

Report - Sub-regional training course on women in wood energy development

BANGKOK, THAILAND
27 November to 1 December 1995

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For copies write to: Regional Wood Energy Development Programme in Asia c/o FAO
Regional Office for Asia and the Pacific
Maliwan Mansion, Phra Atit Road,
Tel: 66-2-280 2760
Fax: 66-2-280 0760
Bangkok, Thailand.
E-mail: rwedp@ksc.net.th

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Foreword

One of the most exciting sessions in the Sub-regional Training Course on Women in Wood Energy Development was undoubtedly the role playing exercise, as reported in section 11.2 of this report. It was evident from this that women can ably represent a group of 'tough' foresters, and, equally well, a group of wise village council members. It was also striking that wise and experienced men (I wouldn't dare to say tough!) can very eloquently defend women's interests. More importantly, the role players demonstrated that they had truly absorbed the various gender issues and tools which were presented to them during the training programme.

The group photograph on the front cover of this report shows happy faces, though the organisers still look a bit worried. Please note that the photo was taken at the beginning of the course when some of us may still have been a little 'gender blind'. Probably, a group photograph at the end of the course would indicate a different picture: one where organisers look greatly relieved and participants look eager to implement the many important gender tools in their professional life.

RWEDP is extremely grateful to the highly professional training facilitators, Prof. Govind Kelkar and Dr. Dave Nathan, as well as to Mr. R.M. Amarasekara and Prof. Anoja Wickramasinghe for their excellent contributions. We would also like to express our thanks to all the participants for their full commitment to the course. They definitely did not disappoint Mr. Sawad Hemkamon who in his welcome address reminded us all that a training course is not at all meant to be a touristic visit, even when the host country is as charming as Thailand. Participants have also taken seriously the words of Mr. Obaidullah Khan, who in his opening address emphasised the need for active participation based on personal experiences and viewpoints.

RWEDP plans to organise further gender oriented training activities, some integrated into other training events and some as dedicated activities. Training modules on gender and wood energy for use by interested training institutes are also being prepared. Furthermore, RWEDP is developing approaches to gender-disaggregated data bases on wood energy. These efforts can only be successful in cooperation with the many interested professionals in the region.

Dr. Willem S. Hulscher Chief Technical Adviser

1. Opening speeches

1.1. Text of opening address by mr. Sawad Hemkamon on behalf of director general, DEDP

Mr. Dent, representative of the Assistant Director General of FAO, Mr. Vehmeyer, representative of The Netherlands Government, Professor Hulscher, CTA of the Regional Wood Energy Development Programme, Distinguished participants, experts and guests,

Ladies and gentlemen,

On behalf of the Director General of the Department of Energy Development and Promotion, I have the pleasure of welcoming you to Thailand. I appreciate that you have come from 7 different countries in Asia to attend this Training Course. As you know, Thailand has hosted the Regional Wood Energy Development Programme in Asia for many years. The Department I represent enjoys excellent cooperation with the programme. Naturally, quite a number of activities of the Regional Programme have already taken place in Thailand, and we will be pleased if this continues to be the case.

Early this year, the Regional Advisory Committee meeting of the Wood Energy Programme was convened in Bangkok, which brought many delegates from countries in South and South-East Asia to this place. And last June, Thailand was host to the Regional Expert Consultation on Gender and Wood Energy, which was convened in Chiang Mai. We consider both meetings to have been very important and successful, and to have provided opportunities for many interesting discussions. I myself had the pleasure of participating in the Expert Consultation, and actually it was in Chiang Mai that we discussed how RWEDP could proceed with further activities and training courses related to that subject.

I would like to quote some of the recommendations which were formulated in the Chiang Mai Expert Consultation:

- In order to administer and monitor the implementation of gender policies, there should be institutions with responsibility for gender matters at all levels
- Gender-based responsibilities should also be written into the duties and terms of reference of different staff
- There should be a gender sensitization of all staff. This could begin by offering them gender analysis training
- It is necessary to have greater involvement of women at all levels, including the higher positions
- Gender sensitization of all staff and the greater involvement of women at all levels are not alternative suggestions, but both together need to be implemented.

The present Sub-regional Course on Women in Wood Energy Development is a follow-up of these recommendations, particularly the third one which recommends gender analysis

training. I am glad to note that RWEDP quickly taken up the matter and is now implementing this training course.

In the coming week, the focus is on Women in Wood Energy Development, which is a major component of gender analysis. But of course, there are other gender groups which matter when wood energy development is discussed, for instance, children and elderly people. We know that in many countries young children bear the heavy burden of collecting fuelwood on a daily basis, and we also know that the elderly and, for instance, single-headed households often face severe problems in coping with their wood energy needs, in addition to other burdens. Perhaps these children should be at school rather than collecting fuelwood, and perhaps the elderly deserve a little more comfort. Similar and other problems are faced by women when it comes to wood energy. I expect and I trust that the coming week will help you in analysing wood energy projects and programmes from a women's and, more generally, from a gender perspective. I think the same type of analysis should not only apply to wood energy, but also to many other projects and programmes. Perhaps the approach by the Regional Wood Energy Development Programme can provide an inspiration to other programmes in related fields.

The Department of Energy Development and Promotion in Thailand is concerned with various aspects of energy, including wood and charcoal, energy conservation, and other issues. In the rapidly developing economy of Thailand, growing energy requirements are posing new challenges, and new options have become available. Modern forms of energy like oil, gas and electricity have become more and more widespread, even in the rural areas. At the same time we know that the use of wood and charcoal remains extremely important in the rural areas as well as in the cities. Actually, the use of wood and biomass fuels is still increasing in Thailand. Obviously, this requires adequate attention from the government departments concerned.

A glance at the programme for the coming week shows that you will have little spare time for sightseeing in Bangkok, let alone visiting other parts of Thailand. That is natural, as this training course is not meant as a touristic visit to Thailand. All costs are paid for by FAO, and understandably, FAO is expecting the training programme participants to gain the maximum benefit from the course. However, when you have free time on an evening or Saturday morning, do look around the bustling and fascinating city which is Bangkok. Even though Bangkok is considered a shopping paradise, please do not forget that Bangkok has much more to offer than shopping. Nearby the FAO office you will find the Grand Palace which attracts visitors from all over the world. Thai culture is also very much present in the many beautiful temples which can be visited. And related to the subject of your programme, you could also make your own field observations, in almost any part of the city, regarding the roles of Thai women in utilising woodfuels for the preparation of food at the numerous food-stalls. Furthermore, you can experience for yourself what many people in this country find: that the best and tastiest food is prepared using charcoal as a fuel.

Finally, I would like to congratulate the Regional Wood Energy Programme for convening this Training Course. I trust you will have an interesting and rewarding programme, and I wish you a very pleasant week. Thank you.

1.2. Text of opening address on behalf of Mr. Obaidullah Khan, ADG, FAD/RAP

Mr. Sawad Hemkamon, representative of the Department of Energy Development and Promotion, Mr. Vehmeyer, representative of The Netherlands Government,

Mr. Hulscher, CTA of the Regional Wood Energy Development Programme, Distinguished participants, experts and guests,

Ladies and gentlemen,

It is my pleasure to welcome you on behalf of FAO to the Sub-regional Training Course on Women in Wood Energy Development, which is organised by the Regional Wood Energy Development Programme. The Regional Office of FAO in Bangkok is delighted to host this course and to receive participants and delegates from 7 countries in South Asia.

Women's issues have, as you know, recently been the focus of interest at the International Conference on Women in Beijing, last September. In fact, aspects of gender and particularly women, are crucial in many approaches to development. It is often the women, the children and the elderly who suffer most from hardship and poverty. At the same time, women play an important role in national and local economies, a role which is not always appreciated or valued properly. Thus it is clear that the hardships as well as the contributions of women need to be addressed in development policies, programmes and projects.

Wood energy development is one of the areas in which women's issues are crucial. We know that in most, if not all countries in Asia, that it is the women who take care of daily fuel needs for domestic use, it is women who work for many hours in smokey kitchens, and it is often the women who participate in village woodlots or care for homegardens which supply the much needed woodfuels. At the same time, women have many other domestic tasks and they contribute, for instance, to subsistence farming, and also to income earning from commercial crops, livestock, and small-scale enterprises. Detailed surveys on gender aspects of rural households have shown that generally women have less time to sleep than men, the difference being as much as a few hours every night all the year round. Also, the time spent by women in their daily tasks appears to be much more fragmented than the time spent by men. Such information is important when we try to design effective interventions for development, including wood energy development.

Gender aspects are part of the present phase of the Regional Wood Energy Development Programme, even more explicitly and systematically than in past phases. I had the pleasure of attending part of the programme of the Regional Expert Consultation on Gender and Wood Energy in Asia, which was organised by RWEDP last June in Chiang Mail In those consultations, in which many high-level representatives from RWEDP-member countries participated, some country delegates presented articulate national policies on women's issues. Plans for mulating similar policies were indicated by others. Delegates also discussed how to institutionalise a gender approach in their respective organisations. It was noted that women's issues have to be integrated further into policy making and planning for wood energy. The consultations were conducted in a very good and cooperative atmosphere, and provided a common policy framework as well as outlines for further activities in the context of RWEDP.

The present course is a follow-up of these consultations. Amongst other subjects, methods and tools for incorporating women's aspects into projects and programmes will be analysed and discussed. I have seen from the programme that you will discuss gender analysis tools and apply checklists to project cases. The materials available from case studies for such analyses are abundant, and it is up to us to make good use of the lessons we can learn so as to improve future projects and development efforts. In a course like the one starting today, participants must be active contributors to the sessions, and base their contributions on their own personal experiences and viewpoints. It is fortunate RWEDP provides the scope for this international exchange and for the learning process which is admirably supported by experienced resource persons.

I would like to congratulate RWEDP for its current initiative, as well as for the success of the recent Expert Consultation which I mentioned before. I think women's and gender issues have been put firmly on the agenda of the Regional Wood Energy Development Programme. You may have seen the special issue of Wood Energy News last June, which focused on Gender and Wood Energy. I would also like to express my appreciation and thanks to the government of the donor country, The Netherlands, for its continued support to FAO, and to the Regional Wood Energy Development Programme in particular.

I wish you a very successful and pleasant programme in the coming week.

1.3. Text of opening address by Mr. Paul A.M. Vehmeyer, first secretary, the embassy in Bangkok and deputy permanent of the Netherlands to ESCAP

Dear representatives of the Royal Thai Government and the FAO Regional Office for Asia and the Pacific, colleagues in the inaugural forum, course collaborators and WEP-Staff,

Dear Participants,

It is my pleasure to address you on behalf of the funding government, the Government of the Netherlands. I know that you have high expectations about this course.

Well, may I assure you that these are entirely justified. In my four years here in Bangkok the WEP-team has demonstrated great enthusiasm, dedication and a superb standard of professionalism.

The staff, together with the selected resource-persons, stand ready to offer another high calibre course. So may I encourage you to participate as fully as possible in order to extract generous experiences and benefits from it.

With your approval I would like for a moment to go back to the Participants' Information Note you all received. From this you must have concluded that a Gender Approach is a condition for a successful Wood Energy Development Programme Plan.

Please allow me to formulate a question which almost certainly is lingering in the back of your minds.

Why are donors so interested in funding "the Gender Approach" in the Development Cooperation?

This question was treated at a previous seminar and it seems appropriate to recall the response.

Of course an overall concern of the Netherlands Development Cooperation is that the large financial sums that are donated should in particular be relevant for Structural Poverty Alleviation. Many bilateral donors share this paramount consideration. It is fair to say that decades of development assistance programmes have failed to root out hard-core poverty on the desired scale.

Now, the international discussion on development theory - in other words the debate on unresolved challenges - centers on a number of topics, including the agents of change and the risks of the Structural Adjustment Programmes and the Extended Structural Adjustment Facilities, the SAP's and the ESAF's of the Bretton Woods Institutions. Development research has brought to light that under the heading "Agents of Change" the Gender Analysis Tools are indispensable if one is committed to increasing levels of participation at the community level. That will evidently guarantee real will-power and provision of means to push back persistent poverty levels within deprived societies.

Certainly one can ride much higher waves of inspiration. The Beijing Conference, following on the Forward Looking Strategies of Nairobi is a monument to collective creative activity and commitment, serving all-important political goals.

The RWEDP Gender Approach I would like more to compare with the bread and butter instruments needed to technically deliver the goods at grassroots level, or more aptly put, 'at the root of shrub and tree' within or around the village. In other words to formulate policies and put them to work in rural areas, in daily life. This seminar is the second in a tripod or a trivet to use a metaphor. The latter supporting a nice boiling kettle which is not the same as a melting-pot. But I leave that matter to much better qualified speakers later in this week.

Ahead of the current seminar lies a similar sub-regional conference targeted at the eight South-East Asia countries.

May I remark in passing that Gender & Development Specialists are attached to the Netherlands Embassies in many countries. Also at the subcontinent level. They are ready to help where they can with network information, enquiries regarding the operation of local and regional Women's Funds and with advice on matters of common interest.

To facilitate your access to these officials you will find some information at the table where the conference papers are issued. With reference to what Mr. Sawad said on behalf of the Thai Government regarding particularly vulnerable groups such as female headed single parent households and children who are denied a basic education, it should be noted these could be possible beneficiaries of local community initiatives.

Let me now say something about the FAO. It is a very large organisation with many activities throughout the world. These days are not the easiest for the United Nations and its Specialised Agencies and the FAO is no exception. In fact more the place where an example has been set. Its General Conference in October was the first major gathering of a UN agency after a strong drive from a large country to gain efficiencies by slashing UN budgets everywhere. At this gathering I'm afraid I have to report that the FAO took a maiden hit.

This RWEDP programme is financed from the FAO's extra-budgetary programme and should be considered safe from financial cut-backs. It seems an appropriate time, therefore, to dwell on its achievements.

The RWEDP was established in 1988 and was developed with due regard for "critical mass" with 11 participating countries in this part of the world. It was also devised in a well-structured manner with a Regional Advisory Board, National Advisory Committees and National Wood Energy Working Groups. The programme focal points, again in each participating country, are the life lines to "Mother" to use an epithet - a descriptive phrase for Headquarters borrowed from a once famous TV crime-series. The headquarters, as you know, is situated in Rome.

In 1994 after a thorough evaluation the extended RWEDP started to encompass the 15 countries which are currently participating in the programme.

That "Mother" cares well may be indicated by the number of publications which to date exceeds 40, many of which are technical reports with vast, readily usable knowledge. I am not counting the editions of the Wood Energy News, the Journal which has appeared no less than 24 times. Already 6 years ago a RWEDP publication was dedicated to Women's Role in Forest Resource Management. Moreover, a Special issue of WEN was devoted to the Gender-Issues after the Chiang Mai workshop held in the beginning of this year.

Let me finish this inaugural contribution at the beginning of your course with the most important part of all, that is the knowledge and experience you bring to this meeting yourself. Coming from various countries and diverse institutions and organisations - government agencies, academic centers and NGOs alike - you together represent a rare source of wealth. Your combined knowledge and experience is your biggest asset here. That each of you and the course as a whole may capitalise on that is my sincerest wish.

Finally, I would like to express my gratitude for the opportunity to speak here this morning, so kindly offered to the Embassy by the Chief Technical Adviser, Professor Wim Hulscher. May I also wish you all a fruitful and pleasant stay in Bangkok.

Thank you.

1.4. Vote of thanks by Dr. W.S. Hulscher, CTA, RWEDP, Bangkok

Mr. Sawad Hemkamon, representative of the Department of Energy Development and Promotion, Mr. Dent, representative of the Assistant Director General of FAO,

Mr. Vehmeyer, representative of The Netherlands Government,

Distinguished participants, experts and guests,

Ladies and gentlemen,

Thank you all for coming to Bangkok, to FAO, and to the Opening of our Training Course on Women in Wood Energy Development.

In particular, thank you Mr. Sawad, for welcoming us on behalf of DEDP and the Thai Government. I am happy you can observe this follow-up of the Chiang Mai Consultation, and that you underlined so well some of the conclusions of that meeting. I think it is as long as 11 years since I first visited DEDP at Yodse, Patumwan, in Bangkok, to meet the then Director, Mr. Sompong. By then DEDP was still called NEA. In those days we didn't know the word gender, or at least we didn't use it. We simply talked about woodstoves and households. And yes, we talked about charcoal; I fully agree with you on the tastiness of food prepared on charcoal. A lot has changed in Thailand as well as in the energy field in these 11 years, but fortunately not the charcoal! Mr. Sawad, I also appreciate that you drew our attention to the wider scope of gender groups. The Regional Wood Energy Programme very much appreciates the good cooperation with DEDP, and all of us are delighted to be hosted in Thailand.

Thank you also, Mr. Dent, for addressing us on behalf of the ADG, Mr. Obaidullah Khan. I was pleasantly surprised when, last June, the ADG indicated his wish to attend part of our Expert Consultation on Gender and Wood Energy. Actually, I learned that the ADG takes a keen interest in issues of gender, and is personally committed to the subjects we are discussing. It is very stimulating for the Regional Wood Energy Development Programme to interact with the highest-level Representative of FAO in this Region in a way which goes beyond administrative affairs. We are also indebted to the Regional Office of FAO for the very pleasant cooperation and the general support our programme enjoys.

Perhaps we should strive even more to implement the lessons from our own training courses and the recommendations made by experts. In Chiang Mai it was recommended that women should have greater involvement at all levels, including the higher positions, as quoted by Mr. Sawad. In one of the Professional Staff meetings when Sandy Stephens was still with RAPA, some 20 men and only 1 woman were counted. And Headquarters will probably show the same balance, just multiplied by a few hundred or so. Similarly, looking at RWEDP itself, I see only men as professionals. But at least, in the very near future RWEDP is expecting 2 female assistant-professional officers to counter the balance.

Thank you too, Mr. Vehmeyer, for addressing us on behalf of The Netherlands Embassy and Government. I know you have absented yourself from another important meeting in order to attend this Opening Session. I also know you are following with close interest what is going on at RWEDP, including the many Back-to-Office Reports on our activities. Indeed, these days United Nations, including FAO, is critically looked at by many members and contributors. The best thing we can do is to work hard, critically look at our own organisation performance, and be open to suggestions for improvements. Personally I think that the current overhead can and should enable an increased output by the organisation. Definitely we must open our minds for greater dialogue with the outside world, which is the only justification for the UN's existence.

Mr. Vehmeyer, you have for a long time sympathised with the aims of the Regional Wood Energy Programme, and I do hope we can enjoy your interest for many more years to come.

Ladies and gentlemen, participants,

I very much appreciate your interest in wood energy development, and this course in particular. I value your mixed backgrounds: government departments in energy, forestry and other sectors, to academic institutes and NGOs. I think we can learn a lot from each other, from your experiences with projects and programmes with regard to the role of women. I also

appreciate that this group consists of both women and men. It is clear to all of us that we do not look at issues of gender or women in wood energy development as only a women's affair. What we aim for is that the quality of our projects and programmes, indeed the formulation and implementation of our policies and interventions, will benefit from a better understanding of gender aspects. This matters to all staff in a professional organisation. I am pleased to acknowledge and thank Mrs. Govind Kelkar and Mr. Dave Nathan, who will facilitate most of our sessions in the coming week, as well as Mr. Amarasekara, who will serve as a resource person.

It may be of interest to you to know that another Sub-Regional Course is being prepared by RWEDP on "Women, Wood Energy and Health", in 1996 in Malaysia, for the 8 member countries from South-East Asia. Furthermore, gender aspects will play a role in several other regional and national activities supported by RWEDP.

Last but not least, I would like to thank the support staff of RWEDP. It has been a hectic time at our offices. In the past 7 weeks we have organised 7 regional workshops in 6 different countries. All sorts of arrangements have had to be made for the programme and the participants, hundreds of faxes, letters and e-mail messages have had to be sent out every week, and travel arrangements, finances, paperwork and numerous other things dealt with. This has required a tremendous effort, skill and organisational discipline from all staff. I think the support staff has done an excellent job. In times of pressure they have maintained a joyful and cooperative atmosphere, and I would really like to thank them for that.

Ladies and gentlemen, I am confident you will benefit from this training course and that you will enjoy your stay in Bangkok. Thank you very much.

2. Background

This document is a report on the Sub-regional Training Course on Women and Wood Energy Development which took place at FAO - RAPA, Bangkok, from 27 November to 1 December 1995. The training course was organised by the RWEDP. Training Course participants were invited from the RWEDP-member countries in South Asia - Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

The course was meant for higher and middle-level staff from institutions and departments connected with wood energy planning, policies and strategies. Participants were from the forestry sector, energy sector, teaching institutes and NGOs, linking to the implementer level of projects and programmes. Two-thirds of the participants were women.

The Training Course was a follow-up to the Regional Expert Consultation on Gender and Wood Energy in Asia held in Chiang Mai, Thailand, in June 1995. At this Consultation the following RWEDP Policy Statement was discussed and endorsed by the participants.

2.1. RWEDP policy statement on gender and wood energy

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 in 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 under-represented 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 off-take 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

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.

- 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.
- 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.
- 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 women's viewpoint at district and national planning levels. RWEDP will support attempts of wood energy planning organizations and relevant ministries to institutionalize gender issues in their work.

Discussion on the best ways of formulating and implementing gender policies led to the following recommendations:

- To administer and monitor the implementation of gender policies there should be institutions with responsibility for gender matters at all levels, from planning down

Gender-based responsibilities should be written into the duties and terms of reference of different staff

- There should be a gender sensitization programme for all staff, and this could begin with gender analysis training
- It is necessary to have greater involvement of women at all levels, including the higher positions

- Gender sensitization of all staff and greater involvement of women at a levels are not mutually exclusive measures: both need to be implemented together.

Objectives

It was with this background that the Training Course was conducted. The general objective was to familiarise trainees with the use of gender analytic tools and review and assess their appropriateness. The specific objective was to provide trainees with the means to select, modify or design operational procedures to ensure that gender issues are covered in project design, appraisal, implantation and evaluation processes.

Course Contents

The main subjects covered in the course programme (all with respect to wood energy) were:

- Personal awareness of gender -- i.e. perceptions about gender and development
 - Placing gender -- or understanding different possible approaches to issues of women and development which have different implications for the kinds of interventions that are selected
 - Gender analysis tools -- step-by-step methods and procedures with respect to planning, assessing project proposals, etc. to check possible impacts on women and men
- Adapting existing checklists -- how to adapt checklists to local circumstances
- Gender analysis field tools -- tools and procedures which are useful in the fundamental redesign of projects using gender principles.

Along with expert inputs from the resource persons there were a number of case studies which the participants analyzed as a group exercise. A number of videos were also shown to the participants.

2.2. Programme

The Training Course Programme was as follows:

Monday 27 November	
09.00-10.15	Opening ceremony
10.15-10.45	Coffee break
10.45-12.00	Objectives and programme of the course Results of Chiang Mai Workshop Statements
12.00-13.30	Lunch break
13.30-14.00	Video "Gender analysis for forestry development planning", FAO
14.00-15.00 :	Case study/exercise

15.00-15.30 :	Tea break
15.30-17.00 :	Case study/exercise (continued)
Tuesday 28 November	
09.00-10.15	Placing gender
10.15-10.45	Coffee break
10.45-12.00	Gender concepts
12.00-13.00	Lunch break
13.00-13.30	Video "Community Forestry in Nepal"
13.30-15.00	Personal awareness of gender
15.00-15.30	Tea break
15.30-17.00	Case study: Stove Dissemination Programme, Sri Lanka Video on same topic
Wednesday 29 November	
09.00-10.15	Gender analysis field tools
10.15-10.45	Coffee break
10.45-12.00	Gender analysis field tools (continued)
12.00-13.00	Lunch break
13.00-13.30	Video: PRA for Community Forestry
13.30-15.00	Gender analysis tools
15.00-15.30	Tea break
15.30-17.00	Gender analysis tools (continued)
Thursday 30 November	
09.00-10.15	Adapting existing checklists
10.15-10.45	Coffee break
10.45-12.00	Adapting existing checklists (continued)
12.00-13.00	Lunch break
13.00-13.30	Video: Improved Stoves Programme in Bangladesh
13.30-15.00	Video: Agricultural research with women farmers, ICRISAT
15.00-15.30	Tea break
15.30-17.00	Group exercises: Applying checklists to project cases
Friday 1 December	
09.00-10.15	Presentations of group exercises
10.15-10.45	Coffee break
10.45-12.00	Review outlines of RWEDP gender training modules

12.00-13.00	Lunch break
13.00-15.00	Evaluation, conclusions, recommendations
15.00-15.30	Tea break
15.30-16.30	Closing session

3. Case studies

After the Inaugural Session and the Introduction, the participants were given a few case studies to open discussion. The idea was to get the participants to think about gender questions even before any instruction in the matter.

After a discussion of Cases 1 and 2, the participants were given Case 3, to be worked on in country groups, again without any prior instruction on gender analysis. The results of the group exercises were collected, with the idea that they would later be checked at the end of the course, with what participants would then think of the same matters. But, due to time constraints, this follow up was not carried out at the end of the course.

3.1. Case study 1: Gender in community organizations

In the above example (in Himachal Pradesh, India) the NGO started to work on getting women collective control over common lands. Up to then, the forest department consulted the village Panchayat (council) about the type of trees to be planted on common land. The council was solidly male and commercial timber species were always planted. Various women's groups began to oppose this strategy; one group passed a resolution that unless the forest department planted at least 50% fodder species, they would uproot all the trees and replace them with fodder crops. They also demanded that in future the Forest Department should consult with the women's organizations as well as the village council; later this was taken further, to demand that the government should give the women's organizations the power and responsibility for deciding how the common lands should be developed.

[From Madbu Sarin, in "Local Organizations in Community Forestry Extension in Asia"

FAO/RWEDP, 1992, summarized in M.M. Skutsch.]

A group of men was invited to a village meeting to jointly plan a community forestry project. The men told the foresters that they wanted to plant hardwood tree species to make furniture and wood carvings to sell. Three thousand hardwood seedlings were provided. They all died. Why? Because in the village it was the task of women to care for seedlings; no one had told them that the seedlings were coming. Another meeting was held. This time the women were included. Foresters reamed that the women preferred soft wood fast-growing species for fuelwood and fodder. When the project provided seedlings of both types, satisfying the needs of both women and men, the women planted and watered all of them.

From Marilyn Hoskins, Gender Analysis and Forestry, in press, Sec. A, p. 6.]

Questions:

- Why are there differences between men and women in the choice of trees? Is it a matter of biology, or different areas of responsibility for the family?
- How can these differences be taken care of in a project?

