Contents

Editorial .......................... 2
Why Gender in Wood Energy Development? .. 3
Gender Analysis Tools .. 5
Institutionalization of the Gender Approach ........ 6
Country Papers on Gender and Wood Energy ...................... 9
Discussions on Gender and Wood Energy .............. 10
RWEDP Policy Statement on Gender and Wood Energy .................. 12
Development in Gender? ........................................ 13
News & Notes ................. 16
Publications Review .... 18
Events ......................... 19
Editorial

Gender issues are not new to wood energy development. For many years they have played a role in community forestry and household energy projects. However, in the overall planning and general policy making for wood energy, they have still not been institutionalised. Gender issues refer to the role and position of women, but also to other groups like children and elderly people. Such groups often face specific problems with respect to the production and use of woodfuels.

Quite a number of RWEDP-member countries have already adopted articulate policies which address gender problems, some even specifically in the field of wood energy. However, as with other policies, implementation is not always easy. A lot still needs to be done to operationalize policy statements into effective action. RWEDP has taken up this challenge together with its members. At the Expert Consultation on “Gender and Wood Energy in Asia” in Chiang Mai, last June, policy makers of member countries reviewed relevant gender analysis tools. They also discussed how to institutionalise a gender approach in their respective organisations. In doing so, they went a few steps further than just re-iterating popular statements on gender gaps. It was probably the first time high-level policy makers from both the forestry and the energy sectors have jointly discussed gender issues. The meeting provided a conceptual framework to assist in the process of integrating gender issues into wood energy policies. One of the results was the endorsement of an operational policy statement of RWEDP on Gender and Wood Energy.

The meeting covered the grounds for training of staff from the 2 named sectors in gender and wood energy. Special training workshops will be organised by RWEDP in 1995 and 1996, and training modules will be developed, as advised by the Regional Advisory Committee meeting last January, for integration into further RWEDP training activities.

At the meeting in Chiang Mai I was asked by one of the delegates why donor countries these days put so much emphasis on gender, which is sometimes felt as a donor pressure. My answer was the following: I like to believe that the international scientific community is constantly studying problems of development, i.e. how policies and interventions can more effectively benefit target groups. Worldwide, academics often link to NGO’s, and they work in both developed and developing countries. Usually, donors are relatively quick to pick up the findings and signals of this international community, as donor countries happen to have the means to do so. Then, donors translate them into programmes. Through this route, it may seem to the international community, as donor countries happen to have the means to do so. Then, donors translate them into programmes. Through this route, it may seem as if gender issues, or for that matter environmental management, energy conservation, and many other issues, originate from donors, but actually their origin lies in the developing countries as much as in the developed countries.

None of us in Chiang Mai pretended there will be one common solution to problems of gender and wood energy in different cultures and societies. However, we did agree that gender issues need our further attention and professional efforts for the benefit of those groups most in need.

Front page: Visit to a Hill Tribe Village during the gender meeting

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The opinions expressed in this publication are those of the authors alone and do not imply any opinion whatsoever on the part of the FAO.
Why Gender in Wood Energy Development?

Margaret Skutsch

Women are heavily involved in wood energy, of that there can be no doubt. In most countries, at least in the rural areas, it is primarily women who are responsible for gathering firewood or crop residues for household fuel use, and certainly it is they who do the cooking. This fact is known to all in the business of wood energy planning. So why do we need special training on how to take gender into consideration in wood energy planning?

The truth is that the majority of wood energy planners (and the overwhelming majority of them are men) rarely really sit down with the women for whom they are planning and discuss the problems from their angle. Too often, the assumption is made that, for example, a new type of stove that has been shown to use less firewood will readily be adopted by women because it saves them time in fuel gathering. In reality, women have many criteria in assessing the utility of stoves, of which fuel economy may be only one. These criteria are not universal and may need to be carefully investigated in the early stages of planning, if the stove project is to be a success.

An even more common assumption is that women will be pleased to plant some trees because this will supply them with a ready source of firewood. Whether this is the case or not may in fact depend on whether there is any land available where the women feel confident that their trees will be safe, on whether tree growing is culturally considered to be a suitable activity for women, on what type of trees are being offered, and of course on whether they have any time at the planting season to take on this extra work. Very many projects have run into difficulties when women ‘unaccountably’ did not appear very enthusiastic about this sort of intervention.

Less obvious, but even more common, are cases where wood energy related projects which by their nature are not intended to specifically benefit women, turn out to have inadvertent negative effects on women. Examples are employment generation schemes based on forest products use (lacquer making, uppage etc). These can end up quite unintentionally putting women out of work by displacing traditional craft centres with modernised workshops—filled with men, who for a variety of often non-explicit cultural and training reasons ‘fit’, or are thought to fit, with the new machinery and workshop locations better than women do. Usually in such cases the problem is simply that no thought was ever given in the planning to the fact the project might have an impact on women, which is different from the impact it has on men. A little forethought might have prevented some serious problems.

Gender analysis is the name given to the set of tools, or planning analytic procedures, which have been developed to help planners consciously and systematically take gender differences into account. Ideally, they should be applied to all projects, not just projects specially intended to benefit women, if the kinds of problems illustrated above are to be avoided. The term ‘gender’ is used in preference to ‘women’ because gender analysis is not just about women’s needs, preferences and constraints, but about differences between women and men in these regards.

Gender analytic tools (and there are a large number of different ones to choose from) generally start by looking at who does what—task distribution—in the village or community. In most communities in the region there are quite strictly determined patterns of responsibility, and besides looking after the household matters, women frequently spend many hours in agriculture on the family farm, or as labourers, or in other productive work. In addition they often have community obligations to attend to. Men are perhaps more heavily involved in productive work, but rarely have time-consuming duties at home, and frequently have more leisure time. Understanding working patterns is important when planning projects since these almost always require participation of men and women in various activities.

It is not only working times and responsibilities that differ between men and women. There are also differences in the access that men and women have to different resources—forest, fields, cattle (all potential energy sources), money, credit, etc. and to the level of control they have over them. Women frequently have access to fields where the crops grow but often have no control or decision making power over what is grown there, how much is sold, and how the waste is used, for example. Access and control may be vital to the success of a project and therefore understanding who has these rights and who does not can be crucial. The point is that the situation with regards to these issues (as in the pattern of work responsibility) varies from community to community, and each case needs to be carefully studied to determine the local conditions. One should be wary of generalisations on these matters. Even within one country, districts and even villages can have different cultural customs and different traditions of authority over resources.

RWEDP is developing a training package in which gender analytic tools are presented and practised by using case studies, all of which are based on real examples of situations and projects within the region. The course starts with a general introduction in which participants exchange ideas about the relationship of women and of men to wood energy, describing the situation as they know it. For some people, the purpose of gender analysis is to highlight the fact that women in many communities are essentially subjugated to their menfolk, working longer hours for less return and

Dr. Margaret M. Skutsch is a senior lecturer with the Technology and Development Group at the University of Twente, the Netherlands

Vol.10 No.2, June 1995 page 3
with less control over the means of production. For others, the purpose is to improve project efficiency by designing it to fit more closely to the reality of the field situation. Both are valid starting points, and it is useful to begin the course by comparing and discussing the appropriateness of these different aims. A film prepared by the FAO Forests Trees and People programme which illustrates the application of gender analysis to community forestry projects in the region helps to orient course participants as to the nature and purpose of these tools.

