility of a cassava field.' This came from a survey done by the local project some time ago. Farmers found that the fertility of the cassava field declined gradually after continuous cropping and tried to improve this situation by planting Chinese herbs. But the villagers met many technical and marketing problems in the process. Obviously, cassava is very popular in the village for its easy cultivation, high production, and unimpeded market channels. So we discussed this with the local extensionist, and she helped us pay a visit to a local trader of Chinese herbs. Then we talked with members of the Community Development Committee. We discussed together about how to carry out the experiment, how to monitor and evaluate it, and how to make and manage the budget. Farmers were very active and we just gave them some suggestions in the discussion. This was a very good experience.

Yang Huan, June 2007

Self-evaluation of my fieldwork

I stayed in Wuming nearly three months last year. It is a period that I will remember for all my life. As a student, I do my 'homework' in Wentan village. As a stranger, I try to make friends with the villagers.

Living with the villagers and letting them knowing us — Wentan is in Wuming County. There are more than 200 people in the village. Not everyone accepted us at once. Some answered the questions that we asked them and were friendly to us, but some gave us 'a closed door.' In order to build a local foundation, we changed our interview type day by day and chased every chance to talk and work with the local people. During the farmers' busy days, we went to the field and helped them plant rice and maize. There are two small shops in the village where local farmers buy daily goods. Most farmers are likely to play games or talk to each other in these two

shops. So, we went to the shops and tried our best to join in their games or talking.

We knew little about the village at first and did not fit well with their food and living environment. After almost a month in the field, we were not totally strangers anymore to the local farmers. We even make some friends in the village. To be friends and then to do interviewing, it is the best way to 'see' local farmers' real thoughts. Learning from them and trying to know them - There are fifty eight households, and we interviewed thirty. We could only go to their houses when they were free. So we did our household interview during the time for lunch or supper. It made trouble for them and took their time, so we gave a small gift to them after interviewing. After a day's work, we wrote down the feelings and important details about the households that we interviewed. The last task of a day was to prepare materials and make a plan about how to work the next day. Making friends with villagers and trying to help them - At last, all villagers knew where we come from and what we wanted to do! They were not hostile to us anymore. We talked with them. The old and the young, men and women, the rich and the poor, we tried to be friends with everyone. And we tried to have a seat at every household. Each family has its own story. We shared their tears and happiness.

We made ourselves into local people and focused on what they were worrying about – the difficulty of getting water, pollution from the cement factory, the variety of the local cassava crop. We held community meetings and let villagers speak about their worries. We let them find the causes and find solutions on their own. We just called them together and gave some suggestions. In fact, local people are very bright. They have the ability to do something if the help from outside is available.

In a word, we became friends. We brought them some new ideas. They also taught us a lot. I cannot promise that my research can solve their livelihood problems. But I do my research with my heart. I have tried my best to accomplish my goals. Three months is not a long time, but it is unforgettable. I will continue to focus on the countryside and the villagers' livelihoods.

The Fruits of Teamwork: A Synthesis of Our Learning Journey

Ronnie Vernooy, Qi Gubo, Lu Min, Xu Xiuli, Li Jingsong, Long Zhipu, Yang Huan, Zhang Li

'If you exchange an apple with someone else's, each of you still has only one apple. If you exchange an idea with someone else's, both of you have two ideas.'

Yang Huan, M.Sc. student, Beijing, April 2006



Local girls and women playing a rhythm game Photo: Ronnie Vernooy

One could add to this metaphor that from the two ideas, a third could easily be developed. Making this happen requires mutual engagement and commitment to a common undertaking with clear and jointly agreed on goals – a common course indeed. These principles have been at the heart of the innovative processes underway at CAU and JLAU and now spreading to other universities. These principles are largely responsible for the remarkable results achieved so far.

In this chapter, is summarised the most important results emerging from the combination of work in the classroom and in the field. The main changes that have occurred at the individual and organisational levels, with a focus on the interpersonal (group or team) and microorganisational levels are described. Efforts were made to distinguish between strengthened capacities in terms of changes in attitudes, knowledge, and skills and the resulting practice or performance, individually and organisationally (for a useful discussion of this distinction, see Bernard 2005). The relative importance of the specific actions undertaken in terms of the changes brought about and, where feasible, suggested why changes have occurred. The chapter closes by mentioning a number of challenges that are faced while attempting to continue learning and support similar opportunities for others.

What was learned

As of summer 2007, 125 postgraduate students in Beijing and Changchun have taken part in the new CBNRM and PRD courses and related field research, accompanied by a total of twenty facilitators/ teachers who were directly involved in the process. At the field level, numerous farmers, extensionists, government staff, leaders, researchers, and research managers have also been involved in our efforts. Colleagues at CAU, JLAU, and collaborating organisations in China (notably the Centre for Chinese Agricultural Policy, Guizhou Academy of Agricultural Sciences, the Centre for Poverty and Environment (HOPE) in Ningxia, the Guangxi Maize Research Institute, Yunnan University's Regional Development Research Centre) and elsewhere (CIP-UPWARD and IDRC)

have provided strong direct and indirect support – technical, administrative, logistic, and financial. The involvement of the core group in this process has been extraordinary, leading to many new insights and experiences.

The lessons learnt encompass many new attitudinal, conceptual, methodological, and practical elements. It has also started to lead to what we think are various expressions of transformative learning, i.e., more encompassing ways of adapting to new circumstances, designing one's own life path, and learning about learning (Cranton 2006). However, it is important to recognise that the learning paths of various team members and participants are not the same nor are they all continuous. Learning comes with ups and downs and often occurs at different speeds. Thus, different people undergo different processes, although certain similarities were observed, which will be highlighted on the following pages.

Collaborative management of the new courses and the fellowship support programme – coordination, facilitation, administration, monitoring and evaluation, documentation, and reporting – opened eyes, minds, and hearts to innovative and inspiring ways to reform Chinese higher education. The relevance and potential application of CBNRM to the many problems embedded in the complex and rapidly changing rural landscape across China was discovered. Through efforts to bring these realities into the very core of the courses, a curriculum was developed (Van den Bor et al. 2000). As a result, the difficult roles that rural development professionals can play in today's rapidly changing China was realised. Courses and related field research and policy oriented efforts lent new perspective which helped translate new thoughts to practice.