3.2. Case study 2: Gender policy for technology development

"... the scenario is such that forests (land under forestry departments' control) are unlikely to be available for fuelwood production through the agroforestry approach in most developing countries. Similarly, food production will continue to be of top most priority so that it may not be prudent or feasible to envisage any substantial fuelwood production schemes on arable agricultural lands at the cost of food production. However, agroforestry can be of value in this context by:

- Incorporating and integrating appropriate species of woody perennials on farmlands along with other components of the farming system not in a competitive but in a complementary way;
- Integrating herbaceous crops and livestock on forest land according to the agroforestry management schemes so as to facilitate simultaneous production of wood and food crops; and
- Employing agroforestry techniques for reclamation of degraded lands and proper utilization of "wastelands".

"Some prototype agroforestry technologies for each of these situations are now available. Most of these have evolved through the trial-and-error approach of local farmers with practically no scientific input to improve them. The greatest scope for improving their efficiency and obtaining tangible results in such a program lies with the integrated food and fuelwood production initiatives in small holdings."

[From P.K.R. Nair, 1994, "Agroforestry and biomass energy/ fuelwood production' in Agroforestry Systems in the Tropics, Kluwer Academic Publishers, Dordrecht, 597.]

Questions:

- Are there any gender differences in the knowledge of women and men that are not taken account of in the above analysis?
- What difference would any such differences make to design of an agro-forestry project?

3.3. Case study 3: Ulipur village, Comilla district, Bangladesh

Source of data: J. Briscoe: Energy Use and Social Structure in a Bangladesh Village

Ulipur is located in the deep-water flooding plain of the Meghna River. This land is only ten meters above sea level and becomes covered with a sheet of water when the rivers flood their banks in June. By the end of October, the waters have receded, leaving the land covered with a soft, fertile sand-clay silt. The area is heavily populated (750 per square km) and people live in bards, clusters of predominantly bamboo walled and straw roofed houses surrounded by trees and bamboo groves.

The population is divided both by religion and by income. There is a group of Hindu fishermen who live along the river banks at some distance from the rest of the village: the rest of the population is Muslim.

There is in Ulipur as in many villages in rural Bangladesh an interdependence between landowners and agricultural labourers, although this is less strong than formerly. Quite a large proportion of the population, in addition to the fishermen, are actually landless, and find employment with large farmers; other small farmers operate as sharecroppers or tenant farmers, sometimes also labouring for larger farmers to supplement their earnings. Land is held by the male head of household, there are very few households with women heads, and these are in all cases, widows with no land. Decisions on type of crop, when to plant etc are made by the male head of household. Labourers are also hired by the head of household, and paid by them. Selling of cash crops is done by the men, except in the case of low caste families in which women sometimes sell vegetables in the market. Women of poor families provide labour on the fields in all agricultural activities except ploughing, which is done by buffalo. Women from the richer families do not work in the fields and are more restricted by 'modesty' rules, to moving around only in the area of the house itself. Very few of the adult women have any education and girls are rarely allowed to stay in primary school more than four years, whether rich or poor.

Estimated fuel used for cooking and for parboiling rice is given in Table 1. It will be seen that crop residues, especially coarse rice straw (amon nara), and various types of better quality straw of other grain crops (kher) are very important. Dung hardly plays a part, although there is plenty available: there are 10 bullock and 10 working cows (for ploughing and threshing) plus 10 milk cows and about 20 immature beasts; the average dry dung production per animal is about 1.2 kg., of which the greater part is used for fertiliser. Firewood is available from a variety of sources. 'Other fuels' are biomass fuels gathered from wild (i.e. not cultivated) plants. These include doinshah, a tall weed which grows widely on bunds between fields, and bamboo.

The social set up has considerable significance for the use of fuel and for the potential to intervene in the fuelwood system in Ulipur. Workers are sometimes paid partly in kind as well as in cash: they may receive foodcrops, or agriculture residues as part of their wages, or in addition. Table 2 shows how social grouping affects the actual use of fuel in the village.

Different classes use approximately the same number of kilocalories to cook a kilogram of food, but richer people eat more so use more fuel (in a good year, such as 1977, the difference is not so great). However, the poor people experience difficulties, particularly in some seasons. Obviously, as 60% of fuels are crop residues, they are easier to obtain directly after the harvest (there are two cropping seasons per year). However these fuels are not so easy to preserve and store, partly because many families do not have room to sun dry plant materials in their courtyards, which are very cramped in the case of poor families.

Table 1 Annual Use of Fuel in Ulipur

Fuel Type	Quantity of Fuel in 10 ³ Kcals/Person/Year	Percent
Crop residues		

From village		
Amon nara	633	38.3
Amon kher	23	1.4
Aus kher	18	1.0
Boro kher	15	0.9
Grain husks	88	5.3
Jute sticks	32	1.9
Sesamum plant	48	2.9
Mustard plant	29	1.7
Chili plant	6	0.4
Total crop residues from village	891	54.0
Amon nara from char outside village	85	5.1
Animal residues		
Cow dung	46	2.7
Firewood (including twigs and branches)		
From village trees	167	10.8
From river (bhaza-lakri)	72	4.4
Purchased from bazaar	85	5.2
Total firewood	324	20.3
Other fuels		
Doinshah	81	4.9
Bamboo	60	3.6
Water hyacinth	27	1.6
Other crop residues and leaves	136	7.6
Total other fuels	305	17.7
Total, all sources	1,615	100.0

Table 2 Fuel Use by Different Social Groups During the Study Period

Fuel	Percent of Total Consumption for				
	Hindu Fishermen	Muslims			
		Landless	Poor	Medium	Rich
Sesamum shrub	0.3	0.0	1.5	10.3	10.2
Hanza kuta	1.2	3.2	10.7	8.6	16.6

Grain husks	2.7	4.1	6.9	12.7	17.3
Ghoita	0.0	1.3	5.3	3.2	4.7
Jute-sticks	0.5	1.5	0.9	0.7	4.5
Doinshah	1.4	7.5	5.3	9.3	7.5
Nara	25.0	38.4	26.0	33.2	19.2
Lakri	46.9	26.8	31.1	9.0	10.8
Bamboo	16.6	3.1	1.2	4.8	1.5
Water hyacinth	0.0	4.8	1.7	1.8	1.8

Table 3 Ownership of Fuel-Producing Assets (per family)

a One decimel = 1/100 acre.

		Muslims			
	Hindu Fishermen	Landless	Poor	Medium	Rich
(Number of familiar)	(8)	(14)	(11)	(8)	(8)
Land (decimelsa)					
Median	0	8.5	66.0	126.5	242.0
Mean	0.7	9.5	65.2	135.1	295.8
Trees					
Median	0	6.0	8.0	16.0	182.0
Mean	2.0	11.1	12.2	17.5	209.0
Cattle					
Median	0	0	0	10	4.0
Mean	0	0.3	1.3	1.3	2.6

Exercise Using Case Study E

Case study E concerns a village in the floodplain in Bangladesh. Read the description of the village, its economics and social structure, and its fuel economy.

Problem

The regional commissioner, after visiting the village one day, was appalled to see how difficult it was to obtain firewood and how women often have to use very poor quality residues for cooking, or pay high prices for wood brought in from distant forests and sold in the village market. He proposed that a social forestry project should be set up to improve the situation, particularly for the poor women who cannot afford to buy wood.

Question 1

From table 2 it is clear that different social groups in the village use quite different proportions of fuel of different types. Try to explain why this is so. Work fuel by fuel through the list and come up with plausible reasons. Make a list of the reasons.

Question 2

The regional commissioner has specified a social forestry project, especially to benefit the poor women in the village. What factors may limit the participation of poor women in such a project in Ulipur, or the flow of benefits from such a project to them? Be as specific as you can, relating your analysis to the data presented rather than to generalisations. What in your view would be the best strategy to help poor women obtain better quality fuel more easily? What alternatives to social forestry would you recommend, if any?

4. Placing gender

Margaret Skutsch

4.1. Placing gender

Understanding the WID/GAD matrix

1975 was declared the International Year of Women by the United Nations. The first UN Conference on Women and Development was held in Mexico City in 1975 under the motto 'Equality, Development and Peace'. At this conference, the objectives for the first UN Decade of Women (1976-1985) were set: equality between the sexes was to be achieved within the framework of changed relations between North and South. In 1985, to mark the end of the first Women Decade, a second UN Conference was held in Nairobi. On this occasion, a much larger number of women from the South attended and made their voices heard. The third UN Conference on Women and Development, will soon be held in Beijing in September 1995. What have twenty years of Women and Development brought us? What has been achieved, and what is still lacking?

There are many different approaches to the 'women and development' issue. This paper aims to give an overview of these different approaches and relate them to the energy sector. As we will see, different approaches have different implications for the kind of energy policy that is adopted and the energy interventions that are selected. Note that the approaches are not placed in or implied to represent a hierarchy of correctness. Instead, attention is directed to what is perceived as 'appropriate' to different situations in different countries at any point in time.

The paper has the following structure: first, an historical overview of approaches in the 'women and development' debate is presented (2). The debate started off in the early seventies with different groups within the women in development (WID) movement, with special emphasis on women, environment and development (WED), and has gradually developed along the lines of the gender and development (GAD) approach. Next, the theoretical framework outlined is applied to the energy sector. Which findings are especially relevant to the energy sector, and what does this imply for the energy policy that is adopted? Finally, an extended bibliography with references for further reading is presented.

From WID to GAD: an historical overview

Women in Development

Over the last twenty years, the subject of women and development has received increasing attention from both scientists and practitioners. Since the early seventies, donors and NGOs have regarded women as a special target group and have directed aid towards them in various ways. The mode of aid delivery has been influenced by dominant analytical approaches towards the subject of women and development. Throughout the years, there has been a progression in thinking. However, this did not include a dramatic shift of paradigm: different approaches reflect different view points and angles rather than different dogmas. Today, many different approaches can be seen in the field. This section distinguishes between various approaches and gives an overview of the 'cycling of ideas' in order to enable us to identify the thinking behind policies and projects in the field of women and development.

Different phases within the women in development (WID) movement can be identified (Moser, 1989). The first idea, which came even before the official recognition of women as a special target group, was to start special programmes for women, which were primarily welfare oriented; they were designed to assist women in their traditional tasks, in the reproductive sphere. Programmes were aimed at women's practical needs like health, nutrition and family planning, but not at making women self-sufficient. Women were seen as passive recipients, as victims of underdevelopment. This charitable approach was present long before WID became fashionable, in missionary development work during the colonial period, for example.

In the mid seventies the notion of **equity** between men and women became important. It was recognised that almost all aid had unconsciously gone to men, because they were thought to be heads of the households and, according to this way of thinking, helping the households meant helping the women as well. This view now proved too simple: many households appeared to be headed by women instead of men and it became apparent that the trickle-down of benefits to women did not occur as expected. Various international conferences, among which the UN Conference (1975) mentioned earlier, were held, which succeeded in raising consciousness and placing women's issues more firmly on the agenda of donor agencies. Two new women's agencies were created under the UN umbrella: UNIFEM and INSTRAW. Resolutions were made by donors to treat men and women on an equal basis in their projects, for example in agriculture, and address the strategic needs of women in addition to their practical needs ¹. In practice, many difficulties were experienced in doing so. All in all, the equity approach represented a political move, initiated by feminist movements in the USA, and was not all that popular in most developing countries.

¹ Practical needs refer to the concrete circumstances women have to deal with whereas strategic needs are derived from the subordination of women in relation to men (Moser, 1989).

The **basic needs** approach took the view that provision of basic needs to poor people would increase their ability to develop themselves. When the donors adopted this strategy, more funds were directed to the welfare of the poorer strata in society. Women were seen as primary beneficiaries, and both women-specific and women-integrated projects were implemented, most of them targeted to meet practical needs rather than strategic needs. Many studies were also made at this time to document the situation of women, particularly in rural areas. Most of the donor agencies set up special women-in-development bureaux within their central administrations to monitor such developments and to stimulate consciousness within their organizations. The women's issue in development circles thus became more and more stripped of its originally feminist nature (the equity approach) and became inextricably linked with poverty alleviation in the South (Hausler, 1993).

Taking the basic needs approach as a starting point for their policy, donors began to hold the view that women should be included in projects on **efficiency** grounds: poverty alleviation can be achieved more efficiently when women are included from the start. Involvement of women was no longer considered morally correct only, but practically important as well. After all, women were doing most of the work in agriculture, so they should deliberately be integrated into ongoing projects. This approach is also called the instrumental approach, because it sees women as human resources for development. The term *mainstreaming* is used to indicate that women should be integrated into general projects for practical needs, on a par with men, in addition to having special projects for themselves.

The last phase identified in the WID approach is that of **empowerment**. In contrast with the other views, this view has mainly been inspired by Southern women. Historically based inequalities have to be broken by strengthening and extending the power base of women. Policies and programmes will have to meet the strategic needs of women to make a change for the better, including land rights, land titles, access to resources, education and employment. The concept of empowerment concerns the general emancipation of women. This line of thought is further pursued in the concept of **autonomy**, in which the equity and independence of women are the objectives of projects and programmes.

Women, Environment and Development

Women, Environment and Development (WED) as a theme came up in the early seventies, in the context of the debate on Southern women's roles in economic development. The accelerating global economic problems, the debt crisis, the increasing environmental destruction and the overall feminization of poverty in the South started off a debate on the specific and cumulative effects of these processes on the poor, and especially on women. The WED approach was initiated from within environment-related disciplines such as forestry (fuelwood energy) and agriculture. At that time, there was an increasing awareness of the effects of environmental degradation worldwide, marked for example by the publication of the study of the Club of Rome in 1972, in which the long term effects of population growth, production growth, exploitation of mineral resources and pollution were combined in a number of future scenarios. In that same year, a UN Conference on the Human Environment was held in Stockholm. On this occasion, the United Nations Environmental Program (UNEP) was called into being. In 1987, the World Commission on Environment and Development (better known as the Brundtland Commission after its chairman) forwarded its report. The Commission advocated the need for the world to move toward *sustainable development* which was defined as: *'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'*. The Commission also initiated the idea of holding a world conference in which both environmental and developmental problems would be addressed. In 1992, this UN Conference on Environment and Development (UNCED) was held in Rio de Janeiro. A major parallel event, the Non Governmental Organization Forum (Global Forum) in which over 3,200 NGOs participated, also took place in Rio. It is in this context, that the WED approach took a firm shape.

Jackson notes that WED differs from earlier work in WID in the following ways: *'it (WED) is not led by academics, it is very anecdotal... and not concerned to establish clear evidence or strong arguments but it takes its position as self-evident and it is characterized by a strong presumption that women have an affinity with the environment'* (1993, p.1948). Rural women are recognized as important victims of environmental degradation. The effects of deterioration hit women hardest: the subsistence of their families and households, for which they are held responsible, is endangered. As women develop new coping strategies to continue to carry out their survival tasks, their work load is often increased. Take the example of energy supplies. 75% of rural energy supplies (and 90% in Africa) comes from biomass such as fuelwood, crop residues and manure. Fuel collection, as long as it is not commercialized, is mainly a task for women, with some help from the children. As the ecological situation deteriorates because of deforestation, women have to spend more time and (human) energy collecting fuel. Depending on the ecological characteristics of the area in which they live, women may spend up to five hours a day on fuel collection (Dankelman & Davidson, 1987). New coping strategies, for example the use of alternative energy supplies as dung and crop residues, can lead to further deterioration of the environmental situation by affecting the soil fertility. The

poor in the South have no choice but to destroy their own environment: they are trapped in a vicious circle.

Apart from characterizing women as the main victims of environmental degradation, WED emphasizes the special bond that exists between women and the environment: women are seen as the privileged bearers of the knowledge nature has provided them with. In this view, women are assumed to be caring, nurturing and selfless beings committed to both future generations and the environment. Local women, environmental managers as such, have taken the lead in environmental protest actions. The Indian Chipko movement is one of the most quoted examples, as is the Kenyan Green Belt Movement. The WED approach is propagated by many NGOs, both Southern and Western based. Some key documents which demonstrate the features of WED thinking were produced at the NGO Forum of the 1985 UN Conference in Nairobi. Bottom-up, people-oriented development has to be stimulated in order to reach sustainable development, and women, with their 'healing hands', are prominent actors in this matter, according to this way of thinking.

A more radical line of thought within WED is pursued by the ecofeminists. In this concept, different factions of feminism, Southern critiques of these factions, spirituality and the ecology movement come together. Ecofeminism encompasses an important criticism of the Western industrial growth model of development, which has dominated the global scene for so many years. It is felt that both women and the environment have suffered from the effects of the maledominated growth model, and that an alternative path of development will have to be taken instead (Shiva, 1989). The concept of ecofeminism is based on the claim that there are connections between the oppression of nature and the oppression of women and that understanding these connections is necessary to understand the oppression of both. Feminist theory should include an ecological perspective, just as solutions to ecological problems must include a feminist perspective. The line of ecofeminism is pursued by the 'Development with Women for a New Era' (DAWN) network. This group of Southern-based female researchers, that first met in India in 1984, criticizes the Western development model from the experiences of poor women from the Third World. The group also criticizes the WID approach as being 'paternalistic'. DAWN formulated its own ideas regarding women's development within the framework of an alternative model of development, and presented these ideas at the UNCED Conference in 1992.

Gender and Development

In the past few years, the expression 'women in development' has gradually been replaced by the term 'gender' in the development literature. Instead of restricting itself to women only, a gender perspective takes into account the division of work and benefits between women *and* men: it aims for a conscious redistribution of these not only in productive activities but also within the household. Because men and women have different positions within the household and different control over resources, they do not only play different and changing roles in society, but also often have different needs. This role and need differentiation is the underlying rationale for gender analysis and planning, which has as its long term goal the emancipation of women. The GAD approach tries to counter the almost universal tendency to make the following generalized assumptions, which are far from confirmed by empirical reality:

- the household consists of a nuclear family of husband, wife and two or three children

- the household functions as a socio-economic unit within which there is equal control over resources and power of decision making between all adult members in matters influencing the household's livelihood
- within the household there is a clear division of labour based on gender. The man of the family is primarily involved in productive work outside the home, while the woman takes overall responsibility for the reproductive and domestic work involved in the organization of the household.

Gender analysis helps to undermine this short-sightedness by differentiating between needs and interests of both men and women. With regard to the third assumption, for example, evidence shows that in most low-income households in the Third World, women have a triple role: their work does not only include *reproductive* work, the childbearing and rearing responsibilities, but also *productive* work (secondary income earners) and *community managing* work, concerning the provision of items of collective consumption, undertaken in the local community in both urban and rural contexts (Moser, 1993). Although the tasks and responsibilities of women are not restricted to the reproductive sphere, their access to and control of resources such as land, trees, machines, credit etc., remains limited. Improving this access and control, which are now unequally divided between the sexes, concerns a strategic need of women, which can be identified by gender analysis.

Planning for low-income rural women in developing countries must be based on their interests, or, their prioritized concerns. Gender analysis tools are helpful instruments in identifying gender interests and needs. Gender analysis involves the collection of gender-disaggregated data, concerning:

- the physical location and type of economy
- the different groups within the community (class divisions, ethnic and/or religious minorities)
- age pyramids and other demographic data (family size, education level)
- living conditions and technology available
- the normal roles of men and women, children and old people as regards task distributions, including the hours worked by different family members on different tasks and distribution of these through the day and year exceptions to the task distribution (in case of widows, unmarried mothers and other female headed households)
- access to and control of resources (land, money, credit, machines etc.)
- legal and actual land holding situation
- rights to use communal or state land and forests
- financial situation
- household budget data

- membership of community organizations
- existence of women's groups
- observations on general problems facing the community
- observations on general problems facing women observations on gender behaviour in general.

and, in case of energy interventions:

- types of fuel used for different activities, users and suppliers of fuel.

Now that we have gained some insight into the various approaches to the subject of women/gender and development, let us consider the implications of these different ways of thinking for interventions (projects and programmes) in the energy sector.

Gender and Energy

The oil crisis in the early seventies ushered in an era of higher energy costs. This, and the rising awareness that energy sources are exhaustible, underlined the need for a more global energy planning. For developing countries, the picture is gloomy. These countries, including many oil exporters, need ever larger amounts of energy in the future owing to increasing population growth, urbanisation and industrialisation. In 1983 the World Bank estimated that developing countries needed to invest about 4% of their GDP annually in order to meet projected energy needs over the next ten years (Cecelski, 1987). However, so far the impact of higher energy costs has been softened by large reserves of 'free' wood and other biomass fuels (dung, crop residues). As mentioned earlier, 75 to 90% of total rural energy supplies comes from biomass in developing countries. Households are the largest users of biomass fuel, but many governments are now looking to biomass and wood cultivation and crop residues as new sources of energy for modern industry and transport as well. Overall, more than half of the total energy consumption of poorer countries is believed to consist of traditional fuels, especially wood.

Deforestation and desertification are among the most serious consequences of this reliance on 'free' biomass fuels'. Agricultural productivity falls since the growing use of tree, crop and animal residues decreases the soil fertility. Both crop yields and the capacity to support livestock are reduced. Men are forced to leave the land in search of seasonal work or work in the towns. These 'environmental refugees' swell urban populations and intensify the pressure on rural food and biomass resources. The 'rural energy crisis' hits women hardest (Agarwal, 1986). Women are largely responsible for subsistence food production and must increase their own labour input as productivity decreases. Time and effort spent on collecting fuel and water, two traditional tasks of women, increase. Cecelski: *'Women have little choice but to work more..., cut down on family living standards and try to squeeze more output and income out of the land, thereby contributing to the destruction of the ecological base- a vicious circle'* (1987, p.42).

The energy crisis of biomass fuels in addition to the energy crisis of fossil fuels is now commonly understood. However, the integration of gender issues into the energy sector has

not gone very far as yet. The vast bulk of energy assistance goes to the formal sector. Over 50% of the DAC2

Note that woodfuel gathering can not on its own be said to have had a major impact on deforestation in most places: agricultural clearance for cultivation coupled with grazing is today believed to be the main threat to forest

DAC is the Development Assistance Committee of the OECD countries energy budget is spent on conventional power projects including thermal plants hydroelectricity. For the World Bank, this figure is 80% (Skutsch, 1994a). Although 'sustainable development' has been adopted as an overriding goal by donor agencies, this has not led to a major shift in their energy policies towards relieving the daily energy problems of rural women. In accordance with Agenda 21, more emphasis is given to the choice of (cleaner) technology in new power plants, to upgrading technology in old plants and to building up energy institutions. Most new elements in the policy primarily concern the building of planning and management capacity in the energy sector of the recipient countries, but the development of new and/or renewable energy sources, although it certainly falls under the general umbrella of the new environmental aims, still receive a very small proportion of energy spending.

To support rural people in their daily struggles and to come to terms with the increasing shortage of wood energy, donor agencies have developed several strategies, which however take up a minor part of the energy budget'. Women have become the main target group for wood-saving stove programmes and eventually also for rural afforestation programmes. Donors however tend to define the subject of 'women and energy' as 'women and firewood': no attempt is made to look into other energy enduses than cooking and other household activities. Apart from these, there is also a large group of energy enduses which do not involve fuel but human energy -the larger part of which is women's energy- in exhausting physical tasks. These include, for example: the drudgery involved in fetching fuel and water, the transport of which mostly takes place away from the recognized transport network; the increase in female agricultural labour as a result of male migration and food processing (grinding grain). Cecelski (1992) concludes that one of the most damaging concepts in conventional energy studies is the exclusion of metabolic human (and animal) energy from consideration. Since the human energy provided by women to carry out their traditional tasks is left out of donor considerations, most of women's activities are not energy sector concerns. If the energy enduses mentioned above were taken into account, other types of projects would be identified (a technical intervention to reduce drudgery could then be considered as an energy project).

Programmes for household cooking technologies and other small scale alternative energy devices are supported by a large number of donors but their share in overall energy spending is very small, less than 2% of the DAC energy budget in the period 1979-1982 (Skutsch, 1994b)

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4.2. Notes on different approaches

Welfare approach

Interventions for traditional female domestic tasks, with aim to reduce drudgery, often based on simplistic assumptions, such as:

- improved stoves will result in reduced fuelwood collection
- improved stoves will alleviate smoke problem and improve women's health

Equity approach

- this has not generally been addressed at project level: it could mean measures to ensure men do an equal share of fuel gathering/providing
- raising men's awareness of the firewood problem
- often interpreted in terms of getting more women onto programmes aimed at men rather than changing programmes appropriately, so could include projects in which positive discrimination was used to ensure that women got their share of the same benefits that men were getting.

Basic needs approach

- community or individual woodlots with the simple aim of increasing the supply of firewood; also agroforestry projects which aim for multi-products as well (fruit, fodder, fuel etc) intended primarily for home consumption and not for the market.

Efficiency approach

- projects in which it is recognised that women need to be directly involved, e.g. in stove design and in tree planting, because men don't understand their needs and priorities as regards cooking, and men use trees for other purposes (commercial), which is often the reason that fuelwood projects 'fail'. Some deliberate integration of women in on-going social forestry projects has been introduced in places, and a few special women's tree planting projects have been started. Gradually more accommodation of women's views in stove design has been made, with resulting

success. Participants may have good examples of this. Note: efficiency approach may also include some stove programmes, but the 'efficient stove' is not what is meant by efficiency in the sense under discussion! We are talking about the efficiency by which the project meets its goals, not the efficiency of the technology itself!

Empowerment

- it has been recognised that until women get land rights their access to fuel will be vulnerable; there has been some discussion in the forestry sector but the energy sector has not pursued this line very far
- it would involve policy for giving land titles to women separately from men: changing inheritance practice, divorce settlement practice etc.
- generally also aims to support women's education in energy technologies and positive discrimination in job allocation in energy institutions.

Autonomy

- not applied widely to energy sector yet
- Madhu Sarin's women's stove building programmes (main aim: employment of low-caste women, to give them a profession as stove builders with independent income and a measure of freedom to travel) falls into this category
- it also means applying criteria of gender fairness to *all* projects which a department handles (forerunner of the gender approach), rather than setting up 'gender friendly' projects as such. Participants may be able to cite cases where this is done, but they must show that it is done in a formal way, not just ad hoc.

Women, environment and development (WED) approach

- support in energy should be directed through existing women's organizations - this is a basic principle of WED.
- support to programmes in which women are seen as the ones primarily responsible for environmental protection the need for *gender-sensitive* data is increasingly being recognised, i.e. use of and access to energy sources needs to be carefully analysed both at inter and at intra- household level. Up till now most practitioners have worked with gross generalisations about role of men and women as regards energy
- some case studies are available but there is an urgent need for more, and for training in how to do case studies.