Then a variety of gender analytic tools are presented. These are of two types. The first are those that are intended as ‘desk’ tools, for a project officer, for example, to use in assessing the probable benefit of a proposed project. They are matrices and checklists which help the officer make sure that important gender considerations are not forgotten, and give an early warning if gender problems are likely to be encountered. These tools can also be used by project designers as regular checks within the planning process. They are intended to process data in a standardised way, and can be compared to Environmental Impact Matrices, which are commonly and routinely used to ensure that any potential environmental damage is identified early in project planning.

The second group of tools are those intended as ‘field’ tools, in other words for gathering raw data in the field. These can help project planners to gather the kind of data which will allow the differences in gender to become apparent. Many of these latter tools are closely related to Participatory Rural Appraisal tools of the type publicised in the FAO programme Forests, Trees and People. They include methods such as preparation of ‘seasonal calendars’, differentiated or disaggregated by gender, and ‘resource maps’ in which gender specific resource access becomes clear. They also include methods for running discussions or focus groups. The kind of data gathered through use of these field tools will provide input for analysis using the first group of analytical tools.

In the final part of the course, attention is turned to how a ‘gender sensitive’ approach, using both types of tools, can be integrated into the normal working procedures of typical wood energy planning offices, and how resistance to it (perhaps itself due to fears about the real purpose of gender analysis) might be gradually overcome.

The course is being designed as a set of modules, each complete in itself, with trainers’ notes, lecture material, exercises, case studies and reading material. A module can take from half a day to three days, depending on the complexity of the material. This modular design means that courses can be put together in a very flexible way, according to the particular needs and time available in a given situation. The materials are in preparation and are being tested, but should be available from RWEDP in the course of 1996. It is planned to run several courses in the near future.
Gender Analysis Tools

Govind Kelkar

Gender analysis begins with the recognition that while sex is a biological category, gender is a social and cultural construction. Gender is based on the roles that are socially accepted for men and women, though differently organized in different societies. Gender relations take account of the central issues of power and hierarchy within the family and society.

The accepted gender roles and relations give rise to a number of persistent gender gaps—gaps in wages, housing, and land titles, credit, and so on. Women are concentrated in a few economic sectors and, relative to men, occupy the low status, low paying jobs with generally poorer working conditions, little prospects of occupational mobility and high incidence of sexual harassment. Women also work longer hours than men.

Most governments have made some progress in providing for the practical gender needs of women—through basic needs and poverty alleviation programs to provide food, shelter and the survival of families. But, for instance, in allocating homestead or agricultural land to the landless, the landlessness of women has not been addressed, consequently, there has been little change in the types of gender relations within Asian families.

That persistent gaps can be closed can be seen from the experiences of indigenous communities, from once socialist countries like China and Vietnam and from the advanced capitalist countries, like Norway and Sweden. In all of these there has been both a participation of men in housework and of women in work outside the home.

What gender analysis changes in planning is its assumption about the micro-economic unit of society—the family or household. It introduces the recognition of different interests, different needs and different rights at the household level, all of which tend to affect household functioning and its response to technological and other development. Why there have been such differing responses to the improved cookstoves programme cannot be understood without gender analysis.

Gender analysis tools enable planners and development practitioners to take account of gender factors in the design of policy and projects. These tools are:

1. The sexual/gender division of labour, dealing basically with how work is organized and who does what. This can change from community to community and over time within a community.

2. The types of work done by women, men and children. Both of these analyses are necessary in order to ensure that the participation of the genders is ensured in various project activities.

3. Access to and control over resources. Resources can be economic (land, equipment, tools), political (representation in organizations and committees), time, and access to education and training. There can be divergence between access and control. In China, India, Vietnam and many of the countries of Asia women play an increasingly important role in agriculture. But though women have access to land for work, they lack ownership rights and control over it. Furthermore, benefits can also vary from person to person within a family. It is not need, but family and social position which affect the distribution of benefits within a household.

4. Influencing factors. These are the macro-economic and political factors that have an effect on gender relations, for example, male migration, or the growth of women-based industrialization can both bring about changes in gender relations.

5. Condition and position. The former refers to women’s material state—their immediate sphere of experience, and the latter refers to the relative social and economic standing of women and men, i.e. to gender relations. Women’s condition, for instance, may improve without there being a change in the gender relations of women and men. This distinction is carried forward in the next analytical tool.

6. Practical needs and strategic interests. The first relates to the condition of women (and men), while the second relates to the possibility of transforming the existing gender relations in the direction of greater equity and democracy.

Besides the above analytical tools, of special interest to policy planners and project managers are the possible roles of women and men in the development of technology and sustainable management systems. It is now realized that sustainable management systems in, for instance, forestry are only possible...
Institutionalization of the Gender Approach

**Uraivan Tan-Kim-Yong**

If a gender approach is to be adopted in energy planning, this does not mean setting up a few special projects to try to benefit women. It means that all projects should be viewed through ‘the gender specs’, similar to the way they are viewed in an environmental perspective. It means that gender analytic tools and procedures need to be integrated into the regular pattern of work as carried out by the organization. Thus, the attention given to gender (or to ‘women’) is not a special but a normal planning task institutionalized into the routine of office activity. Just as it is increasingly common these days to carry out an environmental impact analysis of any proposed project, so it should be standard practice to carry out a gender analysis in addition. While this does of course entail an increase in workload to the planners concerned, the chances are that the effectiveness of wood energy projects will be greatly increased if proper attention is given to gender matters. Therefore in the long run, time (and money) will be saved.

However, as we all know bureaucracies are often slow or even unwilling to make changes in procedures and a number of deliberate steps must be taken to prepare the way for the adoption of the gender approach.

**Visible support from the top**

In order to ensure that staff do respond and adopt gender analytic procedures, it is essential that a policy directive is promulgated which is clear and definite about what the policy is. Such a policy statement should state not only the organization’s policy on gender in general, but also on the strategy, i.e. how it intends to ensure that a gender sensitive approach is followed. The policy statement may be rather specific about the procedures which it expects staff to follow in this regard. It should also indicate the commitment of policy to the gender issue by indicating that staff will be evaluated and promoted on the basis of their implementation of the gender approach (as well as on other criteria). The policy directive should be distributed and discussed throughout the organization.

**Gender analytical procedures**

A standard analytical and reporting approach, such as the Harvard Framework (Overholt et al., 1985) or a standard checklist, can be used; alternatively, an adaptation of such an approach, designed to fit the specialized work of the organization concerned can be made. Most agencies, such as energy planning ministries, will possibly find it better to create their own standard approach following general guidelines of the Harvard sort. The manual should cover the gender component in all aspects of planning, including project formulation, appraisal, implementation, monitoring and evaluation. Whatever methods are used must be clearly defined and their use explained in a short manual which should be distributed to all departments, together with the policy directive on gender. Obviously such methods should be subject to criticism and revision in time as experience in using them develops. Where staff experience difficulty in applying the stated methods, it should be clear to them to whom they should turn to for advice, and to whom they can express suggestions regarding the appropriateness of the methods.

**Appropriate structure and location for gender expertise**

A basic question the organization must ask itself is: can we cope with the gender approach by training existing staff or do we need some additional specialised staff?