Among the lessons learnt were not to be nervous in front of a large group of students or farmers, even when deans, directors, or other high ranking officials are present, and to speak our mind and share our thoughts and experiences. Being involved in the whole development process (for the course and fellowship support), which was characterised by cycles of action and reflection, also allowed many of the participants

to become more aware of their own (different) backgrounds, knowledge, and skills. Through these interactions, reflective skills were strengthened. This helped participants become more adept at adjusting and adapting along the way and, hopefully, more effective and less prone to mistakes. In a word, this exercise increased resilience.

Participants are now more cognizant of the small but important contributions that collective efforts can make. This is highlighted, first, by a radical shift from a teacher-centred to a learner-centred approach to learning. This was put into practice in the everyday course dynamics, the physical set-up of the classroom, exercises in the class and in the field, and in the nature of facilitator - student interactions as well as those between facilitators and students and the people with whom they interact, such as villagers in the rural areas where they do their research. Second, there is greater emphasis on the potential power of teamwork and friendship, which can create strong synergies. Throughout the courses, the fellowship support program, and the related activities (such as the seminar series), learners were able to discover the notion that the whole can be more than the sum of the parts. The relevance of teamwork, or more broadly, collective action, in the field as well, as a key element in solving natural resource management problems, tensions, and conflicts was understood. Many of the participants are now trying to apply this insight in a practical way, as part of research, policy reform and development initiatives in various parts of the country in collaboration with local partners.

The importance of creating and constantly 'nurturing' an enabling environment – in the class, in the field, and beyond, among both students and facilitators/teachers, during informal conversations, meetings, workshops, and with others with whom we interact during our work, such as farmers, and government staff was realised. Central to this enabling environment has been the space to freely express oneself (thoughts, but also feelings), to be listened to with attention and respect, and to be given the opportunity to ask questions. Very important has been the chance to interact equally, irrespective of social status defined by position, age, and sex, and to take part and contribute to the best

of one's ability irrespective of level of expertise. In the context of the still very strong Chinese cultural values and norms of authority, power, and respect for teachers, this has perhaps been one of the biggest changes this programme has brought about.

The learner-centred arrangement of the classroom, the 'open to all' puzzle game at the beginning of the CBNRM and PRD courses, the role plays, the regular teamwork (replacing individual learning), the student produced reflective audiovisual presentations, and the proposal peer review process have all proved to be key methods contributing to the ambiance. The meaningful inclusion of students in the establishment and administration of the courses (as members of the working group, assistants, and assistant/apprentice facilitators) and as core members of the fellowship support management team, as well as in the monitoring and evaluation, and documentation processes, is another crucial element. They not only contributed time and energy to the pioneering efforts, but including them also effectively allowed sharing of expertise between the 'older' participants and the younger ones, between the current and the coming generation of rural development professionals.

Learning by doing - developing professional skills

'I feel I learned a lot about the content, principles, methods of CBNRM by taking this course in this semester. My knowledge and perception of related theories has deepened by virtue of the field visit part of the course. A thorough study of CBNRM has also given me new insight into the research mechanism in the field of participation, such as identifying problems, establishing concepts of participation and empowerment, considering participation from a gender perspective, building participation capacity in various strata of participants, integrating participation projects into the communities, and building trust and teamwork into implementation of participatory development. Through theoretical and practical study, I also now have an explicit understanding of action research. Compared with conventional courses, we were more involved in and more impressed by CBNRM studies.'

Ph.D. student, COHD, Beijing, April 2006

'After taking the CBNRM course, I developed a great interest in the theories and approaches of CBNRM. I would like to apply for the fellowship to do further research on rural development and resource management. I really appreciate the insight I developed on how to do action research within the Chinese context through reading materials and discussions with classmates and facilitators. This is one of the best courses during my Ph.D. study period. I learned a lot, not only from reading and discussion, but also from the fieldwork and teamwork.'

Ph.D. student, COHD, Beijing, April 2006

A golden rule applied throughout the course development process was 'no lectures, no lecturing.' This principle was adopted to encourage learning through active discovery. This allowed freedom to combine theoretical insights that support CBNRM – from rural development sociology, agroecology, and political science, for example – with practice. As one of the students summarised, 'I learned a new way of learning by doing. This is a very good method for field study.' Doing includes such 'simple' things as communicating with others, in the classroom and in the field. 'In the course, I began to show more enthusiasm and take more initiative. I understand that what I have said is listened to carefully by others and recorded. Both the students and teachers seemed to be interested in what I said and made comments and suggestions.' Many of the students mentioned that the course gave them a chance to make friends – with peers and with farmers, government officers, and extensionists. As one stated, 'friendship is the most unexpected fortune that I will cherish.'

The course and fieldwork began the process of developing the skills needed for valuing and, more importantly, using a CBNRM approach in today's rural China. These skills include the ability to analyse situations and problems from a people's perspective using a holistic and interdisciplinary scientific approach, combining natural and social science knowledge and methods, and keeping a critical eye on the socioeconomic and sociopolitical dimensions of natural resource management and rural development at large. Students and staff improved their ability to define CBNRM oriented research questions and develop action focused research proposals. From a struggle to define research questions in the first place, students have come a long way.

It is interesting to compare the experiences at COHD and JLAU, given the significantly different settings. At COHD, most staff and students have a social science background and participatory approaches are not new. The CBNRM mainstreaming activities gave many students an opportunity for in-depth learning about rural development. However, for some, it was a completely new experience in terms of learning through practice about the key conceptual and methodological elements of our CBNRM approach. For students who received a fellowship award, the extended period in the field was a strong and sometimes transformative experience.

At JLAU, participatory research and learning was completely new to all participants. In addition, given the natural sciences background of most students and staff, exposure to insights and the practices used in the social sciences opened minds, eyes, and hearts. JLAU's relative 'isolation' from both the national and international academic worlds made the experience even more momentous.

Although the courses increased the students' understanding of participatory action research and CBNRM or PRD, the class exercises and the fieldwork also introduced many to the challenges of working in rural development. This is not surprising, given the short duration of the course and the field assignment. The focus on the social dimensions of CBNRM/PRD, e.g., module 3 on effective and ineffective action learning processes, contributed to students' ability to 'see the process, troubles, conflicts and influences of participatory rural development.' The fellowship support program offered many students the opportunity to practise their new skills and, thus, gain deeper insight into the ups and downs of rural development. A good start has been made, but much more needs to be done.