Ecofeminism approach

- energy technologies are all basically bad and come with a false type of development as regards women. Particularly large scale e.g. power plants or hi-tech e.g. solar but also tree planting schemes which are unnatural and do more damage than good, playing into hands of commercialisation

- empower women to manage the natural resources, which will result in sufficiency in subsistence requirements including firewood, low consumption levels, low growth rate.

Gender (GAD or GED) approach

- use of gender analysis rather than emphasis just on women's role, when assessing projects: *gender-disaggregated* data. Aim not just to describe situation (data analysis) but to explain it
- no clear implementation strategies as regards energy have emerged one could expect a movement towards provision of technologies to replace women's energy in tasks other than cooking (e.g. portage and food preparation), and for income generating activities outside the house, but this has not been forthcoming yet one could expect analysis of impacts of e.g. electrification on men and women in rural areas but this has not yet been forthcoming
- as in WED, there have been statements to support to women's groups to access/manage natural resources and/or obtain more legal rights over privatised land, but few actual examples: active seeking out of women's voices in project preparation has been called for (again!) but rarely actually done
- support to technical education and placement of women in relevant planning sectors is needed but also major attitudinal shift in existing staff cannot assume that women are natural experts on gender, or that they have other women's interests at heart. This mistake is made far too often.

4.3. Exercise on gender, development and energy

Many energy projects have a 'women's' component, or at least 'helping women' is mentioned as a specific goal. During the lecture it was pointed out that there have been many different approaches to women or to gender in development, which have rather different underlying philosophies and aims. This is reflected in the choices made at project level in a sector such as energy. A project which provides free improved cooking stoves to women is based on very different philosophy about women and their needs than one which gives a women's group land so that they can cultivate trees, for example, although superficially the idea may be to save natural forest resources in both cases.

On the attached pages you will find a table in which the different stages in thought about women (or gender) development are presented. They are shown roughly in the chronological order in which they were developed, but it was never the case that one approach displaced another and there are examples of most types to be found in projects operating today. In the second column, examples are given of the types of rural development projects typically implemented under each of these approaches. The third column is blank. The idea is to fill it with projects in the energy sector which might be considered for each of the approaches. This might be actual projects with which you are familiar, or it might be general types of projects.

This course is primarily concerned with wood and biomass energy, but you may want to add projects which deal with other forms of energy, particularly if one of the aims of such projects is to reduce dependence on wood and other biomass resources.

Authors' Note

The above exercise was worked on by all participants in country groups. The results of their exercise, along with explanations were presented somewhat later, after the participants had undergone some more instruction.

One of the completed exercise is reproduced below as an example of the participants' understanding of the subject.

Approach	Typical projects	Typical energy projects
Various WID approaches:		
welfare approach	programmes aimed at practical needs, targeted especially to 'reedy' women, who are seen as passive recipients (charitable approach)	interventions for traditional female domestic roles and tasks - nutrition classes - sewing classes - family planning
energy conservation project e.g. 'Improved smokeless chulla'. This could help improve kitchen environment as well as the health of the person who is cooking (the woman) because research has shown that CO (carbon monoxide) inhaled during one hour cooking is equivalent to smoking of 20 cigarettes.		
equity approach	This was essentially a political movement, stimulated mainly by developments in the USA (anti- discrimination in job opportunities, equal pay for equal work etc). It is based on the idea that women should participate equally with men in everything, thus they should be 'mainstreamed' in all projects. Also, the equity principle stresses the need to meet women's strategic needs as well as their practical ones.	There have been very few projects or programmes which aim at equity. There are however <i>policies</i> such as compulsory education for girls as well as boys, abolition of dowry, equal right of inheritance which are equity based, but these may be difficult to implement in local situations.
Efficient use of traditional fuel and alternative energy e.g training conducted to create awareness among women about how to modify their own traditional chulha, need of using dry wood/biomass fuel which is efficient in terms of energy economics and readjusting their cooking method. This will give them time to do things which they want to do for themselves to help enjoy a happy and healthy life.		
basic needs approach	Projects and programmes targeted to meet practical needs, on the basis that women need to have their basic living requirements fulfilled before they can participate in development	- Mother-and-child-care programmes should be designed targeting women as - Vegetable
Agroforestry/homes forestry projects e.g projects beneficiaries to help ease their burden of wood collection.		

	activities	gardening - Provision of piped water	
efficiency approach	Projects and programmes both mainstreaming or integrating women into general projects, and special projects targeted only at women. The purpose is not especially to benefit women, but to involve them because <i>unless</i> women are involved, the projects designed for general community benefit are likely to fail.	- agricultural extension directly addressed to female members of households (as well as males) - projects to support subsistence food cropping as well as cash crops	Energy (biomass energy) conservation and biomass energy augmentation projects aimed at the direct participation of women. In this case extension worker and target groups should contain a respectable number of women.
empowerment approach	Policies and programmes to meet strategic needs, which is to say education, legal and political rights, and women's use of these; also mobility, and self-confidence of women.	Most interventions for empowerment have been more at the policy level than at project level. - land rights and inheritance - rights for widows and divorcees - quota systems for political committees and university entrance Often the law is far in advance of the actual practice, because of conservative attitudes locally.	Formulation of legislation to ensure women's right to land and property. This will give freedom to women to take agroforestry, woodlot or farm forestry projects. By doing things in their own way and according to their own wishes they will be empowered with resources and confidence. This will create a national confidence which is a great achievement for developing and developed countries in terms of human resource development.
autonomy approach	The aim is to give women much more freedom and independence in all walks of life. Thus the autonomy approach is an extension of the empowerment idea, but in adopting it, a sponsor is saying that <i>all programmes and projects</i> , for all aspects	Projects are similar to those under empowerment, i.e. aiming to meet strategic needs of women. Officially, all projects of all types should be scrutinised to make sure that they	Credit programmes designed to allocate money for women. After having "their money" they will be able to utilise it for other renewable energy technologies available around such as using solar dryers for their food

	of development, must pass certain equity/independence criteria, and none must worsen the position of women in the social, economic or physical spheres.	do not involve a worsening of women's position.	drying if they think that is profitable in terms of money and time.
WED approach	Women have a special relationship with the environment, which is very different from men's, and more 'sustainable'. Programmes and projects should use their special skills and indigenous knowledge about the natural environment. In doing this, a better overall outcome can be attained, in addition to catering to the special needs of women.	- support to development should be directed through existing women's organizations; - support to programmes in which women are seen as the ones primarily responsible for environmental protection- the need for <i>gender-sensitive</i> data is increasingly being recognised, i.e. use of and access to resources needs to be carefully analyzed both at inter and at intra-household level. Such data is required in the approval process for project proposals.	Agroforestry, social forestry, strip plantation, homestead plantation and nursery projects aiming at 100% participation of women. Experience has shown that women has more in depth knowledge about fuel, fodder, timber and medicinal plants. If the project is designed and managed by women it is more likely to be better than that of men.
Ecofeminism	Conventional development is bad for the environment and bad for women. Ecofeminism rejects the goal of economic growth, and proposes instead that women should manage the environment for subsistence, resulting in sustainability.	There are few operational projects of this kind, but the idea is to empower women to manage the natural resources, which will result in sufficiency in subsistence requirements, low consumption levels, low growth rate, and ecological balance.	Credit allocation aiming at 100% participation of women; i.e the target group should only be women for "Integrated", dairy, poultry, fishery and vegetable gardens coupled with biogas plants. This project is a profitable one. In such a case men have no other option but to share the household work.
GAD/GED approach	It is recognised that it is useless to tackle the problems of women without seeing them in	- use of gender analysis rather than emphasis just on women's role, when	Gender development training projects for energy planners to help sensitize them to the need to create a gender

	<p>their context: that of division of work, access and power between men and women. The whole system needs to be dealt with, not just the women's part. The subordination of women to men is generally the key; there is a need to clearly establish how and why access to and use of resources, and tasks, are divided M/F.</p>	<p>assessing projects: in using <i>gender-disaggregated</i> data the aim is not just to describe the situation (data analysis) but to explain it</p> <p>- gender sensitive projects does not mean that special projects need to be set up but <i>all</i> projects need to consider their gender aspects.</p>	<p>friendly environment.</p>
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5. Gender concepts

5.1. Gender concepts

Gender

A social cultural and personal construct, not a biological construct; separate from the sex-based categories of male/female. A view through which to assess other social organizing principles with influence on the status of men and women-class/caste, race, age, religion, location/city/country side; not used in isolation.

Gender Relations

Refers to social relations between men and women. Major issues are power and hierarchy. How these relations are formed and supported by family, culture, state and market is an important consideration.

Sexual/gender Division of Labor

"Who does what work?" is an entry point to understanding gender as a social construct.

Activities

Productive/economic/"outside"

Household/reproductive/"inside "

Community

Gender Roles and Responsibilities

Gender roles and responsibilities are extensions of the division of labor, the key issue is the concept of "gender" (the social, not biological concept) and how different roles and responsibilities are assigned to men and women.

The intersection of these gender roles and responsibilities with a development project's goals and activities is the focal point of a gender analysis.

Persistent Female-Male Gaps

Even though women's employment levels, occupational representation and education, etc. have improved compared to their levels in the past, there have been little or no changes in their relative positions vis-a-vis men. Women still lag significantly behind men in all areas. Empowerment opportunities for women have not been on the same terms and conditions as for men; and education and training have not successfully broken down sex segregation in occupations. Women are concentrated in a few economic sectors and, relative to men, occupy the low status, low paying jobs with generally poor working conditions, little prospects of occupational mobility, and increasing incidence of sexual harassment.

In Japan, women account for only 8 per cent of total administrative and managerial positions (1991); in the Republic of Korea for 4 per cent (1991); in Malaysia for 11.5 per cent (1988); in

Singapore for 15.7 per cent (1991); in Thailand for 12.5 per cent (1980). Gender wage differentials remain significant. In 1991, the average wage of women workers in manufacturing relative to the wage earned by males was 69.5 per cent in Hong Kong; 42.9 per cent in Japan;

50.8 per cent in Republic of Korea; 55.7 per cent in Singapore; and 87.8 per cent in Sri Lanka.

Women also work longer hours than men. In many countries hit by the economic ravages of the 1980s, women, especially very poor women, are now working 60-90 hours a week just to try to maintain their meagre living standards of a decade ago.

What can be done about these Gender gaps? Redefinitions of gender roles/sharing.

Examples of success in Asia and Europe:

- Most indigenous communities in countries of Asia
- China, Vietnam
- Norway, Sweden

Why has this process of redefining gender roles been successful? How has it affected these societies?

Example of Improved cookstoves: Why was it considered a welfare policy measure?

- Provided relief from drudgery but reinforced domesticity of women.
- The opportunity cost of women's labor-examples of India and China (see pages 70-71).

We must understand reasons for the greater acceptability of improved cookstoves. How will the "saved" labor time be used? Do women and planners have similar ideas about this?

- Wood energy crisis affects poor, rural women more than it does the men of these communities.
- With regard to labor and work, or the cultural division of labor within the household, labor and energy involved in childcare is not regarded as work, but as "service",

"service" performed by a woman for her family.

Wood Energy-Specific Gender Analysis Tools

- Gender analysis of labor and work Distribution of benefits within the household
- Access, control and management of resources: women's agency
- Gender policy for technology development: women's indigenous knowledge

In sum: What has gender to do with planning?

Gender analysis potentially changes planning at the micro-economic units--household/family.

5.2. The meaning of gender awareness

What Does Gender Awareness Mean in Development Projects?

- Women are treated as representatives of half of the population, not as a special interest group
- Development projects do not address only women, but involve men and women according to their specific needs and strengths.
- Projects are not limited to women's traditional concerns such as health, nutrition and childcare, but also to the productive sphere, education and social-cultural fields, where women are still under-represented
- Projects are concerned not only with the protection of women as needy and vulnerable individuals, but are aimed at the enhancement and expansion of women's and men's experiences, their self-awareness, skills and creativity
- Projects do not regard women and men only as beneficiaries, but also involve them as participants and decision-makers.

Objectives of Gender Awareness Training

- This training addresses both men and women, and aims at sensitizing them for gender related problems
- It focuses on men's and women's different roles in society, shaped by ideological, historical, religious, ethical, economic and political factors
- Gender awareness training is concerned with the relationship between men and women in all fields, and the factors which influence these relationships
- An awareness about gender differences in society is a first step towards addressing and integrating the special concerns of men and women fairly in development programs and projects.

6. Personal awareness of gender

Margaret Skutsch

6.1. Planning approaches to gender in energy

The Fundamental Purpose of a Gender Approach in Energy Planning

We have already seen that the understanding about how women should be involved in development has itself evolved over time. The current preference is to think not in terms of special or separate programmes women, but in terms of *gender*. There are still a number of different positions, however, that can be taken regarding the reason for and purpose of a gender approach in energy planning.

Gender for Efficiency

Many energy planners are increasingly aware that their projects have been less than satisfactory, and have interpreted this in terms of failing to understand the needs of the people concerned. For a number of years it has generally been accepted that *participation is* a fundamental requirement for project success, because it was understood that a proper understanding of people's needs and priorities can only be gained through a participatory process. Similar to this is the notion that each gender has its own requirements and its own constraints which need to be taken into consideration. A gender approach ensures that these needs and constraints are at least understood by the planners, which should enable them to design better project and programme interventions.

The film "Gender Analysis for Community Forestry", produced by the FAO Forests, Trees and People programme is a good example of this approach to planning with gender. In the film the different roles and requirements of men and women are explained, and we see how the project is modified to suit these requirements.

This approach to gender makes no attempt to change the basic roles which men and women play. It accepts the status quo and maximises project efficiency by ensuring that the project is sensitive to these roles.

Gender for Equity

At the other end of the scale there are energy planners who see the gender approach primarily as one which highlights inequalities in society, and which stresses the fact that in almost all societies women are subordinate to men in most respects. The purpose of applying gender analysis is, in this view, not to increase the success of projects by fitting them more closely to people's current needs, but to change the status quo: to meet not just the practical needs of women but to help them meet their strategic needs and to give them more power relative to men. The gender analysis is used to identify the most serious blockages to women's control over resources, to document the conditions under which women work relative to men, and to propose changes which benefit women.

Intermediate Positions

Most energy planners find themselves between these two extreme positions. Most energy planners, particularly in the area of wood energy, are more than aware of the enormous burden carried by women, literally and figuratively, as regards the daily supply of household fuel. Increasingly planners are also becoming aware of the fact that solving woodfuel supply problems is difficult for women because of their lack of rights to land: it is often much more difficult for women to plant trees than for men to do so. Most planners are also aware of the inequalities as regards labour inputs in agriculture (women provide the bulk of agricultural labour worldwide) and the 'triple role' of women, which means that on top of agricultural work they have all their housework to do too. In other words, it is almost impossible to deny the fact that women have a relatively hard time compared to men in rural life - and from there it is a relatively short step to taking the position that this is unfair and something should be done to improve their situation vis-a-vis that of men.

Changing the relative status and rights of women however means interfering in social practices which are considered to be culturally determined, which raises the fear that many positive cultural values will be lost as well. Some societies are much more willing to make fundamental changes as regards women's position than others and the energy planner, whatever his/her own personal views on the subject, will have to be very sensitive to the realities and the potential for change. In some cases it is a big step even to accept that women have practical needs which are different from men's, and need to be consulted concerning what these needs are. In other cases this is well understood already and the energy planner may be in a position to initiate deeper changes, for example by increasing women's control over certain natural resources.

The point is that awareness of gender, and use of gender based planning procedures, can help the planner whether the aim is efficiency or whether the aim is equity; and in most cases, the aim is in fact somewhere in between.

How the Gender Approach Fits into the Overall Planning Approach

Another point of discussion in gender and energy planning is whether the inclusion of gender issues is a relatively simple matter or whether it requires a complete overhaul of the planning procedures and a rethinking of planning theory. There are proponents of both positions.

The 'Add-Gender-And-Stir'¹ Position

Many planners feel that gender is a socio-economic variable just like many others (class, income group, ethnicity etc) and that if proper data on gender is made available, gender can simply take its place alongside these other variables. This position is one taken by many planners who feel that the basic model of planning they use should not be changed, whether it is based on a rational comprehensive type of planning ideology or on socialist principles or on participatory procedures.

¹ Anyone who is familiar with supermarket convenience foods and their preparation will be familiar with this phrase! It refers, for example, to packets of ready made cake mix: all you have to do is add an egg and stir and the cake is ready. The parallel in this case is that 'gender' is just one of the many ingredients in the energy planning cake mix and that it can be simply added without making any further adjustments.

The 'New Paradigm For Gender Planning' Position

In contrast to this a growing number of planners feel that the old models of planning are so firmly based in the idea of the household as the basic unit in society and the man as the primary decision maker, that totally new models will have to be developed if gender is to receive the attention it deserves. Such views are held both by planning theorists of the far left, who have tried and apparently failed to integrate a feminist angle into Marxist theory, and by planning theorists of the right who support the principles of market economics and capitalism as the engine for development. Indeed theorists of all political persuasions are engaged currently in developing new planning models in which it is hoped that gender will be the central issue. One example is represented by the ecofeminists who are working from a quite different set of assumptions about what development *is*; starting from a new theoretical base they will presumably eventually develop planning procedures which reflect this. Other writers, for example Moser (1993), stress the need for a 'new paradigm' but so far outputs have been more procedural than theoretical. One of the difficulties with approaches such as that proposed by Moser is that while gender is central to the planning procedures adopted, many other important issues environment, class, technical options etc. are completely left out of consideration.

Intermediate Positions

It is of course very possible to take an intermediate position between these two extremes, and in the short term at least it is likely that most planning agencies in the energy field (as in other areas) will be more concerned with how to modify their planning methods to incorporate gender than with designing totally new methods. The matter of immediate and practical concerns are: what types of planning procedures should be introduced, and at what points in the planning cycle?

Alternative Ways of Embedding the Gender Approach in Planning

Even if (as is usually the case) the choice is made to modify existing planning procedures to incorporate gender rather than scrapping the whole system and starting again, there is still some choice available as to where and when the gender procedures will be inserted.

Using Gender Analysis As A Filter

A parallel might be made with environmental concerns. In many agencies Environmental Impact Statements are compulsory for all project proposals and these are made following a standard procedure and with specified types of data. Once the EIA is made, it is reviewed and should the impacts on the environment be found very severe, the project must be modified, or may even be rejected totally. The format of the EIA is fixed, but generally the decision to modify or drop the project is made by a committee or in consultation with staff and people concerned. It is possible to envisage the gender component of planning in a similar way; to see gender analysis as a 'sieve' or filter through which all project proposals should go before approval. Thus projects are not deliberately designed with gender as a primary concern, but some degree of equity is assured because all projects have to pass a 'gender test', so to speak.

Not surprisingly perhaps, use of gender analysis in this way is most often found in conjunction with the 'add gender and stir' approach.

Building Gender into The Project Cycle

Another approach which has been taken by some agencies (for example, it is proposed by SADC TAU, the energy agency for the southern African countries, as a model for all national energy planning agencies) is to work through the project cycle ensuring that gender issues are considered at every stage. This is akin to the 'wearing of gender specs': it involves consciously seeing the gender aspects of the development process as it is going on, and the gender impacts of potential interventions. This is a more thorough-going approach to incorporating gender issues, and it means that a variety of different planning tools or analytic frameworks will be needed for use at different stages and at different levels of data aggregation. The result will be that gender considerations may be creatively taken into account from the very beginning of the process (problem identification and project formulation) and not merely used to filter out 'poor' projects. It presupposes of course that the agency concerned already uses the project cycle method and sticks to this rigorously, which is by no means always the case even when agencies claim to use the project cycle as their basic planning procedure.

Building Gender Into Other Planning Procedures

Some agencies base their planning procedures on other models such as the Logical Framework or ZOPP, or possibly around computer based energy models which predict supply and demand etc. In principle there is no reason why gender issues should not be incorporated into such models, whether they are used at the beginning of the planning process to identify potential interventions or at the end to evaluate them. The important thing is to set up a procedure involving the use of gender analytic and planning tools such that they fit into whatever planning model is already in use. In this way the gender issue is 'mainstreamed', and not kept apart as a separate (possibly omittable) procedure.

6.2. the household

The Household

The most immediate and personal awareness of gender issues is in the household. The household is also the focus of project interventions in the area of wood energy, particularly project interventions aimed at increasing the income of woodfuel producers. Most policy analyses view the household as a single unit, having only one set of preferences. It is assumed that the welfare of individuals in the household does not depend on the person who is targeted by the person, usually the male head of the household, who receives the extra income. But, should one look at the way resources are distributed within the household? The same extra income derived from a project, whether given through men or women, may not have the same effect on household welfare, if women and men tend to spend the income they control in different ways. This would make a difference in poverty alleviation measures. Empirical studies in a number of countries show that the different ways in which household income is controlled translate into different patterns of expenditure. Men spend more of the income they control for their own consumption than do women. Men spend more on alcohol, cigarettes, and other status consumer goods. Women, on the other hand, are more likely to purchase goods for children and for general household consumption. Thus, for poverty alleviation measures it does make a difference whether the extra income is under the control of women or men.

Discussion Question

A land reform programme increases the consumption possibilities of households in peninsular South Asia. In another village there is a programme of compulsory school attendance with a midday meal programme. Will there be any difference in the inequality of consumption between boys and girls in the two programmes?

(Author's note: Initially, at least some of the participants held that there would be no difference in the inequality of consumption of boys and girls in the two programmes. They said that parents were equally interested in the welfare of their children, whether girls or boys. But others opposed this view, saying that parents did discriminate against girl children. Thus, income given to the household, will be spent in a discriminatory way against girls. But, income distributed as a public feeding programme, a compulsory school attendance with mid-day meal scheme, would not favour boys against girls).

Why Inequality in Consumption?

Evidence shows that there is a regular and substantial inequality in distribution of resources and leisure within a household. Women and girls regularly get less of the consumption possibilities of a household than do men and boys. At the same time, they also get less of the leisure time and work longer hours than do men and boys. Can we assume that the inequitable distribution of resources within a household represents a willing act on the part of the women (and girls)? Nancy Folbre challenges such an assumption: "The suggestion that women and female children 'voluntarily' relinquish leisure, education, and food would be somewhat more persuasive if they were in a position to demand their fair share. It is the juxtaposition of women's lack of economic power with the unequal allocation of household resources that lends the bargaining power approach much of its persuasive appeal." (Nancy Folbre, 1992, *Who Pays for the Kids?*, RKP: London). The distribution of resources within the household is not the result of the "altruism" of the (male) head of the household. The distribution of resources within the household can be seen as a bargaining problem. In relations between spouses there exists both cooperation and conflict - by cooperation they can both improve their position, but there is also conflict over the distribution of gains within the household. What determines the distribution of gains within the household? As stressed by Amartya Sen, a key factor is the *fallback* or *breakdown* position of each partner - the income or well-being that each person can achieve if cooperation were to fail, i.e. the independent position that each partner can attain without the other. The person with a weaker fallback position, i.e. with less independent possibilities, will be weaker in the bargaining, whereas the person with a stronger fallback position will be stronger in the bargaining. The independent access to income that a woman has will strengthen her bargaining position within the cooperation (i.e. within the household) and thus improve her share of welfare from total household income. The breakdown position indicates the person's vulnerability or strength in the "bargaining". If, in the case of a breakdown, one person is going to end up in more of a mess than the other person, that factor will weaken that person's ability to secure a favourable outcome.

Policy Implications

In order to reduce inequalities of consumption within the household, it is necessary to enhance women's independent access to income. Changes in women's access to common property resources, inside and outside the marriage, would alter the distribution of resources (consumption) within the household. Thus, the importance of going inside the "black box" of the household in order to discuss individual incentives and the distribution of welfare among its members.

7. Stove dissemination programme, Sri Lanka: an overview and assessment

R.M. Amerasekera

7.1. progress of stove programmes in Sri Lanka

Sri Lanka is one of the few countries where significant and consistent progress is seen in woodstove development activities. In general this has been in the direction of sustainability or commercialisation.

One of the reasons for the success of the stove dissemination programme may be that the programme has been able reorient its objectives and implementation strategies to attract the interest of several actors with different perspectives to actively support and participate in the programme activities. In keeping with this trend the implementation organisation too has changed along with the organisations providing infrastructural support. Because of this flexibility it has been able to secure resource inputs and the technical assistance required from local as well as foreign organisations at various stages of development to sustain the momentum and continuity of the programme. Looking at the entire process of stove development activities this is a fact that can be clearly observed.

Moreover, the manner in which the stove models, development objectives, implementation strategies and implementers changed at various stages of development to facilitate the progress towards achieving commercialisation and sustainability can also be clearly observed.

- The stove models have changed from heavy mass mud stoves to mobile pottery insert stoves
- Development objectives have changed from macro level national concerns to micro level user, producer and social concerns
- Strategies have changed from subsidies to commercial orientation, centralised to decentralised activities, and individual management to participatory management
- Implementation responsibility and involvement have shifted from government to non government organisations.

Depending on the implementation organisation, specific and narrow objectives have been spelled out in the initial stove programmes in Sri Lanka related to such issues as energy or environmental conservation, deforestation etc which have been necessary when centralised implementation of activities were carried out at the initial stages.

In the National Fuelwood Conservation Programme document prepared in 1984 by the Senior Energy Advisor To H.E. the President it is stated that:

"Since the potential savings from the national economic viewpoint are about Rs 2000/= - 3000/= per family for 3 years, or Rs 5000/= to 8000 million for all households, popularising the use of woodstove must be given the highest priority even if it has to be given at a nominal cost (e.g. R 25/=)."

Although this was later realised to be a wrong conception it was the most significant event in the stove development activities in Sri Lanka which gave the programme considerable impetus and brought in very influential actors into the stove scene.

As the implementation process continued, there was a move, towards wider participation leading to a more decentralised and participatory implementation strategy. Thus the activities were planned to have a certain amount of flexibility to accommodate changes or to fit into an integrated development framework where a broad range of development issues are addressed at the micro level.