Let it first be said that training of the existing staff is essential whether or not new specialized staff are recruited. Failure to train existing staff will result in misunderstanding, resentment and outright rejection of work done by the new specialized staff. However, the increased workload incurred by the gender analytical procedures may justify the hiring of additional specialized staff in the case of large organizations. There may be a minimum requirement of a (new) gender specialist to organize the training for staff internally (see below).

Assuming that new staff need to be recruited, the question then becomes: should a special gender unit be set up.
within the organization, or should larger units within the organization have a gender specialist attached directly to them? There are advantages and disadvantages to both models. There is a danger that a special, separate gender unit may generate conflict and be marginalized within the organization; on the other hand, if it is well managed, it might have sufficient resources to build up a good documentation centre and form a focal point for extending the gender debate within the organization. In comparison, the distribution of a handful of gender experts over the whole organisation would probably lead to fewer situations of conflict, but also to less visibility and accessibility of gender matters. Much depends on the existing culture of the organization concerned and its normal working procedures: if it is quite normal that inter-departmental committees exist and if they are effective in other areas, then a ‘spread-out’ model of gender expertise might be the most effective. In a more ‘top-down’ type of organization in which directives are generally issued from above without much discussion, then perhaps a separate gender unit is more appropriate. In smaller organizations such as NGOs the matter does not really arise as internal communication is generally much easier.

Even if the budget does not extend to the employment of additional ‘gender’ staff it is wise in a technical team to ensure that some social scientists are present. If they are already in place, then it may be possible to place the main responsibility for the implementation of the gender approach in their job descriptions (but, as noted already, do not neglect to train the technical team members too: they will not accept advice from the social scientists if they do not see the point of it or understand it). It is not essential that such staff be female, but as there are far more female graduates in social sciences than in technical fields, there is a good chance that they will be. If the ‘gender specialist’ is indeed a woman, it is important that a man on the staff (technical or non-technical) should be made co-responsible for gender, since it is important that the whole gender issue is not seen just as ‘women’s business’. The tendency to revert to the notion that gender is about women, and therefore that only women need be concerned about it, is one that has constantly to be combatted in organizations. If the gender issue is seen as such by the majority of (male) staff members, there is a large probability that it will be marginalized.

On-going training programme

Large organizations such as international donor agencies may have permanent gender experts employed solely to train their own staff. In smaller organizations this is of course not possible, and the choice is to hire temporary staff to carry out training intermittently, or to allocate the training responsibility to an existing member of staff in addition to his/her existing tasks. It is however important that all staff at policy and implementation levels receive some training. Neither is training a ‘one-off’ exercise: it may be necessary to repeat training sessions or design more advanced ones for some or all staff as the need arises.

Training should relate as directly as possible to the work of the staff concerned. It should therefore be based on

Gender roles in hill tribes were studied at a field trip during the meeting in Chiang Mai
the concrete gender procedures adopted by the organization, and illustrated with exercises and discussion on projects or programmes which the organization is actually involved in. Early preparation of an in-house manual on standard procedures to be used will obviously assist in focusing training on the reality of staff work. However, experience shows that gender training, even when based on procedural matters and how to carry out routine analytical tasks, often overflows into much more general discussion and learning as regards gender in society. Since gender training is in essence not just a matter of skills, but also of attitude, it is very important that sufficient time is allowed in the training sessions for discussion and critique.

The ideal group size for training is 12-15 persons but training programmes can vary from half a day to two weeks in length. It is possible to train each unit within the organization separately - which has the advantage that training case studies can be used which are directly relevant to the work of that unit - but mixing staff from different units is also interesting. Whether staff of greatly differing rank are included in the same workshops will depend on the level of communication that is to be expected if this is done. It is essential that all participants in the training workshops feel able to express their opinions, and if the presence of senior staff suppresses the ability of junior staff to speak out it is more sensible to provide training by level.

The ideal trainers would be a team of one man and one woman; this combination has been shown time and time again to be very fruitful, indicating to participants that gender is not just about women. Although the basic training materials may be standard, care should be taken that the case studies or examples used are as close to the normal work experience of the participants as possible. Case studies which the participants have to analyze themselves, using the standard procedures adopted by the organization, are without question the most effective way of learning.

From the experiences of major donor organizations with gender training for their own staff, fourteen important lessons can be drawn, which are briefly summarized below:

1. There must be an explicit mandate for gender training from the top of the organization. This mandate must be clearly communicated to all departments within the organization. It must be clear that gender training is for the entire organization and not only for the gender office(r). A broad range of people has to be trained to ensure that gender issues become a normal part of the operations. Directors and administrators must attend the training: they need to learn the language of gender issues and, at the same time, make a statement by their presence that gender training is indeed important to the organization as a whole.

2. Training can serve as an effective mechanism to integrate gender perspectives and gender analysis into the operations of an organization. However, training is a process and requires sufficient time to achieve full impacts.

3. Gender training must be managed and backstopped by strong, qualified professionals within the organization.

4. Someone from within the organization needs to have full-time responsibility for training (Training Coordinator).

5. Training is more effective and efficient when the same team or at least a core group of the same team conducts the training over the initial training period during which gender analysis is being introduced to the organization.

6. Training of trainers is a critical element for achieving long-term integration of gender issues and analysis in an organization.

7. Every training course needs preparation time.

8. Training must be financed, and costs for a training programme must be comprehensive.

9. Trainers require adequate resources and support personnel.

10. The case method approach is particularly well-suited to training in gender analysis, because it avoids lecturing to participants, actively engages participants in learning as individuals and in collective groups and provides realistic examples in relation to gender analysis in development efforts.

11. It may not be necessary to develop new case studies in order to begin training in gender analysis. Existing gender case studies can be used in initial training activities.

12. Selection of participants is crucial to a successful training course or programme.

13. It is essential to provide participants with an analytical framework for gender issues and analysis. This framework is not a checklist or a recipe, but a tool that enables critical diagnosis and analysis leading to better project design and implementation.

14. There is no single training strategy that will fit all organizations: each organization needs to diagnose the internal situation in order to design an effective training strategy that will successfully assist in the process of integrating gender analysis within the organization, and overcoming the resistance towards gender issues.

Other steps

Whether for training or for carrying out specialized tasks, it is important that the organization maintains links with a number of gender consultants who can be called upon occasionally in an individual capacity or via other institutions such as universities.

In addition, it would be wise to review the standard guidelines used by the organization both for hiring consultants and for bringing in regular staff. Most guidelines are biased in favour of male candidates; they may need to be rewritten.

If possible, a special fund or budget should be established to cover gender related activities such as small seminars, visits of specialists, sending staff...
to occasional training outside the organization, purchase of books etc.

Network with other organizations that are attempting to bring in a gender-sensitive approach to planning. Make sure that there are lines of communication to important gender groups such as the Ministry of Women’s Affairs, major women’s NGOs and other technical ministries.

Monitor and evaluate the progress made in implementing a gender sensitive planning approach within the organization and be prepared to make adaptations when necessary.

Country Papers on Gender and Wood Energy

Harry Oosterveen

During the Gender and Wood Energy meeting, organized by RWEDP in Chiang Mai from 28 to 30 June, the representatives of each country gave a statement on the situation in their own country, and many of them prepared a paper on this issue. Based on these, this paper will give an overview of the gender situation in the region, with a particular focus on wood energy related issues. It should be noted that these papers were often written from the perspective of one particular sector (forestry/energy) and may not give a complete picture of each country.