Everyone rediscovered the importance and power of full engagement, not only in course delivery, but also in the management of the whole process. This is strikingly summarised by Yang Huan, both a student and one of the 2006 CBNRM course assistants (also quoted at the beginning of this chapter).

'It's not easy for me to talk about my feeling in this course. The most important thing that I want to say is what someone else said,

"You can learn more from the process if you take part in the course more actively." I took part in the January 2006 workshop for curriculum development. So I experienced the whole process from the beginning to the end. I got the chance to learn how to develop a course and carry it out. It's really a special experience for a student. Second, I think I learned more as an assistant. Although the additional work takes time, the support from teachers and classmates makes me happy and comfortable. As a student, I think this course is really novel for us. It is interesting and open. What impresses me most is the power of the team. If you exchange one apple with someone else's apple, each of you still has only one apple; if you exchange an idea with another, both of you have two ideas. The formulation of the survey plan in the field, the report, the proposal, the short movie (of the field visit), all gave me many new things. It is really learning by doing. And the course persists in emphasising the practice. It's very useful for us.'

Yang Huan, M.Sc. student, Beijing, April 2006



The persistent link between theory and practice contributed to a stronger ability to define the key concepts, principles, and methods of CBNRM/PRD, one of the main learning objectives of the courses. Students phrased this as 'CBNRM becoming more meaningful.'

'I have completed the CBNRM course and learned a lot, such as learning-by-doing and teamwork. I learned many participatory research methods and mastered farmer centred research methods in the field survey. And I know how to share the research results and learning experience with team members and how to promote cooperation through teamwork. I would like to continue along this path.'

Ph.D. student, COHD, Beijing, April 2006

Feet on the ground - linking theory to practice

'During the fours days in the field, I learned more than during my first three years of study in the class room.'

M.Sc. student, JLAU, Changchun, May 2006

'I am majoring in rural development management. I have been to some poor rural areas in several provinces as a consultant or researcher and have found a lot of poor people improved their livelihood with external support especially with the help of development projects, which affirm participatory approaches. I think action research is one of the most effective ways to put theory/ideas into practice and make things change. So I hope I can apply what I learned from the CBNRM course and make a contribution to rural development. I don't want to be a researcher who just knows how to say something and not do anything. So I would like to conduct my Ph.D. study through this way.'

Ph.D. student, COHD, Beijing, April 2006

According to most students, the course contributed, to varying degrees, to their ability to link the CBNRM/PRD approach to actual rural situations in China, to design and draft a CBNRM action proposal, and, in particular for the Ph.D. students at COHD, to review international literature in relation to the CBNRM course.

'Based on contact with local farmers in Guangxi, I think we have become more mature. What is more, we have learned a lot of useful and meaningful knowledge from the farmers and government officers, which is very important for our future studying.'

M.Sc. student, COHD, Beijing, March 2006



'The trip to Guangxi was unforgettable. Friendship with local farmers and also with our "family," the party with farmers, the local team, and our family are all kept in my mind. All these encourage me to continue.'

Ph.D. student, COHD, Beijing, March 2006



The various field visits raised deep emotions and left many strong memories. The open, largely self-directed and intense engagement with the complexities of rural life in Ningxia, Guizhou, Guangxi, and Jilin has marked most if not all of the students (and facilitators/teachers as well). For many – as the vivid and often heartwarming testimonies tell – the visits were beyond expectations. For some, it was the first prolonged

stay in a rural area, not based on rapidly 'extracting information' for the sake of fulfilling a task assigned by someone else. For almost all students, it was the first joint research exercise, based on interactions with local partners and driven by a desire to learn something, share thoughts, ideas, and experiences, and explore possible future cooperation – cooperation in terms of mutual interests, but respectful of local agendas and circumstances.

The field visits – although too short, according to most students – provided fertile ground for the next steps, with an emphasis on the development of a field research proposal for a Master's or Ph.D. degree. Effectively, after the 2006 course in Beijing, about half of the group (15) expressed an interest in doing CBNRM oriented fieldwork to learn more about the methods in practice. Of the 125 students who took the courses, about thirty five actually continued doing CBNRM/PRD oriented fieldwork supported by a small fellowship grant from the support program. Several others also did CBNRM/PRD focused research, but without financial or technical support from a fellowship.

The quality of the students' research proposals indicates a good sign of the level of learning. A formal thesis review committee made up of CAU staff reviewed proposals. Selected proposals were also reviewed by the newly established CBNRM Fellowship Support management team made up of staff from CAU, JLAU, and IDRC and students from CAU (see chapter 6). Among the main criteria used for these reviews were the definition of a clear and relevant problem, e.g., building on the findings of the field research during the course; clear, relevant, feasible, and appropriate research questions; and cooperation with local stakeholders. Below is one example of a sound and interesting research statement.

'My M.Sc. thesis will deal with the issue of rural microfinance with focus on a case study in one poor village located in Yanchi County, Ningxia Hui Autonomous Region, where I made a first survey last summer when I was doing fieldwork for the CBNRM course. During my fieldwork, I was deeply impressed by the tremendous efforts made to alleviate poverty. Although a microcredit scheme run by an NGO helped poor villagers, my preliminary observation on the field application of this scheme tells me that this scheme is not well

designed in every detail. For instance, the term is so short that some borrowers have to get high interest private loans to repay the microcredit loan. I wonder why it happened, how it happened, whether there is any option to cope with it. To answer my questions, I need to do further in-depth field research by using the knowledge and skills learned in the classroom and from reading including the course of CBNRM.'

M.Sc. student, COHD, Beijing, April 2006

The richness of methodological variety

For the courses and field research, students and participants were encouraged the use of a variety of teaching and research tools. Methods used during the courses include case study analysis and comparison of cases, critical literature review, group proposal writing, group reporting of field research, audiovisual presentation of the fieldwork, puzzle games, and role playing. During the field research, students, with some guidance from facilitators/teachers, select a variety of tools usually including individual and group interviews, participatory mapping (of the natural resource base or social networks and organizational context), participatory ranking exercises, participant observation, group discussion, photographing and videotaping, and role playing (as a feedback tool). PM & E tools were used throughout the whole process. Facilitators stress that practice – experimenting with a variety of tools – is most important.