7.2. History of stove activities

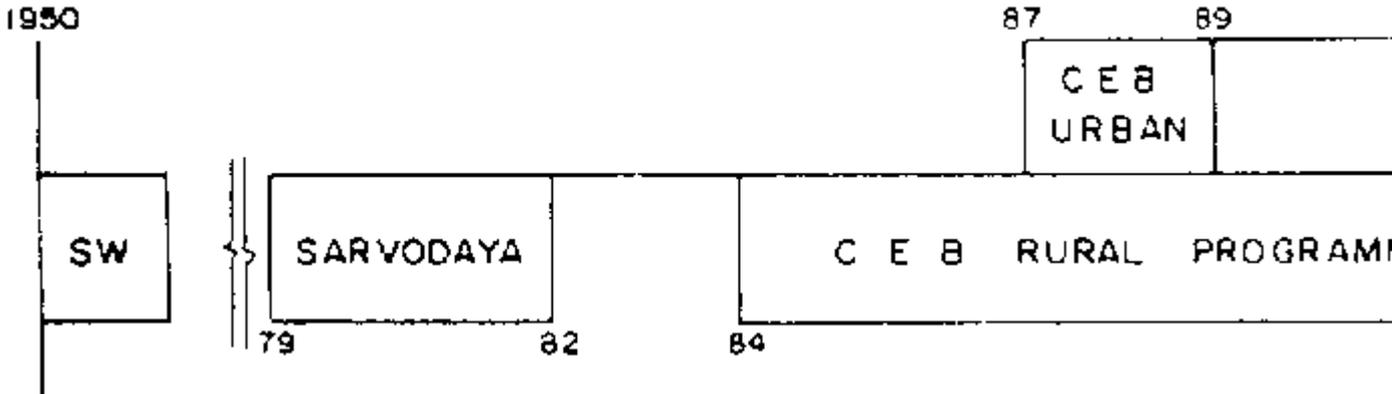
There is historical evidence to show that improved stoves were used in Sri Lanka as far back as the 10th century. Pieces of clay stoves have been discovered in recent excavations carried out in the North Central Province in Sri Lanka.

Clay stoves resembling U Chula are believed to have been used in the Central Province in the 17 and 18th centuries. A few of these are exhibited at the museum in Kandy. However, it may be that these were used only by aristocratic families and not by ordinary people.

In the recent past, around 1953, some initial efforts were taken by social workers to introduce the Herl Chula which was popular in South India. However, widespread use or sustained efforts to popularise it are not evident.

The period after 1970 saw some remarkable interests being generated in stove activities. This was the crucial period when oil prices escalated and within a short period of two decades rapid deforestation took place mainly due to various development schemes launched by the government. During this period Sarvodaya Institute, Ceylon Institute of Scientific and Industrial Research (CISIR) and the Industrial Development Board (IDB) took a leading role in carrying out R&D work to develop suitable designs.

Stove programme continuity (1950-1995)



This pioneering work paved the way for large scale dissemination efforts after 1984 and the major involvement and commitment of the Ministry of Power & Energy (MPE) and the Ceylon Electricity Board (CEB). Despite the focus on narrow objectives, which of course was

not very evident or realised at the beginning, this gave a tremendous impetus to stove dissemination efforts.

The major thrust towards large scale stove dissemination efforts was begun in 1984 with the dissemination of stoves in rural areas. Based on the experience gained efforts were later extended to cover urban areas with modified objectives and strategies.

The lessons reamed and the experiences gained from these programmes are vivid and diverse.

These are well documented and the subject of deep discussions and have been widely shared with local and international stove development agencies. Two international seminars were held in Sri Lanka in 1989 and 1993 to share the experience of the Urban Stove Programme implemented by the CEB and the Stove Commercialisation Programme implemented by IDEA.

It must also be mentioned that there are a few other organisations independently promoting stoves within their own agendas without much publicity. Such promotion is generally carried out in a small way, but consistently. Unfortunately, these organisations have very little interaction with other organisations which are more involve in stove dissemination activities. UNICEF and the extension unit of the Agricultural Department are two such organisations.

7.3. Important events in the history of stove activities in Sri Lanka

1950 Introduction of the Herl Chula

1972 Interest shown by govt. research organisations, namely IDB and cisir in designing stoves

1979 Sarvodaya Stove Project with technical inputs from ITDG

1981 International Seminar on Stove Projects ITDG/Sarvodaya

1983 Formation of the National Fuelwood Conservation Programme under the Ministry of Power and Energy

1984 Pilot project to identify a suitable stove design for a large scale dissemination programme funded by the Ministry of Housing and Construction

1984 Pilot project to identify a suitable dissemination strategy for large scale dissemination funded by the CEB.

1985 Commencement of a three year large scale dissemination programme in Hambantota District under the IRDP and funded by NORAD.

1985 Launching of the national Rural Stoves Project jointly funded by the MPE and Royal Government of The Netherlands.

1985 Prof. Mohan Munasingha Award presented to the stove team for implementing the best energy project in 1985.

1985 High priority accorded to stove project activities by H.E. the President

1987 Launching of the Urban Stoves Programme jointly funded by MPE and ODA (UK)

1989 International Seminar on Urban Woodstove Dissemination, funded by ODA/CEB

1989 Pilot Project to identify suitable stoves for the plantation sector

1990 Extension of the Rural Stoves Programme (CEB)

1991 Omnibus survey on "Anagi" stoves (Woodstove promoted under the Urban Stoves Project)

1991 Stoves Marketing Project - Extension of the urban commercial strategy to rural areas. Implemented by Integrated Development Association (IDEA) in collaboration with ITDG.

1993 International Seminar on Commercialisation of Wood Stove Dissemination jointly funded by FAB/RWEDP, GTZ, ITDG, ARECOP.

1993 IDEA Stove Marketing Project 2 phase

1993 Termination of the CEB stoves project

1994 Continuation of the Stove Marketing Programme by IDEA

1994 Pilot project to identify a suitable strategy for marketing of woodstoves in the Plantation areas. Funded by the Plantation Housing Social Welfare Trust (PHSWT) of the Ministry of Plantation Industries.

It is this chain of activities which has kept the programme moving forward uninterruptedly from

1972 to the present.

7.4. shift of development objectives in stove programmes in Sri Lanka

1953 To improve kitchen environment (Taking away smoke using chimney stoves). Social Workers

1972 To develop stoves with high efficiency. CISIR & IDB

1979 To develop a socially acceptable stove. Sarvodaya

1984 (National Stove Programme - CEB)

To minimise deforestation and its ill effects

To increase the availability of firewood by helping to use firewood more efficiently, thus reducing pressure on existing resources.

To develop a built-in mechanism in the village infrastructure for a self sustaining programme for dissemination of fuelwood efficient stoves

1987 (Urban Stoves Programme - CEB)

The reduced consumption of fuelwood for domestic purposes using an improved design of cooking stove

To reduce the rate of deforestation

To enable households to reduce their expenditure on woodfuel Generation of employment opportunities

Improving quality of life through cleaner kitchens, and the potential to increase the availability of hot meals and hot water

1991 (Integrated Development Association Stoves Marketing Programme - IDEA Programme) To create additional income earning opportunities for potter families, including women potters

To improve household conditions, particularly for women through greater cooking convenience and savings of time spent in the kitchen

To provide information so that the experience and lessons learned from the project can be used to influence policy makers, donors, and others interested in household energy, health, and other development issues

To make provisions in the project for low income households, especially in the rural areas, to benefit from the stove

To establish fully commercial and sustainable production distribution and sales networks for stoves

1994 (Plantation Housing & Social Welfare Programme - IDEA Proposed Programme)
Reducing the woody biomass (tea clippings & wood) that is removed from the vicinity of tea estates
Improving conditions under which women cook
Utilising stoves as an entry mechanism for social work of other types.

7.5. Change of stove models

1953 Herl Chula - Two pot mud stove with chimney

1972 Two pot brick 8 cement stove - IDB model

1978 CISIR two pot pottery liner chimney stove

1982 Single pot clay stove with built-in grate

1979-1983

Sarvodaya

Lorena Stove

Two pot mud stove with chimney

Dian Desa Chimney Stove

Dian Desa Chimneyless Stove (2 pot)

Sri Lankan Chimneyless Stove (2 pot)

Sri Lankan pottery liner stove (2 pot)

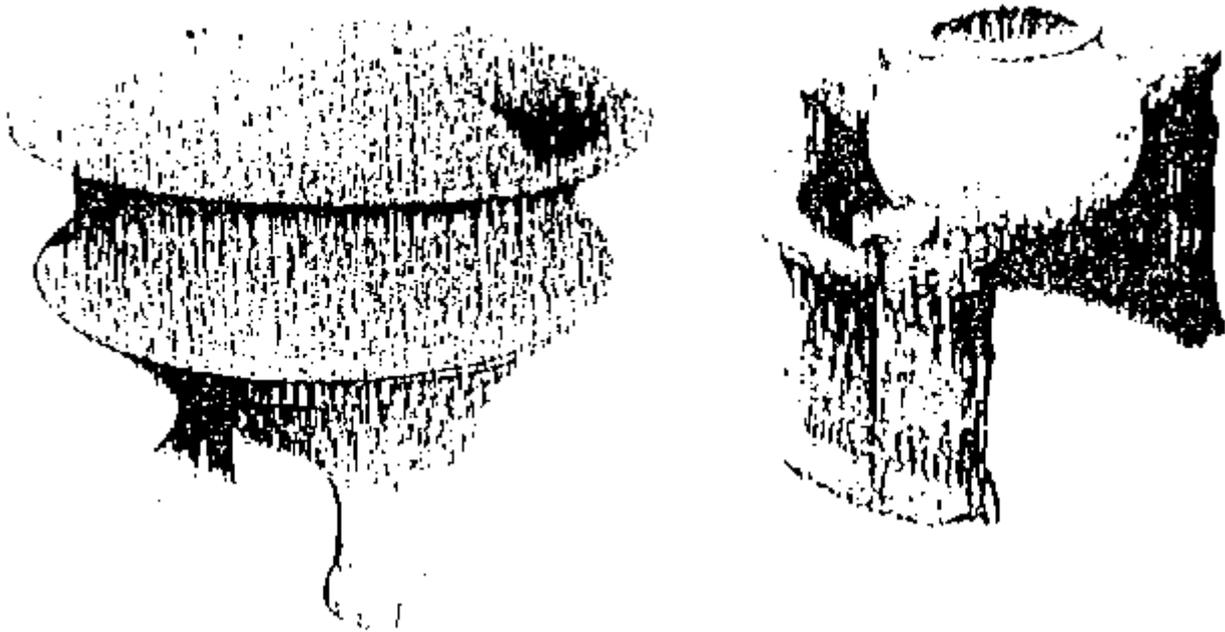
1983 Single pot clay stove with grate - CISIR model

1986 CEB "Anagi" Stove (2 pot, clay)

Various Actors in Stove Programmes

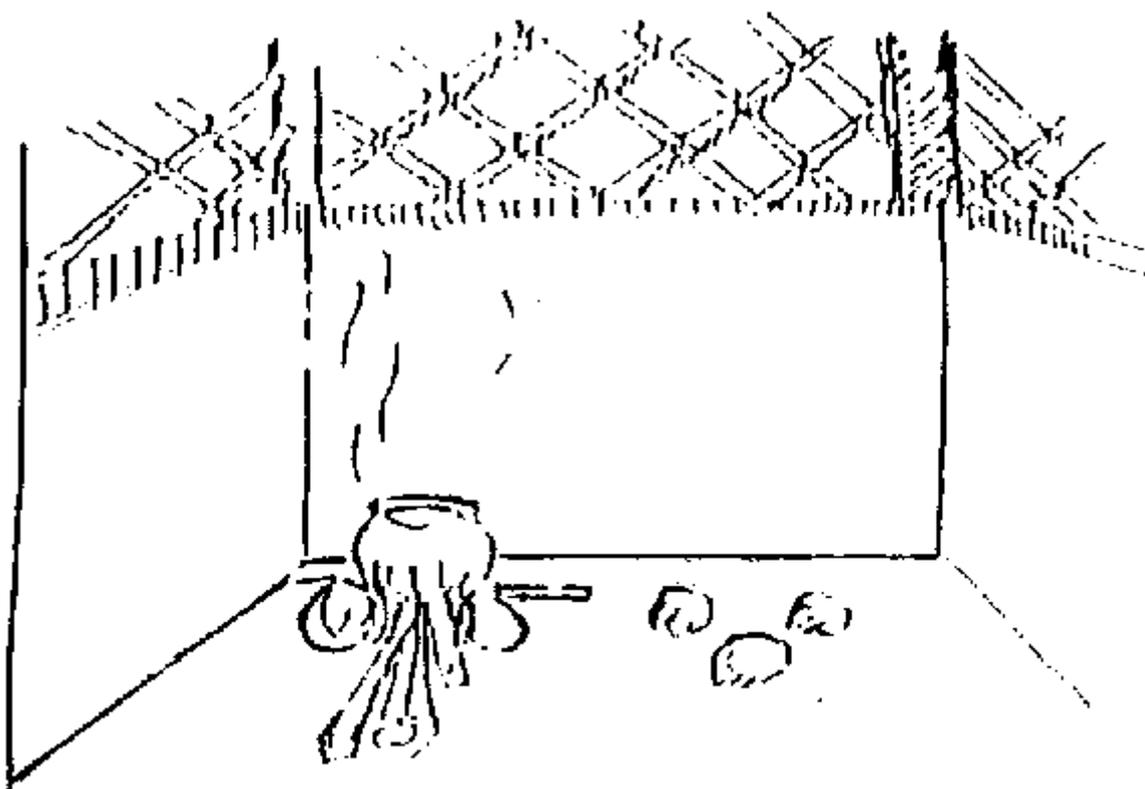
Year	Implementer	Technical Assistance	Donor	Activity
1950	Social Workers			
1972	IDB/CISIR	IDB/CISIR	IDB/CISIR	Design & Testing
1979	Sarvodaya	ITDG	VITA, ATI Helvitas Novib,	Design & Field Evaluation
1984	CEB	Sarvodaya	ITDG	Field Evaluation
	CEB	CEB	Prime Minister	Pilot Dissemination
1985	CEB	CEB	CEB	Rural Dissemination
		Hoffman Eng	Dutch govt., MPE	
1987	CEB	ITDG	& CEB	Urban Dissemination
1990	IDEA	IDEA/ITDG	ODA, MPE Future	Commercialisation
1993	IDEA	IDEA	Publishers/ ITDG ODA/NORAD/	Commercialisation
1994	IDEA	IDEA	ARECOP/JTF PHSWT	Pilot Project

Stoves used in Sri Lanka in the 17th & 18th Centuries.

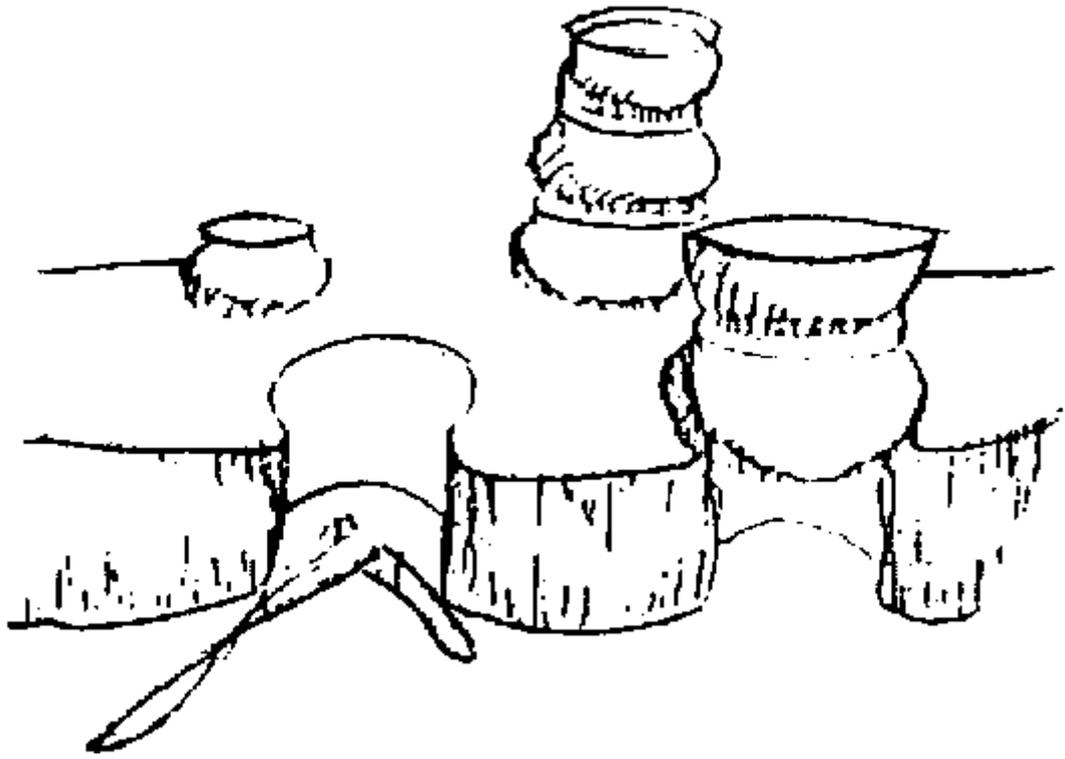


Traditional stoves used in Sri Lanka.

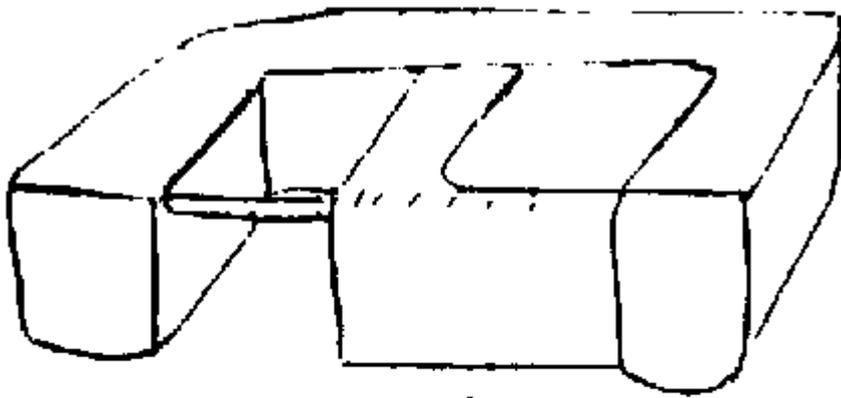
3 stones open fire



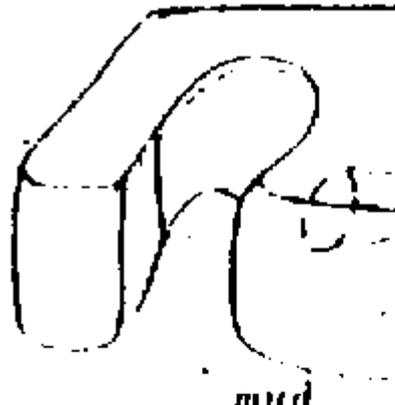
Semicircular mud stove "Sinnala Lipa"



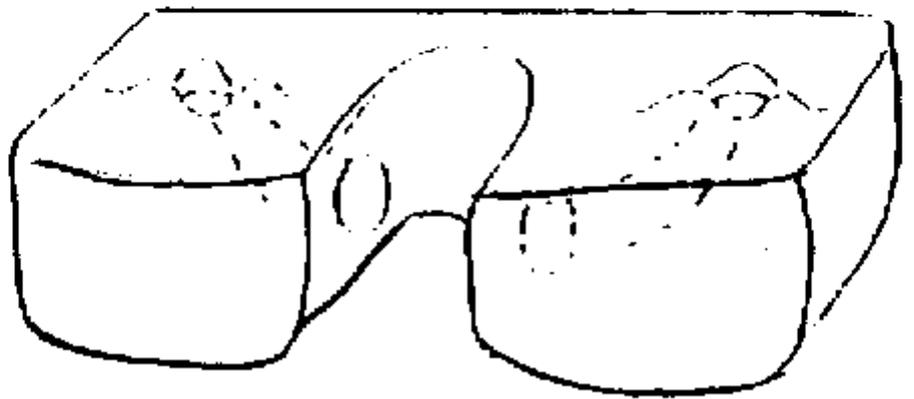
Stove used in the Plantation areas by the South Indian Community.



