



Rural  
Development  
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Network

network paper 24d  
winter 98/99



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# Rural Development Forestry Network

## **Participatory Curriculum Development: a Workshop to Update the Forest Guards Course in Nepal**

Philip N. Dearden

## **Base-line Training Needs Assessment for Community Forestry in South Africa**

Michael Underwood

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**ISSN 0968-2627**

# PARTICIPATORY CURRICULUM DEVELOPMENT: A WORKSHOP TO UPDATE THE FOREST GUARDS COURSE IN NEPAL

Philip N. Dearden

*“the forestry profession has before it a unique window of opportunity to ... embrace a philosophy of people-centred forestry, while retaining the traditional tree centred forestry. As forestry educators it is our responsibility to instil in our students this new philosophical approach in their work. People-centred forestry will allow foresters to apply ... knowledge of the physical and biological forest processes to the cultural and social environment in which they work”<sup>1</sup>*

## SUMMARY

With the changes going on in forestry in Nepal in the late 1980s the disadvantages of conventional approaches to curriculum development had become acute and pre-service courses being taught to many Nepali forestry staff were out of date. In order to overcome these disadvantages a participatory workshop methodology based upon the ‘collaborative’ approach of curriculum development was successfully developed for the Ministry of Forests and Soil Conservation (MFSC) for Forest Guards in Nepal. The successful use of

this participatory methodology has subsequently been transferred to the State of Himachal Pradesh in India where it has been used for developing curricula for both Forest Guards and Deputy Rangers (Mahony, 1995 and 1996). This paper examines the use of the participatory curriculum development model and reflects upon the participatory methodology with reference to Skilbeck’s model (Skilbeck, 1984) and the experiential training methods required for successful participatory forestry.

## BACKGROUND

In the late 1980s community forestry became the major strategy in the Government of Nepal’s forest policy. The Master Plan for the Forestry Sector in Nepal (HMGN, 1988) focused on Community and Private Forestry with special emphasis on the establishment of local community based forest management units called ‘user groups’. By the early 1990s the emerging forest policy and legal reform programme that was underway in Nepal presented a massive challenge to all the staff of the Ministry of Forests and Soil Conservation. This was particularly the case with respect to community forestry which had the status of government policy but formed a discontinuity with the tradition of the old-style forest management.

<sup>1</sup>Vinopal (Ed.) Educating Forest Technicians into the 21st Century. Proceedings of an International Conference, Paul Smith College, New York.

The new community forestry policy provided long term rights of access and use to forest users, and allowed local forest users to own 100 percent of the forest produce from local state forest lands. This gave them a motivation and incentive to protect and manage forest land. The policy required protection and management of existing forests with the main thrust of activity not being law enforcement but enabling people to act so their communities' needs in forest goods and services could be met locally and in perpetuity, enabling the wider natural environment to be conserved.

This shift in policy from looking after trees to working with and through the users of tree products implied considerable changes in the jobs which the MFSC staff were expected to do.

To guide field activities in the spirit of the Master Plan, Nepal's Community Forestry Development Division in the MFSC designed a series of 'Community Forestry Guidelines' (MFE/DANIDA, 1991). Under these Guidelines the front-line staff – Forest Guards – were no longer solely responsible for the protection, through enforcement, of forests. It was now their obligation to help rural villagers form and manage user groups, to assist their line managers – Forest Rangers – in the handing-over of local forests to user groups, and to provide technical assistance through the co-management of these forests. In order to do this effectively the Forest Guards needed to be prepared to learn from local farmers/users and to share local forest management responsibilities with them.

This re-definition of the Forest Guards' role presented an enormous challenge. They had to

shift from being reactive forest protectors keeping people from the forests to becoming proactive and creative forestry workers bringing forests to the people, seeking to weld indigenous knowledge and traditional practice to technical 'modern' knowledge and professional practice. The new role required a significant change in both attitudes and knowledge, as well as the addition of social and communication skills to the traditional technical forestry skills previously taught to Forest Guards. It meant, in short, that training needed to be revised to reflect the new realities and responsibilities of user-group forestry in the field.

#### SITUATIONAL ANALYSIS – TRAINING NEEDS ASSESSMENT

Among the sub-plans in the MFSC Master Plan was the Human Resource Development plan which called for a comprehensive training needs assessment of the whole sector and the subsequent development of new training curricula to fit the identified needs.