Students understand and appreciate the need to learn a number of methods and practise using them, as evidenced by some of their comments:

Through practice, I mastered methods, which I have never used before.

I learned some new skills and used some new tools during the field visit, and I have more willingness to develop or study now.

How to do a field visit, how to communicate with local people: I have learned a lot in the village. I also know PM & E is a good method.

I learned more about self-reflection and others' merits through the fieldwork.

The active learning and teaching style are beyond my expectations, such as the puzzle game and the role play.

The power of teamwork

Joint or collective efforts are at the heart of the course, not only because this mirrors one of the pillars of CBNRM – the notion of 'community-based' management – but also because it was considered central to the process of learning itself. According to Wenger (1998), teamwork is central as a means to explore and experiment with forms of mutual engagement (how to work together effectively and efficiently); define, negotiate, and stick to a common agenda (how to carry out an exercise according to agreed on rules); and develop a 'track record' of progress and achievements (producing accounts, representations, stories). Teamwork has several dimensions and brings various fruits, as students and facilitators/teachers have mentioned:

The friendly atmosphere makes me happy to work with the facilitators, my classmates, and local officials and farmers. It is a process of learning, including gaining knowledge and developing friendship.

I got a lot of inspiration from other team members.

I did not expect to have such good teamwork. Now I can see the power of it. It will be an important idea.

Through teamwork I learned a lot from others. I have made some good friends.

The course let me know that students and teachers can become very good friends. This will make me communicate with them and express my suggestions more actively.

The course has brought me a new attitude, which can support and direct my future research. Teamwork is the biggest gift for me. We have become good friends.

More than just friendship, the word 'family' frequently appears in the testimonies of participants. Through the collective work, bonding takes place in the classroom, among the 25–30 students and 5–10 facilitators/teachers and, especially, in the field within the groups of 8–10 students and 2–3 facilitators/teachers. Travelling together – for several students a first experience – and working intensively together in a remote area, trying to carry out a research task brings participants together. Careful guidance and the systematic use of process monitoring

have played an important role in this process. When tensions, problems, or conflicts arise, the groups try to deal with them immediately by sitting together to reflect on what happened and why. No one is blamed, but suggestions for alternative behaviour are solicited, reviewed, and when 'approved' put into practice. From learning to work together to defining and carrying out tasks in an effective way, students and facilitators, alike, shift to learning together based on friendship and 'family' ties (for a more detailed discussion, see Cranton 2006: 42–43).

Reflecting on teamwork in terms of a broader innovation perspective (Wenger et al. 2003), it was suggested that the horizontally oriented, self-organising nature of our working and learning groups had much to do with the positive achievements. Assigning tasks and responsibility as much as possible to the practitioners themselves is another key feature. Collegial relations are the focus, not reporting relations. This approach produces knowledge that is 'close to the ground,' with an immediate use. Too often still, academic knowledge is disconnected from real life. Too often still, students are seen as cheap labour for teachers.

Teamwork takes time and effort and does not always proceed without problems. Working groups discovered that team members don't necessarily speak up and contribute. PM & E groups suggested giving 'shy' students more opportunities to do a presentation. Efforts were usually made to address this problem, but it merits systematic attention from all participants. Some students observed that during the course, teamwork had been very good, but cooperative behaviour did not necessarily continue outside the classroom. They thought that the learning process should emphasise the fact that cooperation does not stop at the classroom door.

The joy of team facilitation/teaching

'Teachers of this course changed from their conventional roles to that of "facilitators." Instead of giving an immediate answer regarding the content, principles, and methods of CBNRM, they employed a variety of inspiringly planned modules to help us in our thinking, exploring, and drawing conclusions, by which we turned from passive receptors to active participants.'

The expression 'two (people) know more than one,' serves as one of our principles. This was reflected in the central role that teamwork plays among students, but was also important for the facilitators/teachers. The collaborative approach is bringing academic staff at CAU and JLAU closer, overcoming professional isolation and starting to bridge curricular walls. Teamwork among the facilitators gives an interdisciplinary perspective to the courses and supervision of students during fieldwork. It is also instrumental in bringing different local perspectives to the forefront, as project leaders from various agroecological sites and socioeconomic contexts join forces. This is enriching for both students and facilitators/teachers and provides the opportunity to compare and contrast field study cases, insights, and experiences, and to identify common grounds and unique differences. In this way, diversity truly enlivened the course.

Another important advantage of team efforts is the opportunity to engage in collective instead of individual reflection on content and process and to make adjustments based on collective decisions. Responsibility is then carried on multiple shoulders.

'Shall we (the facilitator group) also evaluate the changes we have made in the course arrangement – such as extending the time in the field, working with more students than last year, comparing conventional research with action research before going to the field, etc.? I suppose the facilitators can look back to the whole course design stage and critically assess the effectiveness of the changes we made.'

CBNRM course facilitator, Beijing, June 2006

Student 'champions' played an important role in team building and teamwork, in the class and in the field. Our strategy of identifying potential champions and giving them a chance to take on key management tasks and leadership roles clearly produced good results. In the classroom, during seminars, as core members of the fellowship management team, and in the field, these champions were an inspiration to all of us. They facilitated or co-facilitated activities, took the lead in mobilising their peers, and took on administrative tasks, while also carrying out excellent research. Several have been recognised for their outstanding contributions, not only by the mainstreaming working groups, but also by university authorities.

Transformations

Mezirow and colleagues (2000; see also Cranton 2006) describe the various interrelated dimensions of personal development and transformation: the capacity to engage with the world of ideas and learn from experience, to challenge one's own assumptions; to arrive at thoughtful commitment through self-reflection; to construct a value system that informs behaviour and to risk action based on these values; to contribute one's voice to a collective endeavour, realizing that collective awareness and thinking are greater than the sum of their parts; and to become a continuous learner, e.g., by seeking authentic feedback from others. In other words, apart from technical and practical knowledge, learning increases emancipatory knowledge, i.e., becoming more aware and critical of ourselves and our environment and increasing our capacity to transform reality through action (Cranton 2006). This chapter has presented various elements of learning that to varying degrees speak to these dimensions.