In all countries it appears that inequalities in position between men and women have been recognized, and a specialized ministry or other organization has been established, for example a Ministry of Women and Children (Bangladesh), Ministry of Women’s Role (Indonesia), National Commission on the Role of Filipino Women, etc. Depending on the country, the main activities of these organizations are:

- Formulation of policies and laws that provide a legal framework for equal treatment of men and women (e.g. same salaries for same work) and that promote special attention to women’s issues and the involvement of women in all kinds of activities;
- Implementation of programmes that specifically address women’s issues, such as reproductive health, access to water, fuel and sanitation, but also more strategic needs such as education for women, addressing gender issues in the workplace, and supporting employment opportunities for women.

Still, the activities of these organizations vary substantially from country to country, which is in line with the different views on how women can best be helped: in some cases the focus is on programmes to address the practical needs of women, in which women are seen as passive beneficiaries, whereas in other cases the focus is more on creating opportunities or removing barriers for women in their development; hence, women are seen as an active participant in their development. Also, within the same country you may find these different attitudes in different organizations.

Even though, “officially” and under the law there are no inequalities between men and women, in practice the situation is often different. There are many differences, in particular in the type of work that is done, in access to education, health care, employment, credit, etc. These vary from country to country, and within countries there are often great differences between the urban and rural settings. It was also mentioned that the situation is changing, and this also explains differences within a country: changing a policy can be done relatively fast, but to change the practice takes more time, and in the cities these changes take place faster than in the rural areas.

The extent to which energy/forestry departments were involved in gender issues, or the level of cooperation with specific gender organizations, was often not clear from the papers. The importance of women was stressed, as they are the ones who usually deal with the collection and use of wood energy, and they were mentioned as the main beneficiaries from improved cook stoves. Some departments went further and promoted a participatory approach in the relevant activities. An institutionalized gender analysis approach however was mentioned only by the Nepalese Water and Energy Commission Secretariat (WECs).

With support from the Canadian International Development Agency (CIDA), WECs conducted a seminar and workshop in 1991, focusing both on gender issues in the use and management of energy resources, and on a strategy for the effective participation of women. A WID (Women In Development) section within the WECs was created in 1993, and has developed guidelines for the incorporation of gender issues into the energy sector. As these guidelines have not been implemented yet, no information is available on their effectiveness.

In general, the evidence from the papers suggests that the linkages between institutions set up to address gender issues and institutions dealing with wood energy issues are not very well developed. Thus, close cooperation between these institutions is rare. Moreover, there are very few examples of a gender analysis approach being adopted within the wood energy institutes themselves and the capacity for such adoption still appears to be very limited.

References:

Overholt, Catherine A., Kathleen Cloud, Mary B. Anderson, and James E. Austin, "Gender Analysis Framework" in Gender Analysis in Development Planning, Kumarian Press, 1991
Discussions on Gender and Wood Energy

D. Nathan

During the Regional Expert Consultation on Gender and Wood Energy in Asia the participants actively engaged themselves in the programme, and many points made in the lectures and presentations were discussed by them at length. Given the fact that most participants were attending a gender consultation (or workshop) for the first time, it was inevitable that a lot of time was taken up in discussing basic concepts of gender analysis, rather than the specific application of gender analysis to woodfuel-related issues. What follows is a brief account of the discussions, drawing out the salient points made.

While there was almost no reference to “good wives and mothers” it was argued by some that there was a physical or biological basis to gender differences: men can do hard work, while women can do delicate work. The discussion showed that the idea of what is hard work is itself a matter of definition on the basis of the values of a society. Is ploughing harder work than transplanting? Furthermore, in Africa for example, women are not less strong than men. Finally, in today’s world, with machines taking over much of the physical aspect of labour, it is not physical strength but skill that is important.

In response to the statements on existing gender gaps (in wages and earnings, in positions of power and influence, etc.) some questioned whether it was at all necessary to accept the closing of gender gaps as a development objective. In reply it was stated that if other gaps, e.g. relating to race or caste, were not acceptable in development, then gender gaps also should not be acceptable.

But will reducing gaps erode the traditional roles of women and men, and undermine the family? Democratic functioning, it was pointed out, would strengthen and not weaken the family as an institution. It was also pointed out that there are variations in gender roles across cultures and that these gender roles and cultures themselves were also not static, but constantly changing.

Above all, it was pointed out that gender analysis is not only relevant for those who advocate social equality, but also for those planners and development practitioners solely concerned with the success of their policies and development efforts.

In the course of the consultation, the varied experiences with improved, more fuel-efficient cookstoves came up for discussion. It was clear that in, say, China these stoves were sold commercially on the market, and were quite well accepted as an innovation, whereas in, say, India and Nepal, there were numerous subsidy schemes for the distribution of these stoves and yet their acceptance was not very substantial. The reason lay not only in the inadequacy of design, but more so in the fact that gender roles in India and Nepal did not stress the economizing of women’s labour in fetching fuel and in cooking. These were non-monetized costs, whereas a stove entailed a monetized cost. The improved stoves were widely accepted where, as in China, women were substantially involved in monetized production.

The differences in gender roles related to the acceptance or nonacceptance of improved stoves were also revealed in the discussion around the field visit. In the field area, the Karen more readily accepted the fuel-efficient improved stoves than the Hmong. The new stoves needed constant tending, which the Hmong women working outside the house were loathe to do, while for the Karen the improved stoves contributed to a better quality of their main cash crop, tea.

In discussing the planning approaches of the different government departments, those of forestry and energy, represented in the consultation, it became clear that there were major differences in the experiences of the two with regard to gender issues.

Across Asia there has been a shift, though not to the same extent in every country, to participatory forms of forest management. In Nepal all the income from community forestry goes to the users. There are rules and regulations about land use in the forests and the Department of Forestry provides technical help.

In community forestry projects it has been realized that if communities and families are taken as undifferentiated units, then projects are likely to fail. In the Philippines, for example, women were initially not part of the training. However, later it was seen that if women were trained and got the credit, then the project would work better. Without taking account of the existing division of labour in the household, a project could not be efficiently executed.

It was also pointed out that as a development objective it was also necessary to take measures to change the division of labour and control of resources in the household in a more fair and democratic direction.

Discussions revealed that there was little realization of gender issues within the region’s departments of energy. While there was a disaggregation of data on energy sources into non-monetized and monetized fuels, the social factors underlying such differences in sources and uses of fuel were not brought out. In fact, the area of non-monetized fuels tended to be ignored by energy departments. It was mainly in forestry departments, where there were concerns with the sustainability of woodfuel extraction, that the non-monetized fuel sector was looked into.

Dr D. Nathan is a social scientist and worked for RWEDP as an independant consultant during the Expert Consultation on Gender and Wood Energy.
Would incorporation of gender issues increase costs and reduce efficiency in a project? While some argued that it would increase costs, others pointed out that with people’s participation, in which the roles of both women and men were to be taken into account, the process of project implementation might become longer and, thus, seem to increase costs. But if women were not consulted on a project, it might fail altogether. Failure is more expensive than a longer process involving consultation with women and men.

Some pointed out that education was necessary for effective participation. But others argued that participation should not wait until the persons had been educated. The right to vote or to govern oneself, far more serious rights, were not made contingent upon educational attainments. Education is always an objective, but cannot be made a condition.

Given that gender analysis is essential to improving the working of a development programme, how can a concern with gender issues be institutionalized? It was argued that political support was needed at the national level. One participant said that political will to take up gender issues and improve the condition of women was necessary.