A country-wide survey, undertaken in 1991, of the in-service training needs of the MFSC (Dearden et al, 1991) established the need for retraining the entire staff of the MFSC for their new role as advisers and extensionists and for improved and updated pre-service training for all levels of staff (see Figure 1). Many of the MFSC staff consulted in the study stated that the pre-service Forest Guard curriculum urgently need updating. The pertinent point was made that there is little point in training the Forest Guards in 'traditional' forestry when the MFSC is trying to introduce community forestry throughout the country. Several officers felt that training Forest Guards with

**Figure 1** MFSC staff pre-service training courses and providers

Level of staff	District Forest Officers	Range Forest Officers	Forest Guards
<b>Pre-service training provision</b>	3 year BSc Forestry	2 year Forestry Diploma	3 month Forest Guards Course
<b>Training providers</b>	IOF Pokhara	IOF Hetauda	Donor Projects NGOs Courses organised by MFSC Training Division

the existing curricula could in the longer term do more harm than good.

In late 1991 the Training Division of the MFSC decided that there was an urgent need to update the existing Forest Guard curriculum; in the event it needed complete revision. The development of a new Forest Guard curriculum was used as an opportunity to introduce the important process of participatory curriculum development into the Training Division of the MFSC.

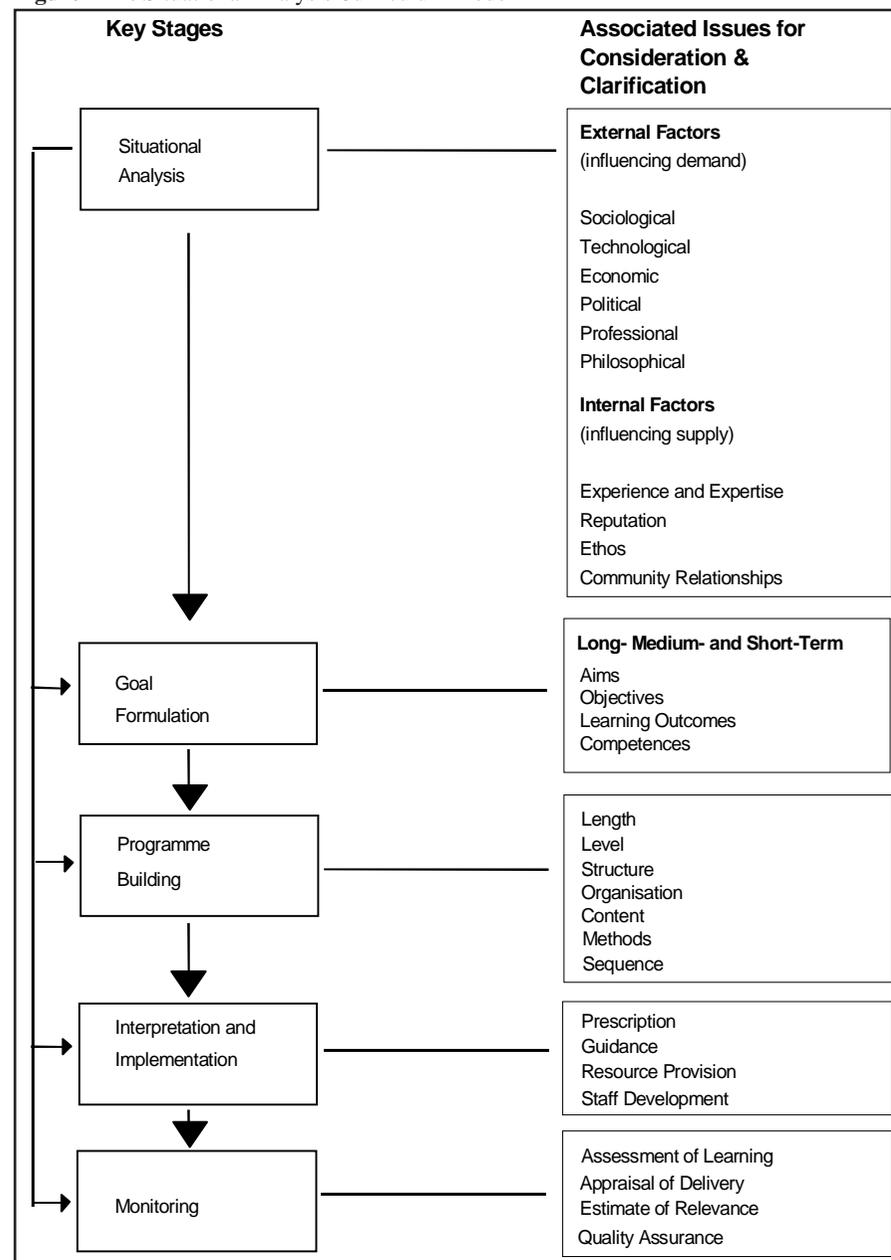
#### APPROACHES TO CURRICULUM DEVELOPMENT

Curriculum development can be conducted in a variety of ways. At one extreme is the 'institution based' or 'do-it-yourself' approach where a single trainer or teacher in an institution is given the task of revising and updating the content of the syllabus which, when taught, becomes the curriculum. A draft syllabus may be formulated and then reviewed by staff in the school or college. Often it may be modified many times by other teachers or trainers before being utilised.