Below, is presented some of the students' own reflections on the process, as a way of summarising valuable thoughts. They speak of deep changes in their thinking (about what happened and how things came about), feeling (about what it meant to them), and doing (how they acted on their reflections). The most evident are students who changed from passive listeners to active contributors, from sitting 'second row' to sitting around the table with facilitators/teachers and government officials in the field, from looking up to teachers to sharing thoughts with them, sometimes even fiercely contradicting them. Eating with staff instead of separately, a seemingly trivial change, was of considerable symbolic importance. Students themselves facilitated such activities as small group discussions and conducted many of the monitoring and evaluation sessions. For those who witnessed this close-up, these changes seem to point to some form of transformative or emancipatory learning.

'In interactions with local farmers of Guangxi province, I felt the importance of "participatory development" and paid more attention to the role of local farmers in the elimination of poverty. In the past, I thought a good policy carried out by qualified officials would be

enough to change everything evil into good, without any consideration of the participation of the poor and their feelings. But reality proves that my way of thinking is wrong, because most government policies are not welcomed and may even be rejected by the farmers. The result is far from satisfaction. On the contrary, farmers want to express their own demands and explore their resources – human, natural, and social resources. Thus, they show more enthusiasm and take more initiative for this communication and participation.'

M.Sc. student, COHD, Beijing, April 2006



'After learning CBNRM and visiting Guangxi, I realise that action research is important. Only when we live with local people, communicate with local people, and make friends with local people can we know what they need and what they are lacking. It is a long journey for us to join in the village life, to make friends with the farmers. Although fieldwork is tiring and also lonely, I feel we are obliged to respond to the poor farmers' needs, the poor villagers' needs. We are young and have a duty to try our best to do something for the kind and poor farmers. Maybe we cannot change and improve their life, but we can try. To do is always better than not to do! My hometown is a poor village; my parents are farmers too. I want to put what I learn into the rural reality. It is meaningful work! There are so many poor farmers in our country!'

M.Sc. student, COHD, Beijing, April 2006



'I am so excited since I came back from Baicheng (site in east Jilin province)... It is worth doing this kind of research and this is my first, but most important thing to experience. I got a lot of information about rural development by visiting the field to deepen what I have learned in the class. For our research, we not only grasp some basic principle about PRD, but also master what the reality is. Second, the participatory method is a new one to come into our study life. It is just like a soft wind by which our way of learning from books and doing research becomes more varied and more interesting. This gives us another avenue to solve problems. So, I cherish the choice and feel lucky to take part in the course. Also, this is a course to practise everyone's ability. We all have the same opportunity, and no

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one wants to refuse to participate. At the same time, to finish the work, everyone must work together, just like a harmonious family in which every member plays an important role. This is the spirit of teamwork. I hope I have more chance to attend this kind of course and feel the special warmth of this family.'

M.Sc. student, JLAU, Changchun, May 2006



'After I came back from Baicheng, I was depressed again by the life model that I have now; I miss the life in Baicheng and our course. In the process of attending the course, I have very strong feelings. I can attend the course freely and actively. Especially when I went along with the farmers and the government staff, the feeling rose more quickly. I think the experiences and the feeling will be shown in my life. One day, when I become a teacher in the university, I will try my best to apply this teaching method so that all my students can like and enjoy my class. Today, there are many problems in the countryside, but I think the most important is the following three aspects. First, there are some disadvantages in the agricultural policy; sometimes, conflicts between government and the farmers occur because of the disadvantage. Second, the farmers need good organisations that can protect their benefits. Finally, the farmers do not have enough money to establish their own companies. They can only sell their products for low prices. They need financial support from outside to start to change this situation.'

M.Sc. student, JLAU, Changchun, May 2006



These reflections are remarkable; their scope and depth is revealing. They suggest a very strong motivation to learn among the students involved in the efforts so far. It may be said that the shift away from individual learning to an emphasis on joint learning, in a society of mainly one child families, explains the strong emotions and reactions. Students mentioned over and over again how making new friends during the course and related activities was a major achievement. The formation of a small but rapidly growing CBNRM/PRD community is allowing them to truly connect with one another and to do more meaningful research.

Toward organisational change

Efforts at curriculum framing are gradually bringing about changes at the organisational level, within CAU/COHD and JLAU (more slowly and more limited in scope so far), but also within partner organisations, most notably the Centre for Chinese Agricultural Policy, the Guizhou Academy of Agricultural Sciences, and the Centre for Poverty and the Environment (HOPE). These changes affect key elements of organisational development - communications, management, leadership, programming, incentives and rewards, and networking. At CAU/COHD, JLAU, and other collaborating universities such as Hebei, Guangxi, Guiyang, and Kunming, we see students becoming more vocal and taking on stronger roles in courses and learning activities. In December 2006, in Beijing, a group of M.Sc. and Ph.D. students initiated a comprehensive assessment of all their courses, in terms of content and dynamics, with the aim to bring about changes and improvements.

Staff who participated in the CBNRM/PRD courses in Beijing and Changchun have started to make changes in other courses they teach, including those at the undergraduate level. They are introducing innovations and have ideas for new courses in the future. Other members of the course working groups have brought their experience to Guizhou, Guangxi, Yunnan, and Mongolia, and have begun to integrate key elements of the CBNRM/PRD courses into their own teaching and training efforts. The success achieved so far in Beijing and Changchun has attracted the interest of other universities in China, and Mongolia, but also in Vietnam and Laos. Through IDRC's involvement, wider links are being developed in the Asian region and beyond into Africa and Latin America.

Contributions to rural development

It has proven very effective to adapt course content and dynamics according to the local situation – analysing situations from local people's perspective, asking relevant questions, combining natural and social science elements, and dealing with socioeconomic and political dimensions of natural resource management, such as differences in knowledge and resources and conflicts. Linking the courses and field research directly to local level rural development issues and initiatives is a key path by which was envisioned bringing higher education closer to reality and making a difference. Based on the observations and analysis so far, it is believed that these efforts are contributing to modest change in a number of ways.

Students contribute to more relevant research and to some action at the local level. Several students have focused on the key issue of farmer organisation, encompassing economic, sociocultural, and political elements. They have worked directly with village development committees, cooperatives, local agricultural research committees, associations, and cultural performance groups in a number of provinces. Their research and related efforts have attempted to strengthen these organisations to give the farmers more opportunities and influence. This is perhaps the most dominant research theme chosen by CBNRM/PRD students.

