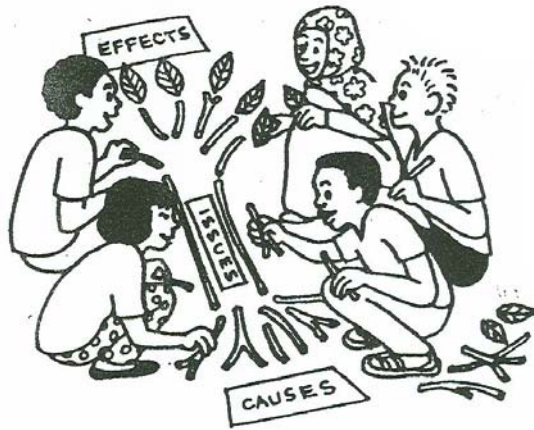


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Participatory agroforestry curriculum development – an account of a participatory writing workshop

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Summary

This paper describes the process of a workshop which used a participatory curriculum development methodology (PCD) to create an agroforestry curriculum development guide. The paper introduces the underlying concepts of PCD and reflects on some lessons learned about the process. It also discusses some possible reasons behind the success of the workshop in terms of the participatory process applied, the content, and the final product. By the end of the workshop, participants had, together, written a detailed draft guide. After review and editing, this guide will serve to support the development of agroforestry education and training programmes in the South-East (SE) Asia region, and enhance the teaching and learning process of agroforestry.

Introduction

While agroforestry is a practical activity, mostly done by small-scale farmers, their voices are rarely heard in curriculum development. On the contrary, many or most existing agroforestry curricula in SE Asia have been developed using a classical, top-down approach. Participatory approaches are increasingly used in agroforestry research and development programmes. But universities and technical colleges still have no or little experience in applying such methods in curriculum development.

The Southeast Network for Agroforestry Education (SEANAFE) is a regional network with a mission to improve the quality and accessibility of agroforestry education. It was formed in 1999 by 32 universities and technical colleges in Indonesia, Lao PDR, Philippines, Thailand, and Vietnam. The network identified curriculum development as a main priority, as well as identification of tools that could be utilised to bring this about.

Key questions that needed to be addressed in the curriculum development process were:

- How could stakeholders be involved to help improve the relevance and quality of agroforestry curricula?
- How could institutions and teachers be guided, in a flexible way, in developing agroforestry curricula that

capture both recent research findings and field-based realities?

- How could the agroforestry curriculum development process lead to an educational approach based on learning rather than on teaching?

In the first general meeting of SEANAFE, members reviewed and prioritised potential agroforestry education activities and decided to develop a regional guide for participatory agroforestry curriculum development. This guide would present both a participatory curriculum development process and a flexible framework for agroforestry curricula in SE Asia. We envisioned a step-wise process, as follows:

1. Writing first draft during a regional workshop, held in Hanoi, Vietnam, November 1999.
2. Testing the guide in national and institutional curriculum development fora.
3. Evaluation and feedback by individual reviewers.
4. Revision to suit regional and institutional requirements.
5. Final editing and publishing.
6. Use of the guide as one of a range of resource tools for national and institutional curriculum development activities.

The workshop approach

A participatory curriculum development (PCD) approach underpinned the workshop process. This has been used as the basic educational approach for the development of social forestry education in universities in Vietnam. The aim of PCD is to develop a curriculum from the interchanges of experience and information between the various stakeholders in the education and training programme. It is believed that increasing the extent of participation of different stakeholders in the curriculum development process will lead to greater ownership of education and training, leading to more effective learning. From this perspective, the process of curriculum development should involve a wide range of stakeholders in meaningful roles. It should draw upon their experience and insights in a structured approach to curriculum planning, implementation, and evaluation. PCD involves stakeholders in a flexible and dynamic way, in an attempt

to achieve a deeper understanding of a complex situation. It was decided by the workshop organisers that participants at the workshop should comprise a fairly small group (about 20, plus resource persons) from the SEANAPE member countries.