At the other extreme is the 'centre-periphery' or 'expert group' approach where a committee of senior staff may be formed and given the responsibility of consulting all relevant personnel before sitting down and developing a curriculum. This is then invariably given to more junior or subordinate staff to try to interpret and then teach.

Both these models of curriculum development have their own fundamental disadvantages. The major disadvantage of both methods was that the development of a new Forest Guard curriculum in Nepal using either would have taken a long time. Consequently, there was a real danger that any new curriculum might well have been out of date before it was introduced and delivered.

A third approach to curriculum development is the 'collaborative' approach which, as its name implies, involves a partnership between the central authorities and field-based staff. This approach capitalises on the advantages and reduces the limitations of each of the other two approaches. Given the pressing need for curriculum development for the three-month

**Figure 2** The Situational Analysis Curriculum Model

Source: Skilbeck (1984)

Forest Guard course this approach was chosen. An informal workshop format using an adult-learning facilitation methodology was chosen to launch the process.

### PLANNING THE CURRICULUM DEVELOPMENT WORKSHOP

Having decided on the methodology to be used the first critically important exercise was to choose the workshop participants. Following considerable debate, a group of 14 staff was chosen. These 14 comprised a judicious mixture of experienced forestry trainers, who had been involved in training Forest Guards, and a range of other forestry field staff who worked at different levels in the MFSC and had field experience of the many different agro-ecological zones in Nepal.

In planning the workshop the facilitators set clearly-defined workshop objectives. The general objective was: 'To develop a new and appropriate Forest Guard curriculum'. In addition to this other specific objectives were set. Each participant would:

- Take part in a series of structured exercises to identify the training needs of Forest Guards;
- Gain practice in the writing of aims and objectives as an aid to the planning of curricula;
- Analyse existing Forest Guard syllabi and curricula (several different courses had been taught by a variety of training providers in the past few years);
- Discuss and integrate new and existing ideas related to the training of Forest Guards; and
- Work in small groups to develop specific subjects to be included in a new Forest Guard curriculum.

In order to achieve these aims the workshop structure was based loosely on Skilbeck's Situational Analysis model (see Figure 2). This model was chosen for its pragmatic application to the situation in Nepal.

As can be seen from Figure 2, Skilbeck's model has five key elements arranged in a logical sequence of stages, with 'feedback loops' between each stage to provide an ongoing and responsive review of the curriculum. These key components or stages of the model are shown below (see Figure 3 overleaf).

Each of the five stages gives rise to a number of questions and issues to be resolved. In planning the curriculum development workshop the model was used pragmatically to identify a series of simple questions about the new Forest Guards course, namely:

- What should be taught?
- Why should it be taught?
- How should it be taught?
- How will the teaching, and more importantly the Forest Guard's learning, be evaluated?

### THE CURRICULUM DEVELOPMENT WORKSHOP PROCESS

#### Introduction

The workshop commenced with an informal opening where a senior member of the MFSC explained how much forestry had changed in Nepal over the last few years and how there was now an urgent need to update the three-month Forest Guard curriculum. The senior staff member also helped set the scene by urging the workshop participants to work hard and think carefully about the new skills, knowledge and, most importantly, attitudes that both they and the Forest Guards required.

**Figure 3** The five key stages of Skilbeck's model

1	Situational Analysis <i>External Factors</i>  <i>Internal Factors</i>	Influences outside educational and/or training institutions which affect the demand for educational/training provision Features within educational/training institutions which affect their ability to supply such education/training
2	Goal Formulation	Anticipated learning outcomes
3	Programme Building	Selecting subject matter
4	Interpretation and Implementation	Delivery of the course
5	Monitoring	Monitoring of the course Assessment and evaluation

Following an overview of both the objectives and the planned programme workshop participants then introduced themselves. In a small group icebreaker session participants expressed both their fears/worries and expectations of the next ten days.

#### Increasing awareness of training needs

On the first and second days of the workshop participants were encouraged to think about their own training and how this had, or had not, fulfilled their training needs. Participants were all encouraged to reflect on the type of training that they planned/delivered and whether this met the real training needs of their trainees.