At a ministry or government department level, policy statements which addresses gender issues in the wood energy sectors were thought to be necessary.

Discussion on the ways of formulating and implementing gender policies led to recommendations, unanimously approved by the participants. The first was that to administer and monitor the implementation of gender policies there should be institutions with responsibility for gender matters at all levels, from planning down. Further, gender-based responsibilities should also be written into the duties and terms of reference of different staff. It was agreed that there should be a gender sensitization of all staff. This could begin by offering them gender analysis training. Along with the above, it was also felt that it was necessary to have greater involvement of women at all levels, including the higher positions. In the discussion it was stressed that gender sensitization of all staff and the greater involvement of women at all levels were not alternative suggestions, but both needed to be implemented.

It was suggested that RWEDP could prepare specific materials on the gender issue in wood energy in each country or sub-region. The participants felt that FAO and the RWEDP could take the lead in organizing trainers’ training programmes in the various countries of the region. The RWEDP staff pointed out that sub-regional workshops for training project staff in gender analysis were being planned, and that modules that could be used for gender analysis training both within RWEDP-related departments and other institutions would also be prepared.

Discussion during the meeting
During the Regional Expert Consultation on ‘Gender and Wood Energy in Asia’, the following statements were discussed and endorsed by the participants.

Observations

The burden of providing traditional energy supplies for domestic use is commonly the responsibility of women. General trends towards higher woodfuel prices, lower woodfuel quality and reduced access to woodfuels increases their burden. Interventions in the energy sector such as landuse and fuel price reform often have disproportionately negative implications for women, especially those of the lower income groups. They have as yet insufficiently benefitted from the potential that wood energy development offers. In many countries of Asia the concerns of women are underrepresented in shaping wood energy policies and strategies.

It is widely recognised that wood energy plays a part in the reproductive tasks that most women carry out, that is to say in the maintenance of the household. The development of cheap (or less time-consuming) and sustainable access to sources of wood energy and of woodfuel efficient cooking and heating devices will be of direct benefit to women in this role. But women increasingly also have energy needs in their productive, bread-winning tasks. Many women today depend on wood or other biomass energy for independent commercial activities such as food preparation for sale, or are employed in establishments which operate on a wood fuel base. Others are economically dependent on trading in fuelwood and charcoal. Moreover, where firewood is being sustainably produced either in woodlots or by planned offtake and management of natural forests by local communities, women very certainly are involved. The need to understand and to relate to women’s needs in regard to these matters is thus of central importance in wood energy planning at all levels.

Policy

1. While appreciating that special projects specifically targeted at women can be beneficial in certain instances, RWEDP maintains that women’s interests in the wood energy field can best be served by adopting a gender approach across all its activities. In this, women’s role in wood energy supply and use is not considered separately but viewed in relation to men’s (and children’s) roles. The crucial factors to consider here are, who does what, and why; and who has access to and control over the sources of wood energy. This type of analysis needs to be applied both to the existing situation and to the implications of any planned wood energy interventions. Such types of gender analysis will provide the basis for the planning of ameliorative measures where necessary.

2. Many wood energy projects are intended to be of immediate value to women in assisting them to meet their day-to-day practical needs. There is, however, potential for wood energy projects to work towards assisting in meeting the strategic needs of women also, particularly with regard to establishing women’s rights in the sharing of both responsibilities and benefits from community land resource management programmes related to firewood, and RWEDP will seek to support these rights.

3. RWEDP aims to stimulate the appreciation of gender issues in wood energy planning among all energy planners. It will support these aims through the development of training materials to cover both awareness raising on the need for gender analysis in energy planning, and on practical, operational tools for carrying out gender analysis and gender sensitive planning. Thus, the emphasis is not on special women’s projects, but on providing general procedures for scanning and improving all wood energy projects, programmes and policies. RWEDP will endeavour to promote the use of these tools in wood energy planning organisations throughout the region by ensuring that suitable training is offered both at policy level and for implementer level, and will provide materials that can be used at national level for training field level workers. Furthermore, the training materials will be packaged in such a way that they will be accessible and usable by any organisation within the region which wishes to initiate gender and wood energy training itself.

4. RWEDP will also promote the active participation of women in wood energy planning at all levels, both by preparing training materials which demonstrate in a highly practical manner how women at village level can be approached and encouraged, and what the benefits of this are likely to be; and by encouraging discussion about the need for a woman’s viewpoint at district and national level planning. RWEDP will support attempts of wood energy planning organisations and relevant ministries to institutionalize gender issues in their work.

How Women React: Forestry for Conservation in China

Between 1949 and 1978, China’s forested area was expanded from 5 to 12.7 percent of total land area. Most of the work was done by rural communes, and much of it by women. In 1954, for example, women planted a shelter belt along the entire coastline of Kwangtung Province. In this area, men fish and women raise the crops. Women commune members led others in forming tree-planting groups in much of it by women. In 1954, for example, women planted a shelter belt along the entire coastline of Kwangtung Province. In this area, men fish and women raise the crops. Women commune members led others in forming tree-planting groups in

From: Restoring the Balance, Women and Forest Resources, FAO/SIDA, 1988
Gender is not a new topic in the field of wood energy and forest resource management. During the previous phases of RWEDP, the theme regularly showed up in publications, although the wording may have been different. In earlier documents, the theme was women, whereas in more recent documentation this has shifted towards gender, indicating the wider context of social and cultural relations that determine women’s (and men’s) position. The following are excerpts from documents, published by RWEDP, which illustrate the programme’s concern with gender issues.

The role of women

“Rural women in Asia often play an important role in the collection of fuelwood, fodder and water. They are the primary users of forest products, which are not only used for domestic consumption but also for commercial purposes to obtain additional family income.” (Borg, 1989)

“It is very important to recognize the role of women in small scale multipurpose tree production systems in mountainous regions. Women carry out most of the work connected with agriculture, horticulture and animal husbandry. Most of the fuelwood and fodder collection is done by women. The women climb the trees to lop the branches for fodder and fuelwood collection. Felling of trees and their conversion into timber and/or fuelwood is, however, done by men. The women in these villages spend about 2–4 hours per day for fodder and fuelwood collection except during sowing and harvesting seasons of agricultural crops when agricutural operations keep them fully occupied. The women have to work for more time to collect and store fuelwood for such periods and also for rainy and winter seasons when daily collection of fuelwood is not possible.” (Singh, 1991)

The neglect of women’s role has been explained in different ways:

“The reasons for the neglect of women in decision making and in managing multipurpose tree production systems are many. Some of the important ones are, the weak position of women in the male-dominated society in India, legal position regarding ownership of land and lack of education.” (Singh, 1991)

“The explanation for the neglect of forestry and women is obvious. Development has concerned itself with producing surplus for the market economy, and because natural forests are used by the poor and tribals for their consumption needs, and many women remain involved in the informal rather than formal economy.”

Implications for development

The time has come to help restore the precarious balance between women and forest resources. While this can often be done by simple changes to development projects, it also requires high-level policy support. It is increasingly obvious that the participation of women in forestry projects is crucial to their success. Foresters and planners must consider women as well as men in their plans for forestry development.

From: Restoring the Balance, Women and Forest Resources, FAO/SIDA, 1988
Who’s interest?