mad pipe tin



mad

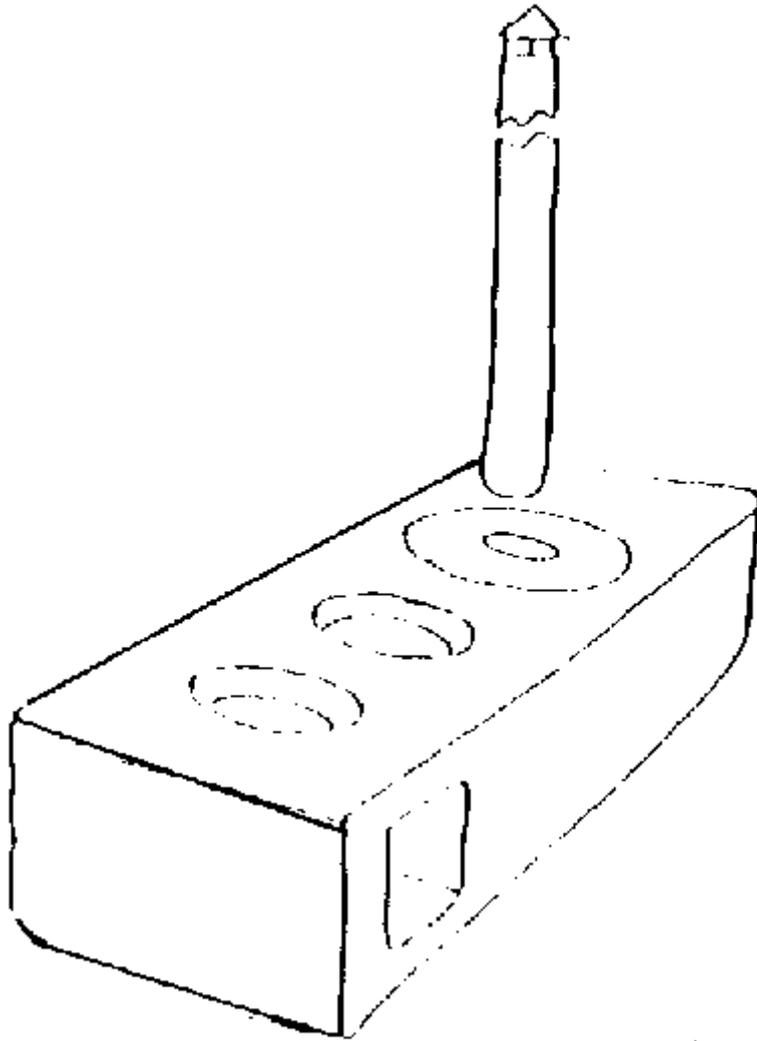


mad

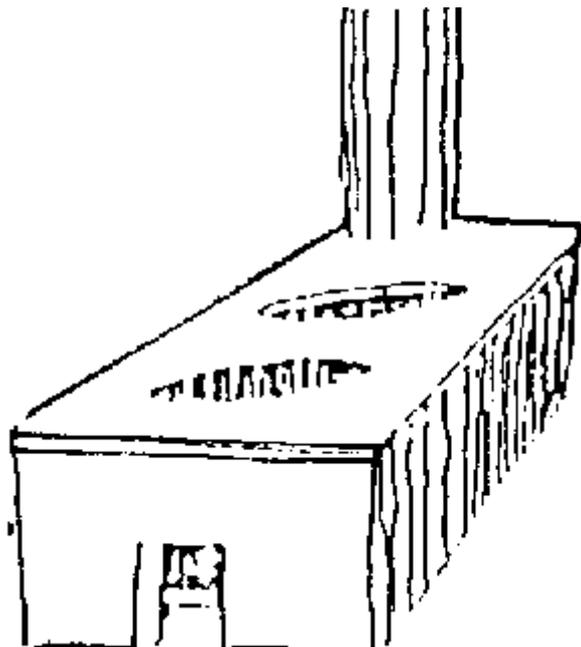
Improved Stoves 1950-1978

Stove designs 1950-1978

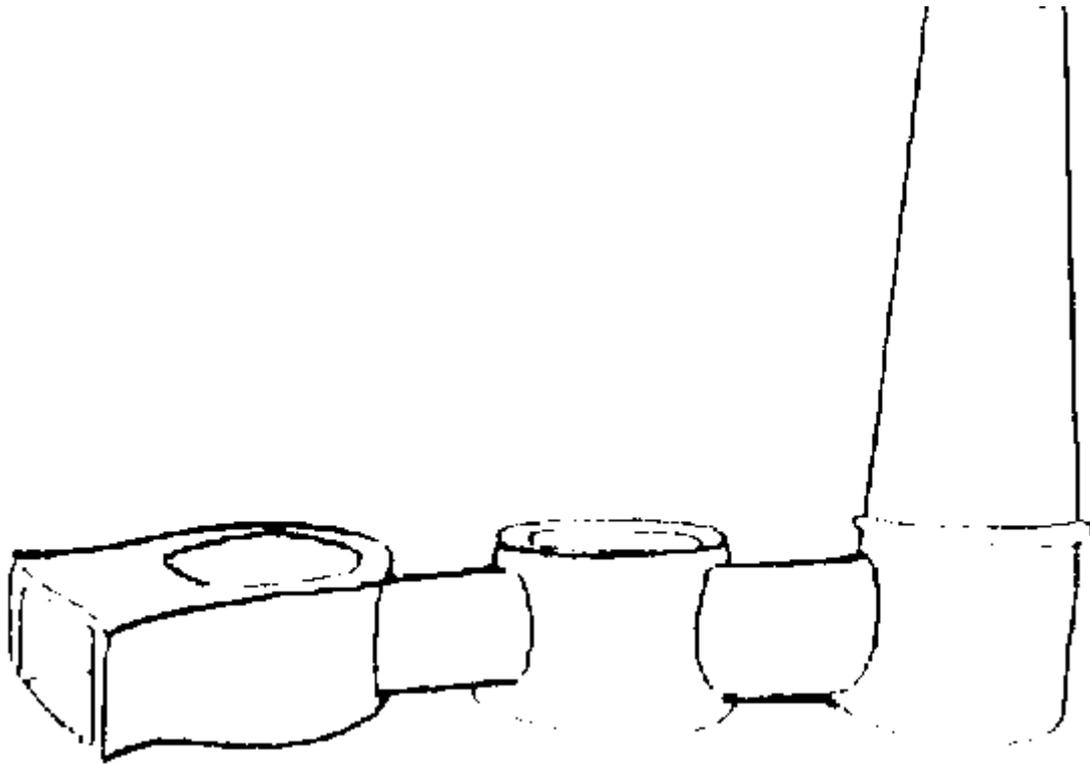
"HERL CHULA" 1953



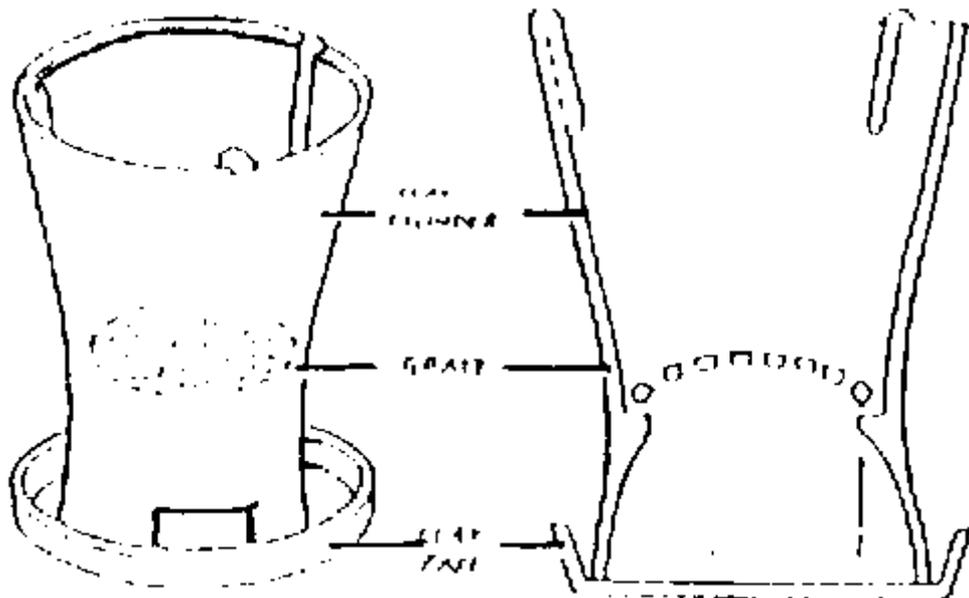
I.D.B. Stove 1972



CISIR Stove 1978

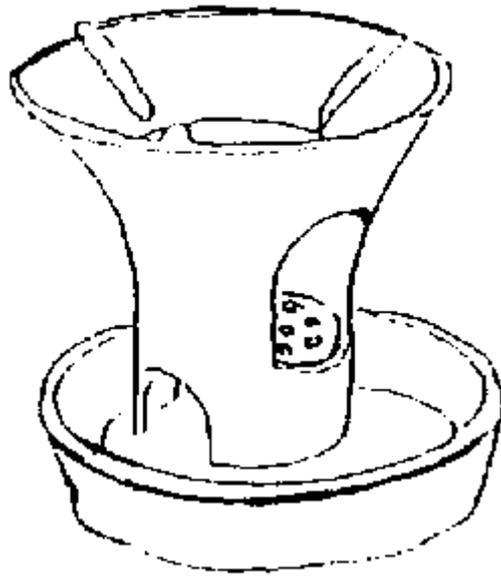


CISIR Charcoal Stove 1978

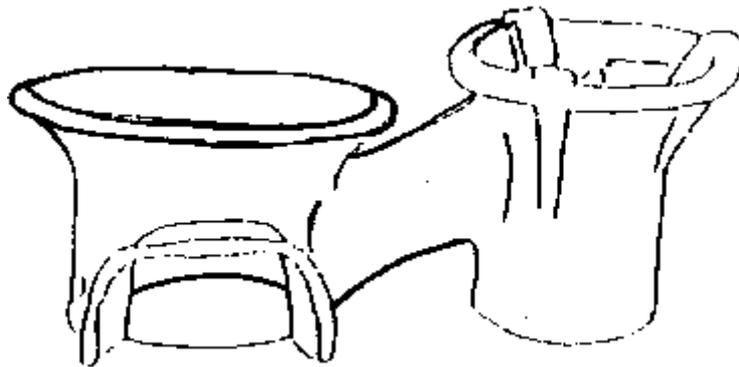


Stoves Disseminated in Sri Lanka 1988-1987

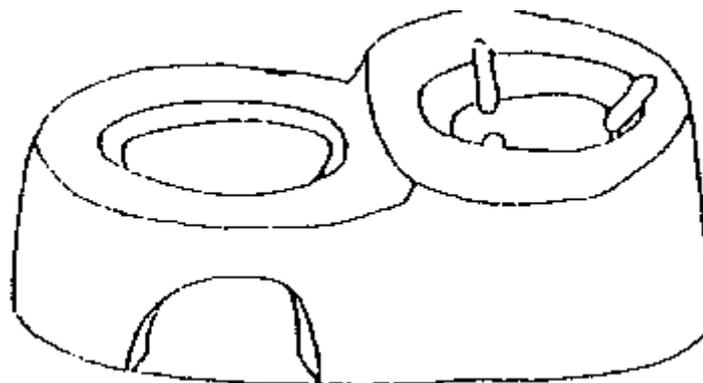
CISIR Stove (urban)



CEB Two-pot Stove (urban)



Sarvodaya Mud Insulated Stove (rural)



7.6. Some important findings of the omnibus survey 1991

This survey was carried out by a private marketing consultancy firm SRI BRANDSCAN on behalf of IDEA/ITDG. 1,000 urban and 1,000 rural households were interviewed.

- 75% of the urban and 31% of the rural users have modern stoves while 1/3 of the urban and 3/4 of the rural users have biomass stoves
- Under 30% of the urban and rural homes have pottery stoves and 1/3 of these are "Anagi" stoves
- 12% of the population have purchased "Anagi" stoves
- Over half of urban homes and around one quarter of rural homes have two or more stoves
- Stove users spend on average 1.5 hours a day cooking food on electric stoves, 1.9 hours on gas and 2.3 - 2.9 hours on biomass stoves
- In urban areas three quarters of users purchase firewood and only one third collect it. In the rural areas the ratio is reversed
- 99% of the "Anagi" stove users were using it regularly, 93% for cooking and 71-76% for boiling water
- Of the "Anagi" purchasers 62% have an income below R 2500
- The main motivation for buying the "Anagi" stove was to save firewood -- 66% mentioned it as the main advantage. The second main advantage was that it has two pots so that two items can cook simultaneously. The third main advantage is that it cooks quickly
- The source of awareness of "Anagi" stoves differ between urban and rural areas suggesting different promotion strategies.

	<u>Urban</u>	<u>Rural</u>
TV	25%	15%
Neighbours & Friends	15%	21 %
Officials & Societies		18%
Dealers	11 %	10%
Radio		9%

Over 50% were purchased by women and in 2/3 of all cases the decision was taken by a woman. This pattern is equally strong for rural and urban areas. The clear implication is that marketing has to be focused on women

39% of the urban "Anagi" users and 46% of the rural users do not use any other stove which indicates that the "Anagi" meets the full range of the cook(s) needs

- An "Anagi" is reported to have a life of at least 2-3 years
- 83% of users mentioned that there are no disadvantages while 5% identified its inability to cook large meals.

According to the latest Omnibus Survey (report not yet ready) the penetration level of "Anagi" stoves is assessed to be 19%.

7.7. Present situation

The CEB, IDB, CISIR and Sarvodaya, the four pioneering organisations in stove activities are no longer active. The Integrated Development Association (IDEA) which took over dissemination activities in 1991 is implementing the second phase -- the Stove Commercialisation Programme.

Unlike in the Urban Stoves Programme where the focus for production was limited to the formal sector, mainly the tile factories, the IDEA strategy was to bring in the rural potters into the commercial network. With the "Anagi" stove gaining popularity there emerged a large number of untrained potters producing sub standard "Anagis" which was a cause for concern for the project officers creating an antagonistic attitude towards these producers. They were even labelled as "Pirate" producers. This was in one way justifiable because sub standard "Anagis" were posing a double threat: they could undermine the reputation of the "Anagi" hence limiting the potential for commercial success and secondly, they could restrict the benefit of "Anagi" use. However being associated with NGO with a broad development outlook, the project officers were made to realise that this was an indicator of success and that they needed to capitalise on this entrepreneurial effort of the potters. Thus the "Pirate" producers became Look Alike Stove (LAS) Producers -- a more respectable name which amply recognises their resourcefulness.

In phase 1 of the programme it was seen that with the process of commercialisation, the poorest users and producers did not reap any benefits from the programme activities. It was mostly the affluent users and producers who had access to commercial markets and networks. Being an NGO devoted to uplifting the living conditions of the poor IDEA was concerned and had to incorporate activities in the second phase to ensure that IDEA's development and social obligations were not diluted by the commercial interests of the stove programme.

Accordingly the following actions were taken.

- It was decided to strengthen grassroots level NGOs both financially and technically, to establish a revolving fund and to carry out promotion activities so that stoves could be sold to the poor users with the cost to be recovered on an installment basis. There are nearly 20 such NGOs in operation and most of them are women's groups
- Marketing assistance was to be provided to link up isolated producers with stove distributors and to set up producer cooperative societies wherever a sufficient number of producers could be grouped together. This also avoided elite producers having a bigger share of the market.

In addition to the need to access a large number of poor users through grassroots level organisations there are other reasons and benefits from working with them.

- There is better feedback of genuine responses, needs and immediate priorities of the beneficiaries over a wide geographical area. It was felt that this could guide future strategies
- Planning and implementation are exposed to broader participation so that the perspectives and needs of partner organisations could also be accommodated in the project activities
- Over a period of time, activities can be decentralised and phased out so that the institutional capability of the partner organisations could be built-up to take the responsibility of continuing the programme independently in their respective areas with a minimum of outside inputs
- It provides an opportunity to integrate stove initiatives with other NGO development programmes.

7.8. Impact of the programme

To quantify or assess the impact at a national or macro level programme is a difficult task. It was a misconception to have expected stoves to save the forests or reduce national firewood consumption. Even a crude estimate therefore may not be realistic.

In an evaluation (carried out by ITDG in 1989), of the Urban Stoves Programme, it was estimated that 100,000 stoves disseminated under the programme would provide 0.4% of savings relative to deforestation (saving of forest cover is 16.4 ha while annual deforestation rate is 42,000 ha). This indicates that even a very successful stove programme would have only a marginal impact on the rate of deforestation.

The evaluation highlights the substantial financial savings at household level that could be achieved from using stoves as the pay back period is 3 months for users buying their firewood.

The stoves have brought in positive changes at the household level as a result of savings of firewood, and savings of women's time in collecting firewood and cooking. These effects in turn have also had associated health benefits.

Certain households do not save firewood but do more work such as boiling water which is also a positive impact. Recent tests carried out in the estates households indicate lower CO levels (reduced by 31 %) in the smoke emissions when using "Anagi" stoves.

The following are the results of a survey carried out in 120 households in 1987.

Per capita consumption of firewood & boiled water per day

Village	Wood in Gms			Boiled Water Lts		
	Trad	Sarv	Anagi	Trad	Sarv	Anagi
Pusselle	1164	1051	918	2.8	3.8	3 66

Kobeigane	1843	1262	1083	1.64	4.12	3.94
Average	1503	1157	991	2.02	3.95	3.80

Smoke emissions tests in plantation households - Peter Young & IDEA staff, 1994, Comparison between "Anagi" and traditional stoves.

Test	Anagi (5 tests)	Trad(6 tests)	% Change
CO ppm	18.9	27.3	31
RSP ug/m ³	682	727	6

CO: Carbon Monoxide

RSP: Respirable suspended particulates

From the producers side, benefits are very visible. In some of the pottery villages a considerable social and economic transformation can be seen. Improved housing conditions, land ownership and social status are some of these. Some producers have become distributors making use of their own lorries. A number of them have also made other profitable investments.

The following data is from a survey carried out in Kumbukgete which is a pottery village comprising 24 families mainly producing stoves.

INCOME	No of <u>Families</u>	
	Before	After
< Rs 3,000	12	3
Rs 3,000 - 5,000	5	4
Rs 5,000 - 7,000	0	7
Rs 8,000 - 12,000		3

New Possessions

ITEMS	Families	
	Before	After
TV	1	12
Cassettes	2	10
Radio	1	3
Cycles	2	8
Hand tractors		1

Video decks		1
Lorries		1
Motor cycles		4
Bullock carts	1	

The Stove Cooperative Society, established with a loan of Rs 20,000 provided by IDEA, has earned Rs 459,640 over a period of 14 months and each member has been provided with Rs 4,000 from profits to open a savings account with the bank.

It is estimated that donor agencies have provided nearly \$800,000 for stove activities in Sri Lanka. Users are likely to have spent nearly \$400,000.

Since 1983 about 500,000 stoves have been disseminated either through the extension or commercial routes. Neglecting the future production, the donor investment is around \$1.6/stove. Assuming a life span of 2.5 years these 500,000 stoves have been used by 125,000 households over a period of 10 years. Thus, the investment is little over \$5/household. How do these indicators compare with donor investments in other fields of development? At present, without exaggeration it can be said that at least 100,000 stoves are sold annually through the commercial route established as a result of this investment. If this output is also considered the benefits will spread over 250,000 households over a period of 10 years, making the indicator a little over \$1/household.

7.9. Lessons learned

- It is not only the stove design which has to be appropriate but the entire dissemination process, viz. design, production, promotion and marketing. Because it may be impossible or impractical to have a clear picture of the total process at the beginning it is necessary to adopt a flexible and responsive approach to dissemination. This will enable diverse and complex issues related to all aspects all phases of stove development to be addressed effectively whenever they come to light. Such flexibility is required from donors, implementors and project staff alike.
- Appropriate and timely monitoring and evaluation activities facilitate the progress towards a responsive approach and ensures sustainability. Regular monitoring and evaluation provides data to enable a quick change to new strategies before the project activities are interrupted. Continuity of activities needs to be maintained despite different actors taking over from one stage to the next.
- Sharing of experiences and the effective interaction and communication among national and international organisations facilitate project success. (Inputs provided by ITDG, RWEDP, Hoffman Eng, ARECOP, DianDesa experience are examples.)

- Commercialisation need not be seen as a process which prevents or inhibits provision of benefits to poor users outside the commercial network. In other words, a focus on social objectives and concerns is possible within a commercial framework if appropriate strategies are used. (Involvement of grassroots level NGOs in the extension route, establishing revolving funds etc.)
- Although in many projects, the emphasis is on the user, the project cannot isolate or neglect the producer. Therefore, project activities have to incorporate a strategy to address social and technological needs of the producer as well e.g., technical assistance to potters to maintain quality of stoves, decentralised production making use of poor rural potters, establishment of potter cooperative societies, training in entrepreneurship etc.
- Highly efficient stoves may not be the most acceptable type of stove. For example, the failure of IDB, CISIR & CEB stoves is noted as is the acceptance of the less efficient

Sarvodaya stoves in the CEB programme

- Institutional support to cover R&D work, training, institution building & promotion are essential and justified can facilitate and create a conducive environment for development of commercial mechanisms, e.g. Investments in stove activities in Sri Lanka led to sustainability and a multitude of user and producer benefits
- Subsidised stoves may hinder sustainability despite the fact that large numbers are disseminated. For example, 400,000 stoves were disseminated under the CEB rural programme, but the institutional structure for dissemination dissolved after subsidies were withdrawn. However, subsidies provided under the CEB rural programme have had a positive effect in that they have created a substantial degree of awareness among the users and project officials and created a conducive environment for pushing the case for stoves in the development arena
- Formal sector participation is not an essential ingredient in commercialisation, e.g. poor rural potters in Sri Lanka were heavily involved.
- In the Sri Lankan context, dissemination of stoves has made little contribution towards achieving national objectives but the impact at the micro or household level has been significant
- Stoves should be introduced not necessarily as an energy intervention but more appropriately as an intervention facilitating an integrated development process at community or domestic level with benefits related to income generation, health, coping with energy shortages, saving women's time etc.
- Since women comprise almost 100% of users and a sizable proportion of producers, stove programmes should address women's concerns and therefore their participation is essential at all stages: planning, design, implementation, monitoring and evaluation. The absence of female officers in the project staff in production and evaluation activities have been identified as a shortcoming which has had a negative effect on the quality of the programme

- Political commitment and policy support (e.g. priority accorded by H.E. the President and establishment of the National Conservation Fuelwood Programme by the Ministry of Power & Energy) have played an important role in the success story
- Because of a rigid focus on a wide range of social benefits and an emphasis on commercialisation considered to be the ultimate success of stove programmes, gender related issues were effectively down played or ignored.

List of Acronyms

CEB	Ceylon Electricity Board
MPE	Ministry of Power & Energy
CISIR	Ceylon Institute of Scientific & Industrial Research
IDB	Industrial Development Board
PHSWT	Plantation Housing & Social Welfare Trust
JTF	Janasaviya Trust Fund
ARECOP	Asian Region Cookstove Programme
RWEDP	Regional Wood Energy Development Programme
ITDG	Intermediate Technology Development Group

References

Project documents of relevant stove programmes

Progress Review of Stoves Marketing Programme - Peter Watts 1993

A History of Stove Development Programmes in Sri Lanka - Emma Crewe & Peter Young - 1995

National Fuelwood Conservation Programme - Prof. M. Munasinghe 1984

Evaluation of Urban Stoves Programme - Mel Jones 1989

Conservation of fuelwood in rural households - Sepalage & Amerasekera 1987

Sri Lanka stoves programme: Progress. Issues and Future Directions - Amerasekera 1991

"Smoke Signals" - A health warning to estate workers - Peter Young & others 1994

Sri Lanka Ominibus Survey - SRL Brandscan 1991

Commercialisation of improved cookstoves - T.R. Shyam Sundar 1995 Sri Lankan experience

Women producers and user's of intermediate technology: the trade offs within ITDG improved stove programme. Kiran Dhanapala 1995

7.10. Annex

Women Producers and Users of Intermediate Technology;

The Tradeoffs Within ITDG (Sri Lanka's) Improved Stove Program

by Kiran Dhanapala

There are several constraints to operationalizing gender concerns in development projects despite the existence of gender issues for about two decades. Analysis of an ITDG (Sri Lanka) project promoting improved fuel efficient stoves seeks to throw light on the constraints that exist when gender related objectives are linked to multiple general project objectives and the internal conflicts and compromises this gives rise to.

"In practice, gender concerns in a project are often made subservient to other objectives which are often seen as more indicative of success - such as marketability, sustainability and productivity, and the sustainability of the project itself. As such, there often exists unacknowledged and inherent internal trade-offs between multiple objectives. This does not aid the integration of gender concerns fully into the overall project but instead, leads only to the partial fulfilment of its objectives."

Further, there is an important need for practical realism in formulating objectives that are achievable and complementary to each other in the project planning stage.

Projects seek to address a combination of interests, priorities and issues felt by different levels of actors; donors, governments and implementing agencies such as NGOs. This leads often to a multiplicity of objectives - as is the case with successive improved stove projects in Sri Lanka. In the past, projects such as the Sarvodaya Stove Program from 1979-83 and the Ceylon Electricity Board (CEB) instituted project under the National Fuelwood Conservation Plan (NFPC) from 1984-89, and ITDG's Urban Stoves Program (USP) during 1987-89, stressed macro national level objectives such as fuelwood conservation and environmental benefits from reduced deforestation. This was in addition to micro-household level objectives such as cleaner kitchen environments, reduced expenditure on fuel wood, etc. which were often added as projects progressed for sake of added legitimacy and the appearance of wider impact.

Further, the projects differed in both their approaches to implementation with the first and the second projects characterized by rural decentralized production in a welfare oriented approach while the third was urban, centralized mass production with a commercial dissemination strategy. Commonalities among these three projects include; (1) relatively little achievement in attaining respective macro objectives in contrast with micro impact. (2) achievement in micro objectives were primarily from the user end due to addressing quality of life factors, and (3) fulfilment of women users' practical needs within an existing gender based socio-economic framework (4) relative lack of prominence to gender concerns at the producer end. Fulfilling gender concerns at the producer end was relatively easier in decentralized production models than in highly centralized and commercial production models. (5) a lack of regard for women's strategic interests and concerns.

The Sri Lanka Stoves Marketing Project began in 1991 with a number of objectives (a mix of both macro and micro as in the past) within a commercial project framework. The project

cycle emphasised, firstly, the potter producers, and later, the users. This involved a shift to welfare concerns for both in the later parts of each respective stage. Its commercial orientation in its objectives, the stress on sustainability and, its pursuit of a supply led "market take-off" strategy for the Anagi stove led to the project's inability to optimally address gender concerns at both producer and user ends. The project was unable to provide adequate access to and unable to address the constraints to greater inclusion of female potters in stove training at the producer end (female potter trainees were around 23% during different intervals despite comprising usually 50% of potters). This was due to the project's inability to deal with gender concerns (such as the practical needs of women potters) due to the constraints in having to achieve (conflicting) higher priorities/objectives during this period. Through the lack of optimal integration of female potters into learning about a new product and the consequent exclusion from production, thereby reinforcing gender based divisions and norms, a negative effect on strategic interests resulted. This is however, in an academic sense as in no way did such issues ever enter the project's already numerous objectives and was therefore beyond its scope. This gender related failure was however, within the success of its overall (commercial) objectives and to a lesser extent, the welfare objectives that followed.

On the user end, the successful achievement of initial supply concerns and product take-off enabled a shift in attention to the user and user benefits. Although the project gave priority to impact at the household level, the emphasis in stove promotion was chiefly on quantitative benefits (such as fuel savings) instead of qualitative benefits (such as cooking time savings and convenience). Later research on users by the project suggested that women users' qualitative concerns like time savings and ease of cooking (41.3% as compared to 25%, excluding other qualitative benefits, Boowalikada User survey 1992). This indicated a misperception and/or misrepresentation of women's practical needs and interests. With respect to the project's user related welfare objectives, the impact on poorer users was achieved in a relatively comprehensive coverage of low income groups (Omnibus Survey data 1992). Users' strategic needs and interests again were largely ignored by the project which adopted gender norms (such as women as cooks) in its promotional material due to cultural and practical considerations. On balance, strategic interests were neglected more with respect to female potters than users. Indeed, the project could have played a direct role in affecting some important changes within this group.

The project serves to provide lessons and insights into the tradeoff that is likely to appear when gender concerns are incorporated into overall project objectives. Firstly, due to the market driven nature of launching a "social good" project, implementation was responsive and supply led forcing it to compromise one set of objectives for others. This was perhaps greater in the case of producer related objectives. Secondly, the multiplicity of objectives were too extensive and ambitious. In seeking to address issues such as project and product sustainability, poverty alleviation, household level needs serious internal incompatibility, seen in consequent shifts in emphasis throughout the project cycle, resulted. Lastly, despite stress on potters involvement in stove production and women's participation, the failure to adequately address these concerns at both producer end and within the project was due to the failure to analyze the implications of such objectives and consider the mechanisms by which they may be reached.

It can be concluded that careful analysis of project objectives in an overall project context is required to ensure defined and focused goals which are mutually supportive. More generally, a comprehensive approach addressing all aspects of beneficiary needs is required; in the case of stoves this would imply a greater focus on women user's overall requirements (including

their strategic interests) and their roles so as to result in greater benefits. In the Stoves Marketing project this would require a stress on contextual concerns; the "soft skills" of stove use and management techniques rather than the stove itself. This home economics dimension would include stoves and women's energy requirements and, women's coping strategies in fulfilling both their roles and the energy constraints they function under.

8. Gender analysis tools

Govind Kelkar

8.1. Gender analysis tools

Introduction: The Need for Gender Analysis

Increasingly woodfuel and other biomass sources have become inaccessible to women due to large-scale degradation of the environment and the inability to sustain rural energy sources. (See Box 1) There are two major features of such an energy crisis: women in poor, rural households are affected more than others, leading to an increase in the labour used to collect woodfuel from longer distances; and there is a diversion (and eventual scarcity) of organic materials like cowdung, dry leaves, and crop residues, from other uses, such as fertilizing fields, with possible adverse consequences on agricultural fertility.

Over the past few decades, a number of innovative measures have been introduced to solve the woodfuel problem. These have been mainly of three types:

- Improved stoves to economize on the consumption of wood for fuel
- Community, social and farm forestry projects to increase the supply of wood for fuel
- Equipment using alternative sources of fuel for cooking and other domestic purposes, like the community or household gas plants, using organic wastes.

Reportedly, these measures have had poor results, largely because, as for instance in the case of improved stoves, the specific needs of users (women) have not been taken into account in formulating such solutions; and the improved stoves were not just another piece of equipment but introduced new ways of cooking. In the more successful cases, however, it was noted that there was a high involvement of users or women in the design and construction of energy-saving equipment (Bina Agarwal, 1986). More importantly, where there is a higher opportunity cost of women's labour, there is a demand for improved stoves to reduce cooking and fuel collection times.

Thus, whether a community or household does or does not seek greater efficiency in fuel use depends on decisions by woodfuel users, i.e. poor rural women. They will decide on the basis of factors like: How and to what extent will their labour be saved? And, what are the alternative uses of that labour in non-domestic, income-earning activities and the consequent impact on household welfare and their own social position?

The praxis of such a policy demands the application of gender analysis to the woodfuel case.

Box I THE SEARCH FOR FUEL IN INDIA

- "Energy surveys in the country show that in an average semi-arid village, a woman walks as

much as 1,400 kilometers a year - the distance from Delhi to Calcutta - to collect

firewood alone... The situation is much worse in hill and mountain regions such as the Himalayas and in the arid regions of Rajasthan and Gujarat.

- "As firewood becomes scarce, people scrounge around for cow dung - a valuable source of

manure which literally goes up in smoke. But today even cow dung is scarce.

- "Given the energy crisis, people improvise in a thousand different ways to collect this very

basic need for cooking energy. In many places, crop residues such as arhar sticks and

cotton sticks are being used increasingly for fuel. But with a difference. Crop residues, unlike most trees and weeds, are a private resource... And today they are being used as a bargaining counter by the landed. In Jalna district in Maharashtra, where cotton sticks are an important fuel, we were told that landowners had refused to increase farm wages by threatening to stop giving the free supply of cotton sticks to the laborers. In many other places today, crop wastes are given in place of wages.

- "In West Bengal people have no option but to burn leaves. Every morning, women walk to the nearby forest and literally sweep the ground with brooms to collect every fallen leaf to take home. But these bundles of leaves, after hours of back-breaking work, will disappear in cooking just one meal. Leaves are such poor quality fuel that women are forced to shove in leaves every minute to keep the fire going. The situation... is so bad that we found a four month old plantation... being swept clean by young girls.

- "As the environment degrades, women have to spend an extraordinary amount of time

foraging for basic household needs such as fuel, fodder and water. It does not matter

whether they are young, old or pregnant. There are no Sundays or holidays. It is a job which

takes place, day after weary day, year after weary year".

Source: "Between Need and Greed - the wasting of India; the greening of India" (1987), Anil Agarwal in *The Fight for Survival People's Action for Environment* Edited by Anil Agarwal Darryl D'Monte and Ujwala Samarth, Centre for Science and Environment.