Participants were also encouraged to reflect upon the external factors in Skilbeck's situational analysis. These refer to broader contextual issues, including what type of education and educational system is currently

provided, and what is desired. In the discussions further questions arose which mirror those asked by Lawton (1983) in his 'Cultural Analysis':

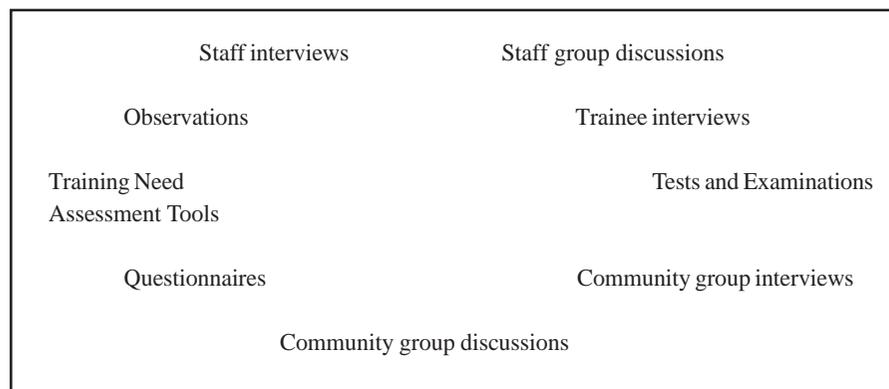
- What kind of 'society' currently exists in Nepal?
- How is it developing?
- How do we want it to develop?
- What values and principles are involved?

These important questions were all briefly considered and their influences on the provision of trained Forest Guards identified. This was done in summary form by using a Sociological, Technological, Economic, Political, Professional and Philosophical (STEPPP) analysis (see Figure 4).

Space does not allow for a full report on each of the factors identified in the STEPPP analysis. They include the increased professionalisation of foresters, the *sociological* trend towards

**Figure 4** STEPPP factors underlying the training of Forest Guards

This analysis highlights the contribution of external factors in determining the level of professional practice and in the move towards participatory community forestry.	
<p><b>Sociological</b></p> <p>Increased numbers of women working in community forestry Increased numbers of NGOs involved in forestry training Increased access to higher education Professionalisation of forestry Increased need for staff trained in community forestry</p>	<p><b>Technological</b></p> <p>Information technology e.g. geographic information systems and satellite imagery New use of forestry technology Forestry developing as a profession</p>
<p><b>Economic</b></p> <p>Very limited MFSC budgets for training and restricted access to courses (time, resources, costs) Expectations that Forest Guards will undertake a supporting role in community forestry Donor agencies funding forestry projects</p>	<p><b>Political</b></p> <p>New forest policy MFSC reforms Development of new non-government organisations Professional/local groups</p>
<p><b>Professional</b></p> <p>Need to firm-up educational basis of forestry Need to develop educational experience from student school education to advanced stage of forestry practice Need of MFSC staff to work in partnership with village level organisations Need for MFSC staff to develop skills of critical analysis and reflection</p>	<p><b>Philosophical</b></p> <p>Prevailing philosophy of the forestry profession in Nepal leading towards the adoption of community forestry New understanding of the psychology of the learning process Values and beliefs of the forestry profession – what is important and worthwhile</p>

**Box 1** Tools that can be used for the assessment of forestry training needs in Nepal

Source: adapted from Dearden, Parker & Paudyal (1992)

higher levels of qualification and a desire/need for more qualifications which has influenced the level of practice. In addition, *sociological* influences such as foresters taking on skills previously used within the sphere of the community development workers has encouraged the need for a wider field of practice.

An important influence on the level of Forest Guard practice was the *philosophy* of several major forestry projects in Nepal, which were actively encouraging foresters to reflect and constantly evaluate their practice. The development of research-based practice within these projects was also encouraging an awareness of the increasing need for Forest Guards to have skills of critical analysis.

Once the STEPPP analysis was complete, the complexity of training and of the things that can go wrong on training courses/workshops was introduced by way of a case study. Working in small groups participants discussed many

of the background issues to the successful identification of training needs.

The third and fourth days of the workshop focused on methods of assessing training needs. Working in small groups participants considered two key questions:

- How can we work out the training needs of Forest Guards?
- What methods can we utilise to collect the information/data we require?

A range of training needs assessment tools was considered (see Box 1) and many of them were practised through a series of role-play exercises. Having practised some of the tools, participants were then ready for the next day's field visit to examine training needs.