Aim of the workshop

The four-day workshop aimed to introduce participants to the basic concepts and methods associated with PCD so that they could apply these in the development of the agroforestry curriculum guide. Although the primary goal of the workshop was to produce a draft guide, the process was rather similar to that followed when developing a curriculum using the PCD approach. This begins with experiential activities (learning from practical experiences or doing rather than formal learning) that promote reflection on existing experience, followed by analysis, and then action.

The workshop process

The workshop process is summarised in the table below by indicating the key points addressed, the methods used, and the outputs. The main steps of the process are then described in more detail:

Step 1: Participants' background in agroforestry; how agroforestry is taught; when curricula were revised

Following participants' introductions and listing of expectations, each participant was asked to indicate how agroforestry is taught in his or her institution, and also the time when those curricula were developed or revised.

Step 2: What is involved in curriculum development?

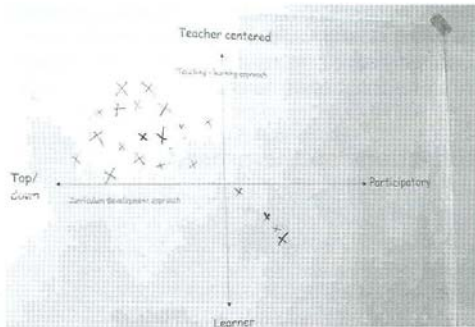
The objective of this activity was to learn about participants' perspectives on what is involved in curriculum development. The ideas were then discussed in plenary. This was followed by a short presentation on PCD concepts and approaches, which related quite closely to many of the comments emerging from the brainstorming session.

Step 3: Curriculum development methods and teaching/learning approaches in participants' institutions

The objective of this exercise was to indicate how curricula are developed (top-down vs. participatory) and which teaching/learning approaches (teacher-centred vs. learner-centred) are used in participants' institutions. In a short discussion about the result of a participatory exercise, participants agreed that it would be desirable to move in

Table 1 The workshop key points, methods, and outputs

Step	Key points	Method	Output
1	Participants' background in agroforestry; how agroforestry is taught; when curricula were revised	Participants place marks in matrix on poster	Range of agroforestry curriculum development needs that the guide would need to address
2	What is involved in curriculum development?	"Merry-go-round" brainstorming. Presentation on PCD approach	List of participants' perspectives on what is involved in curriculum development, compared with existing theory
3	Curriculum development methods and teaching/learning approaches in participants' institutions	Completing matrix of "curriculum development approach vs. teaching/learning approach" on poster	Participants' agreement on desirability to move in the direction of more learner-oriented teaching approaches and more participatory curriculum development
4	Stakeholder analysis	Listing stakeholders and their interests, importance and influence matrix, stakeholder participation matrix	Potential roles and responsibilities for a list of identified stakeholders
5	Why this guide is needed	Focused conversation	Consensus about what needs this guide should address
6	Stakeholder perspectives on agroforestry education	Case study presentations (by a university teacher, a field worker, an employer, and a former agroforestry student)	Issues raised about the job and characteristics of an "agroforester" in each country, as well as the regional implications arising
7	Knowledge, skills, and attitudes which this guide should address	Listing on cards (group exercise), posted on wall	Consensus on categories and lists of knowledge, skills and attitudes to be addressed by the guide
8	Planning and writing the main sections of the guide	Groups writing detailed content	Agreed structure and main content of the guide Detailed sections of the guide written, presented, and agreed
9	Evaluation	Positives and negatives chart. "Satisfaction dartboard" Process vs. product graph "Overall feeling" chart	Participants' evaluation of workshop



Completed matrix of curriculum development and teaching and learning approaches

the direction of more learner-oriented teaching approaches, and more participatory curriculum development.