Gender Analysis

Paying attention to Gender Analysis means recognizing that households are not solidary units with undifferentiated labour, resources and incentives; but in fact are made up of women, men and children who may share, complement, differ or be in direct conflict in their need for or interest in improved technologies.

Gender Analysis quickly gained a foothold in international development agencies in the late 1980s. The major tools of Gender Analysis were derived from either the Harvard "WID Analytical Framework" (1985), or the Development Planning Unit of London College and the Canadian Council for International Cooperation (CCIC, 1991) conceptual tools or a combination and adaptation of these. These provided the basic questions that researchers or project workers were **to ask when they went to the field** - how they were to generate data for future work.

The Harvard WID Framework had four sections - (1) an activity profile, which was basically the gender division of labour; (2) an access and control profile, which looked at access to and control over resources for production, reproduction and decision-making; (3) factors influencing activities, access and control - that is, the basic causal determinants of the gender division of labour and access to resources, which inevitably had to include the overall influence of the national and world social, economic and political structures; and (4) application to the project cycle, that is ensuring project identification, design, implementation and monitoring was adequate to gender issues and to women's as well as men's needs and priorities.

The DPU - CIDA conceptual analysis expanded these to eight tools, focusing on (1) the sexual/gender division of labour; (2) types of work, which appear to have involved a classification of the data gathered from the first set of questions into the three categories of productive work, reproductive work and community work; (3) access to and control over resources and benefits; (4) influencing factors; (5) condition and position, which was a kind of summary of data from the first three tools in a form that attempted to differentiate women's material condition viewed in and of itself from their relative position in regard to men of the community; (6) practical needs and strategic interests, which incorporated the important differentiation raised by Maxine Molyneux and Caroline Moser, attempting to build in some assessment of women's day-to-day needs and long-term emancipatory system-transforming goals; (7) levels of participation, which asked in particular about relative decision-making powers at various phases of the project and its impact on women and men; and (8) potential for transformation, which asked gender analysts to assess the long-term and basic potential effects of the project of the transformation of gender and power/class relations in the community (CCIC, 1991).

At the Asian Institute of Technology (AIT) we added three new tools of Gender Analysis to deal with Asian specific situations (Kelkar, Omvedt and Weber, forthcoming). These include: (1) poverty, analyzing the problem of poverty, its gender specific features, and what kind of government programmes and interventions can help in alleviating it; (2) cultures, assessing cultural perceptions and categories that may assign a subordinate place to women and also to the resource within particular cultures in specific areas for moving beyond subordination; and (3) empowerment, in the context of a process of advancement of women in decision-making and in influencing gender relations through change in the perception that women have of themselves and of others, and the ways in which the role and functions of women are defined (ESCAP, 1994, 75)

With regard to the woodfuel case, the Gender Analysis tools adapted are the following: gender analysis of labour; distribution of benefits within the household; access, control and management of resources: women's agency; and gender policy for technology development.

Gender Analysis of Labour

Fuelwood is a material necessity for maintaining food consumption. its appropriation and processing involve energy expenditure, i.e. labour. For calories to be of any use in economic analysis they must be converted or carefully related to use and exchange values. Though, monetary or other economic transactions are not the equivalent of physical flows.

Economic relations are grounded in a concept of value. But not all energy expenditure (labour) is valued in the same way. Thus, it is necessary to open up the 'household' cell, a black box, i.e. a cell whose content is unexplained or unexamined in the usual farming systems approach.

Yet another major problem area has been the inadequate understanding and analysis of the household differentiation, particularly with respect to gender. This is despite the recognition of the importance of gender many years ago and the incorporation of social scientists into research systems. This positive move has not been developed further, as many research systems have little understanding of the impact of gender analysis, both as initial step and as an integral activity in research (David Gibbon, 1993).

Labour and Work

There is a cultural division of labour within the household. But there is a distinction between the technical concept of 'effort' (or, energy expended) and the ideological concept of work. For instance, the effort involved in childcare or healthcare is not regarded as work, but as 'service', service performed by a woman for her family.

In the case of the factory/ office worker, it might be possible to make a clear-cut distinction between two kinds of labour - that of production and of reproduction. In the peasant household such a distinction is not possible. Labour in production or reproduction are mixed up and not separable by location (in the homestead or outside) or person.

But, a distinction does exist between work that provides or brings in cash income, and work which does not. A notion also exists of the possible alternative earnings with available labour time, the opportunity cost of labour in terms of alternatives foregone. Variation in terms of effort expended between different subsistence activities, and between subsistence and other activities, is important for understanding the political economy of households.

Will money be spent to economize on labour that does not produce money (marketable goods or services), or where the saved labour cannot be used to produce such marketable goods or services? In the case of improved stoves, the effect is of saving labour spent in the collection of fuel (since less fuel will be required). Whose labour will be saved? What are its alternative uses? What is its opportunity cost in terms of other income that could be earned, or production that could be increased, by other uses of the saved labour?

Thus, whether a household does or does not seek greater efficiency in fuel use (an improvement which will cost some money) depends on the opportunity cost of women's labour in fuelwood collection and cooking. The lower the income or production lost by women's spending more time cooking, the less will be the incentive to adopt improved stoves.

To the extent that women's non-domestic, monetary income activities are concentrated within the homestead, these tend to be combined with domestic work, like cooking, and not separated from it. But when women's non-domestic, income activities are located outside the

homestead, there is a push for economizing on women's labour in domestic work, like fuelwood collection and cooking. Thus, the importance of increasing the possibilities for women's non-domestic, income-earning activities outside the homestead, in order to increase the demand for more efficient stoves.

This analysis holds essentially for poor households, those who have to maximize their cash incomes and product in order to survive. At higher levels of income, where there is no need to look at the monetary opportunity cost of saving women's labour, or where woodfuel is purchased anyway, the improved stove is likely to be adopted purely for the reason that it reduces women's labour - or even for prestige reasons, for that matter.

"Where food production, work patterns and income sources and control are all changing, fuel sources probably are too." (Elizabeth Cecelski, 1984, ILO - WEP, p.84")

For example, in urban families where both husband and wife earn money incomes, and can afford the initial expenses of different fuel based stoves, time-saving cooking methods are widely used. Little effort is needed to diffuse innovations saving energy and time. And the innovations can be sold on the market, without requiring a subsidy.

Most of the activities reserved for women (either socially or in projects) tend to be physically located in and around the homestead. This results in a simple increase in the workload of women. The intensity of work increases, with more tasks having to be performed at the same time. On the other hand, if work assigned to women was of a type that takes them out of the homestead, there is likely to be greater pressure for a redefinition of gender roles, both familiarly and socially, with men taking some of the responsibility for child care (as is seen among some swidenning communities, where women and older children go to the swidden fields, leaving men and younger children in the residence) and more social provisioning for these necessary functions (as through child-care centres at Food for Work sites).

And there will be a definite increase in the demand for time-saving food processing methods to reduce time spent in collecting fuel and in cooking itself.

Thus, the wood-fuel question must be seen as an aspect of labour availability of the farm household. The gendered labour constraints and objectives of the farm household need to be understood in order to design appropriate policies.

BOX 2a: CASE STUDY for GENDER ANALYSIS OF LABOUR

Improved Stoves

1. China

"At present, most Chinese people living in rural areas still prefer to use biomass fuel-saving cookstoves to alleviate fuel shortages and to improve general sanitary conditions in their kitchens. Even though there is a tendency for the relatively rich rural farm and small town households to switch to coal for cooking and space heating, biomass, especially fuelwood and agri-residues, is still a major domestic fuel and will remain so in the foreseeable future."

"Since the early eighties, the central government authorities... have made a coordinated

national effort to develop and disseminate fuel-saving stoves with the active involvement of various national, state and local institutions(e.g. administrative departments, scientific and technical research institutes, training institutions and the industrial service and manufacturing sectors). As a result, by the end of 1991, about 142.56 million farm households had adopted fuel-saving stoves, or equivalent to about 70% of the total number of farm. households in China....

"Other benefits derived from the use of the improved stoves include: time savings due to faster cooking and less collection of biomass fuels, the enhancement of soil fertility by returning the crop residues saved to the field and, as a whole, the development of the rural economy and the improvement of farmers' living conditions in rural China."

[From Dr. Wang Megjie, "Preface", in RWEDP, Chinese Fuel Saving Stoves, FAO, Bangkok, July 1993.]

BOX 2b: CASE STUDY for GENDER ANALYSIS OF LABOUR

Improved Stoves

2. India 1

"The Indian National Programme on Improved Chulhas (NPIC) is a little more than eight 1 years old now. The major thrust of the programme has been the conservation of biofuel, 1 reduction or elimination of smoke from the kitchen and alleviation of the drudgery of cooking, as experienced especially by women. By early 1992, over 12 million improved chulhas or improved cookstoves had already been disseminated all over the country.... By [1997] it is anticipated that a coverage of about 25% of potential rural households will be achieved. "

[From L.M.Menezes, "Preface", in RWEDP, Indian Improved Cookstoves, FAO, Bangkok, July 1993.]

"Subsidies were provided for the installation of improved cookstoves and Technical Backup Centres were established in many States. "

[From E. Pelinck, "Foreword", in RWEDP, Indian Improved Cookstoves]

Questions

- What gender factors are responsible for the different performance of India and China with regard to the dissemination of improved cookstoves?
- Why is there a difference in the pricing of improved cookstoves in India and China, with a continuing (though falling) subsidy in India and commercial sale in China?

Distribution of Benefits Within the Household

The now standard neo-classical economic theory uses the concept of the Rational Economic Man -defined as being entirely selfish and self-seeking in the market. But the same Rational Economic Man is also assumed to be entirely altruistic at home.

The household in standard neo-classical economic theory then has a joint utility function something like socialism (from each according to ability, to each according to need) in one family (Nancy Folbre, 1994). James Mill invoked the concept of a joint utility function. He argued that women did not require the franchise, because their interests were represented by their fathers and husbands. His son, John Stuart Mill, one of the founders of neo-classical economics, championed individual rights, and so women's rights.

Class theory has presumed that the working class or peasant family is united in struggling for its interests against capital and the state. In a sense, the families of working people (workers and peasants) are also presumed to have a joint utility function!

As we have already seen, within the household there is a cultural division of tasks, of labour. The subsequent distribution of benefits within the family do not in anyway have to correspond to the contributions of the various family members to the family's total labour, whether within or outside the household. Rather, the distribution of benefits within the household also depends on the distribution of ownership of assets, attribution of cash incomes, perceptions about relative contributions, and so on. Rather, than possessing a joint utility function, the family can be seen as a venue of cooperative conflict. (Amartya Sen 1987).

According to Sen's analysis the distribution of benefits within the household is influenced by a few factors, chief among which is the "breakdown" or "fallback" position of the two partners. The breakdown position is that which would obtain in the event that cooperation (i.e. marriage) were to fail. The breakdown position depends on the independent access of each partner to the means of production. This breakdown position is relevant to the distribution of benefits within the household -a stronger breakdown position secures a more favorable outcome within the household. Then, the worst position would be where a woman completely depends on a man for access to the means of production or income. A woman in such a position would be forced to accept a much less favorable outcome in the household than a woman who had independent access to the means of production. Such independent access to the means of production, both familial (e.g. land) and communal (e.g. forest resources) would then strengthen the woman's position in the distribution of benefit within the household.

A study of various tribes in the Jharkhand region of India (Kelkar and Nathan, 1991), revealed that in some tribes (e.g. Santhal, Munda and Ho) access to forests, the source of gathering, is not mediated in the way that access to agricultural land is. Any member of the community, woman or man, can apply his/ her labour to gathering. Further, the income from gathering accrues to the one who performs the labour of gathering, who also does the marketing. But in tribes like the Kherwar, while women's involvement in gathering is no less than in the tribes mentioned above, the women do not carry out the marketing and do not have separate control over the income from gathering.

Corresponding to these differences in control over income, there is also a difference in the relative position of women, with Santhal, Munda and Ho women having a relatively higher position in the family.

Access, Management and Control of Resources: Women's Agency

In the gender analysis of labour, we have seen that without taking account of the gender distribution of monetary and non-monetary activities, it will not be possible to understand the acceptance and spread of attempted innovations, like improved stoves. Approaching women and involving women is not enough to guarantee the success of a project that aims at reducing women's drudgery.

In this part, we will look at the importance of understanding gender roles in managing woodfuel resources in order to design effective projects for increasing woodfuel production.

Women's concerns are not confined to well-being. In confining one's attention to well-being, women are treated merely as beneficiaries. But women, like men, also have agency roles, which means that they have to be seen as agents of judgment and change, of management.

Women are the primary collectors of woodfuel. This is more or less so in most agro-ecological regions. Men and children also collect woodfuel, but to a much lesser degree. In some places, e.g. Bangladesh, woodfuel collection away from the homestead is the work of men. Women, however, are also day-to-day managers of wood and related biomass resources.

But a distinction needs to be made between daily management of and control over resources:

- In peasant households in the plains, land is almost exclusively owned by men. This gives them the right to dispose of the family's assets. The key decisions about the use of the household's resources may be made by the man, while the day-to-day management, within the limits set by the earlier decisions, may be carried out by the women. Of course, while performing such daily management functions it is always possible to stretch the decisions in one way or another. This is the everyday form of resistance that subordinated people, whether peasants or women, exhibit. But we should not exaggerate the possibilities of such stretching of the limits - they may modify the effects but are not likely to change the direction of deployment of the household's resources.
- The growing phenomenon of men migrating in search of urban wage labour, leaving women to manage agriculture, does give more scope to women as unsupervised managers of the family farm. But still leaves ownership in men's hands.
- In the peasant situation, women's access to productive resources is necessarily mediated through men. Women, on their own, do not have access; though they do perform the labour and carry out daily management.

Men are then understood to be the "farm operators". And are approached when decisions are to be taken about investments in farm forestry. Or, when women are approached they are unable to take appropriate decisions - because they do not own the land.

BOX 3: CASE STUDY for GENDER ANALYSIS of EFFECT OF ACCESS, AND OWNERSHIP OF RESOURCES

In Himachal Pradesh, India, in the drought year of 1987, a women's organization, SUTRA tried to motivate women to plant trees, since the women were then walking 20 km to get one headload of fodder. SUTRA introduced the idea of multipurpose trees, and provided seedlings. The members of the women's groups were asked to send lists of plants they

required.

However, when the seedlings arrived, few were taken by the women and of those that were taken, few survived. Analysis showed that the areas with the greatest potential for growing trees are the privately owned grazing lands since here the trees will not compete with valuable cash or food crops. But these are far from the home and difficult to protect. In general, men cut any trees with commercial value, for timber. The women were afraid that the same fate would befall their newly planted trees. The men after all have the last word on the management of resources on family property. The men were not at all concerned with fodder and fuelwood trees.

[Source Madhu Sarin, in Local Organizations in Community Forestry Extension in Asia,
FAO/RWEDP, 1993, summarized in M.M.Skutsch.]

Questions

- What steps could be taken for an effective multi-purpose tree project in this situation?
- What national enabling steps (including legislation) would make it easier to secure the correspondence between use and management/ control of the necessary resources?

In many tribal communities (e.g. in Jharkhand in India) women do have access to forest resources and to income from the sale of forest produce. But the overall management of forests is in the hands of the village council, which is composed of adult men and explicitly excludes women. Even in a matrilineal community like the Khasi, men represent the family in its external relations (such as a project would involve) and form the village council.

*Consequently, women are not included in village forest **committees**.*

That women do not own land and that they do not form part of village forest committees, means that those who are affected by decisions about a resource are not the ones who participate in decisions about the resource. It is a usually accepted condition of an efficient property system that those who are affected by decisions also participate in decisions about that resource.

This would not matter if there were a common utility function for the family. Then, women (and children) could as well be represented by the male head of the household.

Deciding on the composition of trees to be planted to be planted either on farmer-owned farmland, or in community woodlots is an important aspect of management. To the extent that women are not an equal part of the decision-making body (farm operator or community committee) their specific preferences for particular types of trees would be ignored or given less importance in the management decisions.

Discussions with men and women in the forests frequently reveal differences in matters like the choice of trees. Women are said to prefer trees for fuel, fodder and fruit; while men are said to prefer timber trees that can be sold commercially.

But the difference is not because women are not commercially oriented, while men are. Women, for instance, may choose fruit trees not out of a preference for having fruits available to eat, but to sell the fruit. The difference lies in the maturity period. Men are more willing to risk a longer investment period, as is necessary in the case of timber trees, with lumpy returns.

Women, on the other hand, prefer trees that yield returns with a shorter waiting period and smaller returns spread out over a longer period, as with fruit trees compared to timber trees.

These differences in attitude to maturity periods lie in women's greater responsibility for day-to-day care of the family, which makes them concerned with quick-yielding and regular returns. Men, relieved of these immediate cares, can afford to think of longer term investments, with lumpy though much larger returns.

Thus, consulting only men or allowing sole decision by men, is likely to result in an unsustainable emphasis on longer-term investments with lumpy returns. Unsustainable because the need for quick and regular returns will be pushed onto other parts of the resource base in unanticipated ways. In order to get a sustainable mix of activities that will increase productivity, it is necessary to take account of women's specific concerns with quick and regular returns, and to enable women to participate in decision-making on these matters. This involves both women's ownership of land and their participation in village or user councils.

BOX 4: CASE STUDY

GENDER IN COMMUNITY ORGANIZATIONS

In the above example (in Himachal Pradesh, India) the NGO started to work on getting women collective control over common lands. Up to then, the forest department consulted the village Panchayat (council) about the type of trees to be planted on common land. The council was solidly male and commercial timber species were always planted. Various women's groups began to oppose this strategy; one group passed a resolution that unless the forest department planted at least 50% fodder species, they would uproot all the trees and replace them with fodder crops. They also demanded that in future the Forest Department should consult with the women's organizations as well as the village council; later this was taken further, to demand that the government should give the women's organizations the power and responsibility for deciding how the common lands should be developed.

[From Madhu Sarin, in " Local Organizations in Community Forestry Extension in Asia",

FAO IRWEDP, 1992, summarized in M.M.Skutsch.]

A group of men was invited to a village meeting to jointly plan a community forestry project. The men told the foresters that they wanted to plant hardwood tree species to make furniture and wood carvings to sell. Three thousand hardwood seedlings were provided. They all died. Why? Because in the village it was the task of women to care for seedlings; no one had told them that the seedlings were coming. Another meeting was held. This time the women were included. Foresters learned that the women preferred soft wood fast-growing species for fuelwood and fodder. When the project provided seedlings of both types, satisfying the needs of both women and men, the women planted and watered all of them.

Questions

- Why are there differences between men and women in the choice of trees? Is it a matter of biology, or different inclinations, of different areas of responsibility for the family?
- How can these differences be taken care of in a project?

Gender Policy for Technology Development

Besides the tendencies to break down a system into its parts (reductionism) and to seek technological solutions to the defined problem (technological fix), another strong feature of research policy has been the belief that "formal research and extension is the primary source of new ideas and technologies that will benefit all farmers. Research and extension institutional structures were developed to support the central source, transfer of technology model of development" (David Gibbon, 1992.)

There has been little recognition of the need to consider "a dynamic, interactive relationship between the researcher, extensionist and farmer, and to initiate activities that support the process of technology development in a variety of ways simultaneously."

So long as agricultural research concentrated on the reasonably controlled environments of irrigated rice and wheat fields, few problems were encountered with the old approach. But when ICRISAT and other organizations began to turn their attention to the vastly variable environments they had to deal with, they were faced with the inability of existing technological approaches to solve pressing problems of agricultural development in some areas, in particular the rainfed and semi-arid plains and the hill-forest regions. This has led to the questioning of some of the analytical methods of science and the organizational methods of research. The great variation in environments led scientists to consider the necessity of working in active partnership with farmers, in emphasizing joint work, rather than a "to rely on an expert-outried transmission of knowledge approach."

The old "scientific" approach is increasingly under attack and it is being increasingly realized that producers, farmers in this case, have an important contribution to make in creating and developing new technology. In the new science of agroforestry it is commonplace to start with the observation that, while some farmers have long used trees in combination with crops, agricultural scientists have only now begun to look at the role of trees in farming systems. "Agroforestry is an ancient land use of great promise as a new agricultural science. Traditional farmers have long used trees in combination with live-stock and annual crops, yet agricultural science has in the past ignored the role of trees in farming systems," (MacDicken and Vergara, 1990.)

The basis for farmer's participation in technological development lies in the labour that they perform and their decisions and systems of managing their resources. As a result of this labour and management of resources they gain valuable knowledge and skills. This knowledge and skills may not be (and usually are not) available to the professional scientist and other technicians, whose practice rarely extends beyond the laboratories and experimental farms. It is the need to bring together the knowledge and skills of the producers (indigenous

knowledge as it is sometimes called) with those of the professional scientist and technician that makes a partnership between farmers and experts necessary.

When we talk of the knowledge and skills that farmers possess, does this mean that all of this knowledge and all of these skills are available to all farmers? If so, it would make no difference which farmer we happened to include as a partner. The potential contribution of each person would be the same. (This is the technological counterpart of the household's "single utility function", which enables the man, as head, to represent the household.)

Since knowledge and skills depend on participation in labour and in the management of resources, to the extent that there exists a division of labour within the farm household, the knowledge and skills possessed by different sections of the household will be different. This is the reason why we need to take account of the gender division of labour in production and in the management of resources in a programme that seeks technological development by combining the scientist/ technician and extensionist with the farmer.

Women's Knowledge

The recognition that women and men possess different parts of the knowledge of indigenous farming practice does not mean an abandonment of holism. Some attempts at opposing reductionism (those of the eco-feminists) sought to do this by identifying men with reductionism and women with holism. What is needed is not the replacement of men by women, but a recognition that communities of farmers (including those of tribals in the uplands) are composed of dominant and subordinate genders, and that the "knowledge of the community" resides in particular social beings, who are women or men.

As a result of women's continuous use of woodfuel they have in-depth knowledge and know-how about various species. "When it comes to the knowledge of fuelwood species,..., women can differentiate between those which provide quick high heat, those which provide long-lasting low heat, and those which smoke...When it comes to the management of fuelwood species, successive generations of older women have trained younger women in the art of lopping or pollarding." (Martha Chen, 1993)

A variety of biomass goods are used by rural households. Their collection, processing and use are often gender-specific. " Women are the primary processors, driers, and storers of many of these [biomass] products. Moreover, women generally manage the energy flows from biomass resources, particularly in the form of fodder and composting materials, to the agriculture and livestock sub-systems of household livelihood systems: for instance, gathering and processing fodder, caring for animals, converting animal dung into fertilizer." (Martha Chen, 1993, 31)

As mentioned above, agroforestry is getting increasing attention as a means to solve fuelwood supply and other problems. Agroforestry is a newly-emerging scientific discipline within agriculture. But its practice is very old. Centuries (millennia) of agricultural development have centered on "farm" and "forest" as dichotomous categories, "trees" and "crops" opposed to each other. But now international attempts are being made to revive and extend the practice of agroforestry. The humble home garden, of which the Javanese is the most outstanding example, is now recognized as the repository of very essential knowledge about multi-tier farming.

"While home gardens may occur within systems ranging from shifting cultivation to intensive-multiple cropping in permanent plots, they seem to be the domain of women wherever such a plot is one among many other plots available to the household, or in cases where men are almost exclusively engaged in off-farm labour. In intensively cultivated areas of land scarcity, the whole household may work the home garden under the management of the head of the household, as in parts of Southeast Asia. In such cases, the rationale for the home garden shifts more towards labour intensification on scarce land rather than efficient multiple use of women's scarce time. Even so, these plots may have greater relative importance for women than for men, based on the distribution of labour input and on the fact that men may have alternative sources of cash income. This is also reflected in the tendency for women in Java to inherit home gardens, while their brothers inherit the rice croplands" (Dianne Rocheleau, 1987).

In Bangladesh "by tradition women have always been more involved in homestead agricultural production than men" (C.Safilios-Rothschild and Simeen Mahmud, 1988.) The wood from homesteads is the major source of fuelwood in Bangladesh.

Home gardens then are a special agroforestry niche of women. The development of agroforestry as such requires careful attention to women as those in whom traditional knowledge of agroforestry practices resides.

BOX 5: CASE STUDY: 1 Gender Policy for Technology Development 1

"... the scenario is such that forests (land under forestry departments' control) are unlikely to be available for fuelwood production through the agroforestry approach in most developing countries. Similarly, food production will continue to be of top most priority so that it may not be prudent or feasible to envisage any substantial fuelwood production schemes on arable agricultural lands at the cost of food production. However, agroforestry can be of value in this context by:

- Incorporating and integrating appropriate species of woody perennials on farmlands along with other components of the farming system not in a competitive but in a complementary way
- Integrating herbaceous crops and livestock on forest land according to the agroforestry management schemes so as to facilitate simultaneous production of wood and food crops
- Employing agroforestry techniques for reclamation of degraded lands and proper utilization of "wastelands".

"Some prototype agroforestry technologies for each of these situations are now available. | Most of these have evolved through the trial-and-error approach of local farmers with practically no scientific input to improve them. The greatest scope for improving their efficiency and obtaining tangible results in such a programme lies with the integrated food and fuelwood production initiatives in small holdings."

P.K.R.Nair, 1994, "Agroforestry and biomass energy/fuelwood production," in Agroforestry Systems in the Tropics, Kluwer Academic Publishers, Dordrecht, 597.

Questions:

- Are there any gender differences in the knowledge of women and men that are not taken account of in the above analysis?
- What difference would any such differences make to design of an agro-forestry project?

Along with the home garden, swidden is another type of multi-tier, multi-crop cultivation. Over a long historical period the thrust of agricultural development has been in the plains. Monocropping and irrigated cultivation reached their culmination in the Green Revolutions. This route of development has very little scope in the hill forests, or in the exclusively rainfed plains. The multi-tier, multi-crop cultivation system to which attention is now being paid, is characteristic of swidden. This Ester Boserup had characterized (in the context of Africa, but it hold good outside of Asia too) as a "female farming system".

A recent study by Ramakrishnan (1993) shows the overwhelming importance of women's labour in swidden. Swidden is very much women's work with men mainly contributing a short, sharp burst of activity in clearing the fields.

To draw attention to the important knowledge that women have in swidden, we may take the case of planting. Planting involves not only the physical labour of digging holes and planting seeds (which is done by women), or broadcasting in some cases, but also the careful selection of microsites within the swidden field. A variety of grains and pulses is planted. "When a swidden field is planted the visual result, as viewed by the outsider, is a mixture of plants that defies his idea of order. But to the swiddener, the field is a reflection of the soil variation in the fields and the plants that will do best in each microsite" (Warner, 1991, 39).