During the field visit each participant undertook a series of staff interviews with Forest Guards, Rangers or District Forest Officers in one of three nearby Districts. A series of structured group discussions was also held with a range

**Box 2** Principles towards developing a new curriculum (developed by workshop participants)

- 1 Participants should discuss the various issues together and reach democratic decisions together. These decisions should be respected by all members in the curriculum development team.
- 2 The new revised curriculum should be firmly based on His Majesty's Government of Nepal (HMGN) forestry policy.
- 3 Reflecting point 2 above, the curriculum should be based upon the role of Forest Guards and the detailed tasks and duties they have to perform.
- 4 All the available training needs assessment data and information should be combined with the curriculum development teams' own considerable field experience to develop an appropriate curriculum to fulfil point 3 above.
- 5 The curriculum should be written using clear and understandable training aims and objectives.
- 6 The curriculum should have an appropriate balance of theory and practice for training Forest Guards who are essentially employed to carry out practical tasks in the field.
- 7 Every attempt should be made to be progressive and forward-thinking so that the curriculum will provide for both the present and future needs of forestry in Nepal.
- 8 In order to be appropriate for the training of Forest Guards working in the many varied agro-ecological zones in Nepal the curriculum should be flexible, and, if required, contain some options.

of forestry staff at different levels in the MFSC. Participants were also encouraged to make a series of field observations, some of which identified training needs.

The findings of the participants were then combined with the earlier and more comprehensive findings from the national

survey on training needs (Dearden et al, 1991) which used a wide range of training needs assessment tools and involved forest professionals as well as many community groups.

## GOAL FORMULATION – DEVELOPING PRINCIPLES FOR WORKSHOP PRACTICE

At the end of the situational analysis sessions, participants were ready to consider what the new Forest Guard curriculum should contain. In order to allow constructive dialogue within the workshop, the participants first developed a series of pragmatic principles for their own approach to the development of a Forest Guard curriculum. These principles are illustrated in Box 2 (on previous page).

Having developed the principles, participants then considered in some detail the characteristics of the Forest Guard trainees who would be trained using the new curriculum. A series of recommendations concerning the choice of homogeneous groups of Forest Guards to receive training together were developed. It was agreed that these should be included in the introduction to the new curriculum as a practical guide for training organisers.

## PROGRAMME BUILDING – SELECTING THE SUBJECT MATTER

In the five days of curriculum development activities participants were guided through the curriculum development process.

The process started with the group considering what a curriculum is. Having examined a range of definitions, the group chose Burrell's (1988) definition: "the whole set of influences and events both planned and unforeseen, which affect the students' experience and which will affect their ability to understand and achieve the aims of the course and of the wider arena for which they are being educated".

Building upon this definition workshop participants were encouraged to think about all aspects of the trainee Forest Guards' learning experiences and not just the written syllabus of the course.

### Agreement on underlying principles

In considering the underlying principles participants agreed that the more systematic the planning of the curriculum the more effective the course would be in helping the students/trainees to achieve the course aims. It was also agreed that there was a need to encourage the development of open-mindedness as well as general communication skills. For example, in the teaching of community forestry it was decided that there should be exploration of several forestry development models which would provide opportunities to challenge and evaluate current forestry practice and discriminate between competing theories and explanations.

The relationship between theory and practice in the new curriculum was also carefully considered. Forest Guards are field staff who need 'hands-on' skills. In view of this it was decided that wherever possible subjects should be taught in a pragmatic manner out in the field.

There was considerable discussion of the teaching methods that should be employed. After lengthy debate it was agreed that formal lecturing was an inappropriate methodology for the delivery of the required learning experiences. It was argued that if the guards are to successfully undertake their new tasks and duties in relation to community and people-focused forestry then they needed to be involved in participatory and active learning sessions at all stages of the curriculum. The recognition

### Box 3 The 'classic' and 'romantic' approaches to the curriculum

Classic	Romantic
<b>Objectives:</b> Acquiring Knowledge	<b>Processes:</b> 'Living' attitudes and values
<b>Content:</b> Subjects	<b>Experience:</b> Real-life topics and projects
<b>Methods:</b> Didactic instruction Competition	<b>Methods:</b> Involvement Cooperation
<b>Evaluation:</b> By tests (trainer set) and examinations	<b>Evaluation:</b> Self-assessment (in terms of self-improvement)

Source: Lawton (1973)

that the trainee Forest Guards have their own preferred learning styles (Honey and Mumford, 1985) was coupled with the use of Kolb's learning cycle for planning the various learning activities in the curriculum (see Figure 5 overleaf).

It was also agreed that there needed to be a balance of what Lawton (1973) has termed 'classic' and 'romantic' approaches to delivery of the curriculum (see Box 3).

### Setting course objectives

Working in groups participants first produced a series of overall course objectives for the new Forest Guard curriculum. These were built upon the training needs that had been identified. To ensure they could be easily assessed they were written as behavioural objectives (see Box 4 overleaf).

Following this the major topics of the curriculum were agreed and placed in training units and behavioural objectives were set against them. Working in groups, participants then developed specific objectives for each of the major training units.