Step 4: Stakeholder analysis

This step-wise exercise started by identifying the stakeholders of this guide, and their particular interest in the development of the guide. Participants then looked at the influence and importance of those stakeholders, and finally the potential role for each stakeholder was suggested.

Step 5: Why this guide is needed

To harmonise the groups' thinking about why this guide is needed, we used a "focused conversation". This helped the group to reach consensus about what needs this guide should address. A short open discussion analysed the results, which were synthesised as follows:

1. Agroforestry is a relatively new science, "competing" with traditional fields of agriculture and forestry. It is rarely offered as a full programme so this curriculum guide is very important to keep curricula relevant and to ensure a practical orientation.
2. There is not a clear boundary between agriculture and forestry in upland areas of SE Asia. The co-existence of agriculture with forestry calls for the identification of specific knowledge, skills, and attitudes for the field of agroforestry.
3. Many institutions in the region already offer agroforestry courses, and so good experiences from different countries can be collected, shared, and harmonised.
4. There is a need to update and harmonise old and diverse curricula and to develop practically oriented curricula.

5. It is important to articulate the field contained by agroforestry and to identify and design a framework for agroforestry curricula for different ecological regions.
6. To consolidate diverse curricula and give a solid frame to this area of study which will facilitate a continuous rural development process, relevant to stakeholders.
7. To provide direction for the attainment of desired objectives in the quality control of graduates, monitoring and evaluation, and the implementation process.
8. To help stakeholders to have a common understanding of the agroforestry curriculum.

Step 6: Stakeholder perspectives on agroforestry education

Four case studies were presented towards the end of Day 1, to add various stakeholders' perspectives on agroforestry education. Speakers had been selected on the basis of their different functions and experiences. Following the presentations, a plenary discussion ensued, which raised many issues about the job and characteristics of an "agroforester" in each country, as well as the regional implications arising.

Step 7: Knowledge, skills, and attitudes which this guide should address

The first part of the workshop involved activities which were mainly short, intensive and carefully managed. The rest of the workshop adopted a more open, flexible, and iterative strategy, beginning with the question "What knowledge, skills, and attitudes should this guide address?" A list of knowledge, skills, and attitudes (KSA) was elaborated which should be addressed by the guide.

Step 8: Planning and writing the main sections of the guide

At this point the participants seemed to have developed a good understanding and consensus about what



Categorising the knowledge, skills, and attitudes required as the basis for the curriculum



Writing the curriculum guide required intensive discussion from all participants

curriculum development involves, the stakeholders for the guide, their interests and potential roles, why the guide was needed, and the KSA which the guide should focus on. The rest of the workshop was devoted to planning and writing the main sections of the guide. The facilitators proposed a structure for the guide, based on the outcome of earlier workshop sessions. This proposal was discussed in plenary to reach a consensus. The participants then individually "signed up" for one of the seven chapters of the guide according to their interest, and were asked to include and elaborate on the main learning points which should be addressed (based on KSA), the main content, suggestions for appropriate learning methods and materials (ideally based on real practical experiences), and how learning would be evaluated.

Step 9: Evaluation

The workshop evaluation was made visually using several participatory tools, and also through a short plenary discussion, which gave some feedback on the main points raised.



Participants engaged in the evaluation process

The output from the workshop

The participants wrote a detailed framework (totalling around 100 pages) for a curriculum development guide for agroforestry. Following a post-workshop peer review

and editing process, this guide has now been completed. It provides a tool for review and development of agroforestry curricula in training institutions (in particular universities and colleges), as well as for national curricula.

Reflections on the process

Although the participatory curriculum development method has been used before, notably in Vietnam, this was the first time it was used to write an actual product. A lot of discussion was required to clarify that the guide would not be a curriculum itself, but a tool for users who are developing agroforestry curricula for different institutions and different target groups. This made the stakeholder analysis complex, initially, since their interests and roles were affected by this orientation. As the participants followed the activities and discussed the results (often very intensely), this issue was resolved, and consensus reached. In planning the workshop, the facilitators had decided to allocate one day only to pre-planned activities, and then to "see what happens" according to the needs and dynamic of the group. This had a certain risk element attached, but the approach proved effective. The outcomes of the first day did seem to fuel interest and prepared the participants well for taking greater responsibility for the preparation of the guide as the workshop progressed.