The complexity of planting in swidden fields shows the important role of women-specific knowledge of multi-tier, multi-crop cultivation. This knowledge needs to be built on in any attempt to develop the productivity of sustainable cultivation in the uplands, if not elsewhere too. This is not so much a matter of applying particular, well-known techniques and methods but of utilizing the principles embodied in swidden agriculture in order to create a higher productivity, while conserving the natural resource base. The relevant principles of swidden are (Warner, 1991):

- Integration of trees into the agricultural system
- Utilization of microsites, micro-environments, multicrops and multivarieties
- Maintaining stability by the many components of the agro-ecosystem.

Above, we have referred to the very complex knowledge involved in cultivation in home gardens and swidden fields. A recent UNIFEM study of Women's Roles in the Innovation of Food Cycle Technologies, gives many more such examples. "In Sudan women carry out forty-step fermentation processes with utmost care. This causes foods to be preserved for up to two years despite the hot climate. Women know how to use and treat enzymes as they would be used and treated in a laboratory.... In Zimbabwe, women use their knowledge of alkaline and acidic properties in the processing and utilization of over fifty kinds of indigenous wild plants. In Kenya, women potters utilize their knowledge of the properties of

different clay sources and proportions of mixtures in making durable pottery products and fuel-efficient stoves. Women salt extractors in Sierra Leone possess knowledge about the intricate chemical processes of salt solubility and crystallization rates of sodium chloride vis-a-vis other salts" (Ilkkaracan and Appleton, 1994, 70).

Processes of fermentation and other biological methods of preserving and processing food are well known to women, with variations from area to area depending on the type of agro-ecological zone. In the use of neem and other natural products for pest control, women seem to do the major role of processing and preparing the materials, with the application being left to men. (Information supplied by Dorritt Benden-Little.)

The preservation of seeds is often the province of women. In some hill-forest regions (e.g. among the Kreung and Tampuan tribes in Rattakeri, Cambodia) women are the main repositories of knowledge about herbal medicines. In many tribes men have a monopoly of the public knowledge of the complex use of herbs and other treatments. But there are instances of women tribal doctors who are experts in this field.

The number of examples given could be multiplied. But the point is to investigate in each location the specific gender division of labour, the various tasks that women perform and the consequent knowledge that women possess of the relevant processes. This has to be the starting point of any attempt to develop a gender framework for fuelwood interventions.

One of the reasons why such an investigation needs to be carried out is that a large part of women's labour in agricultural production is "invisible". Women's labour in many parts of the agricultural cycle is invisible in census figures. They would continue to remain invisible if investigations of women's roles were confined to asking men about it. Men usually respond with the answer that women only do "domestic" work and nothing else. A large part of women's labour is subsumed under "domestic work"; looking after the animals, tending to the home garden, processing various agricultural materials, and so on, are all regarded as merely parts of domestic duties, and of a very low technical level not deserving the title of labour. Thus, women's knowledge too can remain invisible. In an article, Wild Plants as Milk Preservatives, Ann Waters-Bayer was forced to remark that her male informant "did not once mention that the Fulani who have the knowledge about how to preserve milk and who hold all the other knowledge about milk processing are not the 'herders' but rather the Fulani women" (Ann Waters-Bayer, 1994). The above-quoted UNIFEM study of Women's Roles in the Innovation of Food cycle Technologies (Ilkkaracan and Appleton, 1994) sums up the matter, "Women's knowledge of production processes, although scientifically based, remains largely invisible. Nevertheless women constantly use their knowledge to make rational economic and technical choices and changes appropriate to their environment" (p. 70 in original).

While the combination of modern technology with indigenous knowledge is very essential, it is important that when this takes place the women concerned do not lose control over the results of this combination. This would require not just assigning intellectual property rights to the communities or individuals, but also working with them to develop their knowledge and to adapt it to other uses and more packageable forms, involving processing and formulation.

While noting the existing gender division of labour and thus not depriving women of participation in developing what they know, the existing division of labour should not set the boundary to women's involvement. This, as pointed out above, is essential for effectiveness of

a programme of technological change and adaptation. But equity may require that we go beyond just this consideration.

The division of labour that exists in any place is not fixed, but changing. Further, there are wide variations from one place to another. If in Andhra Pradesh, India, men alone do the work of tapping trees (for gum karaya) in Sri Lanka women are also rubber tappers. So, there is no fixed rule that men alone should be trained in advanced methods of tapping. In a situation of grave imbalance against women, equity would require that we seek to change the balance in women's favour, not only just not making it any worse. This, however, is not just a matter of access to technology, but also one of ownership of and control over resources, particularly land.

But, let us at least begin by separately involving women in areas where they are the acknowledged traditional experts.

Recommendations

- There is need to pay attention to the gender specific division of labour: who does what, when and where; in-farm, and off-farm; non-farm and household maintenance. This will help us to know what women are doing and what they know about woodfuel management
- The question of who benefits is closely related to roles and responsibilities and control over resources. A note of caution: technological innovations may increase women's workload, without providing any direct benefit to them
- It is important to treat women as users, producers and managers of woodfuel and build on their specific knowledge of agroecological systems. Policy measures need to provide women with access to and control over production, knowledge, technology and decision-making. Having access without control may mean greater constraints and less flexibility in using the resources. The major issues in this regard are increased decision-making of women, and gender equity in command over agricultural land and other resources. Enhanced decision-making by women is needed at both household and community levels
- The woodfuel problem can be seen as an aspect of resource and labour availability of the farm household. The gender specific constraints on command over resources and labour of the farm household need to be understood in order to formulate appropriate policies
- Whether a household does or does not seek greater efficiency in fuel use (an improvement which may cost some money) depends on the opportunity cost of women's labour in fuelwood collection and cooking. Thus, there is a need to increase the possibilities for women's non-domestic work, such as income-generating activities outside the homestead, whereby the saved labour from the use of efficient stoves can be used to produce marketable goods and services.

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8.2. An example of gender analysis: woodfuel

Fuelwood is a material necessity for maintaining household food consumption. Its collection and processing involve energy expenditure, i.e. labour in terms of calories. For calories to be of any use in economic analysis they must be converted or carefully related to market values. Though, monetary or other economic transactions are not the equivalent of physical flows of energy. Economic relations are grounded in a concept of value, but not all energy expenditure (labour) is valued in the same way. Thus, it is necessary to open up the "household" cell, a black box, i.e. a cell whose content is unexplained or unexamined in the usual agro-ecosystems approach.

Labour and Work

Cultural division of labour within the household. It is important to distinguish between the technical concept of "effort" (or, energy expended) and the ideological concept of work. For instance, the effort involved in childcare or healthcare is not regarded as work, but as "service", service performed by a women or her family. In the case of the factory/office worker, it might be possible to make a clear-cut distinction between two kinds of labour - that of production and of reproduction. In the peasant household such a distinction is not possible. Labour in production or reproduction are mixed up and not separable by location (in the homestead or outside) or person. But, a distinction does exist between work that provides or brings in cash income, and work which does not. A notion also exists of potential earnings with available labour time, the opportunity cost of labour in terms of alternatives forgone.

Improved Stoves

Will money be spent to economize on labour that does not produce money (marketable) goods or services), or where the saved labour cannot be used to produce such marketable goods or services? In the case of improved stoves, the effect is of saving labour spent in the collection of fuel (since less fuel will be required). Some questions which need to be asked, are: Whose labour will be saved? What are its alternative uses? What is its opportunity cost in terms of other income that could be earned, or production that could be increased, by other uses of the saved labour? Thus, whether a household does or does not seek greater efficiency in fuel use (an improvement which will cost some money) depends on the opportunity cost of women's labour in fuelwood collection and cooking. The lower the income or production lost by

women's spending more time in cooking, the less will be the incentive to adopt improved stoves. To the extent that women's non-domestic, monetary income activities are concentrated within the homestead, these tend to be combined with domestic work, like cooking, and not separated from it. But when women's non-domestic, income activities are located outside the homestead, there is a push for economizing on women's labour in domestic work, like fuelwood collection and cooking. Thus, the importance of increasing the possibilities for women's non-domestic, income earning activities outside the homestead, in order to increase the demand for more efficient stoves. The wood-fuel question must be seen as an aspect of labour availability of the farm household. The gendered labour constraints and objectives of the farm household need to be understood in order to design appropriate policies.

9. Gender analysis field tools

9.1. Tool # 1: The sexual/gender division of labour

Critical Questions:

- How is work organized in the communities to be affected by the project?
- What work do women (and girls) do (paid and unpaid)?
- What work do men (and boys) do (paid and unpaid)?
- What are the implications of this division of labour for achieving project/program goals?
- Does the project tend to reinforce or challenge the existing division of labour?

As mentioned in the previous section, both women and men work to maintain households and communities but their work tends to be different in nature and value. These differences are a central aspect of gender relations. Society has allocated different roles, responsibilities and activities to women and men according to what is considered appropriate. This is usually called the Sexual Division of Labour, but is more accurately the Gender Division of Labour.

The difference between men's and women's work is a source of division and sometimes conflict among them. It is also a source of connection, interdependence, exchange and co-operation in their combined efforts to meet household survival needs. A GAD approach always strives for a holistic vision and recognizes the relational aspects of the division of labour.

Women are essential contributors to the social and economic well-being of their families, but their work is less valued than men's. Women's work earns less prestige and remuneration and is often excluded from national economic indicators. The nature and extent of women's work can remain invisible if there is no awareness that a gender division of labour exists in the community; and inappropriate assumptions may follow about how work is organized, who does what, and how men and women will be affected by any development intervention.

The gender division of labour is specific to each particular culture and time. It can even differ from community to community. It is flexible and adapts to changing household conditions (illness or absence of a key member, changes in income or need for cash, the influence of local development projects, effects of education and so on).

In the project/program identification phase, a participatory analysis of the division of labour will enable community members (women and men) and external planners to understand how a particular project should be designed, who should be involved and the differential impact on women and on men that might be anticipated. In some situations, the different work done by girls and boys, female and male elders might also be examined. By making visible the extent and importance of women's work, this process can contribute directly to consciousness-raising and empowerment.

The *Activity Profile* of the *Harvard Analytical Framework* is a useful practical guide for identifying and ordering information about the sexual/gender division of labour in a community.

9.2. Tool # 2: Types of work

Critical Questions:

- What kinds of work do women and men (girls and boys) do?
- In what ways will the productive, reproductive and community work of women and men be affected by a project/program, and in what ways will these different types of work affect a project?

There are three main categories of work:

- Productive Work involves the production of goods and services for consumption and trade (farming, fishing, employment and self-employment). When people are asked what they do, the response is most often related to productive work, especially work which is paid or generates income. Both women and men can be involved in productive activities, but for the most part, their functions and responsibilities will differ according to the gender division of labour. Women's productive work is often less visible and less valued than men's
- Reproductive Work involves the care and maintenance of the household and its members including bearing and caring for children, food preparation, water and fuel collection, shopping, housekeeping and family health care. Reproductive work is crucial to human survival, yet it is seldom considered "real work". In poor communities, reproductive work is, for the most part manual --labour-intensive, and time consuming. It is almost always the responsibility of women and girls
- Community Work involves the collective organization of social events and services: ceremonies and celebrations, community improvement activities, participation in groups and organizations, local political activities, and so on. This type of work is seldom considered in economic analyses of communities. However, it involves considerable volunteer time and is important for the spiritual and cultural development of communities and as a vehicle for community organization and self-determination. Both women and men engage in community activities, although a gender division of labour also prevails here.

Women, men, boys and girls are likely to be involved in all three areas of work. In many societies, however, women do almost all of the reproductive and much of the productive work. Any intervention in one area will affect the other areas. Women's workload can prevent them from participating in development projects. When they do participate, extra time spent farming, producing, training or meeting, means less time for other tasks, such as the child care or food preparation.

An analysis of the work done by women and men -- of the gender division of labour -- is necessary in order to:

- acknowledge all the work done in the community and its true value
- plan for the impact of projects on the complex balance of community social and economic functions
- reduce women's workload
- ensure women's participation in projects.

An analysis of work might usefully identify the amount of time spent doing different types of work (particularly by women), and their regularity, seasonality and location. An analysis of community work will also identify women's groups, affiliations and representatives -- valuable information for determining how to consult with and support women's collective activity.

9.3. Tool # 3: Access to and control over resources and benefits

Critical Questions:

Resources:

- What productive resources do women and men each have access to?
- What productive resources do they each have control over?
- What implications has this pattern for program/project activities?
- How can a project contribute to increasing women's access to and control over resources?

Benefits:

- What benefits do women and men each receive from productive, reproductive and community work, and from the use of resources?
- What benefits do they each have control over to use as they please?
- What are the implications for program/project activities?
- How can women's access to and control over benefits be increased?

Productive, reproductive and community work all require the use of resources. Engaging in work and using resources usually generates benefits for individuals, households and communities. The GAD approach requires sensitivity to women's access to the resources needed for their work, their control over those resources to use as they wish, their access to the benefits derived from family and personal work, and to the control they have over the benefits.

Resources can include: a) *economic or productive resources* such as land, equipment, tools, labour, cash/credit, employable/income earning skills, employment/income earning

opportunities; b) *political resources* such as representative organizations, leadership, education and information, public-sphere experience, self-confidence and credibility; and c) *time* which is a particularly critical and scarce resource for women.

Benefits can include: provision of basic needs such as food, clothing and shelter, cash and income; asset ownership; education and training; political power, prestige, status, and opportunities to pursue new interests.

Women's subordinate position can limit their access to and control over resources and benefits. In some cases women may have ACCESS (the opportunity to make use of something) to resources, but no CONTROL (the ability to define its use and impose that definition on others). Women may have less access than men to the benefits of economic or political activity, or little control over them. They may have access to land, but no control over its long-term use or ownership. Women may have access to food, but no control over its allocation within the household. Women may have access to income through their food or craft production, but no control over how it can be spent. Women may have some access to local political processes, but little influence and control over the nature of issues to be addressed and final decisions.

Restricted access and control, lack of time, can limit women's ability to participate in and benefit from development activity, particularly at a decision-making level.

Lack of information on access to and control of resources and benefits has led to many incorrect assumptions about what women will be able to achieve and how they will benefit from both women-specific and "integrated" projects. This is another category of information, along with the gender division of labour and types of work, that is required to develop projects that will achieve their objectives. A gender-based analysis of resources and benefits can help planners compensate for and/or correct women's lack of access and control, at least within the project process. An *Access and Control Profile* is part of the Harvard Analytical Framework.

9.4. Tool # 4: influencing factors

Critical Questions:

- What key factors -- past, present and future -- influence and change gender relations, division of work, and access to and control over resources?
- What constraints and opportunities do these factors present for promoting gender equality and the empowerment of women?

Gender relations (including the division of labour, the type of work women and men do, and their different levels of access and control), change to some degree over time in any society. Many factors shape, influence and change these relations. Gender relations in Western societies have been significantly influenced by economic and educational factors; and by the growth of the women's movement and the strength of women's organizing. Gender relations in developing countries have been affected by factors such as the economy, environmental conditions, war and political crises, education, religion, the growing women's movement and Western influence.

Understanding past and present influences on gender relations can give insight into future constraints and opportunities for affecting social change in general, and in gender relations in particular. The rise of religious fundamentalism, for example, can impose new restrictions on women and limit their ability to participate in projects and programs. Male migration, on the other hand, may demand of women more responsibility, non-traditional work and greater independence. Crises such as war or drought can significantly alter gender relations, if only temporarily, and lead women into new roles as leaders, organizers and activists. Development work itself can effect change and be affected by any of the following factors:

- socio-cultural -- such as changing traditional life styles
- economic - such as structural adjustment policies
- political -- such as new policies, a change in government, war
- environmental - such as drought
- demographic - such as male migration, urbanization and rural depopulation
- legal -- such as changes in ownership or suffrage laws
- educational -- such as the changed expectations of educated girls
- international -- such as the influence of Western culture
- religious -- such as rising fundamentalism.

9.5. Tool # 5: Practical Needs and Strategic Interests

Critical Questions:

- How and to what extent do program/project activities and organizational policies address the practical needs of women and men?
- How and to what extent do program/project activities and organizational policies address the strategic interests of the community in general, and of women in particular?

Development projects attempt to identify and address the needs of targeted communities. A GAD approach distinguishes between women's practical needs and their strategic interests. They are closely related to condition and position.

Practical needs are linked to women's condition. They can be readily identified and usually relate to unsatisfactory living conditions and lack of resources. Poor Third World women (while their priorities vary) may identify practical needs which are related to food and water, the health and education of their children, and increased income. Meeting such needs through development activities can be a relatively short-term process involving inputs such as equipment, technical expertise, training, handpumps, clinics or a credit program. Projects that aim to meet practical needs and improve living conditions generally preserve and reinforce traditional relations between men and women.

Strategic interests for women arise from their subordinate (disadvantaged) position in society. Strategic interests are long-term and related to improving women's position. Access to participatory democratic processes is in the strategic interests of the poor in general. Access to gender equality is in the strategic interest of women in particular. Empowering women to have more opportunities, greater access to resources, and more equal participation with men in decision-making is in the long-term strategic interest of the majority of the world's men and women alike.

Strategic interests are less obvious and less readily identified by women than practical needs. Like any powerless group, women may be well aware of their subordination, but may not understand its basis or the possibilities for change. Even when options for change are known, practical needs and family survival are always priorities. Given the appropriate opportunity, however, women are generally able to describe their situation -- their condition and their position. Strategic interests readily emerge in women's gatherings and in the most informal of consciousness-raising processes. The strategic interests of women as a group include:

- reduced vulnerability to violence and exploitation
- more economic security, independence, options and opportunities
- shared responsibility for reproductive work with men and the state
- organizing with other women for strength, solidarity and action
- increased political power
- increased ability to improve the lives and futures of their children
- more humanistic and just development processes.

An underlying assumption of the GAD approach is that people should be agents of their own development. Processes that enable self-determination are processes which address the strategic interests of people: full consultation; involvement as planners and managers; education and training; long-term access to resources; and the promotion of democratic political processes. Subordination means women can be readily excluded from these processes. The self-determination of "people" can readily become the self-determination of "men". Therefore, while ensuring that the strategic interests of the community are addressed through people-centred development, it is important that the strategic interests of women in particular are also taken into account.

Adopting a GAD approach does not mean abandoning practical needs. Their satisfaction is a pre-requisite to the empowerment of women. A GAD approach identifies, negotiates and addresses practical needs of both women and men, in such a way that also addresses women's particular strategic interests. A water project, for instance, will aim to include women as committee members, pump caretakers, technicians and health educators. An agricultural project will involve women in project planning, encourage collaboration among women farmers, employ female extension agents and focus on women farmers' technical and labour saving needs. The scope of an agricultural project could be broadened to include post-harvest agricultural activities which are often traditional women's work (processing, marketing, storage).

The following are examples of ways of addressing strategic interests in project activity.

- *Gender analysis conducted before the project begins* -- A community gender analysis can be conducted through a participatory process involving women and men (separately if necessary) at the village/grassroots level. Information can also be collected through community-based organizations and field workers. The analysis should include the sexual/gender division of labour, the types of work done, access to and control of resources and benefits, and some indication of change over time and influencing factors.

A participatory process can in itself increase the community's awareness of the patterns, value, inter-relatedness, imbalance and impact of their work and relations. A gender analysis provides necessary information to improve project planning and design; and baseline data from which to measure changes in condition as well as position later on.

- *Consultation with women* -- This identifies women's affiliations, organizations, and representatives within the program area and appropriate on-going ways to consult and work with them. A consultation network may include local consultants, government employees, staff/members of women's organizations, and women's community leaders. Advice can be sought on ways to maximize women's involvement, benefits and participation as decision-makers; and to gain the co-operation and support of men.

- *Gain the support of men* -- Male support and involvement is important in development work with women in both integrated and women-only projects/programs. Opportunities should be created for dialogue and negotiation between women and men, and for creating a common understanding of the benefit to men and the community of women's participation. The strategy for achieving this is best developed by women and men who are already supportive.

- *Broaden women's opportunities* -- Maximize women's involvement in collective activity, women's organizations, and community decision-making; strengthen women's opportunities to manage, achieve, receive information and training; and increase self confidence and credibility. This requires an awareness of women's time constraints and efforts to reduce their workload.

- *Support organizing efforts* -- providing support to local women's and mixed organizations working to achieve social change and improve the position of women. These can include organizations working at the grassroots level and those concerned with research, advocacy and policy development. Strengthening links between similar national, regional and international organizations can be of long term importance.

- *Encourage gender awareness* -- Promote gender sensitivity and gender-focused planning skills among NGO staff and overseas partner agencies, including people at the most senior levels. The process should involve systematic discussion and training, an assessment of current structures and practices as to their impact on women, and the development and implementation of a process of change.

Working on women's strategic interests to change women's position is a long-term, incremental process. Each development project may only make one small contribution toward

this end. What is important is that development initiatives, explicitly and strategically, try to contribute to the empowerment of women, as well as the of the community as a whole.

9.6. Tool # 6: Levels of participation

Critical Questions:

- What is the nature of women's (and men's) participation in the program/project and in the organization?
- What is the nature of the benefits that women (and men) receive?
- To what extent are women active agents in each stage of the program/project and policy development and implementation?

A goal of many WID policies is to increase women's involvement as participants, beneficiaries and agents. However, more explicit goals are required for participation and benefit, and the nature of the "agent" role. Women have been participants and beneficiaries in development projects without significant improvement in their condition, and no change in their position. Being an agent in a small women-only project may not enable women to be agents in mainstream development processes.

Participants: participation can happen at several different levels or stages within a project, with varying implications for those involved. CIDA's Social/Gender Analysis Handbook describes four stages of participation in which people will:

- *Be passive recipients* of assistance, materials or services without being in any way involved in their provision, and without control over their continuation.
- Take action prescribed by others such as contributing labour or attending a clinic.
- Be consulted on problems and needs, although not necessarily on the context, analysis and options for solutions. This can result in a "wish list" with no real community responsibility or ownership.
- Be empowered to organize themselves to address their needs, plan solutions to problems and take responsibility for development actions.

The GAD approach aims for the fullest possible participation -- at the level of empowerment -- for both women and men in all development activity. The concept of different levels of participation helps us to be aware of how women and men have and might participate in projects/programs, and the extent to which this participation can contribute to empowerment.

• Beneficiaries: Women benefit in the short-term by having some practical needs met, but long-term benefits are greater -- for women and for communities -- if women's decision-making capacity and status are increased

• Agents: A goal of the GAD approach is to promote women as agents of change -- as planners, managers, organizers, advisors, committee members, and educators within various levels of project activity. This applies to national development organizations,

partner agencies, local advisory and management bodies, and at the community level. The many constraints of women's subordinate position prevent this from happening easily. Simultaneous strategies are required: to pro-actively involve women as agents as much as possible within current structures; and to build opportunities into projects that can help increase women's access to becoming development agents

Women are often agents in women-only projects -- which are necessary to address women's specific needs and to build women's confidence, skills and organizational experience. These projects should aim to enable women without excluding them from mainstream development processes.

10. Adapting existing checklists

10.1. Gender in the project cycle

Gender in the Project Cycle has four major questions:

- Who does what, when, and where? - in enterprises, off-farm, farm and household maintenance?
- Who has access to and control over resources for production, knowledge, technology, time and decision-making? Having access without control may mean great constraints and less flexibility in using the resource
- Who benefits from the existing organization of productive, community and household resources? This question is closely related to roles and responsibilities and control over resources. For example, technological innovations may increase women's workload without providing any direct benefit to them
- How and to what extent do cultural systems, poverty alleviation policies, development planning and technology projects address the practical needs and strategic interests of the community in general and women in particular?

Major concerns are:

Analysis of target group

- What are the main characteristics of the position of (different categories of) women, in relation to men, in terms of (a) gender division of labour, (b) gender-related access to and control over resources, (c) social-political dimension of the position of women, and (d) influencing factors?
- What are the views and expectations of women (and men) with regard to the proposed project interventions?

Analysis of institutional setting:

- What is the gender capacity of the institutions (to be) involved in the project, and are there alternatives with respect to the institutional set-up of the project?

Analysis of project idea/Proposal:

- Are gender issues correctly and systematically incorporated in the existing project idea or proposal?
- In what way and to what extent will the target group in general, and women in particular, be able to participate in the different stages of the project?
- What likely positive or negative effects will the project have on the autonomy of (different categories of) women?

Recommendation:

- How should the project be designed to ensure that it will optimally strengthen the autonomy of women? What recommendations can be made to the donor and (non) governmental organizations in this respect?
- What monitoring indicators can be suggested to monitor women's participation and the gender specific effects of the project?

10.2. Questions to ask

The following questions are part of a paper by Sara Hlupekile Longwe of Zambia. We have excerpted the section called "Examples of Questions to Ask About a Project's Contribution Towards Women's Development".

Question on Problem Identification

- Did the needs assessment look into the special or different problems and needs of the women in the community?
- For the problem selected for project intervention, how does this problem affect women and men differently?
- Were women involved in conducting the needs assessment, and were the women of the community asked for their opinion on their problems and needs?
- Has there been an assessment of women's position in terms of such possible problems as their heavier work burden, relative lack of access to resources and opportunities or lack of participation in the development process?

Questions on Project Strategy

- Is the project intervention aimed at a target group of both men and women?
- Have the women in the affected community and target group been consulted on the most appropriate ways of overcoming the problem?
- Is the chosen intervention strategy likely to overlook women in the target group, for instance because of their heavier burden of work and more domestic location?
- Is the strategy concerned merely with delivering benefits to women, or does it also involve their increased participation and empowerment, so they will be in a better position to overcome problem situations?

Questions on Project Objectives

- Do the project objectives make clear that project benefits are intended equally for women as for men?

- In what ways, specifically, will the project lead to women's increased empowerment? e.g. increased access to credit? Increased participation in decision-making at the level of family and community? Increased control of income resulting from their own labour?
- Do any of the objectives challenge the existing or traditional sexual division of labour, tasks, opportunities and responsibilities?
- Are there specific ways proposed for encouraging and enabling women to participate in the project despite their traditionally more domestic location and subordinate position within the community?

Questions on Project Management

- Is there a clear guiding policy for management on the integration of women within the development process?
- Are women and men of the affected community represented equally on the management committee?
- Is there a need for management training on gender awareness and gender analysis?
- Has management been provided with the human resources and expertise necessary to manage and monitor the women's development component within the project?