Yang Huan and Wang Xiufen provide an example of small-scale action, linked, but not entirely related, to their research (see chapter six). In Guangxi, villagers were experiencing decreasing cassava yields. Yang Huan and Xiufen facilitated a meeting of the farmers and local research partners to discuss the problem and generate some suggestions for action. The villagers were interested in diversifying and trying, for example, Chinese herbs as an alternative crop. Some of the villagers joined forces to prepare a small experiment and investigate marketing options. Yang Huan and Xiufen provided ideas and some small financial support. The experiment is now underway in the village. Many farmers, who originally did not take part in the discussions, have now joined the group that set up the experiment. At first curious about the novelty, they quickly realised it could benefit everyone.

Local partners are learning from our efforts just as we are learning in terms of professional development, improved practice (informed by 'theory'), and teamwork. Joint efforts are leading to more policy and financial support for community based, participatory approaches. The key examples so far are Ningxia and Guangxi, two of the three sites that have served as home bases for the CBNRM course. The support is allowing more local action, including experimentation, farmer organisation, and better delivery of services, which, together, are contributing to improved livelihoods.

The following stories illustrate the perspective of local partners in Guangxi and Ningxia on the contribution of the CBNRM efforts to local rural development.

Reflections on my participation in CBNRM curriculum development

Updating our knowledge is a necessity to understand the complexity of human interactions and to solve complicated social problems. We need multidisciplinary knowledge. The pity of our situation is that the development of our potential human resources has been limited by the narrow viewpoint that results from a discipline oriented education system. In addition, although most of our students who are studying in the university are excellent, some of them could not adapt to the needs of working society after graduation. This CBNRM course in which I participated is an innovation in teaching.

First, the teaching method is good. There is no longer a difference between teachers and students. In an environment of equity, everyone involved thinks about and discusses problems, contributing their own thinking and ideas and benefiting from others' ideas simultaneously. Participants enrich their own knowledge through this kind of open and interactive teaching process. Most important, we learn how to identify and think about problems through a process of active participation, and we learn how to study and solve problems in rural realities. This method of teaching is needed not only in our universities, but also in other training courses.

Second, the courses are designed with a focus on the integration of multidisciplinary knowledge and various perspectives, which is necessary for students who will be facing complicated social issues in the future. Furthermore, the course includes significant fieldwork, which facilitates problem oriented learning and research through action. This focuses more on improving participants' synthesis capacities. And the interests of participants are stimulated when they study real demand emerging from a genuine rural situation. Finally, participating in this course is also helpful for our institute, which is an NGO focusing on rural communities. Previously, we emphasised how to enhance resource management and how to improve the efficiency of resource use. But after participating in the CBNRM course, we realised that although the resources themselves are very important, the development of management principles - by

the community and by community members – is more important. We adjusted our focus in our current work and selected ten communities with different characteristics to practise this new approach. We expect to help those communities advance further through various long-term interventions and, thus, provide examples to other communities in poor areas. However, work is slow and the communities face many different problems and are made up of different groups and individuals. We need the participatory ideas that we learned in the course to brainstorm and mobilise more resources and generate better ideas to solve the problems we face using more integrated perspectives.

The curriculum development process gave us a chance to reflect on our own work and to learn a lot from the experiences of other partner institutes. Being an NGO with a commonwealth mission, our institute needs this kind of course and we also need students trained in this type of course.

Long Zhipu, Director, Centre for Poverty and Environment (HOPE), Ningxia

A CBNRM story from Guangxi

The Guangxi Participatory Plant Breeding (PPB) project has been involved in the CBNRM course at CAU since 2005. Each year, we presented our case study in the classroom to show the students how action research takes shape in the field. When students came to our project villages, they visited farmers, observed their conditions, and tried to obtain information related to their research questions. Each year, the students focused on two topics: local governance system and farmers' livelihood. During three or four days in the field, the students collected information and analysed their findings; this was useful to them, but also useful to our project.

We have gained many insights by working with the CBNRM students. For example, during the 2005 course, the students found that there was a big gap between the county level and the township level extension services, and information/services could not be delivered directly from the county to the township. This important finding contributed to the development and implementation of our extension reform action research project. In 2006, the students used the 'sustainable livelihood framework' to analyse PPB-related stakeholders

in our project, especially the farmers, and based on their work we started rethinking the farmers' roles and their motivation for joining the PPB activities. In the 2007 course, some students discovered potential problems in how the Village Development Fund (VDF) was managed by the local farmer group. They made a kind of diagnosis of the VDF, and their findings will be very helpful for future improvement.

So far, four CAU students (two M.Sc. and two Ph.D. candidates) have chosen our project sites for their thesis fieldwork after finishing the CBNRM course. During this fieldwork, they lived in the villages and made friends with local farmers. 'We feel that they look like our children. We are even closer to them than our own children,' one of the farmers said. The students discussed local livelihood strategies with people and in one case helped farmers decide to experiment with several varieties of cassava (see stories in chapter six). Such activities connect the students with real rural life and, in the process, they have learned what action research is.

In addition to encouraging the project team, the students' field visits also 'cheered up' local farmers and communities. As one farmer remarked, 'We are happy when students come, because we feel that they care about us.' Every time students arrive, farmers welcome them warmly, prepare food, talk with them and answer their questions. In 2006, farmers even prepared a traditional cultural performance to show their hospitality. The last day of each field visit is always unforgettable, as the students present their findings and farmers share their stories.

Before leaving, students always contribute something to the local VDF to support local development. One year, they helped bring electricity to the VDF office. The students needed the office as a base for interviewing farmers who are busy during the day and only have time to talk to the students in the evening. With lighting, not only can the students use the office, but the villagers now also have a place to go to talk about collective activities.

As a facilitator for the CBNRM course, I feel very lucky. I have learned a lot from the curriculum development process, and discussions with colleagues and students always brought me more and deeper reflections on what we have done.