“Even when the problems of the rural poor have attracted Government attention, the family approach has been adopted under the assumption that the welfare of the head of the family, who is assumed to be a male, will percolate down to women and children. Identification of the interest of the family with its male members exhibits a gender bias that has no empirical foundation.” (Saxena, 1989)

The publications show that the interests of male and female members can even be quite different:

“The women are thus more concerned about the growing and management of multipurpose trees to meet the domestic requirements and also about the efficient utilisation of products from such trees. The decision making with regard to growing and managing trees is, however, the domain of the men in the male dominated social structure in these villages. At times, the interests and opinions of the man and woman in the household may be divergent, but the decision of the man prevails. As the man’s chief role in agriculture is ploughing, the trees along fields are regarded as an interference in agricultural operations and are consequently not encouraged, despite the requests of the women in the house for retention of such trees to augment fodder and fuelwood supplies. The decision to sell the trees for monetary returns is also taken by the man even though the woman of the house may be interested in retaining such trees. Some instances were quoted during the survey of these villages, of the hardships to which the women were put in collecting fodder and fuelwood after trees in the ownership of the household had been sold.” (Singh, 1991)

“Usually women make different use of forest products than men and therefore their priorities can conflict. The differences in priorities between men and women justify the need for specifically involving women in social forestry projects, not only for reasons of equity, but also because of their collection, use and distribution of fuelwood, their role in the management of fuelwood resources (although less frequently recognized) and their role in income-generating activities.” (Borg, 1989)

Stove programmes

“Women’s involvement is important not only in the collection of fuelwood but also in its efficient utilisation. Adoption and use of improved stoves will not be possible without the active involvement of the women (Hoskins 1981). The energy efficient earthen stoves in Kangra district of Himachal Pradesh became popular in areas where the women were trained to make such stoves and to introduce this technology to other women.” (Singh, 1991)

This point was also confirmed at an expert consultation on improved cookstove development (RWEDP, 1991). Among the conclusions were:

• More women need to be trained/appointed to positions of responsibility in R&D programmes.

• Women should play a much greater role in both policy formulation and programme management.

Most of the documents cited in this article were published about 5 years ago. Hence, gender is not really a new topic, but one that has already received considerable attention for some time. Thus the question arises: To what extent has women’s position changed in this time?

References:


How Women React: The Chipko Movement in India

Chipko is a Hindi word meaning “to hug”. The Chipko movement was named after its members who hugged trees to prevent them being felled by foresters. Although the first Chipko workers were men and women, at odds with official forestry policies and mainly concerned with local employment, more and more women joined the movement when they realized that the recurring floods and landslides from which they were suffering were caused by deforestation. When the Forest Department announced an auction of 2,500 trees in the Reni Forest overlooking the Alaknanda River, which had already flooded disastrously, one woman-Gaura Devi-organized the women of her village to protect the trees from the company that won the auction. They physically prevented the tree felling, and thus forced the Uttar Pradesh government to investigate. Two years later, the government placed a 10-year ban on all tree felling in the area. After that, women prevented felling in many other forests all along the Himalayas. They have also set up cooperatives to guard local forests, and to organize fodder production at rates that will not harm the trees. Within the Chipko movement, women have joined in land rotation schemes for fodder collection, helped replant degraded land, and established and run nurseries stocked with species they select.

From: Restoring the Balance, Women and Forest Resources, FAO/SIDA, 1988
A deepening crisis

Events have conspired to deprive women of the relatively easy access they have had to tree products. The problem is not simply environmental: it also reflects the orientation of current development programmes towards cash economies, and widespread failures to understand the real nature of household economies. At the same time, the introduction of new technologies can undermine many of the small-scale forest industries that provide women with at least some cash income.

four factors that deprive women of the forest resources they need:

1. resource depletion
2. changing family structures
3. the introduction of new technologies
4. development projects that fail to target women

The ways in which women traditionally use forest resources are becoming increasingly unviable. There are four main reasons for this, each of which has a cumulative, negative impact on the lifestyle of rural women.

1. In many areas, traditionally useful multi-purpose tree species are becoming increasingly scarce as desertification and deforestation take their toll. Women therefore have longer to walk to collect fuelwood and other forest products, and this adds further hours to their already over-long working days.

2. As more and more men find employment in the towns and cities, women are forced to carry out jobs previously done by men. This leaves little time for the lengthy business of collecting and processing forest products, however important they may be to the family economy.

3. New technologies are changing land use, reducing the availability of minor forest products that women have traditionally used as a source of additional income. These technologies are frequently introduced without providing women with other income-earning alternatives.

4. Development projects often improve conditions for the men, leaving women with as much, or even more, to do than before.

These four factors need to be considered by planners if they are to help restore the balance between women's needs and the forest and tree resources available to them. Each includes issues related to both poverty and gender.

From: Restoring the Balance, Women and Forest Resources, FAO/SIDA, 1988
Wood Energy Planning, Policies and Strategies

The Philippine Department of Energy, through its Non-Conventional Energy Division, in cooperation with the University of San Carlos–Affiliated Noncon Energy Center (ANEC) and the Forest Management Bureau–Department of Environment and Natural Resources, and supported by FAO Regional Wood Energy Development Programme in Asia organized a National Seminar-Workshop on Wood Energy Planning, Policies and Strategies in Cebu City, Philippines, from 28 March to 1 April 1995. The meeting was attended by 43 delegates. Among the delegates were national and local government agencies representing forestry, energy, natural resources management, environment, agriculture, academe, science and technology, women, statistical offices and the country’s legislature; and national and local organizations such as an environmental NGO, a women’s group, regional universities (ANECS) and a farmers’ organization. Delegates from Indonesia, Malaysia, Thailand and Vietnam were also present as observers.

The five-day meeting had two and half days of paper presentations and panel discussions. The presentations and intense discussions dealt with the results of recent studies and surveys conducted in the country with regards to the wood energy situation. The topics ranged from (1) the patterns of supply and use of woodfuels in the country to (2) the current programmes, strategies and policies of the energy and forestry sectors with regards to wood energy development.

This was followed by one and half days of workshops where the multi-sectoral participants of this meeting agreed on the following: (1) a common framework for policy actions to be undertaken to further wood energy development efforts in the country, (2) activities needed to enhance wood energy data base and planning capabilities, and (3) initiatives to strengthen organizational and institutional structures for planning and managing wood energy programmes. There was also a one day field tour which allowed the participants to witness the thriving wood fuel market in Cebu City and interact with one of the most successful wood fuel traders in the province. The meeting was closed with recommendations made by the participants to policy making agencies of the country and to RWEDP.

Integration of Woodfuel Production in Agroforestry Extension Programmes

RWEDP hosted its first sub-regional training workshop on “Integrating Woodfuel Production in Agroforestry Extension Programmes in Southeast Asia” from 23 to 30 April 1995 in West Java (Bogor), Indonesia for its eight member countries in the subregion (i.e. China, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand and Vietnam). The Asia Pacific Agroforestry Network (APAN)—also a regional project of FAO with the support of the Japanese Government, and the Indonesian Agency for Forestry Research and Development collaborated with RWEDP in conducting this workshop.

As the developing countries in the Asia-Pacific region meet 30–80% of all their energy needs with woodfuels (fuelwood and charcoal), this training workshop was organized to increase awareness of the potential that integrating woodfuel production into agricultural systems, including all rural extension schemes/programmes in a broader sense, has in sustaining the supply of woodfuels.