Questions on Project Implementation

- Do implementation methods make sufficient use of existing women's organizations and networks such as women's clubs, church organizations and party political organizations?
- Are women included in the implementation team?
- Are women the target group involved in project implementation?
- Are there methods for monitoring the progress in reaching women? For instance, by monitoring their increased income, increased occupation of leadership roles, increased utilization of credit facilities, increased participation in project management and implementation, increased influence over decision-making processes.

Questions on Project Outcomes

- Do women receive a fair share, relative to men, of the benefits arising from the project?
- Does the project redress a previous unequal sharing of benefits?
- Does the project give women increased control over material resources, better access to credit and other opportunities, and more control over the benefits resulting from their productive efforts?

- What are the (likely) long-term effects in terms of women's increased ability to take charge of their own lives, understand their situation and the difficulties they face, and to take collective action to solve problems?

10.3. Exercise questions on gender in the project cycle

- What productive and reproductive work is done by women and men? (Complete an Activity Profile)

- What resources and benefits do women and men have access to and control over?

(Complete Access and Control Profile)

- How appropriate is the design of the project given women's social and economic roles?

- What has the impact of the project been on women and men? How does this impact relate to project objectives?

- How could the project be changed to ensure more equitable participation and benefit for women and men; and to better address the strategic interests of women?

Activity Profile (an example)

ACTIVITY	Hours per day		Income per day	
	women	men	women	men
A. Productive Activities (producing				
Income in money or kind)				
- farming				
- ploughing				
- weeding				
- fertilizing				
- planting				
- harvesting				
- drying.				
- storing				

- cattle breeding (please specify)				
--				
- home industry (please specify)				
--				
- trading (please specify)				
--				
- industrial work				
- civil servant				
- private company employee				
B. Reproductive Activities				
(non-remunerated work)				
- food production for own consumption				
- organizing household budget				
- housework				
-- cleaning				
-- cooking				
- washing clothes				
- fetching water				
- mending clothes				
- collecting fire wood				
- childcare				
- health care				

-- house repairs				
- others....	.			
C. Social Activities				
- family welfare movement (PKK)				
- village council				
- credit savings and credit group				
- farmer's group				
- religious meetings				
- others.....				
D. Free Time				
- recreation visiting relatives or neighbours				
TOTAL				

Profile of Access to and Control of Resources by Women and Men (an example)

RESOURCES AND FACILITIES	Access by		Control by	
	men	women	men	women
RESOURCES				
- land				
- water				
- raw material (please state)				
- capital/credit				
- production inputs				
- farming				
-fertilizer				

- pesticide				
- seeds				
- cattle/poultry breeding				
- animal feed				
- medicines				
- hybrid stock				
- for home industry				
- thread/yams				
- material				
- others.....				
FACILITIES				
- equipment for				
- farming				
- cattle/poultry breeding				
- fish farming				
- home industry transport				
- as a seller				
- as a buyer				
- as a distributor				
- information				
- training				

Key: H = high

L = low

0 = non-existent

The access and control of resources should be seen as "high" or "low" as a ratio between men and women's access control in any one area.

Example, men's access to land in area A could be classified as high compared with women's access to land in the same area. A could be relatively low compared with men's access to land in area B or C.

11. Exercises

11.1. A women's organization in natural resource management

*Source: Sarin, M: The Potential Role of Rural Women's Organisations in Natural Resource Management. In 'Local Organisations in Community Forestry Extension in Asia'.
FAO/RWEDP, 1992.*

There have been a number of women's groups active in Dharampur Block in Solan District partly due to the efforts of an NGO, SUTRA, which started to work there in 1976. Among other things, the NGO was involved in upgrading the skills of traditional midwives and training women as improved stove builders. By 1985 SUTRA decided that they could not do a great deal more in the way of conventional projects to build up women's organisations, but that they needed to create their own spaces where women could share common hardships and evolve strategies to deal with them. Two inputs were required for women's empowerment: access to information, and opportunities for women to spend time away from home, to reflect on their problems and to build self-confidence. They therefore brought the various local women's groups into contact with each other, and for the first time women began to realise that the problems they faced were not individual, but common to many women. 90% of the population lives in scattered villages of not more than 15 houses and women and girls sustain agricultural production. They receive no pay for this as it is family labour and in fact it is often not considered work at all. One study showed that women do 75% of agricultural work in the fields, 90% of the livestock-related work (gathering fodder, milking) and 95% of the housekeeping work.

In this area there is very little common or shamilat land for firewood gathering, since the government took over a large part of this in 1971 for distribution to the landless. The remaining part was handed over to the forest department to manage on behalf of the villagers. They fenced it and planted it with non-browsable species (thus, those that did not produce fodder), while some private owners acquired land and planted it with fast growing timber species.

In the drought year of 1987, SUTRA tried to motivate women to plant trees, since the women were then walking 20 km to get one headload of fodder. Water was also difficult to obtain. SUTRA introduced the idea of multipurpose trees, and provided seedlings. The members of the women's groups were asked to send lists of plants they required.

At the same time, information was gathered about what women traditionally knew about tree management, which was considerable - women knew hundreds of species by name and by sight, and could list thousands of uses; they knew how much fodder could be cut from different sorts of trees to maintain the maximum output, for example.

However, when the seedlings arrived, few were taken by the women and of those that were taken, few survived. Analysis showed that the women were simply too busy during the rainy season to plant the trees. The areas with the greatest potential for growing trees are the privately owned grazing lands since here the trees will not compete with valuable food or cash crops. But these are far from the home and difficult to protect. In general, there is a shortage

of fodder types of trees on these lands, brought about by the men's cutting of any trees with commercial value, for timber. Thus, the women were afraid the same fate would befall their newly planted trees. The men after all have the last word on the management of resources on family property. The men were not at all concerned fodder trees.

SUTRA then realised they had made a classic error in formulation their strategy. Simply because women have the primary responsibility for gathering biomass for fodder and fuel does not mean that they should be considered responsible for replenishing the source. By asking the women to plant trees, SUTRA was increasing their work levels, but not their control over the use of the trees.

This led to a new strategy, to give women more power over the land and decisions on how to use it. At the household level, and with regard to private landholdings, it was not possible for the NGO to intervene in traditional distribution of power between men and women. But they started to work on getting women collective control over common lands, still in the power of the forest department. Up to then, the forest department consulted the village Panchyat (council) about the types of trees to be planted on the shamilat land, but the Panchyat was solidly male, with the result that commercial timber species were always planted. Various women's groups began to oppose this strategy; one group passed a resolution that unless the forest department planted at least 50% fodder species, they would uproot all the trees and replace them with fodder crops. Notification of this was sent to forest officials. In one village the women were able for force the forest department to take down a fence they had erected around some common land; they then worked out a plan for increasing the area's productivity and asked the forest department to implement it for them. They also demanded that in future the forest department should consult the women's organisations as well as the Panchyat, and later this was taken further; the government should give the women's organisations all the power and responsibility for deciding how shamilat land should be developed. In this they were helped by the NGO who provided a lawyer to help them fight for their rights. The issue was not yet resolved at the time the article was written, but the experience demonstrates that once women's organisations join together, they can influence natural resource policies at the state level.

Exercise for Case Study G

This case study is an example of an attempt not just to help women meet their needs more easily, for fodder and fuel, but to empower them in other ways. The long term aim of the sponsoring NGO was clearly to emancipate women, to meet their strategic needs as well as their practical ones.

The group should divide into three parts: one subgroup will represent the Panchyat, one subgroup the women's organisation, and one the forest department officials.

Each subgroup has 20 minutes to prepare for a court hearing in which the women will plea for full rights over the common land. Each subgroup should prepare its case and be prepared to give evidence in the hearing. After preparing an argument, it should be decided which member will present it and how. None of the such groups has a professional lawyer. The trainer will play the part of the judge, and the matter will be decided by him in the light of the quality of the arguments presented on all sides.

11.2. Report of the role playing exercise

The participants were divided into three groups, to represent the women's organization, the forest department and the village council (panchayat). The groups were deliberately formed in such a way that its members would be arguing a case they usually do not. In this way, it was expected, it would be possible to judge what the participants had absorbed from the training course. All the men were put in one group to represent the women's organization. Those women who were foresters and some others were formed into the village council. The rest of the women were asked to represent the forest department. The exercise was conducted by Dr. Anoja Wickramasinghe, who also acted as the judge.

The arguments presented by each group are given below.

On behalf of the women's organization the following arguments were put forward in the original statement.

Legal

- Both men and women had equal rights to the village common land.
- But the women were not consulted when the decision was taken to transfer the land to the forest department
- Women were users of the common land for grazing their animals and for collecting firewood
- No decision could be taken to usurp them of these rights.

Environmental and Socio-economic

- The forest department has been ignoring fodder and fuelwood species, which is having an adverse effect on land conservation, wildlife habitat, environment and livestock
- This is adversely affecting the socio-economic condition and health of the people.

Welfare

- Women constitute more than 50% of the population and have the potential to contribute to the benefit and welfare of the household by producing more meat and milk
- Women also look after the household needs for fodder and firewood.

Equity

- Both men and women have equal rights and equal potential for socio-economic betterment
- Women should take part in decision making.

Empowerment

- The women's organization should be empowered to manage the land and forest resources, because as compared to the government department this NGO has a better ability to manage it and does not suffer from bureaucratic delays.

On behalf of the village council (panchayat) the following arguments were put forward.

Culture

- It is against our culture and traditions for women to go outside the home. It is out of the question for them to go to the forest to work
- If women go out to the forest, then who will look after the family. The children will suffer.

Time

- Women are already very busy in the home. After completing their domestic jobs, they do not have the time to go and work outside.

What can be done?

- Village men have always looked after the interests of timber in the forest. Let them continue to do this
- If women want fuelwood, this can be supplied by growing fuel species as an agroforestry system in the homestead
- From the time of our ancestors it has always been that we men have looked after timber in the forest. This system is good enough and does not need to be changed.

On behalf of the forest department, the arguments were:

- The government has handed over the land to the forest department
- We have spent a lot of money in fencing
- We have planted trees in order to earn more revenue for the government
- We consulted the village council on the kind of trees that are to be planted. It was they who advised us that they wanted only timber trees
- Both men and women will benefit from commercial timber production
- Once you grow commercial timber trees, they will benefit the women's husbands

- When your husbands benefit, then automatically the women and the children will also benefit
- Further, with more revenue from commercial timber, the government will be able to under-take more welfare and social expenditures, which will have a direct impact on women's welfare
- We respect the feelings of the women. But the village council has been elected by all of you
- For day-to-day fodder and fuel needs, women can be accommodated in the community forestry programme. But the timber forest should remain as it is.

Following the presentation of the main arguments, there was a second round of discussion. The women's organization argued:

- The village council says that our tradition does not allow women do go out of the home. But tradition must change. We cannot agree that culture remains the same eternally
- About women's burden of housework, it is true that women are overburdened. But why must we alone bear this burden. If women work outside the home, then men will have to share some of the burden of housework
- Studies show that women do 75% of agricultural work, 90% of livestock labour and 95% of domestic work. This overwork of women must change and men must take on more of these burdens. Men must also look after babies, so that the family does not suffer
- This is the era of privatization. Everywhere it has been seen that government projects have failed
- If you give the forest land to the village council, then you can see that the men will plant only timber trees. The needs of fodder and fuel will suffer
- Now is the time to give the women's organizations a chance to show what they can do.

The village council objected to the suggestion that men could look after babies.

- Men are already overworked and engaged in other important activities
- So it is not possible for men to look after the babies at home, while women go to the forest.

The forest department reiterated that

- Government property, the forest, cannot be privatized
- If the women don't like the village council, then they can change it

- But the forest department can only deal with the village council and not with a women's organization.

As pointed out by some participants in the evaluation, the arguments, particularly those put forward by the solely men's group representing the women's organization, showed that they had understood the main points about gender analysis and the problems and needs of women. This was confirmation that participants had learnt something about the methods of gender analysis. That, of course, is something very different from saying that they were convinced about the correctness of these analyses.

At the end of the course, participants were asked to work in country groups to formulate relevant projects incorporating gender aspects into wood energy development. Participants spent the better part of one morning in working on these project proposals. They even cut into their lunch time to be able to complete the exercise. But, in the end, the deadline of the formal closing meant that there was no time at all for discussion of the project proposals.

12. Participants' evaluation and recommendations

In evaluating the training course, participants were asked to respond to three areas: the strong points of the course, the weak points and what they intended to do differently as a result of what they had learnt

According to the participants' responses, they liked the overall organization of the course and appreciated the importance of the topics covered. One or two found that too many ideas were put forward, some of them confusing. Some also wanted more material specifically related to women in wood energy and biomass development.

The case exercises, including the "role play", were found useful in applying the knowledge gained. At the same time, some felt that there should have been some field exercise. Others felt that they needed more opportunities to develop project ideas based on what they had learnt.

Many liked the interaction in the course, both between the resource persons and the trainees and among the trainees themselves. They felt that there was a sharing of knowledge between all those concerned with good participation from the trainees. Some, of course, felt that more time should have been devoted to interaction between the participants. Some explicitly said that they felt free in expressing their own ideas and views.

An important indicator of the training course's effectiveness was expressed by one: "Yesterday when men were acting as women and specifying their complaints, it appeared that men do know and feel how a woman feels and what are her problems."

The most frequently referred to shortcoming was insufficient time - time for interaction among participants, to read the materials given, to present their materials, and so on. Others also felt that given the full schedule of the training course, they needed some more time.

Participants wanted more specific materials on different aspects of wood energy development. Some wanted guidance on practical steps to take in "facing the villagers".

Finally, almost every participant wrote that they intended to use what they had learnt in many ways. Some to improve women's participation in forestry projects, others to include women in the process of designing appropriate improved stoves. They said that having earlier been "gender blind", they would now use what they had learnt to incorporate gender into the projects, in design and in implementation at the village level. Those who were teachers said that they would try to incorporate gender, or a women in wood energy module in their courses. Only one person wrote that there was no intention to do anything differently, just to learn what gender analysis was about.

Many participants wanted such training courses to be conducted in their own countries/institutes and sought RWEDP help in the matter.

13. In conclusion

Rather than a conclusion, this is really about what the resource persons thought about the course. The first thing to note was the complete attendance of participants in all sessions. This is unusual for any programme of this type. Normally 80% attendance is counted as very good. Except for the fact that some participants could not arrive on time, there was no absenteeism during the whole course, despite the fact that the venue was right in the heart of Bangkok's shopping district and the participants were kept busy till 5 p.m. every evening. If attendance can be taken as an indicator of interest, then the participants showed a very high level of interest in the course.

As mentioned earlier, two-thirds of the participants were women, including a number of women foresters. But not only was there a high level of participation by women in numbers, in discussions too there was a lot of participation by both men and women. The numerous case studies were helpful in eliciting discussion from the participants and interaction between resource persons and trainees. The relative failure of some case studies, like the project formulations done at the end, need to be taken into account in future design of courses and their time schedules.

While the trainees felt that they had learnt something about why gender analysis was necessary and how to do it, the resource persons also learnt something about organizing such training. The sub-regional scope of the training was decided on the understanding that there was a lot of commonality in the gender situation across South Asia. Discussions in the course repeatedly brought home the point that there was considerable variation within South Asia too. In particular, the Indo-Gangetic plain stood out as different from the plateau and Sri Lanka. Even more so, Bhutan and Maldives contrasted sharply in a number of features and customs, given the strong matrilineal traditions of these countries. The variation was useful in showing to participants that the forms of gender relations they know are not so universal and thus obviously not "natural". At the same time, this variation also showed the necessity of a closer look at gender questions in the changing societies that are still matrilineal or have been so until very recently. Such study needs to be incorporated into future gender training courses.

The differences in the responses of participants over the period of the course and, in particular, the arguments in the "role playing" exercise showed that the trainees had learnt something about the arguments related to gender issues in wood energy. To what extent had the participants accepted or agreed to what they had learnt? That is difficult to judge and only the future will tell. But the enthusiastic and diligent participation of the trainees and their stated intentions to try and incorporate gender into their spheres of work are indicators that the training course did have some beneficial impact. The participants felt that RWEDP has to follow up by keeping in touch with the trainees, getting some feed-back on what they have done, and providing further materials, like the module on "Gender and Wood Energy", to help the incorporation of gender issues into wood energy planning and projects.

14. Annexes

14.1. List of Participants Bangladesh

Mrs. Asma Parveen
Assistant Conservator of Forests
Forests Department
Bana Bhaban

Tel: (Off.) 880-2-605953
(Res.) 880-2419965
Fax: 880-2-605923

Mohakhali, Dhaka

Dr. Lulu Bilquis Banu
Senior Scientific Officer
Institute of Fuel Research and Devpt.
Bangladesh Council of Scientific
and Industrial Research (BCSIR)

Tel: (Off.) 880-2-506335
(Res.) 880-2-862309
Fax: (Res.) 880-2-860220

100/A Crescent Road

Green Road, Dhanmandi, Dhaka 1205

Ms. Hassan Banu
General Manager
Centre for Mass Education in Science (CMES)
37/C, Asad Avenue, Muhammadpur

Tel: (Off.) 880-2-811898
(Res.) 880-2-868490,500101
Fax: 880-2-803559

Dhaka

Bhutan

Ms. Deki Yangzom
Sector Officer
Technical Planning Unit

Tel: 975-2-23618
Fax: 975-2-22279

Division of Power

Ministry of Trade & Industry

Thimphu

Ms. Durga Devi Sharma
Lecturer, Forestry Sector
c/o Natural Resources Training Institute

Tel: 975-2-29325

Fax: 975-2-29326

Ministry of Agriculture

Lobesa, Thimphu

Mr. Mincha Wangdi
Environment Education Officer
Royal Society for the Protection of Nature

Tel: (Off.) 975-2-22056

Fax: 975-2-23189

P.O. Box 325, Thimphu

India

Dr. (Ms.) Natarajan Jayalakshmi
Assistant Professor
Department of Bio-Energy
College of Agriculture Engineering

Tel: (Off.) 91-0422-431222 Ext. 276

(Res.) 91 -0422-431205

Fax: 91 -0422431672

Tamilnadu, Agricultural University

Coimbatore 641 003

Maldives

Ms. Fathimath Inala
Project Officer
Ministry of Youth Women's Affairs and Sports
5th Floor, Umar Shopping Arcade

Tel: (Off.) 960-323687

(Res.) 960-327528

Fax: 960-316237

Chandanee Magu, Male 20-05

Ms. Aishath Niyaf
Secretary
Ministry of Fisheries and Agriculture
Ghazee Building

Tel: (Off.) 960-322625
(Res.) 960-327278
Fax: 960-326558

Ameer Ahmed Magu, Male 20-05

Mr. Mohamed Shujau
Executive Committee Member
Bluepeace
Roma, Gandhakoalhi Magu, Maafannu

Tel: (Off.) 960-325621
(Res.) 960-325717
Fax: 960-327808, 313669

Male 20-01

Nepal

Mr. Kusheshwar Jha
Senior Division Engineer
Water and Energy Commission

Tel: (Off.) 977-1-227699
Fax: 977-1-227185

Secretariat (WECS)

G.P.O. Box No. 1340, Singh Durbar

Kathmandu

Mr. Kamal Bhakta Shrestha
Monitoring and Evaluation Officer
His Majesty Govt. of Nepal

Tel: (Off.) 977-1-220303
(Res.) 977-1419367

Forest Department

Babar Mahal, Kathmandu

Pakistan

Dr. Habib Gul
Deputy Director
Pakistan Council of Appropriate

Tel: (Off.) 0521-842178
(Res.) 0521 -45105

Technology (PCAT)

Ministry of Science & Technology Govt. of Pakistan

Gulshanabad Colony

P.O. Tehkal Bala, Peshawar

Ms. Irfat Roohi Hunzai
Project Forester in Aga Khan Rural Support Prog.
The Aga Khan Rural Support Programme
Regional Programme Office

Tel:(Off.) 0572-2480
(Res.) 0572-2529, 2951
Fax: 0572-2779

Babal Road, Gilgit

Ms. Mamoona Wali Mohammad Khawaja
Lecturer in Forestry (LIF)
Forest Education Division
Pakistan Forest Institute (PFI)
Peshawar

Tel: (Off.) 0521-841879, 40580
(Res.) 0521-42641
Fax: 0521-275618
Email: kms@dg.pfi.pswerum.com.pk

Mr. Malik Mohammad Khan
Conservator of Forests, Rawalpindi
Soan Forest Colony

Tel: (Off.) 92-51-490478
Fax: 92-51 -491112

P.O. Humak

Islamabad 45700

Sri Lanka

Dr. (Mrs.) Anoja Wickramasinghe Tel: 94-08-88301-5
Professor Fax: 94-08-32517
Department of Geography

University of Peradeniya

Peradeniya

Ms. M.D. Kanthi Wijetunga Tel: (Off.) 94-1-684660
Director (Power and Energy) (Res.) 94-1-647449
Ministry of Irrigation, Power and Energy

P.O. 500 T.B. Jayah Mawatha

Colombo 01

Mr. P.M. Sunil Silva Tel: 94-8-32007
Programme Manager Fax: 94-8-32517
Integrated Development Association

No. 20, Hantane Place

Kandy

Ms. N.S. Palihawadana Tel: (Off.) 94-1-866627
Asst. Conservator of Forests (Res.) 94-1-851094
Department of Forest Conservation Fax: 94-1-866633
No. 82, Rajamalwatta Road

Battaramulla

14.2. List of resource persons

IDEA

Mr. R.M. Amarasekara
Executive Director
IDEA

Tel: 94-08-32007
Fax: 94-08-32517

20 Hantana Place

Hantana, Kandy

Sri Lanka

AIT

Dr. Govind Kelkar
Associate Professor & Head
Gender & Development Studies Center
Asian Institute of Technology

Tel: 66-2-5245673
Fax: 66-2-5162126
66-2-5246166

GPO. Box 2754, Bangkok 10501

Thailand

Dr. D. Nathan
Resource Person
c/o Gender & Development Studies Center
Asian Institute of Technology
GPO. Box 2754, Bangkok 10501

Tel: (Off.) 66-2-5162126
(Res.) 66-2-5246257
Fax: 66-2-5162126
66-2-5246166

Thailand

RWEDP

Dr. W. Hulscher
Chief Technical Adviser
FAO/RWEDP
Maliwan Mansion

Tel: 66-2-2802760
Fax: 66-2-2800760
Email: rwedp@ksc.net.th

39 Phra Atit Road

Bangkok 10200, Thailand

14.3. List of inaugural speakers

- Mr. Sawad Hemkamon, on behalf of Dr. Prathes Sutabutr, Director General, Department of Energy Development Promotion (DEDP), Bangkok
- Mr. F.J. Dent, on behalf of Mr. A.Z.M. Obaidullah Khan, ADG, FAD/RAP, Bangkok
- Mr. P. Vehmeyer, First Secretary & Permanent Representative of the Netherlands to UN,

Royal Netherlands Embassy, Bangkok
- Dr. W. Hulscher, Chief Technical Adviser, Regional Wood Energy Development Programme in Asia (GCP/RAS/1 54/NET), Bangkok

14.4. List of FAO/RWEDP staff

- Dr. W. Hulscher, Chief Technical Adviser
- Mr. A. Koopmans, Wood Energy Conservation Specialist
- Mr. T. Bhattarai, Wood Energy Resources Specialist
- Mr. H. Oosterveen, Associate Professional Officer/Information Systems
- Ms. Cristina Srirattana, Administrative Assistant
- Ms. Navaporn Liangchevasuntorn, Secretary
- Ms. Panpicha Issawasopon, Secretary
- Ms. Wjitra Suwannarong, Clerk Typist
- Ms. Punyada Nilagupta

14.5. Participants' information note

RWEDP has organised a Sub-regional Training Course on Women and Wood Energy Development, at FAD-RAP, Bangkok, Thailand, 27 November -1 December.

The Training Course is a follow-up of the Regional Expert Consultation on Gender and Wood Energy in Asia, Chiang Mai, Thailand, June 1995. For the Training Course in Bangkok, participants are invited from the RWEDP-member countries in South-Asia (Bangladesh,

Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka), as well as a limited number of observers.

Background

It is widely recognised that the burden of supplying woodfuels for household use in the region is largely carried by women. These women often suffer from rising prices, decreasing fuel quality and increased difficulty of access to woodfuel sources. Many policy changes in pricing of fossil fuels, conservation of forests, and landuse controls also have a disproportionately negative impact on women, especially women from the lower income groups. In order to mitigate the problems that women in particular, but also other groups, face in connection with wood energy, it is necessary to review any planned interventions in the light of their relative impact on different groups within society: men, women, children, minorities, etc. This is important since the problems of women or any other group cannot be separated from the context in which they occur. The approach is known as a *gender approach*. In recent years, a large number of analytic and data gathering tools have been developed which can simplify the problem of assessing such differential impacts.

The general objective of the course is to familiarise trainees with the use of gender analytic tools and review and assess their appropriateness. The specific objective is to provide trainees with the means to select, modify or design operational procedures to ensure that gender issues are covered in the project design/appraisal process.

Content

The main subjects in the course programme (all with respect to wood energy development) will be:

- Personal awareness of gender (i.e. perceptions about questions of gender and development)
- Placing gender (understanding different possible approaches to issues of women and development, which have different implications for kinds of interventions that are selected)
- Gender analysis tools (step by step methods and procedures with respect to planning, assessing project proposals, etc. to check probable impacts on men and women)
- Adapting existing checklists (how to adapt checklists to local circumstances)
- Gender analysis field tools (tools and procedures which are useful in the fundamental redesign of projects from gender principles)

Participants

The course is intended for higher and middle-level staff from institutions and departments concerned with wood energy planning, policies and strategies in RWEDP member countries in South Asia. Participants will be from the forestry sector, the energy sector and NGOs, i.e. 1 per named category (or equivalent) from each of the RWEDP-member countries in South

Asia. They will link to the implementer level of projects and programmes. Females as well as males will be in these categories.

Participants in the course should be nominated by their own organisation in which they hold a relevant position as indicated above, have a good command of English, and be in good health.

Participants are expected to report to RWEDP on follow-up activities in their own organisation. Some participants may be invited for a regional follow-up training sometime in 1996. Participants are invited to bring videos, if available, which link to the subjects of the course.

Nominees should complete the attached nomination form which is to be received by RWEDP before 1 November 1995.

Costs

The costs of the course will be covered by RWEDP, including accommodation based on DSA. Participants' travels to and from Bangkok will be covered by RWEDP. Participants are to arrive in Bangkok on Sunday 26 November and depart on Saturday 2 December.