> Li Jingsong, Centre for Chinese Agricultural Policy, Beijing, and Nanning, Guangxi

Challenges

So far, the process of innovation and reform has been an enriching experience for all involved. Although it has been very labour and time intensive, benefits have been numerous and of high quality. Careful preparations and ongoing monitoring, involving students as much as possible, and a continuous focus on learning-by-doing have been critical in keeping things going and on track. A good start has been made, but as during any change process, the road is bumpy at times. Challenges that were faced range from making further improvements in the courses to expanding our efforts from CAU and JLAU to China's higher education system at large. In many ways, these challenges are similar to those faced by other higher education innovators around the world (Taylor and Fransmann 2004). Here are some of the major ones:

Fine-tuning the courses

- 1. Pay more attention to the use and integration of conventional methods such as surveys, case studies, life stories/histories, and situational analysis.
- 2. Clarify the central place of group/teamwork.
- 3. Provide more in-depth feedback following exercises and activities.
- 4. Spend more time on the field visit (preparation time and actual time in the field).
- 5. Fine-tune the PM & E work by focusing on one or two key elements to be monitored during the modules; identify these through a more inclusive process.
- 6. Strengthen facilitation skills.

Mainstreaming CBNRM/PRD at CAU and JLAU

- Strengthen the links between the courses and MSc and PhD dissertation work; obtain respect and support for CBNRM/PRD oriented field research, including fair and appropriate examinations or evaluations of theses and other papers produced.
- 2. Share our learning and bring other facilitator/teachers and key decision-makers on board.
- 3. Strengthen our learning skills.

- 4. Encourage more staff to do CBNRM/PRD oriented field research.
- 5. Use participatory curriculum development approaches to improve other courses and develop new ones as a contribution to building more coherent programs in which components interconnect.
- 6. Maintain/rejuvenate the engaged and committed working groups that have the space to maneuvre with flexibility and relative autonomy.
- 7. Support new and younger 'champions' of innovations.
- 8. Increase and strengthen the links between rural realities and CBNRM/PRD research underway across China.

Mainstreaming CBNRM/PRD in Chinese higher education

- 1. Share good practices and encourage adaptation to other contexts in an effective, but also efficient manner.
- 2. Obtain CAU's, JLAU's, and the Ministry of Education's political and financial support to ensure long-term sustainability.
- 3. Further develop an effective and useful approach to assessment of CBNRM/PRD mainstreaming outcomes and impact of the efforts at large (not only the course).

These challenges are considerable. Unfortunately, in the current context of rapid macroeconomic growth, which could potentially provide much needed support, there doesn't seem to be much interest in CBNRM/PRD issues among key policymaking bodies. Although 'promising' discourse concerning rural development and the 'construction of the new socialist countryside' (the official slogan of the government launched in 2006) can be heard and read almost daily, in practice this is not translated to any significant support for the kind of approach that we are embracing in teaching and research. The country's 'reform' process has many dimensions, opening economic and social windows and doors for some, but not for all (Perry and Selden 2000). Although, so far, the momentum of change has been maintained, uncertainties about the prospects for a more profound, solid, and lasting place for our ideas and ideals remain.

However, it has been decided to keep exchanging these ideas and ideals and to continue the collaborative learning process of creating new and better ones.

Tell me and I will forget.

Show me and I will remember.

Involve me and I will understand.

Confucius

Postscript: 29 September 2006

Gift of a dream

Dear All,

Gubo, Ziqin, Lili, Yang Huan, and I have just returned from a week long visit to Mongolia where we shared and discussed our experiences with the Farmer Centred/CBNRM Research Network and the CBNRM Mainstreaming initiative. We had a wonderful time! On Tuesday, Gubo presented the networking experience. This

On Tuesday, Gubo presented the networking experience. This generated much interest, as in Mongolia there is not yet such a 'movement.' On Thursday, about fifteen people came together to discuss networking options in Mongolia, and it seems that some sort of learning 'coalition' will be built. This learning coalition will include the introduction of CBNRM in the higher education system. On Wednesday, Gubo, Ziqin, LiLi, and Yang Huan presented the 'Mainstreaming efforts' with a focus on the CBNRM/PRD curriculum development experiences and the fellowship support program. This took place in the Mongolian Agricultural State University, with an audience of about seventy five people, including many students, staff and senior management. Students and staff from two other universities were also present. Gubo and Ronnie, together with the Mongolian CBNRM project leader, Mr Ykhanbai, also met with the president of the university. He gave his full support.

Ronnie had the honour to appear on the national television news show, on Thursday morning and evening to talk about the visit. Our Mongolian friends were very impressed by the work in China. At the same time, we also learned a lot from the CBNRM work underway in the country.

The students attending the presentation expressed their feelings this way, directing their words to Ziqin, LiLi, and Yang Huan - 'You have given us a dream - to become like you, and to be able to do like you do - participate in the course, the fellowship program, the PM & E activities, and the management of all the efforts, and to be able to act as you do: speak English very well, make excellent presentations.'

We were all moved by these words.

Gubo, Ziqin, LiLi, Yang Huan, Ronnie



Glossary*

Adaptive management is an approach for coping with the complexity of natural resource management, based on establishing indicators, systematically trying interventions, monitoring their effects and learning from feedback. It depends on the ability of natural resource managers to receive, understand, and respond to positive or negative signals in the physical and social environment and to change management responses accordingly.

Agricultural biodiversity is the variety and variability of animals, plants, and microorganisms used directly or indirectly for food and agriculture (crops, livestock, forestry, and fisheries). It comprises the diversity of genetic resources (crop varieties, animal breeds) and species used for food, fuel, fodder, fiber, fuel, and pharmaceutics.

Community based natural resource management (CBNRM) is a participatory action-oriented research and development approach that emphasizes the importance of multiple stakeholder analysis and involvement. Increasing concerns about the (mis)management of the natural resource base stimulated the development of such an approach in which both ecological and sociological aspects of resource dynamics

^{*} Adapted from Gonsalves et al. (2005) and CIP-UPWARD (2003).

are often addressed at a more aggregated level, such as, for example, a micro-watershed, a watershed, or a (community) forest. This allows a more systematic approach to the dynamic and often complex interactions among components of a natural resource or production system (e.g., farming, fishing, forestry, herding, collecting edibles). Stakeholder involvement refers to the active and meaningful participation of small farmers, large farmers, entrepreneurs, local authorities, local groups, NGO staff, and policymakers at different levels who together analyse problems, define research and development initiatives, and work toward reconciling conflicting or diverging points of views and interests. In particular, the active involvement of NGOs, local governments, grassroots groups, and farmer associations is now a feature in many participatory natural resource management research projects.

Constructivism is a philosophy of learning founded on the premise that by reflecting on our experiences, we construct our own understanding of the world we live in. Each of us generates our own understanding (sometimes conceived of as a 'mental model'), which we use to make sense of our experiences. Learning is, therefore, the process of adjusting our 'mental model' to accommodate new experiences.