A total of 16 participants from forestry related institutions and 8 from energy related institutions attended the training workshop. Among the participants were eight women and two delegates from NGOs. The workshop lasted six days: two days of presentations and preparation for two days of field trips, and two days of working groups. Presented papers covered a wide range of subjects, ranging from energy consumption patterns and the share of woodfuel in national energy balances, to its supply sources, its flow systems, and the effect of policy and legislation in its production and distribution, etc. Workshop participants from China, Philippines and Indonesia presented country specific cases. A presentation on the framework of household decision making highlighted those factors which affect the decision making process and emphasised the need for devising appropriate strategies in order to pursue agroforestry extension. Other presentations included topics such as the concept of woodfuel, species selection for woodfuel, production of wood in different agroforestry systems, combustion and processing of woodfuels, use of woodfuel in households and small-scale industries, dissemination of improved woodstoves and other combustors, etc. An Indonesian case study, dealing with the specific aspects such as the role of woodfuels in national energy balance, government policies on woodfuels, and the pricing and marketing mechanisms of woodfuels, was also presented as an example of a growing concern of the government for the integration of woodfuel in national energy sector development plans and programmes.

The field trip was designed primarily to exhibit the Indonesian situation of woodfuel utilization in small-scale industries, woodfuel production in forest plantations, and woodfuel trade by middlemen. Participants were asked to synthesise the observations from the field trip to explain their respective country situations. This information was later used as a guide to identify the components of specific national training courses which the participants were asked to develop within the context of their own country. This framework will be used by RWEDP in coming years to replicate similar training courses at the national levels. The overall rating of the training workshop by participants was "successful".
A second training Workshop on a similar subject is planned for later this year for the seven member countries in South Asia (i.e. Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka). The tentative date is October 1995 in Dhaka, Bangladesh.

Biomass Stoves for Institutional and Small Industry Applications

This five day regional workshop was organized by the Asian Regional Cookstove Programme (ARECOP) and RWEDP from 19–23 June 1995 in Yogyakarta, Indonesia. The workshop was attended by 22 representatives and resource persons from various government and international organizations as well as NGO’s.

Extensive discussions were held with regard to the state of the art of improved stoves and furnaces used for institutional, food processing and small scale industrial processes. Introduction and dissemination systems based mainly on case studies were also discussed. These consisted of biomass based industries dealing with hand made paper, copra drying, salt making, food processing (khuwa [milk solids], lapsi [fruit candy], popped rice, sweet meat, tofu, smoked fish, kerupuk [shrimp crackers], kecap [soya sauce], palm sugar, kalamay [glutinous rice cooked in coconut milk and brown sugar]) as well as several case studies/papers on the introduction of improved institutional stoves in schools, barracks and restaurants. The lively and often frank discussions resulted in the drawing up of conclusions as well as recommendations for the future. These are summarized briefly below.

Small scale industries are important and while the output of these small industries may not be reflected in the overall economic picture of the countries concerned, the industries do provide productive employment and income and a platform of dignity for many (often under-privileged) people in developing countries. At the same time, however, biomass energy is often used in an inefficient manner.

Unfortunately, the biomass energy based small scale industrial activities are often considered by policy makers as ‘backward, non-prestigious and non-sustainable”. This is also reflected in the fact that budget allocations are often relatively small, few support systems exist for these activities (credit schemes and other incentives) and little research is carried out to assist the small scale industrial activities. More activities should be undertaken to support these biomass energy based small scale industries.

However, one should be careful not to make biomass energy an end in itself. The sustainability of the industries as well as support programmes to the industries should also be considered by all stakeholders involved, e.g. government organizations, the communities and the private sector. Some of the issues which should be addressed both before and during the introduction of improved industrial and institutional stoves are:

- The position and experience of the target group or “customer”, both with regard to external and internal factors, and different and opposing priorities that may exist within the industry or institution—owner and management versus labour, male versus female, etc.;
- The real situation with regard to fuel supply, raw material supply, labour, ownership, decision making processes, to whom the economic and/or financial benefits accrue. Besides, there may be variations and/or changes (real and anticipated) in the near future in energy supplies. These need to be considered as they can influence investments in stove technologies;
- Entrepreneurs need time to make decisions about their technology and investments and this has to be taken into account during programme scheduling;
- Reliability is of the utmost importance to industries and institutions in deciding on investments in their enterprise;
- Advisory services (stove, fuel, etc.) are often required but these are normally expensive and there is therefore a need to look for integration with other sectors: services/credit, backup and maintenance services; standardization of stoves and pots, commercialization, etc. In this connection thought should be given to the transfer of competence rather than the transfer of hardware.

The workshop provided a firm basis for follow-up action, both at the national as well as international level. The workshop proceedings, including suggestions for follow-up action, is being finalized.

Gender and Wood Energy in Asia

A Regional Expert Consultation on Gender and Wood Energy in Asia was conducted from 28 to 30 June in Chiang Mai, Thailand. The 33 participants came from 13 countries (2/3 were male and 1/3 female). The importance attached to the meeting was illustrated by the representation of five countries at DG-level, as well as addresses by the ADG and Regional Representative of FAO in the Asia-Pacific region, the Chief of the Asia-Pacific Forestry Desk of FAO Headquarters in Rome, and the Deputy Vice-Governor of Chiang Mai Province. Excellent expert inputs were obtained from Mrs. Govind Kelkar (AIT Bangkok), Uraivan Tan-Kim-Yong (Chiang Mai University) and Margaret Skutsch (Twente University in the Netherlands).

The programme consisted of plenary sessions, case studies, videos and group discussions, as well as field observations at the Upland Social Forestry Project of Doi Sam Muan. All RWEDP staff attended the Consultation, and Mr. Conrad Heruela facilitated some of the sessions. In the evening hours, participants had the opportunity to interact with delegates from the region in the FAO Senior Field Project Officers Meeting. Some of the inputs and results of the Expert Consultation are briefly reported in the current issue of Wood Energy News. The Consultation will be followed by in-depth training activities on a sub-regional and national basis.
Publications Review

Readings in sustainable forest management

This is a collection of technical papers on sustainable forest management contributed by various authors. The volume is published with the aim of providing professional foresters and others with valuable technical information relevant to their work.

The first part consists of nine papers and focuses on system development for sustainable forest management. Grouped under the broad heading “Wood Production and Wood for Energy”, three papers cover the following topics: sustainable management of tropical moist forests for wood; the management of woodlands and savannahs in the Sudano-Sahelian zone; and the sustainable management of plantation forests in the tropics and subtropics. The remaining papers deal with a number of important issues such as forest management and protection, biodiversity, soil and water conservation, wildlife management, and climate change.

The second part focuses on the creation of a supportive environment for sustainable forest management. Three papers deal with policy, legal and institutional issues, with socio economic issues, and with research aspects. The remaining five papers in this part examine the national policies, programmes and experiences of Chile, Indonesia, Sweden, France and the United States.

The introductory section of the volume warns that "until recently, foresters were often concerned to manage forests for the sustained yield only of timber or woody products." It further states that "if sustainable forest management is concerned with the production of wood alone, then the other goods and services that can be obtained as well as the wider social issues that may be involved, are neglected." In order to avoid such issues, "the concept of sustainable forest management, therefore, must include the place of forests and trees in planned land use." The papers included in this publication could provide an effective and constructive basis for the development of policies and programmes that will lead to sustainable forest management.