There was a great cultural mixture among the participants, while professionally the group was more homogeneous, most being teaching staff in universities. An interesting fact to note was that a positive group dynamic developed very quickly among the participants during the workshop. We attribute this to earlier national and regional networking experiences among the participants. About half of them had met before in a regional activity. In the five country groups almost all participants had met before. When the workshop started, therefore, a core team already existed. This shows the strength of a networking approach, not only in the exchange of experiences, but also in breaking the ground for an effective workshop process. Another factor which probably increased the interest of participants in this workshop was that SEANAFE members had already identified curriculum development as a priority, so that this workshop responded to articulated needs. Many participants provided positive feedback on the process and the outputs during and after the workshop. Several declared their intention to use the process in their home institutions for forestry curriculum development.

This workshop was an example of how the PCD approach can be used for a specific subject – in this case agroforestry. The workshop thereby contributed to the evolution of the PCD approach itself. As mentioned above, participants were mainly limited to teachers and

researchers from academic institutions, although a small number of other stakeholders (a senior government policy maker, an NGO representative, several development project advisers, and a field-based graduate) attended. An attempt had been made during preparations for the workshop to have at least one "non-academic" stakeholder from each represented country. The universities themselves played a role in participant selection, and this may have been one reason why a wider range of stakeholders did not participate, indicating that the concept of stakeholder participation is still rather weakly developed in the academic system. A participatory approach for agroforestry curriculum development was certainly something new to many participants in this group of university teachers. It will be interesting to monitor how the participatory approach laid out in the guide is actually followed by institutions.

The stakeholder analysis carried out in the workshop reflects the perceptions of this group, which was not fully representative of all stakeholders in curriculum development for agroforestry. Through this workshop, however, participants gained understanding on how to involve stakeholders, including farmers and local resource users, in their curriculum development efforts. By the end of the workshop they showed a great degree of enthusiasm about the need for change in the way they worked. Hopefully they would later act as "champions" of stakeholder involvement in subsequent curriculum development activities – undertaken by users of the guide – since many of the individuals concerned are quite influential within the education systems of their own countries.

This workshop was to some extent an exchange of South-South experiences in curriculum development for agroforestry, building on valuable experiences of ICRAF in Africa and combining it with more recent experiences in Vietnam and other SE Asian countries. The workshop built on the experiences of individuals from five countries, and through the use of a process which encouraged group and individual learning, a tangible, regional product – a draft guide – was created. This will now be brought back to the national level for testing, adaptation, and further revision. Ultimately there should be a multiplier effect in the region, where this guide will be shared with many more institutions and curriculum developers. Since the guide advocates a participatory approach to curriculum development and was itself developed in a rather participatory way, this provides further experience, which can be shared with a wider audience. The PCD approach continues to evolve through its use in Vietnam and has attracted a high degree of interest from a range of institutions and individuals in countries throughout the SE Asia region, especially through the efforts of networks such as SEANAFE. Efforts are being made to document

and disseminate details of PCD processes in different contexts, as well as concrete outputs developed through collaborative curriculum development activities. Through regular analysis of lessons learned, efforts are now being made in the SE Asia region to develop support strategies for groups and institutions that are interested in using a participatory approach to curriculum development. Networking and information exchange through meetings and workshops at regional, national and institutional level, electronic communications and the Internet, will become increasingly important, especially by forging and strengthening linkages between like-minded organisations, institutions and programmes.

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**The guide entitled *Guiding Learning in Agroforestry*
(Eds Per Rudebjer, Peter Taylor and Romulo del
Castillo, ICRAF, 2001) is now available from
SEANAFE.**