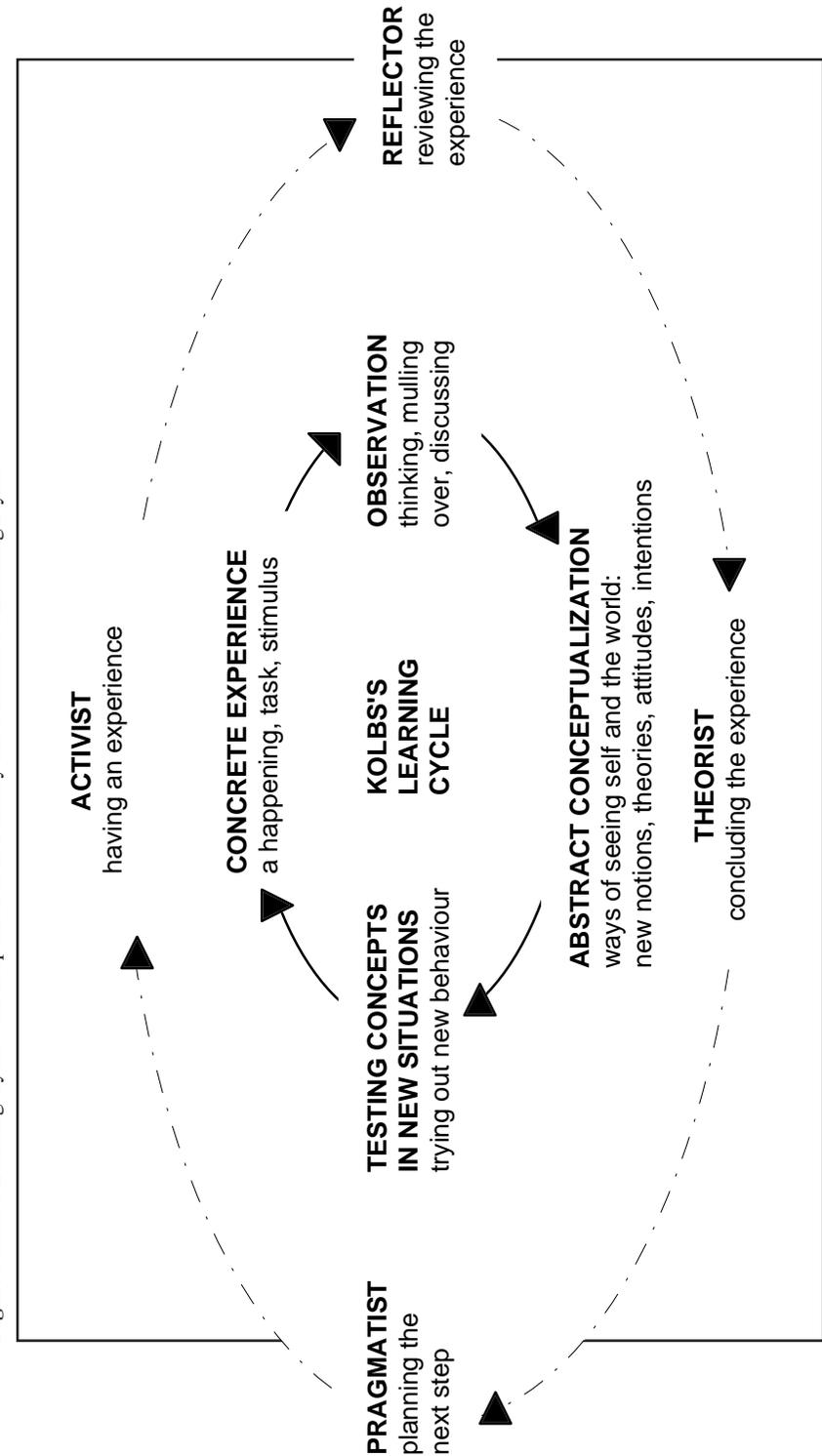
In the next phase of the development participants reviewed a typed copy of the general and specific objectives. Using these objectives as a base, the specific topics for training were then specified, reviewed in a plenary session, and, in some cases, heavily edited or revised. At the end of the ten-day workshop a draft copy of the agreed objectives was typed and printed for distribution and comment.