These papers have been synthesized in a companion volume “The challenge of sustainable forest management: what future for the world’s forests?” for a non-technical audience, including decision-makers and concerned members of the general public.


This document presents a review of the currently available but greatly scattered knowledge on the woodfuel production capabilities of traditional and new agroforestry systems. The author argues that agroforestry is a sustainable and productive form of land use and that proper land use evaluation and planning requires quantitative knowledge of productive capabilities of land. Woodfuel (fuelwood and charcoal)—a major source of energy and expected to remain so in rural areas of the developing countries—is now recognized as an important product of agroforestry systems. This contradicts the earlier views of forests as the most important woodfuel supplier, as the author shows that a major part of the woodfuel originates from trees on non-forest land, mostly from some kinds of agroforestry systems. He further states that the contribution of agroforestry systems to energy supply will be much more prominent as these systems expand.

The review provides some indications and guidelines as to what output of woodfuel is to be expected in a given situation. The focus of this paper is primarily local farmers with average or below average resources who form the majority of rural agricultural populations. The data and discussions presented in the paper are of a general nature but can be relevant also to large scale enterprises with higher inputs.

The review concentrates particularly on RWEDP member countries. It categorically identifies the limitations of data concerning agroforestry. Besides a brief review of the current woodfuel situation in Asia, it covers other areas such as woodfuel demand and supply sources and the importance of wood energy in total energy consumption/supply. It also tries to present woodfuel production data according to broad climatic and structural classifications of the areas where agroforestry has been practised, together with possible options and limitations of estimating the volume of woodfuel production as well as the productivity of agroforestry trees.

<table>
<thead>
<tr>
<th>Event, Description (Info)</th>
<th>Date, Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy Technology</strong>, conference</td>
<td>28-29 Aug 1995 Bangkok, Thailand</td>
</tr>
<tr>
<td>Energy conservation and management, renewable energy, energy policy and planning, environmental issues related to energy utilization (ASEAN)</td>
<td>4–29 Sep 1995 Canberra, Australia</td>
</tr>
<tr>
<td><strong>Environmental Assessment for Development Projects</strong>, short course</td>
<td>9 Oct–10 Nov 1995 Enschede/Maastricht, The Netherlands</td>
</tr>
<tr>
<td>Environmental screening of projects, identification and scoping of environmental impacts, and environmental appraisal in project design, monitoring and evaluation (ANUTECH)</td>
<td>16 Oct–8 Dec 1995 Canberra &amp; Gympie, Australia</td>
</tr>
<tr>
<td>Enhanced management capabilities for small and medium scale industries in developing countries in general, and with respect to the role of energy, energy supply, choice of fuels and machinery, energy efficiency/conservation and relevant policy options and strategies (UT/MSM)</td>
<td>18-20 Oct 1995 Bangkok, Thailand</td>
</tr>
<tr>
<td><strong>Forestry Planning &amp; Management Course</strong>, 8-week course</td>
<td>30 Oct–24 Nov 1995 Wageningen, The Netherlands</td>
</tr>
<tr>
<td>Modern concepts of environmentally sustainable development: plantation development and the management of indigenous forests, project planning and management (ANUTECH)</td>
<td>16 Oct–8 Dec 1995 Canberra &amp; Gympie, Australia</td>
</tr>
<tr>
<td><strong>Income Generation through Community Forestry</strong>, international seminar</td>
<td>5–18 Nov 1995 Wageningen, The Netherlands</td>
</tr>
<tr>
<td>Opportunities for and constraints on income generation for rural people in community forestry, strategies to enhance rural incomes, and in management, distribution and allocation of income from community forestry activities (RECOFTC)</td>
<td>6 Nov–8 Dec. 1995 Canberra, Australia</td>
</tr>
<tr>
<td><strong>Environmental Assessment for Sustainable Land Use</strong>, international course</td>
<td>20–24 Nov 1995 Melbourne, Australia</td>
</tr>
<tr>
<td>Analysis, explanation and design of solutions for environmental problems by the use of the ‘Problem-in-Context’ framework (IAC)</td>
<td>29 Jan–23 Feb 1996 Canberra, Australia</td>
</tr>
<tr>
<td><strong>Community Forestry Extension</strong>, training course</td>
<td></td>
</tr>
<tr>
<td>Extension skill for participatory community forestry, for middle management personnel in forestry departments and community forestry programs (RECOFTC)</td>
<td></td>
</tr>
<tr>
<td><strong>Gender in Policy Development for Sustainable Land Use</strong>, international course</td>
<td></td>
</tr>
<tr>
<td>Information, wider viewpoints and tools required to conceptualize, plan and formulate policies from a gender perspective in the field of sustainable development (IAC)</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Management: A Gender-balanced Approach</strong>, short course</td>
<td></td>
</tr>
<tr>
<td>This course aims to foster the development of plans, practices and policies which encourage gender-balanced environmental management within a framework of sustainable development (ANUTECH)</td>
<td></td>
</tr>
<tr>
<td><strong>Energy, Environment and Economics</strong>, international symposium</td>
<td></td>
</tr>
<tr>
<td>Exchange of knowledge, ideas and plans for the future in policy, efficiency, economics and environmental effects of energy production, utilisation and conversion (MELBOURNE)</td>
<td></td>
</tr>
<tr>
<td><strong>Geographic Information Systems for Resource Decisions</strong>, short course</td>
<td></td>
</tr>
<tr>
<td>Understanding the principles and potential of GIS as a tool in resource management, hands on skills in the development and use of GIS for resource and environmental data, skills in the application of GIS in real world decisions for resource management and planning (ANUTECH)</td>
<td></td>
</tr>
<tr>
<td>ANUTECH: ANUTECH/Australian National University, GPO Box 4, Canberra, ACT, 2601, Australia. (61-6) 249 5671, 249 0617, 249 5875, 257 1433</td>
<td></td>
</tr>
<tr>
<td>ASEAN: ASEAN Conference on Energy Technology, School of Energy and Materials, King Mongkut’s Institute of Technology Thonburi, Bangmod, Rasburana, Bangkok 10140, Thailand. (66-2) 427 8094, 427 9062</td>
<td></td>
</tr>
<tr>
<td>IAC: International Agricultural Centre, P.O. Box 88, 6700 AB Wageningen. (31-3830) 90111, 18552</td>
<td></td>
</tr>
<tr>
<td>MELBOURNE: Symposium on EEE, Faculty of Engineering, University of Melbourne, Parkville, Australia, 3052.</td>
<td></td>
</tr>
<tr>
<td>RECOFTC: Regional Community Forestry Training Center, Kasetsart University, P.O. Box 1111, Bangkok 10903, Thailand. (66-2) 579-0108, 561-4881, 561-4880</td>
<td></td>
</tr>
<tr>
<td>UT/MSM: University of Twente/Maastricht School of Management, Course Administrator, VOK/CT 1799, University of Twente, P.O. Box 217, 7500 AE Enschede, The Netherlands. (31-53) 893539, 340822, <a href="mailto:g.l.stassen-tevelde@tdg.utwente.nl">g.l.stassen-tevelde@tdg.utwente.nl</a></td>
<td></td>
</tr>
</tbody>
</table>
Women firing the stoves kiln in Myanmar

Group portrait during the Expert Consultations on Gender and Wood Energy