Ecosystem is the dynamic complex of microorganisms, plants, and animals, including human communities and their non-living environment, interacting as a functional unit.

Empowerment means increased participation in decisions, along with increased dignity and respect and a sense of belonging and contributing to a wider community.

Equity means equal opportunities in terms of access to natural, social, and economic resources.

Facilitation is the art of leading people through processes toward agreed on objectives in a manner that encourages participation, ownership, and creativity among all those involved.

Gender refers to the different and interrelated roles and responsibilities of women and men. These are culturally specific, socially constructed, and can change from generation to generation, from place to place, and from time to time.

Gender analysis is the study of the differences in women's and men's roles and access to and control over resources. It is a tool for improving understanding of how differences between men and women influence their opportunities and problems and can include identification of challenges to participation in development. It is a subset of social analysis, the study of human differences and their social impacts. These may, in addition to gender, include age, life stage (e.g. childhood, adulthood, old age), class, social group, ethnicity, religion, wealth, well being, and level of resource endowment.

Indigenous/local knowledge is knowledge that develops in a particular area and accumulates over time by being handed down from generation to generation, often without ever being written down.

Innovation, innovation system refers to the period during the 1950s, when innovation was considered to be a discrete event resulting from knowledge developed by isolated inventors and isolated researchers. Today, successful innovation is considered to be the result of a process of interaction and exchange of knowledge involving a large diversity of actors in situations of interdependence. Recent social network theories of innovation emphasise the strategic importance of relationships rather than technical tools, and knowledge rather than technological networks.

Institutional analysis is the study of how rules shape human behaviour. These rules or institutions can be formal and codified as law, or informal, as rules and norms-in-use. Researchers using an institutional approach study how individuals and groups construct institutions, what influence they have on human behaviour, and what the (foreseen and unforeseen) results are.

Livelihood comprises the capabilities, assets (including both material and social resources), and activities required to provide a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.

Participation in society and in social process has many shades of meaning. Participation as a consumer can be as trivial as choosing which brand of toothpaste to pick up in a supermarket. Political participation may be interpreted as casting a vote in a general election every four years. Using terms in this way, participation in research could mean as little as filling out a questionnaire or answering a survey.

This is not what participation means in participatory research or participatory action research. In this context, the word means participation in decision making. A coresearcher is someone who engages in dialogue, so that their contribution can make a difference to the questions asked, the action taken, the research design, the action plan, or the dissemination of results. This does not mean that every participant must have the same input, or the same interests. Participants have different knowledge and skills, different needs and opportunities, and different amounts of time to contribute.

Participatory action research (PAR) combines the action research aim of improving some aspect of society through the research process, with concerns about the politics of research. Participatory action researchers claim that improving society must involve questions of social justice and participation, and that these cannot be separated from issues of control and power. The politics of research involve attention to relationships among researchers, between researchers and other participants, and the wider society. In PAR, a collaborative group of coresearchers combine inquiry, learning and action. Ideally, the collaboration extends to include all those who are likely to be affected by the outcomes of the research and action as participants in decision making about all stages of the research process.

Participatory learning is an approach aimed at socialising knowledge based on the principles of discovery-based learning popular in adult education (adults learn better when they uncover principles and facts for themselves).

Participatory monitoring and evaluation (PM & E) is a joint effort or a partnership between researchers and others involved in the research (such as farmers, government officials, or extension workers) to monitor

and evaluate, systematically, one or more research or development activities. PM & E helps make research, learning, and management processes more accountable to stakeholders and to give participants greater confidence in the results.

Participatory natural resource management involves the management of natural resources by the relevant social actors or stakeholders. This usually involves participatory problem definition, visioning, and building a shared agenda for action. Agreeing on rules of resource management (including ways to enforce compliance) and encouraging knowledge sharing are key characteristics of participatory resource management.

Participatory plant breeding (PPB) is a process in which farmers and plant breeders jointly select cultivars by segregating materials in a target environment. PPB may also include activities such as germ plasm enhancement through pure line or mass selection. PPB approaches thus draw on the comparative advantages of both formal and informal systems. In recent years, has PPB also been considered as a potential strategy for enhancing biodiversity and production.

Participatory research arises with the researcher's concern about the politics of research. Questions about control and power, especially in the relationship between the researcher and those being researched, has led to notion of collaboration. The researcher's role often becomes that of a facilitator who works collaboratively with research participants. The forms and extent of collaboration vary. In some cases, participants are involved in every aspect, including establishing research priorities, collecting data, interpreting data, and disseminating results. Participatory research is not a single approach, but rather cuts across a broad collection of approaches intended to enable participants to develop their own understanding of and control of the process and issues being investigated. Good practice principles of participatory research:

- 1. The research reflects a clear and coherent common agenda (or set of priorities) among stakeholders and contributes to partnership building.
- 2. The research builds capacity for innovation by including stakeholders in joint enquiry and codevelopment of new resource management regimes.

- 3. The research addresses and integrates the complexities and dynamics of change in human and natural resource systems and processes, including local understanding of these.
- 4. The research combines multiple sources of information and methods and links various knowledge worlds through participatory learning and joint enquiry.
- 5. Monitoring and evaluation of participation and the research process occur according to agreed codes of conduct and standards of research practice.
- 6. Power and risk sharing are conscious research strategies.
- 7. The research process is based on iterative learning, feedback loops, and mutual sharing of information.
- 8. Relations among partners are founded on mutual respect, accountability, and joint decision making.

Participatory technology development is an approach that involves farmers in various processes of the research cycle to identify, design, test, and evaluate new technologies that are appropriate to them.

Participatory varietal selection (PVS) is the selection of fixed lines (including landraces) by farmers in their target environments using their own selection criteria. PVS consists of four steps: situation analysis and identification of farmers' varietal needs, a search for suitable genetic materials, farmers' experimentation on new crop varieties in their own fields and with their own crop management practices, and wider dissemination of farmer preferred crop varieties.

Stakeholders are social actors who affect or are affected by development policies, programs, and activities. They can be men or women, communities, socioeconomic groups, or institutions of any size and from any level of society.

Sustainability means meeting present needs without compromising those of the future generations.

Transformative learning: See Participatory learning

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