**Box 4** Course objectives for the three-month MFSC Forest Guard course

*By the end of the training programme the trainees will be able to:*

- 1 Explain past and present HMGN forest policies
- 2 State the tasks and duties of Forest Guards in both community and national forestry
- 3 Explain the importance of national forestry
- 4 Explain the importance of community forestry
- 5 Explain the role of people in community forestry
- 6 Explain the process of identification and organisation of user groups
- 7 Explain the importance of forest operation plans
- 8 Explain the importance of monitoring forest operation plans
- 9 Apply the techniques of effective extension
- 10 Perform basic survey techniques
- 11 Perform basic mensuration techniques
- 12 Construct, maintain and operate a forest nursery
- 13 Perform basic silvicultural techniques
- 14 Explain the techniques of plantation establishment and management
- 15 Identify the causes of forest degradation
- 16 Identify forest offences
- 17 Explain the ways and means of checking forest offences
- 18 Apply the procedures of reporting forest offences and other development activities
- 19 Apply fire control measures
- 20 Perform basic harvesting techniques
- 21 State the ways and means of minimising fuelwood consumption
- 22 Apply basic soil and water conservation techniques
- 23 Explain the importance of wildlife conservation
- 24 Apply basic principles of first aid

**Figure 5** Kolb's Learning Cycle with adaptation to add Honey and Mumford's Learning Styles



**Box 5** Workshop recommendations

- 1 The new Forest Guard curriculum should be introduced as soon as possible.
- 2 When written up in detail the mode of delivery of the Forest Guard curriculum should be flexible so that if necessary it can be taught in blocks (e.g. 2 x 6 weeks or 3 x 4 weeks).
- 3 In order to effectively introduce the Forest Guard curriculum, the Training Division should organise a Trainer's Training workshop for Forest Guard trainers and staff of the Regional Training Centres.
- 4 The Training Division should develop a Forest Guards' Training Manual.
- 5 Forest Guard training should be conducted each year in at least one agreed training institution/centre. The rural CTEVT schools would be ideal locations for this training.
- 6 Training Division and the Regional Training Centres should be financially and logistically supported to enable them to both effectively train and where required monitor and evaluate the training of Forest Guards.
- 7 The Regional Training Centres should act as a link between project Forest Guard training and the Training Division.
- 8 The Training Division and the Regional Training Centres should actively encourage projects to conduct Forest Guard training whenever possible.
- 9 Project managers and training organisers should liaise with their Regional Training Centres and get approval for their Forest Guard training.
- 10 After each Forest Guard training there should be follow-up activities to reinforce the training, e.g. a short workshop.

**INTERPRETATION AND IMPLEMENTATION – DEVELOPMENT OF WORKSHOP RECOMMENDATIONS**

On the final day of the workshop a series of ten workshop recommendations on interpretation and implementation were formulated by the workshop participants (see Box 5). In order to facilitate follow-up activities to the workshop participants were encouraged to write down what they had learnt and commit themselves to personal action plans.

The next step in the curriculum development process was to submit the complete new curriculum to the Head of the Training Division for approval. This was done within a month and the new curriculum was distributed throughout the Ministry for use.

**Monitoring**

The Training Division started using the new Forest Guard curriculum immediately it was ready. Copies were distributed to all Training Providers with guidance on its use.

Skilbeck's model reminds us that quality assurance systems, procedures and methods need to be established to evaluate programme success and the appropriateness of the various elements. After the curriculum development workshop the MFSC Training Division developed clear and well-documented standards and procedures for course monitoring and evaluation (Tiwari, pers. com., 1996).

Both the Forest Guard trainees and the teachers/trainers are expected to undertake mid- and end of course evaluations. The findings of these evaluations are then formally fed back to the Training Division.

**FURTHER CURRICULUM DEVELOPMENT**

Within two years a total of 247 Forest Guards received training on eleven three-month courses that were conducted in the many varied agro-ecological zones of the country.

Having carefully monitored the new curriculum over this time the Training Division decided that further modifications were needed, and in September 1993 a three-day curriculum review workshop was held to update it. Using the same participatory methodology the curriculum was further revised and additional guidelines for the training organisers were developed. Importantly, these guidelines specified that the course could, if required, be taught on a modular basis with the important topics of first aid, forest policy, forestry extension, community forestry, forest survey and mensuration, forest protection and forest utilisation being covered first. These topics could be followed by further inputs on

silviculture, soil and water conservation and wildlife conservation.

Within a three month period the second edition of the Forest Guards curriculum was approved, printed and distributed to all training providers.

**REFLECTIONS**

The first new Forest Guard curriculum showed a good synthesis of realism and innovation. Instead of simply accumulating traditional units of study around a central theme the new curriculum focused on the real world of the Forest Guards. Prompted by the facilitators the workshop participants were continually encouraged to ask themselves "What does a Forest Guard actually do?". By getting out and interviewing a group of Forest Guards in the field, participants were able to address their perceived needs. This helped everyone focus on the actual tasks and duties of the Forest Guards and what they should be taught, an important factor for successful community forestry which was a relatively new concept to many of the MFSC staff.

Another feature which helped to focus the workshop participants' thinking was the agreement, in an early part of the workshop, to write the new revised curriculum in terms of clearly specified and carefully constructed training aims and objectives. Each section of the curriculum informs the trainers exactly what the trainees must be able to do at the end of the training session or section of the course. This is a major advantage for trainers who have subject matter expertise and field experience but are often not experienced in planning training sessions or organising practical classes. It is also a major advantage when assessing

the students and in clarifying what the trainees should be able to do at the end of each course section and on completion of the course as a whole .

A further feature of the new curriculum is the identification of clear guidelines on the training methods that should be utilised to deliver the learning experiences required. This again helps the trainers in the planning and delivery of training sessions. A wide range of training methods is recommended. These include class practicals, case studies, field practicals, field visits, group discussions and role-play exercises.

The use of Skilbeck's model helped the process of curriculum development. The basic pragmatic questions that the model forced the participants to ask helped focus on the key issues involved. The other major value of using the Skilbeck model lay in the way it helped structure the workshop participants' thinking around the delivery of the learning experiences for the Forest Guard trainees. When trying to teach such topics as communication skills, the method of delivery becomes as important as the content.

## CONCLUSIONS

The workshop methodology developed enabled a considerable amount of participation; the workshop participants chose the workshop priorities, the objectives of the new curriculum (based upon recognised and agreed training needs), the content and teaching methods to be used and the actions then required in order to swiftly implement the new curriculum. The adult-education workshop methodology used also enabled senior staff to comfortably listen

to field staff who were often younger and/or junior in rank.

Finally, but perhaps most importantly, the workshop methodology allowed a true sense of ownership of the new curriculum to develop. All the staff involved in the first workshop felt that they had participated in a practical and time-efficient process that enabled the training methods and content of the Forest Guards curriculum to catch up with forestry policy changes that had been made in relation to community forestry in Nepal.

## ACKNOWLEDGEMENTS

The curriculum development work described in this paper was funded by FINNIDA as part of the Forestry Sector Institutional Strengthening Programme Component No 2, In-service Training Development. HMGN/FINNIDA, Kathmandu, Nepal.

The author is most grateful to Mike Nurse (LTS International) and several colleagues in the CRDT, notably Des Mahony, Bob Kowalski and Bob George, for their critically constructive comments on this paper.

## REFERENCES

- Burrell, T. (1988) Curriculum Design and Development – A Procedure Manual. Prentice Hall.
- Dearden, P. N., Parker J. H. P., Paudyal S. S. & Sayami P. (1991) Report in the In-service Training Needs of the Ministry of Forests and Soil Conservation, Nepal. Forestry Sector Institutional Strengthening Programme Component No 2, In-service Training Development. HMGN/FINNIDA, Kathmandu, Nepal.
- Dearden, P. N., Parker J. H. P. & Paudyal S. S. (1992) Training Needs Assessment Manual. Forestry Sector Institutional Strengthening Programme Component No 2, In-service Training Development. HMGN/FINNIDA, Kathmandu, Nepal.
- Honey, P. and Mumford, A. (1985) The Manual of Learning Styles. Peter Honey, Berks, UK.
- HMGN (1988) Master Plan for the Forestry Sector in Nepal – Main Report. Ministry of Forests and Soil Conservation, Kathmandu, Nepal.
- Kolb, D. (1984) Experiential Learning, Englewood Cliffs, Prentice Hall, New Jersey
- Lawton, D. (1973) *Social Change, Educational Theory and Curriculum Planning*. Hodder and Stoughton, London.
- Lawton, D. (1983) *Curriculum Studies and Educational Planning*. Hodder and Stoughton, London.
- Mahony, D. (1995) Report on the Forest Guards Curriculum Development Workshop. Himachal Pradesh Forestry Project, Himachal Pradesh, India. University of Wolverhampton report for Overseas Development Administration/Government of India.

Mahony, D. (1996) Report on the Deputy Forest Rangers Curriculum Development Workshop. Himachal Pradesh Forestry Project, Himachal Pradesh, India. University of Wolverhampton report for Overseas Development Administration/Government of India.

MFE/DANIDA (1991) Guidelines for the Implementation of Community Forestry Training, Community Forestry Development Division. Kathmandu, Nepal.

Skilbeck R. (1984) in: Marsh (1992) Key Concepts of Understanding Curricula, Falmer Press.

Tiwari Sagendra, (1996) Personal communication.

## ACRONYMS

CTEVT	Council for Technical Education and Vocational Training
HMGN	His Majesty's Government of Nepal
MFSC	Ministry of Forests and Soil Conservation